



THE IMPACT OF LOCAL “RIGHT-TO-WORK” ZONES

PREDICTING OUTCOMES FOR WORKERS, THE ECONOMY, AND TAX REVENUES IN ILLINOIS



Frank Manzo IV, MPP



ILLINOIS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
School of Labor and Employment Relations, Labor Education Program

Robert Bruno, PhD

EXECUTIVE SUMMARY

Efforts to create local "right-to-work" zones would have negative impacts on workers and the economy in Illinois. The preponderance of evidence finds that worker incomes are lower in economies with right-to-work laws and that employment effects are minimal at best. For instance, average worker wages are \$2.90 per hour (13 percent) higher in Illinois than in right-to-work Indiana and Illinois added 14,000 more jobs in 2014. At the same time, the unemployment rate in eastern Illinois counties was lower than in right-to-work counties across the Indiana border in December 2014.

The proposal for local right-to-work zones is based on the assumption that high union density hampers local economies. An analysis of the 102 counties in Illinois, however, reveals that this presupposition is unfounded. Higher county-level unionization rates within Illinois have no discernible impact on employment growth, establishment openings growth, and average household income growth. The evidence that unionization raises the unemployment rate in Illinois is also weak. The claim that right-to-work is an effective way to put people to work is rejected for lack of evidence.

Incorporating estimates from previous policy research, economic impact analyses are performed to determine the effect of adopting local right-to-work laws in half of Illinois' counties, excluding Cook County. The models randomly select 51 counties to become right-to-work zones and demonstrate the negative consequences of the proposal. If half of the state's counties (excluding Cook County) became right-to-work zones:

- Total labor income would fall by \$1.3 billion;
- The economy would shrink by \$1.5 billion;
- State and local tax revenues would be reduced by \$80 million;
- Labor unions would experience a loss of 200,000 members;
- Racial income inequality and gender income inequality would both increase; and
- The number of workplace injuries and fatalities would rise.

In the seven integrated county economies with over 100,000 workers in Illinois, predicted impacts are generally similar. If local right-to-work zones were only passed in the Chicago six-county area, the regional economy would experience over 5,500 jobs lost and an economic contraction of \$2.6 billion. Both businesses and workers would relocate to other parts of the state with better incomes and higher consumer demand. Similarly, local right-to-work laws would reduce total worker earnings by around \$40 to \$60 million in the Champaign-Urbana, Quad Cities, Rockford, and Springfield-Decatur regions. Labor income would also be predicted to decline by \$16 million in the Peoria-Bloomington community and by \$104 million in the St. Louis region. Local right-to-work zones would eradicate good middle-class jobs, replacing them with low-wage employment openings and redistributing income from labor to capital.

Ultimately, economic analysis reveals that local right-to-work laws would reduce worker earnings and decrease state and local tax revenues. The result would be a weaker Illinois economy.

TABLE OF CONTENTS

Executive Summary	i
I. Introduction	1
II. Local RTW Zones and Unnecessary Government Regulations	1
III. The Economic Research on Right-to-Work Laws	3
IV. Comparing Labor Market Outcomes in Illinois and Indiana	5
V. Does Higher Union Membership Hamper County Economies in Illinois?	6
VI. Economic Impact Analyses Explained	11
VII. Economic Impacts of Local RTW Regulations to the State	12
VIII. Independent Regional Economic Impacts of Local RTW Zones	15
IX. Local Right-to-Work Zones Would Increase Racial and Gender Inequality	16
X. Conclusion	17
Photo Credits	18
Methodology	19
Data Sources	20
References	21

ABOUT THE AUTHORS

FRANK MANZO IV is the Policy Director of the Illinois Economic Policy Institute (ILEPI). He received 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.

ROBERT BRUNO 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 received his Doctor of Philosophy in Political Theory from New York University and his Master of Arts in Political Science from Bowling Green University. He can be contacted at bbruno@illinois.edu.

I. INTRODUCTION

In 1965, Martin Luther King Jr. gave the keynote address at the Illinois AFL-CIO Convention. He was unconditional in noting that the "labor movement was the principal force that transformed misery and despair into hope and progress." Despite the good that unions had done, the leader of the civil rights movement scolded the nation by adding that, "it is a mark of our intellectual backwardness that these monumental achievements of labor are still only dimly seen" (King Center, 2011). The "labor hater," as Dr. King called corporate executives and political conservatives who mobilized against organized labor in his time, professed that reducing unionization would unleash economic prosperity. This claim was made without ever explaining how suppressing "workplace democracy" would help millions of working-class families, especially when it was demonstrably true that union-bargained contracts provided workers with higher incomes, better benefits, and a "voice" in the workplace.

In 1947, Congress passed the Labor Management Relations Act (also known as Taft-Hartley), restricting solidarity strikes, secondary boycotts, and closed union shops and requiring union officers to sign non-communist affidavits. Taft-Hartley also allowed states to enact "right-to-work" laws. The right-to-work provision was a targeted stipulation, meant to choke off the spread of unionization into the Jim Crow South (Kahlenberg & Marvit, 2012). Had labor managed to organize large numbers of black and white workers, as it had begun to do by the early 1940s, unions may have altered the political balance in the South. Following Taft-Hartley, right-to-work was primarily passed in ex-slaveholding states.

Today, twenty-five states have adopted a "right-to-work" (or "free-rider") law. Three Midwestern states have passed the law since 2012: Indiana, Michigan, and most recently Wisconsin. However, in states where efforts to pass a right-to-work law have been pushed back by voters, a new strategy has emerged. Led by the American Legislative Exchange Council, the Heritage Foundation, and other conservative groups, five counties in Kentucky adopted a local right-to-work ordinance in 2014, pre-empting Kentucky state law (Dewan, 2014). The coalition has claimed that, if successful, it will try to pass similar right-to-work zones in other states.

In his February 2015 "State of the State" address, new Illinois Governor Bruce Rauner also proposed permitting local right-to-work ordinances. The Governor's claim mirrored the stance of other right-to-work advocates that local right-to-work laws, which he labeled "employee empowerment zones," would "increase jobs for residents, increase economic activity for local businesses and generate more tax dollars for local governments" (Rauner, 2015). The presupposition is that unionization suppresses job growth and that, consequently, limiting union dues is a way to increase employment and spur economic growth.

This Research Report, conducted jointly by the Illinois Economic Policy Institute (ILEPI) and the University of Illinois School of Labor and Employment Relations' Labor Education Program (LEP), investigates the economic and policy impacts of adopting local "right-to-work" laws in Illinois. The Research Report assumes a null hypothesis of zero. This means that right-to-work ordinances (or, conversely, higher union membership rates) are assumed to have no impact on any labor market outcome until proven otherwise by *relevant* evidence. Ultimately, the paper evaluates the relationship between labor unions and labor market outcomes and provides a forecast on the impact that local right-to-work ordinances would have on workers, business output, and tax revenues in economic regions in Illinois.

II. LOCAL RTW ZONES AND UNNECESSARY GOVERNMENT REGULATIONS

A "right-to-work" (RTW) law or, as defined more accurately by advocates of collective bargaining, a "free-rider" law has nothing to do with the right of an individual to seek and accept gainful employment. Instead, a RTW law is a government *regulation* that bars labor unions from including union security clauses in collective bargaining agreements with employers. Union security clauses ensure that each member of a collective

bargaining unit who receives the benefits of collective bargaining (e.g., a higher wage, better health and retirement benefits, grievance representation, a voice at work) also provides his or her fair share of dues or fees. Right-to-work is a government prohibition on a specific type of privately-negotiated contract between workers and employers.

Workers are not forced to join a union anywhere in America, but labor unions must by law represent all employees in a workplace. In a fair-share collective bargaining (CB) state, employers and labor unions are at liberty to negotiate a range of union security clauses. They may, but are not mandated to, agree to a union security clause that requires all persons covered by the contract to pay dues or fees to cover the cost of bargaining activities. In these states, covered employees are only required to pay for bargaining costs and are not forced to finance political or other non-bargaining activities. Since the 1988 *Communications Workers of America v. Beck* Supreme Court case, workers have already been allowed to object to paying a portion of their dues toward political activities. Some collective bargaining agreements also allow union objectors to contribute their dues to charity.

A right-to-work law denies workers the basic right to enter into contracts with employers. RTW mandates that the payment of dues or fees becomes an opt-in proposition for all bargaining unit members, forbidding privately-negotiated opt-out clauses and other arrangements. Thus, the default position under right-to-work is to allow workers to "free-ride" on the efforts and contributions of others. When a significant number of individuals make the decision to remain free-riders, the representative unit's resources become depleted.

At a localized level, right-to-work zones would be administratively problematic for Illinois businesses. According to the 2012 Statistics of U.S. Businesses (SUSB) compiled by the U.S. Census Bureau, the average company in Illinois operates 1.24 "establishments," or physical locations where goods or services are provided (SUSB, 2012). The data indicate that thousands of Illinois firms conduct operations in multiple Illinois counties. If one county were to adopt a local right-to-work ordinance right next to counties upholding the state's fair-share law, the new government regulation would cause confusion and would increase administrative costs. For a unionized chain of retail grocery stores in the Chicago area or a contractor employing union construction workers on a multi-county project in southern Illinois or a statewide manufacturer of construction and mining equipment using union labor, local RTW zones would be an unnecessary burden.



Finally, passage of local right-to-work regulations will result in avoidable legal costs. As opined by the Kentucky Office of the Attorney General, it may be illegal for a local government to enact a right-to-work ordinance (Conway & James, 2014). The National Labor Relations Act, as amended, already forbids "closed shops" and allows "any State or Territory" to enact a right-to-work law. The U.S. Supreme Court has stated that "even if the union-security agreement clears all federal hurdles, the States by reason of § 14(b) have the final say and may outlaw it ... It is a conflict sanctioned by Congress with directions to give the right of way to state laws" (*Retail Clerks Int'l. Ass'n, Local 1625, AFL-CIO vs. Schermerhorn*, 1973). Furthermore, the U.S. District Court found that "[t]here is nothing in the legislative history of § 14(b) to indicate that Congress intended a broad reading of 'state'" (*United Food and Commercial Workers Union Local 1564 v. City of Clovis, N.M.*, 1990). Citing many other decisions, the Kentucky Attorney General concludes that federal law "preempts all political subdivisions of a state from enacting right-to-work laws, including counties as well as cities" and that "local governments have no power to enact right-to-work ordinances" (Conway & James, 2014). In addition, Illinois Attorney General Lisa Madigan has issued an opinion, which also concluded that the adoption of local RTW zones would violate federal law (Madigan, 2015). Nevertheless, whether the Kentucky and Illinois Attorney Generals are correct or not, the state will be challenged in Illinois courts on local right-to-work regulations, unnecessarily increasing costs to the taxpayer.

III. THE ECONOMIC RESEARCH ON RIGHT-TO-WORK LAWS

Proponents of RTW make testable claims about the regulation's impact on the labor market. Right-to-work laws, they say, incentivize businesses to locate in a geographic area. This "pro-business" policy purportedly reduces unemployment, increases job growth, and raises worker incomes over time. As of March 2015, there are 25 states with "right-to-work" laws and 25 states (plus Washington, D.C.) with fair-share collective bargaining laws. This difference in statewide labor policy creates a natural laboratory in which economic researchers and social scientists can put the claims of right-to-work's proponents to the test.

A 2012 study by the nonpartisan Congressional Research Service finds that the "existing empirical research is inconclusive" and that the isolated impact of right-to-work on employment outcomes is mixed (Collins, 2012). While some studies have suggested that RTW increases manufacturing employment (Dinlersoz & Hernandez, 2002; Kalenkoski & Lacombe, 2006), recent research finds no discernible effect on manufacturing employment and calls the prior results into question (Eren & Ozbeklik, 2011). In addition, the preponderance of research finds no statistically significant impact of RTW laws on total employment (Stevens, 2009; Hogler, 2011; Collins, 2012). The reality is that private firms do not consider right-to-work laws a defining factor in business location decisions. Labor skills and costs, state and local tax incentives, highway accessibility and infrastructure investment, energy costs, and proximity to major markets with high consumer demand are far more important to corporate executives (Area Development, 2014).

Advocates for RTW laws also often cite methodologically questionable studies. For example, reports that find that local RTW regulations would boost job growth typically fail to control for a litany of extremely important factors that actually increase employment, consequently conflating the impact of RTW with other factors (Vedder, 2010; Zycher et al., 2013; Greer, 2015). They also fail to account for worker skills and educational attainment, for the industry-occupational mix in any given U.S. state, or for state union membership rates.

On the other hand, the assertion that right-to-work laws improve worker incomes is false. While some reports find no evidence that RTW impacts worker incomes (Moore, 1980; Eren & Ozbeklik, 2011; Hogler, 2011), many recent economic studies find that the policy causes a loss in worker earnings. Gould and Shierholz (2011) control for almost all observable characteristics and estimate that RTW reduces wages by 3.2 percent on average, while lowering employer-sponsored health insurance benefits by 2.6 percent. RTW has also been found to reduce the wages of *nonunion* workers by 3.0 percent (Lafer, 2011). Stevens (2009) used an advanced statistical analysis to find that worker wages and per capita income are both lower on average in RTW states. He found that RTW lowers wages by 2.3 percent, but increases proprietor income by 1.9 percent, indicating that RTW is a transfer of income from employees to owners with "little 'trickle-down' to the largely non-unionized workforce in these states" (Stevens, 2009).



The University of Illinois and the Illinois Economic Policy Institute have previously analyzed the economic impacts that full scale right-to-work would have on the State of Illinois. In *The Economic Impacts of Adopting a Right-to-Work Law: Implications for Illinois*, right-to-work laws were associated with a 2 percent to 8 percent reduction in worker incomes amounting to a loss of \$24,400 for the average worker over ten years. Right-to-work's impact on the employment rate ranged from a negative 1.2 percentage point effect to a positive 1.4 percentage point effect. The middle-of-the-road estimate was a small 0.4 percentage point increase on employment. As a result, total labor income in the state would fall by between \$2 billion and \$9 billion if right-to-work was adopted and state tax revenues would decline by between \$75 million and \$355 million. The analysis also indicated that RTW increases gender and racial wage inequality, reduces employee benefits, and increases workplace fatalities (Manzo et al., 2013).

The University of Illinois and the Illinois Economic Policy Institute utilized a separate U.S. Department of Labor dataset and a different time period in *Free-Rider States: How Low-Wage Employment in "Right-to-Work" States Is Subsidized by the Economic Benefits of Collective Bargaining*. That analysis found that RTW laws lower worker wages by 3.2 percent on average, the same estimate provided by Gould and Shierholz (2011). RTW also reduces the share of workers covered by a health insurance plan by 3.5 percentage points and the share of workers who are covered by a pension plan at work by 3.0 percentage points. Conversely, RTW increases the number of workers living below the official poverty line by about 1 percentage point, adding to the number of workers receiving government assistance through food stamps and the Earned Income Tax Credit (EITC). In addition, the report found that labor's share of a state's gross domestic product (GDP) was 2.9 percentage points lower and capital's share was 2.6 percentage points higher in right-to-work states, corroborating the findings by Stevans (2009). Inputs from that study yielded a predicted \$12 billion drop in total labor income, a \$492 million decline in state income tax revenues, and a \$159 million increase in food stamp spending if Illinois were to become a right-to-work state (Manzo & Bruno, 2014a).

It is also worth noting that right-to-work laws have the largest negative impact on the construction industry. Estimates by the University of Illinois and the Illinois Economic Policy Institute discover that right-to-work laws reduce construction worker earnings by between 13 percent (Manzo & Bruno, 2014b) and 22 percent (Manzo et al., 2013). As a result, right-to-work laws increase income inequality in the construction industry by 2.5 to 8.2 percent, depending on the metric used (Manzo & Bruno, 2014b). Zullo (2011) has found that RTW laws "result in the underfunding of union safety training or accident preservation activities," statistically increasing the construction fatality rate by 0.3 to 0.7 per 100 workers. From 2008 to 2010, the fatal injury rate for construction sectors averaged 13.1 deaths per 100,000 workers in RTW states but just 9.4 deaths per 100,000 workers in

fair-share collective bargaining states (Manzo et al., 2013). It is therefore no surprise that a certified safety consultant in Wisconsin warned his lawmakers that "[r]ight to work in Wisconsin will result in more of our friends, neighbors, and families being hurt and killed. It is as simple as that" (Kramer, 2015).

Lastly, one area where economic research is unanimous on right-to-work laws is that the regulation restricts union membership. The work that labor unions perform is not costless. In addition to organizing members and negotiating and administering contracts, unions in right-to-work states must expend resources on activities aimed at discouraging members from defecting even while getting by with fewer financial resources. As a result, RTW unambiguously lowers union membership: Moore (1980) approximates a 5 to 8 percentage point drop, Davis and Huston (1993) find an 8.3 percentage point fall, Hogler, Shulman, and Weiler (2004) estimate an 8.8 percentage point reduction, and Manzo and Bruno (2014a) find a 9.6 percentage point decline in a state's unionization rate due to RTW. Paired with the previous economic impacts, the fact that right-to-work limits labor unions has led one researcher to assert that the true intent of RTW laws is based on ideological motivations: "less influence for unions, less bargaining power for workers, more wealth for the wealthy, and more misery for the immiserated" (Hogler, 2011).

IV. COMPARING LABOR MARKET OUTCOMES IN ILLINOIS AND INDIANA

Arguments for RTW include assumptions that businesses from Illinois are relocating to neighboring states, such as RTW Indiana. Additional claims have been made that "counties along Illinois' borders, especially the border with Indiana, are vulnerable to losing businesses that can hop the border" into right-to-work Indiana (Lucci, 2015). The conclusion they draw is that Illinois counties should adopt local right-to-work ordinances.

However, labor market outcomes are superior in Illinois compared to Indiana (Figure 1). According to December 2014 estimates by the U.S. Department of Labor Bureau of Labor Statistics (BLS), the average worker's hourly wage was \$25.60 per hour in Illinois. This was \$2.90 an hour higher than the \$22.70 average hourly wage in Indiana, or 12.8 percent more. Additionally, over the previous twelve months, hourly wages increased by \$0.56 in Illinois compared to a wage growth of just \$0.26 in Indiana. While the January 2015 unemployment rate was slightly elevated in Illinois (6.1 percent) compared to Indiana (6.0 percent), employment growth was higher in Illinois in 2014: Illinois added 103,000 jobs while Indiana added 89,000 jobs over the year.

Figure 1: Should Workers and Business Want Illinois to Become Indiana?

Labor Market Outcome	Illinois	Indiana
Average Hourly Wage (Dec. 2014)	\$25.60	\$22.70
Wage Growth (Dec. 2013 to Dec. 2014)	+\$0.56	+\$0.26
Unemployment Rate (Jan. 2015)	6.1%	6.0%
Employment Growth (2013 to 2014)	+103,000	+89,000
Government Share of All Jobs (Dec. 2014)	13.6%	14.0%
Non-fatal Injury and Illness Rate (2013)	3.5	3.8
Union Coverage Rate (2014)	16.0%	12.0%

Source(s): U.S. Bureau of Labor Statistics (2015), "State and Metro Area Employment, Hours, and Earnings," "Regional and State Unemployment – 2014 Annual Averages," "Economy at a Glance: Illinois," "Economy at a Glance: Indiana," and "State Occupational Injuries, Illnesses, and Fatalities;" Hirsch and Macpherson (2015). For more, see the "Data Sources" section.

Advocates of "right-to-work zones" contend that they would improve labor market outcomes in areas that implement them, especially compared to bordering counties that do not become right-to-work. To test this idea, BLS Local Area Unemployment Statistics data are compiled for Illinois counties which border at least one county in the RTW state of Indiana. Note that some Illinois counties border multiple Indiana counties and vice-versa, so counties are not sorted into direct pairs in Figure 2 but are reported from north to south. If right-to-work zones would be great economic catalysts for counties, then the bordering Indiana counties should be clearly faring better than the bordering Illinois counties. In December 2014, there were 3.12 million Illinois residents in the

civilian labor force living along the Indiana border. The unemployment rate in these areas was 5.7 percent, driven down by relatively lower unemployment rates in more populous counties such as Cook County (5.6 percent) and Will County (5.5 percent). By contrast, for the roughly 356,000 Indiana residents in the ten counties that "touch" Illinois, the unemployment rate was more than 33 percent higher, at 7.6 percent in December 2014.

Figure 2: Unemployment Rates (Dec. 2014), Illinois Counties that Border Indiana Counties

Illinois (CB State)	Unemployment (Dec. 2014)	Labor Force (Dec. 2014)	Indiana (RTW State)	Unemployment (Dec. 2014)	Labor Force (Dec. 2014)
Eastern Illinois: Counties Listed North to South			Western Indiana: Counties Listed North to South		
Cook	5.6%	2,595,815			
Will	5.5%	368,475	Lake	8.2%	223,617
Kankakee	7.4%	54,409	Newton	7.5%	6,827
Iroquois	5.6%	16,000	Benton	6.1%	4,365
Vermilion	7.6%	34,724	Warren	5.1%	4,831
Edgar	6.5%	9,729	Vermillion	8.1%	7,414
Clark	6.9%	7,890	Vigo	7.5%	49,657
Crawford	6.8%	8,878	Sullivan	8.0%	8,507
Lawrence	5.9%	7,246	Knox	4.9%	20,783
Wabash	5.4%	5,761	Gibson	5.5%	16,794
White	5.3%	7,055	Posey	4.9%	12,742
Gallatin	6.5%	2,559			
Border Counties	5.7%	3,118,541	Border Counties	7.6%	355,537

Source(s): U.S. Bureau of Labor Statistics (2015), "Local Area Unemployment Statistics" for December 2014. For more, see the "Data Sources" section.

V. DOES HIGHER UNION MEMBERSHIP HAMPER COUNTY ECONOMIES IN ILLINOIS?

The purported benefits of "union free" zones are predicated on the notion that labor unions negatively distort the labor market and impede economic performance. This is an assumption grounded in classical economic hypotheses, which can be tested. Information was obtained on the residence of union members by county to evaluate these claims for Illinois. To assess county-level unionization rates, the reported number of union members in each county was divided by the estimated total civilian employment for the population 16 years or older in the associated county, as provided by the American Community Survey from the U.S. Census Bureau. The imputed data indicate that the statewide union membership rate is 16.13 percent, in line with the 16.0 percent rate of workers covered by a labor union reported in the 2014 Current Population Survey by the U.S. Bureau of Labor Statistics (Hirsch & Macpherson, 2015).

Figure 3 provides county-level summary statistics of the dataset used in this section.¹ The analysis includes union membership data paired with various sources of information from the U.S. Census Bureau and the U.S. Bureau of Labor Statistics. For the 102 counties in Illinois, the 2014 union membership rate ranges from 10.5 percent to 30.9 percent, with a median county unionization rate of 18.5 percent.

Current labor market outcomes vary across Illinois counties (Figure 3). The minimum value of total county employment in Illinois was 573 workers in Pope County while 2,499,492 workers were employed in Cook County. Mean household incomes also ranged from \$35,154 in Alexander County to \$108,570 in Lake County.

¹ For more information on the analysis in Section V, please see the "Methodology" section at the end of this Research Report.

Furthermore, as of December 2014, Illinois' unemployment rate was 6.2 percent. At the county-level, the median unemployment rate matched the statewide rate (6.2 percent), and half of all counties ($n= 51$) experienced unemployment rates between 5.5 percent and 7.1 percent. Brown County had the lowest unemployment rate (2.7 percent) while Stark County had the highest unemployment rate (9.0 percent). Though not shown, the unionization rates of Brown County and Stark County were both below the median for the state, providing initial evidence that relatively lower levels of unionization are not necessarily correlated with either low or high unemployment rates.

Figure 3: Summary Statistics of All 102 Illinois Counties, Most Recent Data

Variable	Minimum	Median	Maximum
Unionization Rate (2014)	10.5%	18.5%	30.9%
<i>Current Outcomes</i>			
Total Employment (June 2014)	573	8,269	2,499,492
Mean Household Income (2013)	\$35,154	\$59,895	\$108,570
Unemployment Rate (December 2014)	2.7%	6.2%	9.0%
<i>Growth Metrics</i>			
Employment Growth (June 2013 - June 2014)	-7.8%	1.6%	19.6%
Establishment Growth (2013Q2 - 2014Q2)	-6.0%	1.4%	4.4%
Household Income Growth (2000 - 2013)	-6.9%	32.2%	58.6%

Source(s): Proprietary membership data from two large Illinois labor unions; U.S. Census Bureau (2013), "2013 ACS 5-Year Estimates" and "2000 Census Summary File 4;" U.S. Bureau of Labor Statistics (2015), "Local Area Unemployment Statistics," "Quarterly Census of Employment and Wages." For more, see the "Data Sources" section.

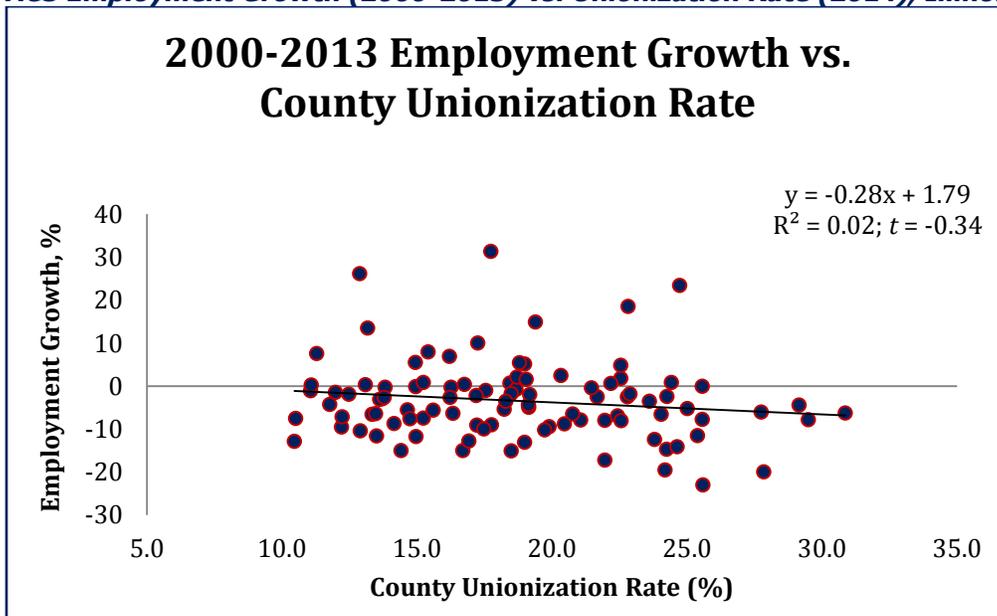
In Illinois, there is no statistical correlation between a county's unionization rate and its employment growth. Figures 4 and 5 display the relationship with employment growth using two separate datasets. Figure 4 utilizes information from the American Community Survey (ACS) administered by the U.S. Census Bureau and importantly reveals no statistical relationship between a county's unionization rate and employment growth from 2000 to 2013. While the relationship is slightly negative (i.e., a slight decrease in employment growth as unionization increases), it is statistically insignificant.² The Quarterly Census of Employment and Wages (QCEW) by the Bureau of Labor Statistics provides more recent data from June 2013 to June 2014, reported in Figure 5. Over the past year, employment growth has been almost completely unrelated to union density in Illinois counties. While the relationship is marginally positive (i.e., a slight increase in employment growth as unionization increases), it is also statistically insignificant. Taken together, the two datasets counter the allegation that unions have negative impacts on job growth over time.

Analyses of the relationship between unionization and the unemployment rate also generate a negligible association (Figures 6 and 7). Using five-year ACS estimates (when the state's unemployment rate was very high), a county's 2014 union membership rate has no relationship with its accompanying unemployment rate. The linear relationship is almost completely flat and is not statistically significant (Figure 6). Using December 2014 data from the Local Area Unemployment Statistics (LAUS) of the Bureau of Labor Statistics, however, an Illinois county's unionization rate is statistically correlated with a small increase in the county's unemployment rate. A 1 percentage point increase in unionization is associated with a negligible 0.07 percentage point increase in the unemployment rate on average. Assuming that union membership would fall by 8 to 9 percentage points in a county that adopted a RTW law, the recent data would correlate to a minimal 0.6 percentage point drop in the unemployment rate. Together, these employment and unemployment relationships align closely with the 0.4 percentage point increase in statewide employment associated with RTW laws that has previously been found by the University of Illinois and the Illinois Economic Policy Institute, although a zero or negative effect cannot definitively be ruled out (Manzo et al., 2013; Manzo & Bruno, 2014). As an example, in the economically

² When a variable is statistically significant, it means that county-level unionization is correlated with a positive or negative impact on the labor market outcome. When it is statistically insignificant, there is no discernible impact of a county's unionization rate on the particular outcome in Illinois. To measure significance, ILEPI and LEP ran t -tests on the relationship between county-level unionization rates and the economic outcomes for all graphs in Section V. For more, please see the "Methodology section at the end of this Research Report.

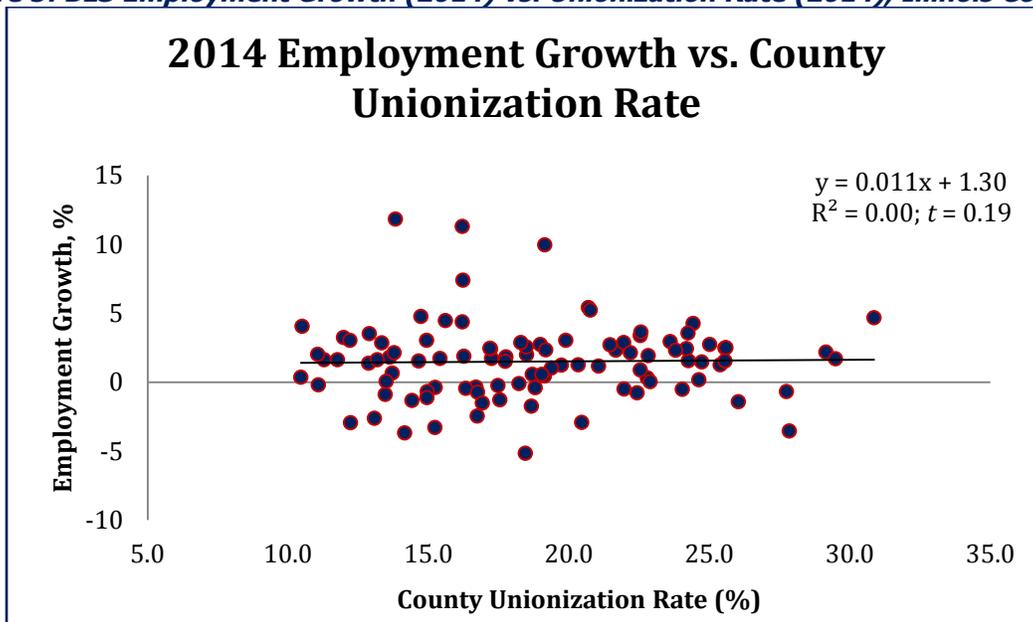
integrated six-county Chicago metropolitan region, the county with the lowest unionization rate (11.1 percent) actually had the highest unemployment rate (6.2 percent) in December 2014.

Figure 4: ACS Employment Growth (2000-2013) vs. Unionization Rate (2014), Illinois Counties



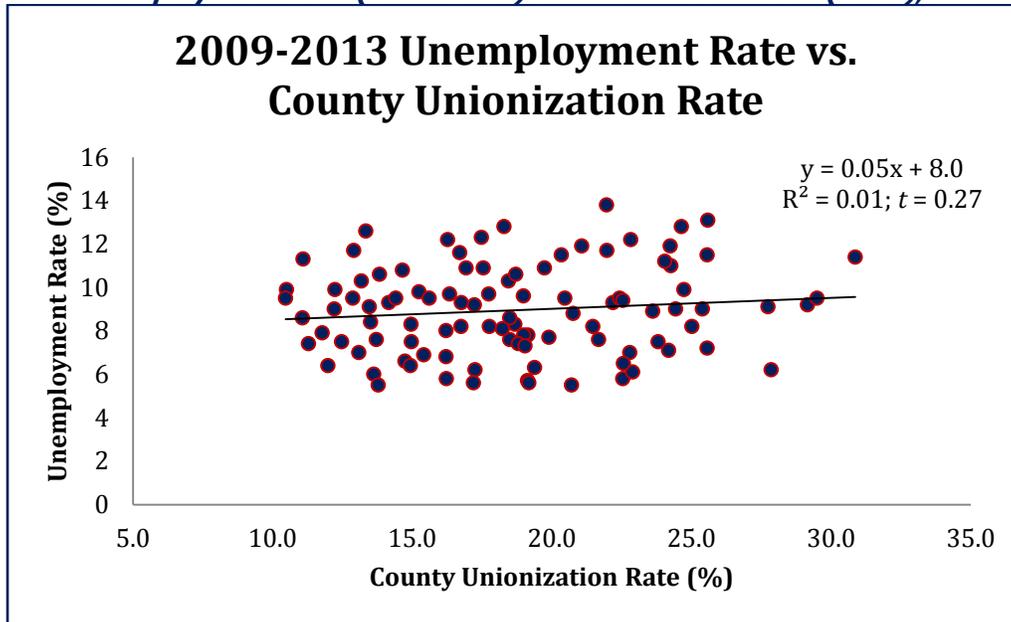
Source(s): Proprietary membership data from two large Illinois labor unions; U.S. Census Bureau (2013), "2013 ACS 5-Year Estimates" and "2000 Census Summary File 4." For more, see the "Data Sources" section. *NOTE: The maximum and minimum values were omitted to reduce the possibility of outliers. Thus, the analysis comprises 100 observations out of 102 Illinois counties.

Figure 5: BLS Employment Growth (2014) vs. Unionization Rate (2014), Illinois Counties



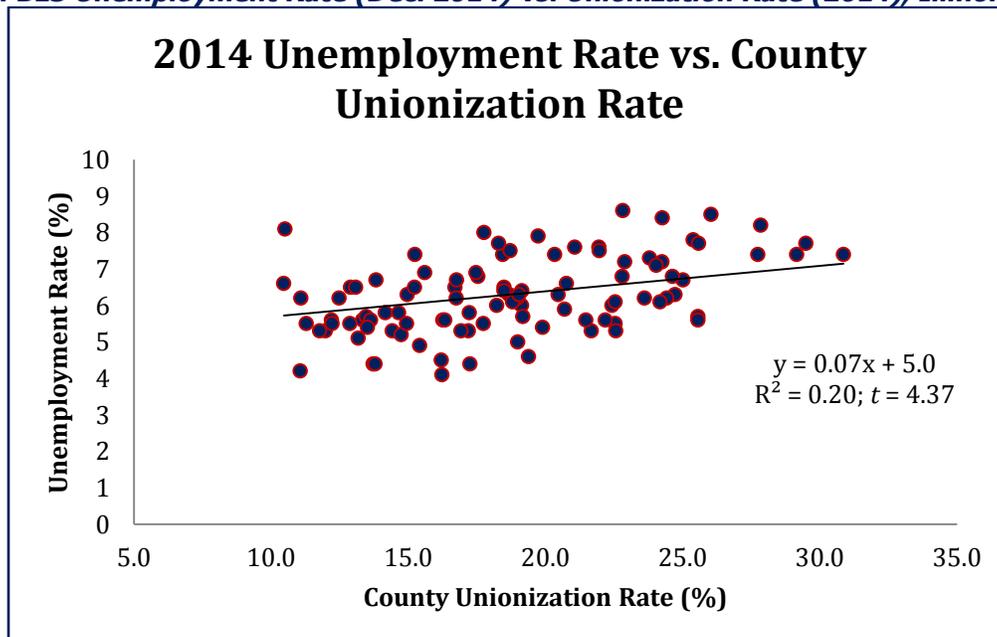
Source(s): Proprietary membership data from two large Illinois labor unions; U.S. Census Bureau (2013), "2013 ACS 5-Year Estimates;" U.S. Bureau of Labor Statistics (2015), "Quarterly Census of Employment and Wages." For more, see the "Data Sources" section. *NOTE: The maximum and minimum values were omitted to reduce the possibility of outliers. Thus the analysis comprises 100 observations out of 102 Illinois counties.

Figure 6: ACS Unemployment Rate (2009-2013) vs. Unionization Rate (2014), Illinois Counties



Source(s): Proprietary membership data from two large Illinois labor unions; U.S. Census Bureau (2013), "2013 ACS 5-Year Estimates." For more, see the "Data Sources" section. *NOTE: The maximum and minimum values were omitted to reduce the possibility of outliers. Thus, the analysis comprises 100 observations out of 102 Illinois counties.

Figure 7: BLS Unemployment Rate (Dec. 2014) vs. Unionization Rate (2014), Illinois Counties

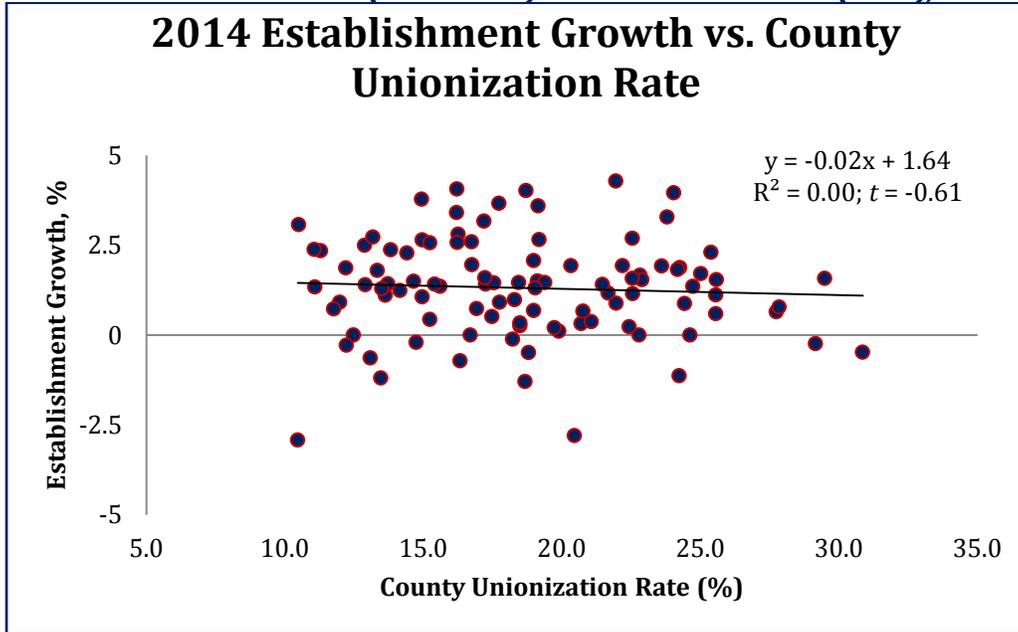


Source(s): Proprietary membership data from two large Illinois labor unions; U.S. Census Bureau (2013), "2013 ACS 5-Year Estimates;" U.S. Bureau of Labor Statistics (2015), "Local Area Unemployment Statistics." For more, see the "Data Sources" section. *NOTE: The maximum and minimum values were omitted to reduce the possibility of outliers. Thus the analysis comprises 100 observations out of 102 Illinois counties.

In addition, high union density does not discourage private businesses from locating in a county. Figure 8 presents QCEW data on establishment growth rates in Illinois counties from the second quarter of 2013 to the second quarter of 2014. Establishments refer to a single economic unit— such as a farm, a factory, or a store— that produces goods or services at a physical location. Note that a firm or company may consist of multiple establishments across multiple counties. The data indicate that 2014 establishment growth was once again

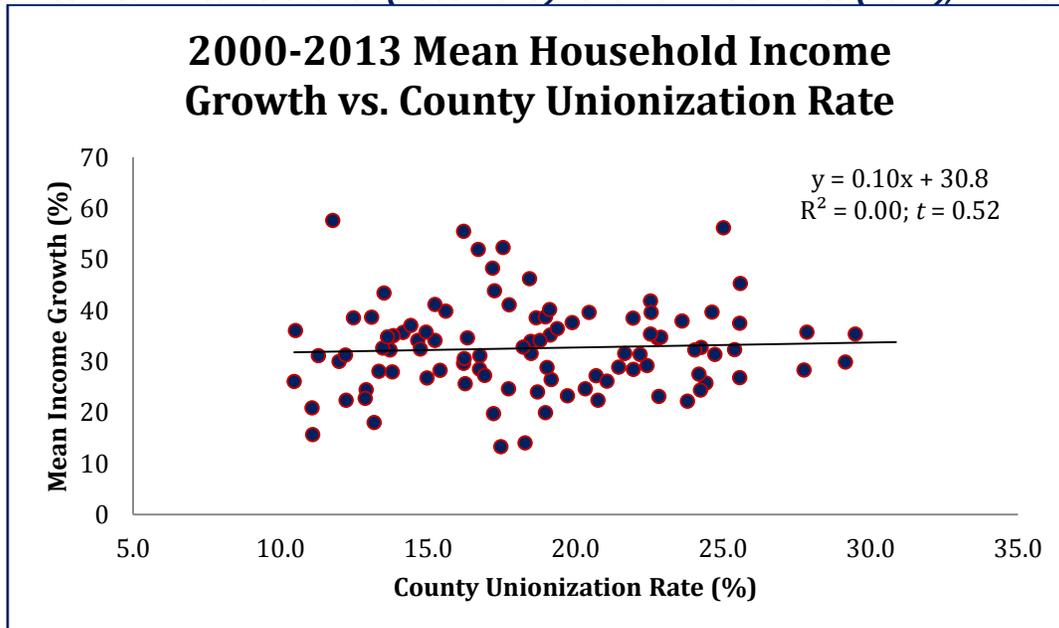
unrelated to the unionization rate in a county. Illinois businesses appear to be attracted to the state's high-skilled workforce and its proximity to major markets such as Chicago, and unconcerned with the union profile in any specific county.

Figure 8: BLS Establishment Growth (2013-2014) vs. Unionization Rate (2014), Illinois Counties



Source(s): Proprietary membership data from two large Illinois labor unions; U.S. Census Bureau (2013), "2013 ACS 5-Year Estimates;" U.S. Bureau of Labor Statistics (2015), "Quarterly Census of Employment and Wages." For more, see the "Data Sources" section. *NOTE: The maximum and minimum values were omitted to reduce the possibility of outliers. Thus the analysis comprises 100 observations out of 102 Illinois counties.

Figure 9: ACS Mean Income Growth (2000-2013) vs. Unionization Rate (2014), Illinois Counties



Source(s): Proprietary membership data from two large Illinois labor unions; U.S. Census Bureau (2013), "2013 ACS 5-Year Estimates" and "2000 Census Summary File 4." For more, see the "Data Sources" section. *NOTE: The maximum and minimum values were omitted to reduce the possibility of outliers. Thus, the analysis comprises 100 observations out of 102 Illinois counties.

Finally, a county's unionization rate has no impact on its mean household income *growth* in Illinois (Figure 9). Figure 9 measures the change in earnings over time in Illinois counties. As union density increases, mean household income growth marginally increases, but the relationship is almost flat and has no statistical significance. Previous research has suggested that, "RTW's effect on earnings growth is unclear," generally finding a small positive effect that diminishes over time and fails to fully "compensate for the policy's prominent downward effect on wages" (Manzo et al., 2013). Figure 9 would tend to support this conclusion. By lowering union membership and reducing the presence of collective bargaining agreements in workplaces, local right-to-work laws would lower employee wages and benefits. On the other hand, a lower unionization rate is not correlated with the rate of worker income growth, so the total overall effect on earnings is unambiguously negative over time.

County economies are dynamic and rely on market conditions in the entire state. Taken together, the previous scatterplot graphs in this section tell the same story: a high county-level unionization rate has no discernible impact on economic outcomes. Local right-to-work laws, which limit union power, would have little to no impact on business attraction, employment growth, and income growth in Illinois counties.

VI. ECONOMIC IMPACT ANALYSES EXPLAINED

Policymakers and economic development experts commonly use economic impact analyses to assess the impact of a project or policy change on the regional economy. The approach helps researchers determine the effect on everyone who either benefits or loses as a result of the change, beyond just those who are directly affected. An economic impact analysis accounts for the interrelationship between industries in the economy, following a dollar as it cycles through the region until it is spent elsewhere in another region, state, or country. This Research Report uses IMPLAN, an input-output modeling software, to measure effects on employment, worker incomes, economic output, and tax revenues.³

In predicting the economic effects of some, but not all, Illinois counties instituting local right-to-work ordinances, the University of Illinois and the Illinois Economic Policy Institute did not presume that specific counties would adopt the regulation. As a practical matter, the likelihood of any individual county becoming right-to-work is difficult to ascertain with any statistical confidence. Instead of assuming *specific* counties that would choose to free-ride, half of the state's counties ($n= 51$) were randomly selected to become right-to-work, excluding Cook County (Figure 10).⁴ Note that randomly dividing Illinois into 51 collective bargaining counties and 51 right-to-work counties is an arbitrary partition. If local ordinances are permitted, the number of adopting counties could be higher or lower. Nevertheless, choosing half provides a hypothetical that can be evaluated with statistical validity.

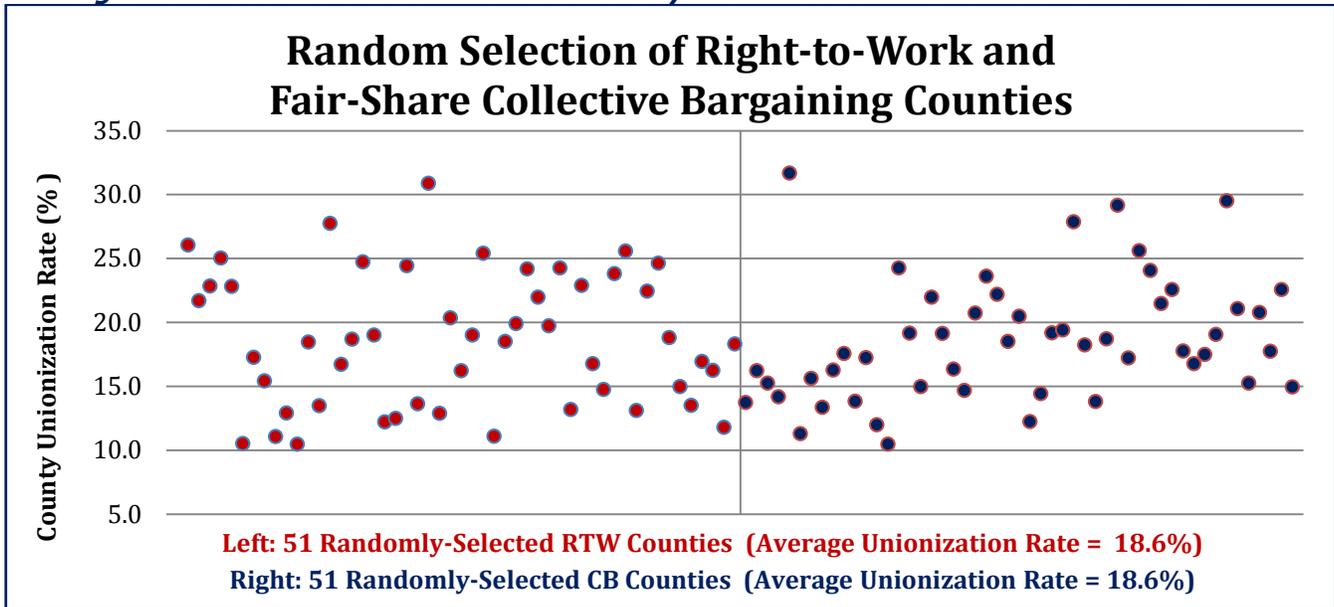
This study performs input-output analyses to estimate the impact of enacting local right-to-work laws in half of Illinois' counties and in seven economic regions with at least 100,000 residents. The seven economic regions are clusters of contiguous counties that approximately (though not precisely) correspond to the state's Core Based Statistical Areas (CBSAs), as determined by the U.S. Census Bureau. Below is a list of the counties included in each of the seven regions:

1. **Champaign-Urbana:** Champaign, Piatt, and Ford;
2. **Chicago:** Cook, DuPage, Lake, Will, Kane, and McHenry;
3. **Peoria-Bloomington:** McLean, Peoria, Woodford, Tazewell, and Stark;
4. **Quad Cities:** Rock Island, Henry, and Mercer;
5. **Rockford:** Winnebago and Boone;
6. **Springfield-Decatur:** Macon, Sangamon, Menard, and Logan; and
7. **St. Louis:** Madison and St. Clair.

³ For more information on the analysis in Section VI, please see the "Methodology" section at the end of this Research Report.

⁴ For more information on how counties were randomly selected, please see the "Methodology" section at the end of this Research Report.

Figure 10: Unionization Rates of 51 Randomly-Selected RTW Counties vs. 51 CB Counties



Source(s): Proprietary membership data from two large Illinois labor unions; U.S. Census Bureau (2013), "2013 ACS 5-Year Estimates." For more, see the "Methodology" section.

To forecast impacts, estimates of right-to-work's employment and earnings effects must be established and inputted into the economic model (Figure 11). This analysis draws on previous research, outlined in Section III, to provide a range of estimated effects. RTW's impact on employment ranges from a 1.2 percent decrease to a 1.4 percent increase with a middle-of-the-road estimate of +0.4 percent (Collins, 2012; Manzo et al., 2013; Manzo & Bruno, 2014a). A 1.2 percentage point decline in employment would occur if wages fall sufficiently far enough to shrink overall consumer demand. Earnings impacts inputted into the economic analysis include a 2.3 percent drop in worker income (Stevens, 2009), a middle-of-the-road 3.2 percent decline in worker wages (Gould & Shierholz, 2011; Manzo & Bruno, 2014a), and a high estimate in which labor income falls by 6.0 percent (Manzo et al., 2013). The matrix of scenarios based on the model inputs is reported in Figure 11. Importantly, since worker earnings decline unambiguously, it is assumed that decreases in total labor income are captured in higher proprietor incomes. In this way, local right-to-work laws redistribute wealth from workers to owners.

Figure 11: Scenario Matrix of Estimated RTW Impacts on Illinois Counties

Range of Scenarios			
(Employment, Earnings)	Earnings: Low	Earnings: Middle	Earnings: High
Employment: Low	(-1.2%, -2.3%)	(-1.2%, -3.2%)	(-1.2%, -6.0%)
Employment: Middle	(+0.4%, -2.3%)	(+0.4%, -3.2%)	(+0.4%, -6.0%)
Employment: High	(+1.4%, -2.3%)	(+1.4%, -3.2%)	(+1.4%, -6.0%)

Source(s): Stevens (2009); Gould and Shierholz (2011); Collins (2012); Manzo et al. (2013); Manzo and Bruno (2014).

VII. ECONOMIC IMPACTS OF LOCAL RIGHT-TO-WORK REGULATIONS TO THE STATE

Application of the earnings and employment estimates from Figure 11 provides a forecast of anticipated changes to the Illinois economy if local right-to-work regulations are permitted and half of the state's counties adopt them. Figure 12 displays the range of economic impacts to the state from the nine combinations. For right-to-work advocates, the worst case scenario is highlighted in light red while the best case upper bound is marked by the color green. The middle-of-the-road effect, in bold font, is the likeliest outcome.

The middle-of-the-road scenario assumes that right-to-work directly reduces average worker wages by 3.2 percent and increases employment by 0.4 percentage points in the counties that enact the policy. But regional economies do not stop at county lines. Non-direct impacts across county lines from changes in inter-industry purchases ("indirect" effects) and in consumer spending from adopting localities ("induced" effects) must also be considered. This market simulation predicts that, if half of Illinois' counties (excluding Cook County) enact a right-to-work regulation, direct employment would increase by 8,858 jobs. Due to reduced consumer demand from lower wages and a redistribution of wealth from working-class employees to upper-class owners who spend a smaller fraction of their disposable incomes, the local laws would cause a non-direct loss of 6,510 jobs. In sum, if 51 Illinois counties became right-to-work, total employment would increase by just 2,348 jobs.

These jobs would come at an exorbitant cost, however. Total worker income is predicted to decline by \$1.3 billion and economic output, or GDP, would contract by \$1.5 billion in Illinois. Dividing the change in economic output by the net change in total employment means that the social cost of "creating" 2,348 jobs through local right-to-work laws would amount to more than \$638,000 per job. The economic principle of "Pareto optimality" dictates that a policy which benefits a select few at the expense of the many is inefficient. Thus, the middle-of-the-road estimates conclude that allowing local right-to-work laws would be bad public policy (Figure 12).

Since economies are emergent and dynamic, an evaluation should include a range of probable estimates using various assumptions (Figure 12). Across all nine models, the predicted total employment effect spans from over 42,000 jobs lost to over 28,000 jobs gained by adopting right-to-work in 51 random Illinois counties excluding Cook. Nonetheless, even in the right-to-work advocate's best case scenario of a 28,354-job gain, total worker income would fall by over half a billion dollars (\$0.5 billion) and Illinois' GDP would be reduced by \$0.6 billion. This translates into a net cost, not benefit, to the state of over \$21,000 per job. In the worst-case scenario for proponents of right-to-work ordinances, total employee compensation would drop by \$3.0 billion and total economic output would decline by \$3.6 billion if half of the counties in Illinois became free-rider zones.

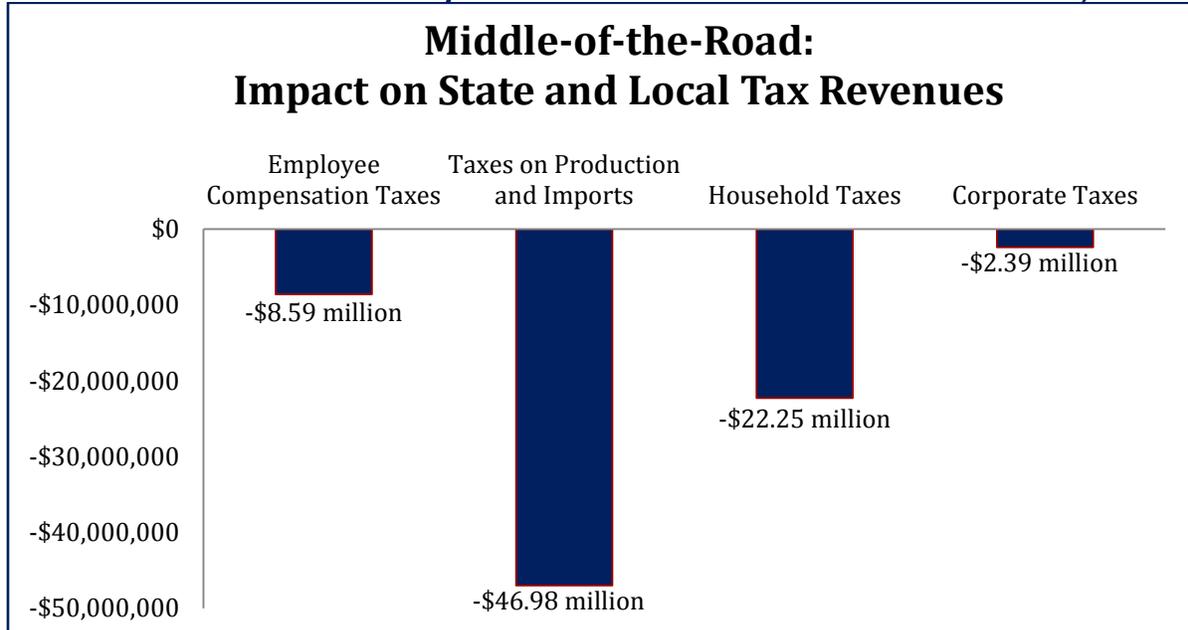
Figure 12: Predicted Economic Impacts of Local RTW Zones in 51 Illinois Counties, Entire State

Combination (Employment, Earnings)	Direct Change in Jobs	Non-direct Change in Jobs	Total Change in Jobs	Total Change in Worker Income	Total Change in Economic Output
(-1.2%, -2.3%)	-26,575	-7,381	-33,956	-\$1.433 billion	-\$1.699 billion
(-1.2%, -3.2%)	-26,575	-9,394	-35,969	-\$1.823 billion	-\$2.163 billion
(-1.2%, -6.0%)	-26,575	-15,658	-42,233	-\$3.039 billion	-\$3.605 billion
(+0.4%, -2.3%)	8,858	-4,469	+4,389	-\$0.867 billion	-\$1.029 billion
(+0.4%, -3.2%)	8,858	-6,510	+2,348	-\$1.263 billion	-\$1.499 billion
(+0.4%, -6.0%)	8,858	-12,857	-3,999	-\$2.495 billion	-\$2.960 billion
(+1.4%, -2.3%)	31,004	-2,650	+28,354	-\$0.514 billion	-\$0.610 billion
(+1.4%, -3.2%)	31,004	-4,707	+26,297	-\$0.914 billion	-\$1.084 billion
(+1.4%, -6.0%)	31,004	-11,107	+19,897	-\$2.156 billion	-\$2.557 billion
Worst Case Scenario		Middle-of-the-Road Scenario		Best Case Scenario	

Source(s): Result of authors' insertion of all combinations of employment and earnings estimates (Figure 11) into IMPLAN's industry change feature for 51 randomly-selected RTW counties. IMPLAN Version 3.0.17.2, MIG, Inc. © 2011. For more, see the "Methodology" section.

Despite minimal job gains in the middle-of-the-road simulation, reduced wages and a shrinking economy result in negative tax impacts for state and local governments in Illinois (Figure 13). With the +2,348 employment effect but -\$1.3 billion labor income impact, the anticipated effect on total state and local tax revenues would be a loss of \$80.2 million. This includes an \$8.6 million drop in employer and employee contributions to social insurance tax revenues; a \$47.0 million decline in production and import tax receipts, such as sales and business property taxes; \$22.2 million lost in household income taxes, property taxes, and other fees; and a \$2.4 million reduction in government receipts from corporate taxes. Local RTW zones would reduce average worker incomes, forcing additional families onto government assistance programs. Unfortunately, county RTW regulations would simultaneously curb resources available to state and local governments used to combat poverty.

Figure 13: Predicted Tax Revenue Impacts of Local RTW Zones in 51 Illinois Counties, Entire State



Source(s): Result of authors' insertion of middle-of-the-road combination of employment and earnings estimates (Figure 11) into IMPLAN's industry change feature for 51 randomly-selected RTW counties. IMPLAN Version 3.0.17.2, MIG, Inc. © 2011. For more, see the "Methodology" section.

If half of the state's counties (excluding Cook County) adopted a RTW law, union membership would be expected to decline considerably. Recent impacts from socioeconomic studies estimate that right-to-work lowers the unionization rate by between 8.3 and 9.6 percentage points (Davis & Huston, 1993; Hogler et al., 2004; Manzo & Bruno, 2014a). Though not shown, the University of Illinois and the Illinois Economic Policy Institute have predicted the total change in union members if local RTW zones are allowed. Assuming the unionization *rate* would fall by an average of 9 percentage points in the 51 random RTW counties over time, there would be 200,000 fewer union members in the state, a one-fifth decline in total membership.



VIII. INDEPENDENT REGIONAL ECONOMIC IMPACTS OF LOCAL RTW ZONES

As previously noted, the seven Illinois regions examined in this study center around the cities of Champaign-Urbana, Chicago, Peoria-Bloomington, the Quad Cities, Rockford, Springfield-Decatur, and St. Louis. All regions employ 100,000 individuals or more. The six-county Chicago area employs 65.9 percent of all workers in the entire state, according to the American Community Survey.

The subsequent analysis investigates the impact of randomly adopting right-to-work ordinances in each region *independently*. That is, predicted impacts in each regional analysis assume that *only* some counties within a given region adopt a right-to-work regulation and that the rest of the state maintains the fair-share collective bargaining law. It is an "all else constant" analysis. The statewide impacts, on the other hand, accounted for the fact that the economy is dynamic and that businesses and workers adjust to better or worse conditions in an area by relocating. Secondly, the random selection of RTW and fair-share counties as depicted in Figure 10 is carried over and used for each region. As a result, some areas have slightly more or less than half of the counties with the RTW designation. All areas include at least one RTW county through the randomization.

Figure 14 discloses the results of applying the middle-of-the-road inputs (a 3.2 percent reduction in worker wages and a 0.4 percent increase in employment) to each region independently. The results mirror those found in the statewide analysis. If local right-to-work ordinances are introduced into the Chicago six-county region, the economic area would be predicted to suffer a net loss of 5,547 jobs, a \$2.2 billion decline in worker income, a \$2.6 billion decrease in economic output, and a \$130 million cut to state and local tax revenues. Once again, these effects assume that the rest of the state remains fair-share collective bargaining and that right-to-work is only passed in the Chicago area. The impacts are more negative than those reported in the statewide analysis. This implies that businesses and workers would respond to a 3.2 percent fall in income in the Chicago region by moving either to other states or to collective-bargaining areas in Illinois (so the net statewide impact is smaller).

Right-to-work zones would have particularly negative impacts on workers in the Chicago economic region, but the results are quite similar across each of the other regions (Figure 14). While the total employment impacts of local right-to-work zones range from a loss of 180 jobs in the Champaign-Urbana region to a 342-job gain in the Rockford area, the total employee compensation would decrease in all local markets. The Champaign-Urbana, Quad Cities, Rockford, and Springfield-Decatur communities would all experience worker earnings declines of around \$40 to \$60 million. Labor income is consequently predicted to decline by \$16 million in the Peoria-Bloomington region and \$104 million in St. Louis economy. Thus, in the communities where employment slightly increases, local right-to-work zones create low-wage jobs and eliminate middle-class occupations.

Figure 14: Predicted Economic Impacts (Isolated) of Local RTW Zones by Integrated Region

Economic Region of Illinois	Total Change in Jobs	Total Change in Worker Income	Total Change in Economic Output	Total Change in State & Local Taxes
Champaign-Urbana Three County	-180	-\$42.60 million	-\$49.83 million	-\$3.11 million
Chicago Six County	-5,547	-\$2,227.6 million	-\$2,592.8 million	-\$130.73 million
Peoria-Bloomington Five County	+141	-\$16.19 million	-\$18.57 million	-\$0.86 million
Quad Cities Three County	+218	-\$40.38 million	-\$43.27 million	-\$1.11 million
Rockford Two County	+342	-\$56.05 million	-\$66.31 million	-\$3.40 million
Springfield-Decatur Four County	+118	-\$63.15 million	-\$67.29 million	-\$2.69 million
St. Louis Two County	+3	-\$103.63 million	-\$120.56 million	-\$6.13 million

Source(s): Result of authors' insertion of middle-of-the-road employment and earnings estimates (Figure 11) into IMPLAN's industry change feature for randomly-selected RTW counties in each region. IMPLAN Version 3.0.17.2, MIG, Inc. © 2011. For more, see the "Methodology" section.

Lower worker incomes in counties that implement right-to-work would depress consumer spending in the broader regional economy. Reduced consumer spending equates to a weaker economy and fewer tax revenues. In all integrated county regions, economic output would be predicted to decline by between \$18.6 million (the Peoria-Bloomington area) and \$120.6 million (the St. Louis area). Total state and local tax revenues would decline by approximately \$1 to \$3 million in each of the Champaign-Urbana, Peoria-Bloomington, Quad Cities,

Rockford, and Springfield-Decatur regions. Receipts from state and local taxes would also fall by over \$6 million in the St. Louis area (Figure 14).

All of the economic impact analyses reveal that local right-to-work regulations have negative impacts on worker incomes, gross domestic product (GDP), and government tax revenues. The key takeaway from the models is that, in areas where local right-to-work zones marginally raise employment, the newer jobs pay low wages while middle-class workers exit the labor market to find employment elsewhere. This supports previous findings by the University of Illinois and the Illinois Economic Policy Institute (Manzo and Bruno, 2014a). The balance between employers and employees tilts significantly toward employers in right-to-work areas. Facing decreased resistance from unions and fewer organizing threats, employers pay lower salaries and offer inferior benefits packages. Accordingly, more workers in right-to-work areas are compelled into reliance on government assistance, but tax revenues to pay for anti-poverty programs decline as well. As a result, the low-wage employment practices in right-to-work zones become subsidized by the higher incomes earned by workers in fair-share collective bargaining areas.



IX. LOCAL RTW ZONES WOULD INCREASE RACIAL AND GENDER INEQUALITY

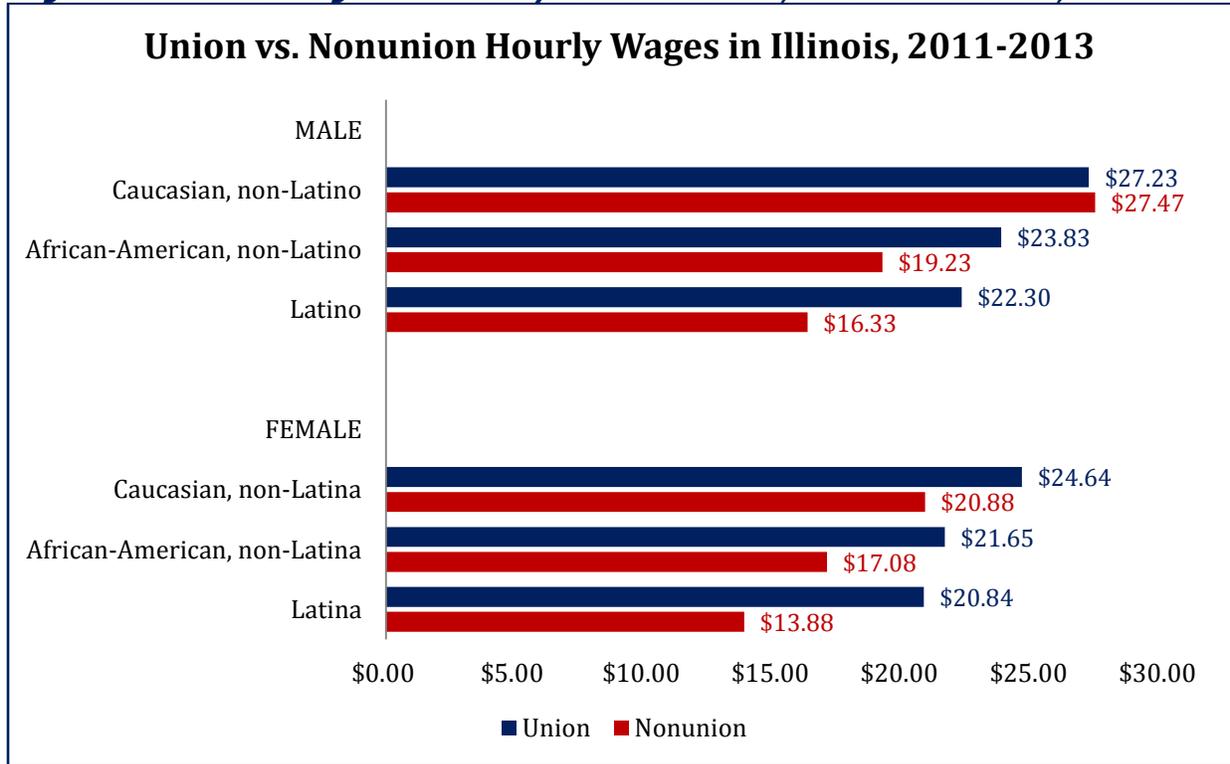
Advocates of RTW have suggested that unions are bad for non-white workers, who are underrepresented in joint labor-management training programs (Thomas, 2015). They further claim that right-to-work zones would specifically benefit economically depressed areas, especially where African American unemployment is high. This section evaluates whether right-to-work zones would close the income gap between non-Latino Caucasian males and all other workers.

First, estimates from *The State of the Unions 2014: A Profile of Unionization in Chicago, in Illinois, and in America* find that union membership was 15 percent for non-Latino Caucasians in 2013. By contrast, 26 percent of African-American workers were union members and 13 percent of Latino and Latina workers were unionized in Illinois. African-Americans are statistically the most likely racial or ethnic group to be unionized in Illinois (Manzo et al., 2015).

An analysis of hourly wages for union workers and nonunion workers in Illinois from 2011 to 2013 reveals that unions benefit all workers (Figure 15). The difference in average hourly wages between union and nonunion workers is positive for all major race and gender groupings in Illinois with the exception of Caucasian non-Latino males, where the -\$0.24 difference is statistically insignificant. Caucasian females who are union workers earn \$3.76 more per hour than nonunion Caucasian females. Unionized African-American male and female workers each earn \$4.60 and \$4.57 more per hour than their respective nonunion counterparts. Additionally, Latino

workers take home \$5.97 more per hour if they are unionized and Latina workers realize the largest advantage, with a positive \$6.96 per-hour union difference. Of the six race-gender pairs evaluated, average hourly wages ranged from \$20.84 to \$27.23 per hour for union members compared to just \$13.88 to \$27.47 per hour for nonunion members. Thus, unions actually provide greater benefits to nonwhite and female workers as compared with Caucasian males. Passage of local right-to-work laws would lower union membership and consequently increase both the racial income gap and the gender income gap in Illinois.

Figure 15: BLS Real Wages in Illinois by Race and Gender, Union vs. Nonunion, 2011-2013



Source(s): Center for Economic and Policy Research (2014), "CPS ORG" for 2011-2013. For more, see the "Data Sources" section.

X. CONCLUSION

Local right-to-work zones would have overall negative impacts for Illinois workers. First, workers earn more in fair-share collective bargaining economies. The preponderance of evidence indicates that incomes are between 2 and 6 percent lower in right-to-work (RTW) states. Compared to their counterparts in Indiana, a neighboring RTW state, Illinois workers earned 12.8 percent more in average hourly wages in 2014. There is also no evidence that higher unionization rates are associated with slower income growth across Illinois. Moreover, if half of Illinois' counties adopted RTW regulations, total labor income in the economy would fall by \$1.3 billion throughout the state.

Second, the impact of right-to-work laws on employment outcomes is mixed. Previous estimates suggest a marginal 0.4 percentage point increase in jobs due to RTW, but an effect of zero cannot conclusively be ruled out. The unemployment rate in western counties in RTW Indiana is higher than the unemployment rate in bordering eastern Illinois. Additionally, there is no evidence that a higher county-level union membership rate leads to smaller employment growth rate or establishment growth rate in Illinois counties. The predicted impact of 51 counties becoming right-to-work zones in Illinois is a small 2,348-job increase in the state.

A definitive consequence of enacting local right-to-work zones would be further erosion of Illinois' middle class. Labor unions would be expected to experience a loss of 200,000 members if half of the state's counties

(excluding Cook County) became right-to-work areas. Since unions provide greater income benefits for nonwhite and female workers than for Caucasian males, this causal impact of right-to-work would increase both racial income inequality and gender income inequality. Good middle-class jobs would be replaced by low-wage openings in right-to-work counties, and employee income would be transferred to wealthy employers. As result, total economic output in Illinois would fall by \$1.5 billion and cash-strapped local governments would experience a revenue loss of \$80 million.

Ultimately, economic analysis reveals that local right-to-work laws would likely empower *wealthy employers* at the expense of employees, the middle class, and the taxpayer. Local right-to-work regulations would encourage free-riding, lower worker earnings, and reduce state and local tax revenues. The result would be a weaker Illinois economy. Improving the entire Illinois economy by increasing consumer demand, raising worker wages, and making investments in education and public infrastructure are better policy prescriptions with proven track records to help all counties in the state.



PHOTO CREDITS

Cover Photo: "Flags in Front of City Hall Building, Rockford" is © Creative Commons Flickr user Daniel X. O'Neil.

Body Photos: "Illinois State Capital" is © Creative Commons Flickr user Jim Bowen (pp. 2), "Red Crane" is © Creative Commons Flickr user Chad Kainz (pp. 4), "Off Duty Crossing Guard" is © Creative Commons Flickr user TheeErin (pp. 14), "The HDR-files: Chicago-Evening Skyline (Navy Pier)" is © Creative Commons Flickr user Bert Kaufmann (pp. 16), and "DC: WI. GOP Fundraiser Protest" is © Creative Commons Flickr user alexmh17 (pp. 18).

All photos used in this report are under a Creative Commons Attribution– (ShareAlike) 2.0 Generic license, available here: <http://creativecommons.org/licenses/by-sa/2.0/> All photos are unmodified except for those on the cover © Daniel X. O'Neil and page 19 © alexmh17, which were cropped to remove a building and the distinct faces of the crowd, respectively.

Neither the Illinois Economic Policy Institute (ILEPI) nor the University of Illinois School of Labor and Employment Relations' Labor Education Program (LEP) owns any photos included in this report.

METHODOLOGY

The Illinois AFL-CIO and the Illinois Education Association (IEA-NEA) graciously provided official proprietary data on total union members in the state, sorted by county. The two datasets were subsequently summed together. The county-level union membership totals were then divided by estimates of total civilian employment for persons aged 16 and older in each county, as provided by the 2013 American Community Survey 5-year estimates. Note that the imputed county-level unionization rate is therefore union membership at the conclusion of 2014 divided by 2009-2013 average employment estimates. Employment grew by an estimated 103,000 jobs across Illinois during 2014 (BLS, 2015), so the actual unionization rates last year were likely a few decimal points lower than reported in nearly all Illinois counties (due to the larger employment denominator).

Furthermore, the imputed county-level unionization rate is also union residents in a county divided by employment in a county. Of course, many workers live in one locality and cross county lines for work. Because counties lose some workers from within their own borders but gain some from other counties, however, this phenomenon should not significantly distort county-level unionization rates. It is worth noting that the Bureau of Labor Statistics (BLS), in determining union membership rates, asks workers what state they live in, whether they have a job, and if they are a union member. The official state unionization rates by the BLS also do not cover union members who live in one state but work in another.

In each linear relationship graphed in Section V, the maximum and the minimum Y-values were omitted. For instance, the county with the highest annual employment growth and the county with the lowest employment growth were removed. This was done to eliminate any potential outliers. As such, each statistical association includes 100 counties out of the 102-county total in Illinois. For each graphical analysis, a *t*-value of greater than 1.96 (or lower than -1.96) indicates that the relationship is statistically significant at the 95 percent confidence level.

In Sections VI through VIII, economic impact analyses are used to determine the effect of the policy change on the entire economy compared to what would otherwise be the case in the absence of local right-to-work laws. The primary method to perform a regional economic impact analysis is to utilize an input-output (IO) model. An IO model accounts for the interrelationship between industries in a regional economy, essentially following a dollar as it cycles through the economy until it is expended elsewhere. IO quantifies recurring inter-industry spending in the form of "multipliers," estimating how much an extra dollar spent will add to the regional economy. A multiplier of 1.5, for example, means that \$1 million worth of spending will generate \$1.5 million worth of new economic activity. Multipliers thus quantify private supply chain operations, industry-to-industry spending, and the consumer demand of workers into one simple number.

The University of Illinois School of Labor and Employment Relations' Labor Education Program (LEP) and the Illinois Economic Policy Institute (ILEPI) both utilize IMPLAN, an input-output modeling software, to measure outcomes. IMPLAN, short for IMpacts for PLANNing, captures all the industry and institutional transactions in a region as a flow of money from purchasers to producers while also accounting for business and household taxes. The software is © MIG, Inc. (2011). To evaluate right-to-work's impact on gross domestic product (GDP), the "total value added" estimate is used instead of the "output" estimate, as suggested by Bess and Ambargis (2011).

To perform an economic impact analysis, LEP and ILEPI designated half of the counties in Illinois as right-to-work (RTW) counties. The 51 RTW counties (excluding Cook County) were randomly selected using the =*RAND()* function in Microsoft Excel. The 51 counties with the highest randomly-generated values were given a RTW value of 1 while the remaining 51 counties were assigned a RTW value of 0. For completion, the 51 random RTW counties had an average employment of 43,422.5 workers and an average unionization rate of 18.6 percent. Conversely, the 51 fair-share collective bargaining counties had an average employment of 73,225.8 workers and an average unionization rate of 18.6 percent.

DATA SOURCES

NOTE: For online readers, links to each source are embedded in the year.

- 2000 Census. ([2000](#)). Profile of Selected Economic Characteristics: 2000 Summary File 3. United States Census Bureau.
- American Community Survey. ([2013](#)). Selected Economic Characteristics: 2013 ACS 5-year estimates. United States Census Bureau.
- Center for Economic and Policy Research. ([2014](#)). CPS ORG Uniform Extracts, Version 2.0, Washington, DC. Data from 2011 through 2013.
- Economy at a Glance: Illinois. ([2015](#)). December 2014 data. Bureau of Labor Statistics, United States Department of Labor.
- Economy at a Glance: Indiana. ([2015](#)). December 2014 data. Bureau of Labor Statistics, United States Department of Labor.
- Hirsch, Barry and David Macpherson. ([2015](#)). "Union Membership and Coverage Database from the CPS," State: Union Membership Coverage, Density, and Employment by State and Sector, 1983-2014 (data from 2014); Andrew Young School of Policy Studies, Georgia State University; Department of Economics, Trinity University.
- IMPLAN Group, LLC. ([2011](#)). IMPLAN System (data and software), 16740 Birkdale Commons Parkway, Suite 206, Huntersville, NC 28078. Version 3.0.17.2.
- Local Area Unemployment Statistics Map. ([2015](#)). December 2014 data. Bureau of Labor Statistics, United States Department of Labor.
- Quarterly Census of Employment and Wages. ([2015](#)). 2013Q2 to 2014Q4 data. Bureau of Labor Statistics, United States Department of Labor.
- Regional and State Unemployment – 2014 Annual Averages. ([2015](#)). Bureau of Labor Statistics, United States Department of Labor.
- State and Metro Area Employment, Hours, and Earnings. ([2015](#)). December 2013 to December 2014 data. Bureau of Labor Statistics, United States Department of Labor.
- State Occupational Injuries, Illnesses, and Fatalities. ([2013](#)). Survey of Occupational Injuries and Illnesses (SOII) and Census of Fatal Occupational Injuries (CFOI). Bureau of Labor Statistics, United States Department of Labor.
- Statistics of U.S. Businesses (SUSB) Main. ([2012](#)). United States Census Bureau.

REFERENCES

NOTE: For online readers, links to each source are embedded in the year.

- Area Development. (2014). "28th Annual Survey of Corporate Executives: Availability of Skilled Labor New Top Priority," *Area Development*.
- Bess, Rebecca & Zoe Ambargis. (2011). "Input-Output Models for Impact Analysis: Suggestions for Practitioners Using RIMS II Multipliers," U.S. Bureau of Economic Analysis.
- Bureau of Labor Statistics (BLS). (2015). "Regional and State Unemployment – 2014 Annual Averages," United States Department of Labor.
- Collins, Benjamin. (2012). *Right to Work Laws: Legislative Background and Empirical Research*, Congressional Research Service, U.S. Congress.
- Conway, Jack and Matt James. (2014). *Opinion of the Attorney General: 14-007*. "Subject: Whether a local government may enact a right-to-work ordinance," Office of the Attorney General, Commonwealth of Kentucky.
- Davis, Joe and John Huston. (1993). "Right-to-Work Laws and Free Riding," *Economic Inquiry*, 31:1, 52-58.
- Dewan, Shaila. (2014). "Foes of Unions Try Their Luck in County Laws," *The New York Times*.
- Dinlersoz, Emin and Ruben Hernandez-Murillo. (2002). *Did "Right-to-Work" Work for Idaho?* Federal Reserve Bank of St. Louis, May/June 2002 Review.
- Eren, Ozkan and Serkan Ozbeklik. (2011). *Right-to-Work Laws and State-Level Economic Outcomes: Evidence from the Case Studies of Idaho and Oklahoma Using Synthetic Control Method*, Department of Economics, University of Nevada, Las Vegas.
- Gould, Elise and Heidi Shierholz. (2011). "The Compensation Penalty of 'Right-to-Work' Laws," Economic Policy Institute, Briefing Paper 299.
- Greer, Stan. (2015). "Right to Work States Benefit From Faster Growth, Higher Real Purchasing Power," National Institute for Labor Relations Research.
- Hogler, Raymond. (2011). "How Right to Work Is Destroying the American Labor Movement: From the Ku Klux Klan to the Tea Party," *Employee Responsibilities and Rights Journal*, 23, 295-304.
- Hogler, Raymond, Steven Shulman, and Stephan Weiler. (2004). "Right-to-Work Legislation, Social Capital, and Variations in State Union Density," *The Review of Regional Studies*, 34:1, 95-111.
- Kahlenberg, Richard and Moshe Marvit. (2012). "The Ugly Racial History of 'Right to Work,'" *Dissent Magazine*. Century Foundation.
- Kalenkoski, Charlene and Donald Lacombe. (2006). "Right-to-Work Laws and Manufacturing Employment: The Importance of Spatial Dependence," *Southern Economic Journal*, 73:2, 402-418.
- King Center. (2011). *What Martin Luther King Said About Unions, Unemployment and Economic Justice: Quotations from King's Speeches to Trade Unions*, The Martin Luther King Jr. Center for Nonviolent Social Change.
- Kramer, Will. (2015). "Will Kramer: Right to Work Will Kill Workers," *The Cap Times*. Subscriber services of the *Wisconsin State Journal*.

- Lafer, Gordon. (2011). "Right-to-Work': Wrong for New Hampshire," Economic Policy Institute, Briefing Paper 307.
- Lucci, Michael. (2015). "Act Locally: Right-to-Work Zones Can Spark IL Comeback," Illinois Policy Institute.
- Madigan, Lisa. (2015). "Authority of Counties and Municipalities to Adopt Right-to-Work Ordinances," Opinion of the Office of Attorney General, State of Illinois.
- Manzo IV, Frank and Robert Bruno. (2014a). *Free-Rider States: How Low-Wage Employment in "Right-to-Work" States Is Subsidized by the Economic Benefits of Collective Bargaining*, Illinois Economic Policy Institute; School of Labor and Employment Relations, University of Illinois at Urbana-Champaign.
- Manzo IV, Frank and Robert Bruno. (2014b). *Which Labor Market Institutions Reduce Income Inequality? Labor Unions, Prevailing Wage Laws, and Right-to-Work Laws in the Construction Industry*, Illinois Economic Policy Institute; School of Labor and Employment Relations, University of Illinois at Urbana-Champaign.
- Manzo IV, Frank, Robert Bruno, and Virginia Parks. (2014). *State of the Unions 2014: A Profile of Unionization in Chicago, in Illinois, and in America*, Illinois Economic Policy Institute; School of Labor and Employment Relations, University of Illinois at Urbana-Champaign; School of Social Service Administration, University of Chicago.
- Manzo IV, Frank, Roland Zullo, Robert Bruno, and Alison Dickson Quesada. (2013). *The Economic Effects of Adopting a Right-to-Work Law: Implications for Illinois*, School of Labor and Employment Relations, University of Illinois at Urbana-Champaign; Institute for Research on Labor, University of Michigan, Ann Arbor.
- Moore, William. (1980). "Membership and Wage Impact of Right-to-Work Laws," *Journal of Labor Research*, 1:2, 349-368.
- Rauner, Bruce. (2015). "Full Text: Rauner's State of the State Address," *Crain's Chicago Business*.
- Stevens, Lonnie. (2009). "The Effect of Endogenous Right-to-Work Laws on Business and Economic Conditions in the United States: A Multivariate Approach," *Review of Law and Economics*, 5:1, 595-614.
- Thomas, Charles. (2015). "Rauner Proposes Right-to-Work Zones in Economically-Depressed Areas," *ABC7 Chicago*.
- Vedder, Richard. (2010). "Right-to-Work Laws: Liberty, Prosperity, and Quality of Life," *Cato Journal* 30:1, 171-180.
- Zullo, Roland. (2011). *Right-to-Work Laws and Fatalities in Construction*, Institute for Research on Labor, Employment and the Economy, University of Michigan.
- Zycher, Benjamin, Jason Clemens, and Niels Veldhuis. (2013). *The Implications of US Worker Choice Laws for British Columbia and Ontario*. Fraser Institute.



ILLINOIS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
School of Labor and Employment Relations, Labor Education Program

