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The Economic and Fiscal Impacts of Collective Bargaining Agreements in Construction

A Northeastern Illinois Case Study

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Frank Manzo IV, MPP
Policy Director
Illinois Economic Policy Institute

Jill Gigstad
Midwest Researcher
Illinois Economic Policy Institute

Robert Bruno, PhD
Director
Labor Education Program
Project for Middle Class Renewal
University of Illinois at Urbana-Champaign

Executive Summary

Following the severe economic recession caused by the COVID-19 pandemic, Illinois is in urgent need of good jobs that provide family-supporting incomes and ensure access to quality health care coverage. One essential industry that has consistently offered pathways into good, middle-class careers is construction— primarily because it is highly unionized with strong collective bargaining agreements (CBAs).

A case study of CBAs between an association of union contractors and eight construction trades in the Chicago metro area reveals that construction industry CBAs provide workers ladders into the middle class.

- The typical union journeyworker earns \$77,300 per year, on par with the average annual income for full-time workers with bachelor’s degrees in Illinois’ urban areas (\$79,000 per year).
- On average, wages increased by 11 percent over the first three years of the CBAs, which is faster than inflation (6 percent) and indicates that construction workers are better off now than three years ago.
- Union construction workers earn between \$10 and \$15 in health insurance benefits per hour worked.

Construction industry CBAs fund the largest privately financed system of higher education in Illinois.

- Joint labor-management apprenticeship programs account for 97 percent of all construction apprentices.
- Joint labor-management apprenticeship programs have a 54 percent completion rate, significantly higher than the 31 percent completion rate of employer-only programs.
- The eight joint labor-management apprenticeship programs in the Chicago metro area case study invest at least \$69 million per year training the next generation of skilled construction workers.

Construction industry CBAs spur consumer spending, boost economic activity, and improve public budgets.

- CBAs supported \$7.5 billion in total wages for 97,000 union construction workers in northeastern Illinois in 2019.
- These middle-class construction workers spend money in the Illinois economy, saving or creating an additional 49,000 jobs per year— particularly in hospitals, retail stores, and food service.
- Combined, construction industry CBAs in the Chicago area support more than \$1.6 billion in total state income tax revenues, state sales tax revenues, and local property tax revenues each year.

Statewide data released by the U.S. Department of Labor from 2010 through 2019 shows that construction unionization promotes a strong middle class and reduces poverty in Illinois’ construction industry.

- The homeownership rate is 76 percent for households with union construction workers compared with 73 percent for households with nonunion construction workers.
- The marriage rate is 63 percent for union construction workers compared with 57 percent for nonunion construction workers.
- The private health insurance coverage rate is 98 percent for union construction workers compared with 70 percent for nonunion construction workers.
- Only 3 percent of union construction workers receive Earned Income Tax Credit (EITC) government assistance compared with 12 percent for nonunion construction workers.

Without construction industry CBAs, there would be negative consequences for economic, fiscal, and social outcomes in northeastern Illinois. If skilled construction workers suddenly worked without CBAs:

- Economic activity would decrease by \$2.2 billion annually and employment would shrink by 13,000 jobs.
- The State of Illinois would lose \$315 million in combined income tax and sales tax revenues and local governments would lose \$251 million in property tax revenues.
- More than 27,000 construction workers would lose their private health insurance coverage and more than 8,000 construction workers would qualify for Earned Income Tax Credit (EITC) government assistance.

Illinois’ construction industry offers a roadmap for family-sustaining careers in the post-COVID-19 economy. This essential industry demonstrates that both a robust middle class and a strong economy are outcomes produced by effective collective bargaining agreements.

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About the Authors

Frank Manzo IV, MPP is the Policy Director of the Illinois Economic Policy Institute. He earned a Master of Public Policy from the University of Chicago Harris School of Public Policy and a Bachelor of Arts in Economics and Political Science from the University of Illinois at Urbana-Champaign.

Jill Gigstad is the Midwest Researcher at the Illinois Economic Policy Institute. She earned a Bachelor of Arts in Political Science and International Studies from Iowa State University.

Robert Bruno, PhD is a Professor at the University of Illinois at Urbana-Champaign School of Labor and Employment Relations and is the Director of the Project for Middle Class Renewal. He earned a Doctor of Philosophy in Political Theory from New York University, a Master of Arts from Bowling Green State University, and a Bachelor of Arts from Ohio University.

Introduction

Illinois is in urgent need of good jobs. The novel coronavirus disease (COVID-19) has revealed the structural economic inequities in Illinois, with essential workers and those in “face-to-face” sectors most at risk of being exposed to the virus also earning lower wages, suffering from the highest job volatility, and having the highest likelihoods of losing their employer-sponsored health insurance (Manzo & Bruno, 2020a). The pandemic has also occurred on the heels of rising inequality, with the inflation-adjusted incomes of the top 1 percent in Illinois growing by 35 percent since 2000 compared with a 3 percent drop in annual income for the median household (Bruno & Manzo, 2019). Recovering from the severe economic recession caused by the public health emergency will require rapid growth in good jobs that not only provide family-supporting incomes, but also ensure access to quality health care coverage, paid family and medical leave policies, and retirement plans that allow workers to retire with dignity.

One essential industry that has consistently offered pathways into good, middle-class jobs is construction. There are about 232,000 wage and salary employees in Illinois’ construction industry, including more than 187,000 blue-collar construction and extraction workers (BEA, 2019; BLS, 2019a). In 2019, the construction industry contributed \$30.9 billion towards Illinois’ gross domestic product (GDP), which equates to a high annual productivity level of \$133,200 per construction worker (BEA, 2019).

The primary reason why Illinois’ construction industry delivers good middle-class jobs is because it is highly unionized with strong collective bargaining agreements. Nearly half of all workers in construction and extraction occupations (46 percent) are union members in Illinois, a unionization rate that is nearly three times higher than the comparable U.S. average (17 percent) (Manzo et al., 2020). On average, union members earn 11 percent higher wages than nonunion workers in Illinois (Manzo et al., 2020).

Illinois’ unionized construction industry finances the vast majority of apprenticeship training for the next generation of skilled construction workers. Between 2000 and 2016, joint labor-management apprenticeship programs that are cooperatively administered by labor unions and signatory employers trained 97 percent of all construction apprentices in Illinois. By requiring more hours of classroom and on-the-job training than public universities, these joint labor-management apprenticeship programs deliver competitive earnings that rival the salaries of workers with four-year bachelor’s degrees (Manzo & Bruno, 2020b).

This report, authored jointly by the Illinois Economic Policy Institute (ILEPI) and the Project for Middle Class Renewal (PMCR) at the University of Illinois at Urbana-Champaign, examines the economic, social, and fiscal impacts of collective bargaining agreements (CBAs) in northeastern Illinois’ construction industry. Using a case study approach, the report evaluates the impact of building trades contracts in the Chicago metropolitan area on worker earnings and apprenticeship training investments before a subsequent section assesses their effects on economic activity and state and local tax revenues. Then, individual-level data for construction workers across Illinois are analyzed to understand how construction unions affect Illinois’ middle class and social insurance programs. A subsequent section assesses impacts compared to an alternative scenario if skilled construction workers suddenly worked without collective bargaining agreements. A concluding section recaps key findings.

Economic Research on Collective Bargaining Agreements (CBAs)

Collective bargaining is the freedom of workers to join together in unions and negotiate contracts with their employers to establish the terms and conditions of employment. Collective bargaining is a method for formalizing labor-management relations, with workplace decisions made jointly by employers and employees, rather than unilaterally by one party. This process fosters democratic workplaces, with workers having a voice

in decisions over working conditions and having the ability to elect representatives to bargain on their behalf. Collective bargaining agreements (CBAs) typically include terms on pay, hours, time off, health insurance benefits, retirement benefits, safety procedures, and other workplace policies.

Collective bargaining is protected in the United States by constitutional law. In 1935, the National Labor Relations Act (NLRA) was passed, granting collective bargaining rights and organizing rights in the private sector (NLRB, 2020). However, in the 85 years since NLRA was enacted, those rights have become increasingly inaccessible to the overwhelming majority of the United States' workforce. Following the *Janus v. AFSCME Council 31* Supreme Court case which was decided by a vote of 5-4 in June 2018, public sector workers are now allowed to receive all the benefits of collective bargaining— including higher wages, better health care coverage, and legal representation— without any requirement to pay for these services.

Every year, millions of American workers across many sectors negotiate or renegotiate their workplace contracts. Numerous studies have found that collective bargaining boosts wages for workers, specifically for low-income employees, for middle-class workers, and for people of color (Callaway & Collins, 2017; Long, 2013; Mishel & Walters, 2003). On average, union households earn between 10 percent and 20 percent more than nonunion households— an income premium that has been consistent since the 1930s (Farber et al., 2018). In Illinois, for every \$1 paid in union dues, more than \$6 is returned to union members in after-tax income each year, a return on investment that is unparalleled for working families (Manzo & Bruno, 2016). Conversely, a recent study of three Midwest states with so-called “right-to-work” laws— which effectively weaken collective bargaining rights— found that the average worker in those states earned 8 percent lower wages and the median worker earned 6 percent less per hour than in states with free collective bargaining laws (Manzo & Bruno, 2017).

Workers covered by collective bargaining agreements also have better fringe benefits. 95 percent of union workers have access to health care coverage, 94 percent have access to retirement plans, and 91 percent have access to paid sick leave compared with just 68 percent health care access, 67 percent retirement plan access, and 73 percent paid sick leave access for nonunion workers (BLS, 2019b). Likewise, unions reduce poverty, lower worker turnover, and fight against inequality and discrimination in ways that reduce taxpayer costs for government assistance programs and increase tax revenues (Nunn et al., 2019; Manzo, 2015). According to recent economic research, union members contribute approximately \$1,110 more in taxes and receive about \$180 less in social safety net benefits, on average, than nonunion workers— positively impacting public budgets by \$1,290 per member per year (Sojourner & Pacas, 2018).

Unions in the construction industry are no different. While unionization has declined over time for construction workers, the construction industry remains one of the most unionized private-sector industries in the nation, and Illinois' construction workers are more unionized than their counterparts nationwide (CPWR, 2017; Manzo et al., 2020). Union journeyworkers in Illinois' construction industry earn nearly \$17 more per hour than their nonunion counterparts (Manzo & Bruno, 2020b). This higher pay is in addition to better health and retirement benefits, enhanced workplace safety procedures, and “gold standard” apprenticeship programs that ensure the next generation of workers is trained and highly productive.

CBAs Increase Construction Worker Earnings

This report reviews and analyzes collective bargaining agreements between the Mid-America Regional Bargaining Association (MARBA), a multi-employer association of union contractors, and eight construction trades unions in the Chicago metropolitan area. The following eight labor unions are included in the analysis: the International Association of Machinists and Aerospace Workers Mechanics' Local 701, the International Union of Bricklayers and Allied Craftworkers District Council 1, the International Brotherhood of Teamsters Joint

Council 25, the United Brotherhood of Carpenters and Joiners of America Chicago Regional Council of Carpenters, the Operative Plasterers’ and Cement Masons’ International Association Local 11, the International Union of Operating Engineers Local 150, the Chicago Journeymen Plumbers Local Union 130 United Association International Union, and the Laborers International Union of North America Chicago Laborers’ District Council. In total, these unions represent about 195,000 members and their families, including retirees. For each trade, the most recent CBAs all span three to five years and range from 2017-2020 to 2020-2025.

FIGURE 1: DATA ON CONSTRUCTION TRADES UNIONS, CBA YEARS, AND TOTAL MEMBERSHIP IN 2019

Union	Length of Contract	Effective Date	Members in 2019
Automobile Mechanics Local 701	2018-2021	6/1/2018	8,938
Bricklayers District Council No 1	2017-2020	6/1/2017	6,583
Teamsters Joint Council No. 25	2019-2023	6/1/2019	100,589
Chicago Regional Carpenters	2019-2024	6/1/2019	30,190
Cement Masons Union 11	2017-2021	6/1/2017	916
Operating Engineers Local 150	2017-2021	6/1/2017	22,500
Chicago Journeymen Plumbers Local 130	2020-2025	6/1/2020	6,164
Laborers' District Council	2017-2021	6/1/2017	18,767
Total for All Eight Unions	--	--	194,647

Source(s): Authors’ analysis of Mid-America Regional Bargaining Association CBAs (MARBA, 2020) and LM-2 union reports from the U.S. Department of Labor (USDOL, 2020).

Collective bargaining agreements provide ladders into the middle class for skilled construction trades workers in Illinois (Figure 2). The typical union journeyworker in these eight trades earned about \$44 per hour in 2019. The hourly base wage ranged from \$39 per hour for the Teamsters Council 25, to \$53 per hour for the Operating Engineers Local 150. However, construction is a seasonal industry, with peak employment during the summer months and little to no activity during the winter months. As a result, blue-collar construction workers in Illinois only work an average of 1,767 total hours every year, according to the most recent *Economic Census of Construction* (Census, 2017).

FIGURE 2: HOURLY WAGE AND ANNUAL INCOME FOR JOURNEYWORKERS IN NORTHEASTERN ILLINOIS, BY TRADE, IN 2019

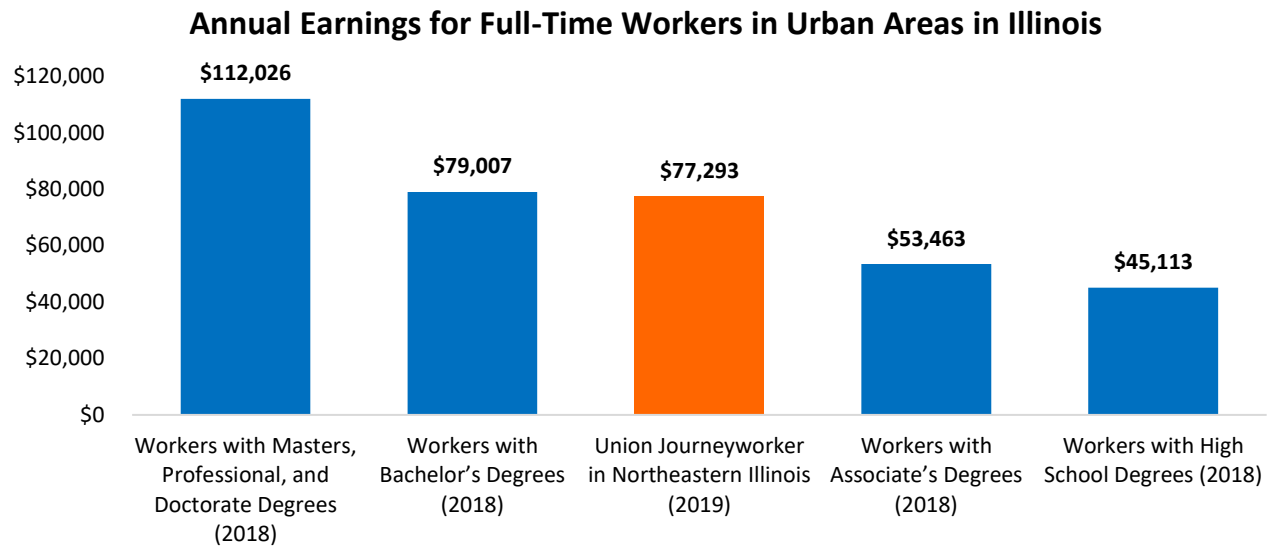
Union	Annual Income from Wages	Average Hourly Base Wage
Automobile Mechanics Local 701	\$77,501	\$43.86
Bricklayers District Council No 1	\$88,191	\$49.91
Teamsters Joint Council No. 25	\$69,531	\$39.35
Chicago Regional Carpenters	\$83,667	\$47.35
Cement Masons Union 11	\$80,204	\$45.39
Operating Engineers Local 150	\$94,446	\$53.45
Chicago Journeymen Plumbers Local 130	\$86,936	\$49.20
Laborers' District Council	\$80,840	\$45.75
Weighted Average for All Eight Unions	\$77,293	\$43.74

Source(s): Authors’ analysis of Mid-America Regional Bargaining Association CBAs (MARBA, 2020) and average hours worked by all construction workers in Illinois according to the *Economic Census of Construction* (Census, 2017).

Using this average annual employment duration, the typical union journeyworker in northeastern Illinois earns about \$77,300 in total wages per year. This is a solidly middle-class income that is on par with the average annual incomes for full-time workers with bachelor’s degrees in Illinois’ urban areas (\$79,000 per year), but less than average earnings for similar workers with advanced degrees (\$112,000 per year), such as Master of Business Administration (M.B.A), Doctor of Philosophy (Ph.D.), and Juris Doctor (J.D.) degrees (Figure 3). On average,

union journeyworkers complete about 7,300 hours of on-the-job and classroom training in Illinois’ joint labor-management apprenticeship programs, 27 percent more than the minimum requirements to earn a bachelor’s degree at Illinois’ public four-year universities (about 5,800 hours) (Manzo & Bruno, 2020b).

FIGURE 3: EARNINGS FOR JOURNEYWORKERS VS. FULL-TIME WORKERS BY EDUCATION LEVEL IN URBAN ILLINOIS, 2018



Source(s): Authors’ analysis of Mid-America Regional Bargaining Association CBAs (MARBA, 2020), average hours worked by all construction workers in Illinois according to the Economic Census of Construction (Census, 2017), and data from the 2018 American Community Survey (five-year estimates) on workers who report that they usually work 35 or more hours per week in urban areas in Illinois (Ruggles et al., 2020).

Over their most recent collective bargaining agreements, construction workers in northeastern Illinois are better off now than they were just a few years ago (Figure 4). In the eight trades with contracts negotiated with MARBA contractors, the hourly base wage increased by between about \$1 per hour for the Automobile Mechanics’ Local 701 and nearly \$3 per hour for the Operating Engineers Local 150 in the first three years. On average, hourly wages increased by \$2 per year for union construction workers in the local labor market, or a compounded change of 11 percent over three years. This annual wage gain exceeded the 6 percent compounded increase in consumer prices between July 2017 and July 2020 (BLS, 2020) (Figure 5). With wages rising faster than inflation, CBAs have strengthened the middle-class status of construction workers in the Chicago metro area.

FIGURE 4: INCREASE IN HOURLY WAGE IN NORTHEASTERN ILLINOIS, BY TRADE, FIRST THREE YEARS OF CONTRACT

Wage Increases by Year				
Union	Year 1	Year 2	Year 3	Average
Automobile Mechanics Local 701	\$1.15	\$1.15	\$1.25	\$1.18
Bricklayers District Council No 1	\$2.23	\$2.30	\$0.00	\$1.50
Teamsters Joint Council No. 25	\$1.94	\$2.00	\$2.07	\$2.00
Chicago Regional Carpenters	\$1.20	\$1.21	\$1.24	\$1.22
Cement Masons Union 11	\$2.24	\$2.30	\$2.37	\$2.30
Operating Engineers Local 150	\$2.80	\$2.90	\$3.00	\$2.90
Chicago Journeymen Plumbers Local 130	\$1.94	\$2.19	\$2.66	\$2.27
Laborers' District Council	\$2.24	\$2.31	\$2.39	\$2.32
Weighted Average for All Eight Unions	\$1.92	\$1.99	\$1.99	\$1.97

Source(s): Authors’ analysis of Mid-America Regional Bargaining Association CBAs (MARBA, 2020).

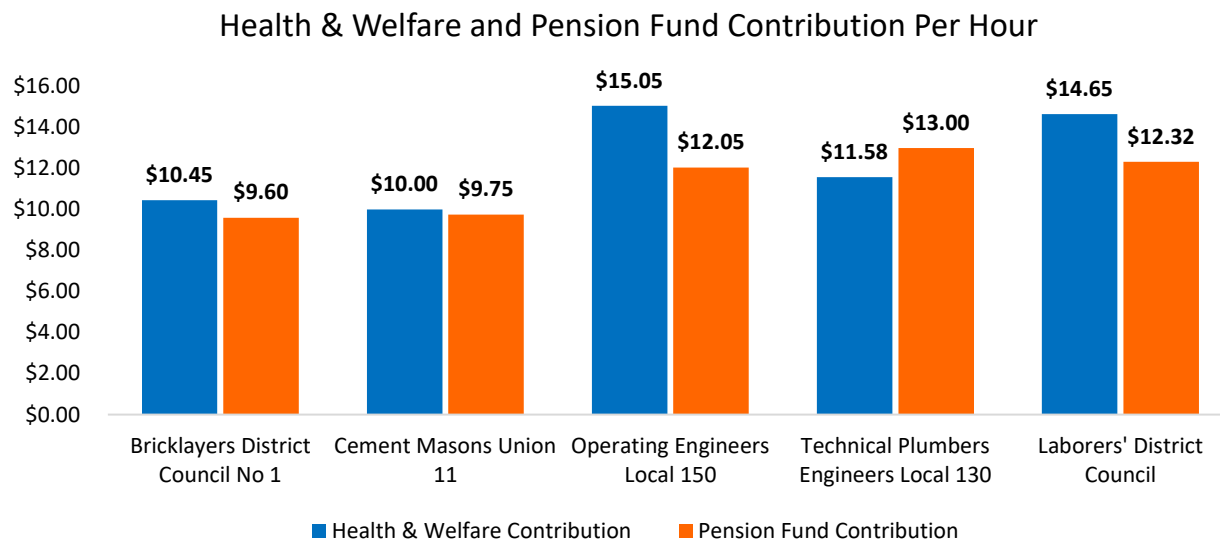
Construction industry collective bargaining agreements in northeastern Illinois also ensure that construction workers have access to both high-quality health insurance and retirement plans (Figure 6). In the Chicago metro area, union construction workers earn between \$10 and \$15 in health insurance benefits per hour worked. Union construction workers also invest about \$10 to \$13 in pension contributions per hour worked. Consequently, while the minimum wage is currently \$13.50 per hour in the City of Chicago and \$10 per hour in the rest of Illinois, union construction workers in northeastern Illinois earn more than twice those amounts in combined health insurance and retirement benefits alone per hour due to their CBAs. Union construction workers in the Chicago metro area earn between \$20 and \$27 per hour in these fringe benefits (Figure 6). By promoting financial security through middle-class wages and strong fringe benefits, collective bargaining agreements attract and retain skilled workers into the trades in the Chicago metro area.

FIGURE 5: AVERAGE INCREASE IN CONSTRUCTION WORKER WAGES IN NORTHEASTERN ILLINOIS VS. INFLATION, 2017-2020

Percent Wage Increases vs. Annual Inflation				
Union	Year 1	Year 2	Year 3	Compounded
Weighted Average for All Eight Unions	3.67%	3.66%	3.53%	11.26%
Inflation: CPI-U (July 2017- July 2020)	2.95%	1.81%	0.99%	5.85%

Source(s): Authors’ analysis of Mid-America Regional Bargaining Association (MARBA, 2020) CBAs and the national rise in the average cost of living between July 2017 and July 2020 according to the Consumer Price Index for All Urban Consumers (CPI-U) (BLS, 2020).

FIGURE 6: HEALTH AND RETIREMENT BENEFITS, HOURLY, FOR UNIONS WITH HOURLY CONTRIBUTIONS, 2019



Source(s): Authors’ analysis of Mid-America Regional Bargaining Association CBAs (MARBA, 2020).

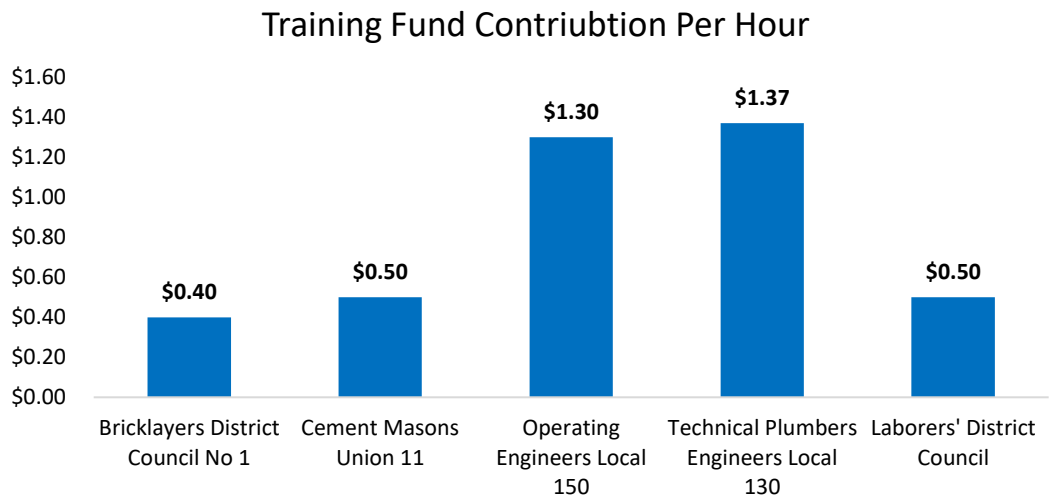
CBAs Fund Illinois’ Largest Privately Financed System of Higher Education

Registered apprenticeships are training programs in which participants get the opportunity to “earn while they learn,” with tuition costs covered by employers and labor-management organizations who gain access to a pool of skilled and productive workers for physically demanding and often hazardous occupations. Apprenticeship training is particularly important to the construction industry in Illinois. With contractors in need of skilled labor, these programs ensure a stable supply of workers for high demand occupations. Since 2000, 85 percent of all registered apprentices in Illinois were enrolled in construction training programs (Manzo & Bruno, 2020b).

Apprenticeship programs are sponsored either jointly by labor unions and signatory employers or unilaterally by employers. The largest apprenticeship programs in the state are the joint labor-management programs, which are cooperatively administered and have standards and wages that are privately negotiated between contractors and unions. These programs are funded by “cents-per-hour” contributions from employers. By contrast, employer-only programs rely entirely on voluntary contributions from contractors. These programs are often smaller and poorly funded because contractors struggling to win short-term project bids have less incentive to invest in long-term workforce training. As a result, joint labor-management apprenticeship programs account for 97 percent of all construction apprentices in Illinois. Joint labor-management programs are also more diverse apprenticeship classes than employer-only programs (Manzo & Bruno, 2020b).

Through collective bargaining agreements, Illinois’ construction industry operates the largest privately financed system of higher education in the state (Figure 8). For the construction trades analyzed in this report, employers invest between \$0.40 per hour and \$1.37 per hour in apprenticeship training on behalf of their workers. These per-hour contributions by union contractors and current construction workers provide substantial revenue to train future construction workers. In the most recent fiscal years available, these eight registered apprenticeship programs invested at least \$69 million over the year training the next generation of skilled construction workers, based on Form 990 tax data disclosed to the Internal Revenue Service (IRS) and made publicly available on online databases (ProPublica, 2020; Candid, 2020) (Figure 9).

FIGURE 8: APPRENTICESHIP BENEFITS PER HOUR, FOR FIVE UNIONS WITH HOURLY CONTRIBUTIONS, 2019



Source(s): Authors’ analysis of Mid-America Regional Bargaining Association CBAs (MARBA, 2020).

FIGURE 9: TOTAL EXPENSES OF REGISTERED APPRENTICESHIP PROGRAMS, FY2017 OR FY2018

Union	Total Apprenticeship Investment
Automobile Mechanics Local 701	\$680,880
Bricklayers District Council No 1	\$2,416,492
Teamsters Joint Council No. 25	\$1,044,117
Chicago Regional Carpenters	\$16,004,614
Cement Masons Union 11	Not available
Operating Engineers Local 150	\$30,339,359
Chicago Journeymen Plumbers Local 130	\$6,768,543
Laborers' District Council	\$11,604,077
Total for All Seven Unions	\$68,858,082

Source(s): Authors’ analysis of IRS Form 990 reports (ProPublica, 2020; Candid, 2020) for most recent year available, either fiscal year 2018 or fiscal year 2017.

Registered apprenticeships are the bachelor’s degrees of the construction industry and are a great alternative to college for Illinois’ youth. In Illinois, the number of active apprentices has expanded by 44 percent since 2011 (DOLETA, 2019). At the same time, total enrollment at Illinois’ public universities fell by 11 percent from Fall 2011 to Fall 2018 (IBHE, 2019). In particular, joint labor-management apprenticeship programs negotiated in construction CBAs require an average of 7,300 hours of training and have a 54 percent completion rate. These outcomes are significantly better than the comparable requirements (6,300 hours) and completion rate (31 percent) for employer-only construction programs (Manzo & Bruno, 2020b). In fact, joint labor-management apprenticeship programs in construction also deliver training hours, graduation rates, and competitive earnings that rival the performance of Illinois’ four-year universities (Manzo & Bruno, 2020b).

CBAs Spur Consumer Spending, Boost the Economy, and Improve Public Budgets

To calculate the effect of construction industry CBAs on economic activity, this analysis utilizes IMPLAN. IMPLAN is an industry-standard economic modeling software that inputs U.S. Census Bureau data, accounts for the interrelationship between households and businesses, and follows dollars as they cycle throughout the economy (IMPLAN, 2020). Estimating the effect on consumer demand requires average annual incomes to be multiplied by the total number of current members actively employed in construction (Figure 10). The number of union members reported in annual LM-2 reports submitted to the U.S. Department of Labor generally includes retirees as well as other working-age members who are not actively employed for any reason, including those who are unemployed or out-of-work due to illnesses or injuries. To determine the share of total members who are actively employed, Figure 10 compares available data on current workers reported in annual funding notices that are required by the unions’ pension plans (e.g., MOE, 2020). On average, current workers account for about half (51 percent) of the total membership reported in fiscal year 2019 LM-2 reports. Notably, these union construction workers participate in pension plans that have an average funded ratio of 84 percent, which is in the “green zone” and not in critical or endangered status under federal pension law.

FIGURE 10: CURRENT EMPLOYEES (FY2019 OR FY2018 NOTICE) VS. TOTAL MEMBERS (FY2019), AND FUNDED RATIOS

Union	Current Workers	Reported Members	Current Worker Share	Pension Funded Ratios
Automobile Mechanics Local 701 (FY18)	4,449	9,279	48.9%	76.0%
Chicago Regional Carpenters (FY18)	11,825	30,363	39.0%	93.0%
Operating Engineers Local 150 (FY19)	12,511	22,500	55.6%	80.9%
Laborers' District Council (FY18)	12,143	18,361	66.1%	83.1%
Total or Weighted Average for Four Unions	40,928	80,254	50.9%	84.4%

Source(s): Annual Funding Notices for the Automobile Mechanics’ Local No. 701 Union and Industry Pension Fund (Local 701, 2019), Chicago Regional Council of Carpenters Pension Fund (Carpenters, 2019), Midwest Operating Engineers Pension Trust Fund (MOE, 2020), and the Laborers’ Pension Fund (Laborers, 2019).

Collective bargaining agreements supported an estimated \$7.5 billion in total worker wages for approximately 97,000 union construction workers in northeastern Illinois in 2019 (Figure 11).¹ These 97,000 Illinois union construction workers spend billions of dollars locally in the Illinois economy, supporting more than 49,000 middle-class jobs that pay average incomes of \$58,800 annually per worker. In total, an estimated \$8.3 billion is circulated in business sales and economic output from the spending of construction workers and their families in the Chicago metro area. Ultimately, over 5,000 jobs are created or saved and \$848 million in economic activity is supported for every 10,000 union construction journeymen in Illinois (Figure 11).

¹ For simplicity, this estimate assumes that actively employed construction workers account for 50 percent of total reported members for the eight unions with CBAs negotiated with MARBA, based on the analysis conducted in Figure 10.

While more than 49,000 jobs are indirectly supported by construction industry CBAs, they have the largest effects on specific industries (Figure 12). The biggest industry that is indirectly impacted by CBAs in Illinois is the hospital and health care services industry. Nearly 8,600 jobs are created or saved at Illinois hospitals and health care facilities due to the large investment in health care benefits negotiated in construction industry CBAs. The retail and wholesale trade sector annually employs about 8,000 more workers in Illinois because of the high consumer spending of union construction workers in the Chicago metro area, whose wages have risen faster than inflation. Similarly, the accommodation and food services sector— which includes restaurants and bars— employs nearly 5,800 more workers as a result of these construction industry CBAs. Construction industry CBAs have a commensurate impact on professional and business services— which include legal services and architecture and engineering services (Figure 12).

FIGURE 11: IMPACTS OF CONSTRUCTION INDUSTRY CBAS ON JOBS AND ECONOMIC ACTIVITY, 2019

Economic Impacts	Current Union Workers	Total Income from Wages	Jobs Created or Saved	Income Per Job Created or Saved	Total Economic Output
Total Effects	97,324	\$7,522,395,668	49,268	\$58,801	\$8,251,151,277
Per 10,000 Union Construction Journeyworkers			5,062	\$58,801	\$847,802,318

Source(s): Authors’ analysis using Mid-America Regional Bargaining Association CBAs (MARBA, 2020), average hours worked by all construction workers in Illinois according to the Economic Census of Construction (Census, 2017), and LM-2 union reports from the U.S. Department of Labor (USDOL, 2020) and annual funding notices for pension funds (see Figure 10). Data are inputted into an input-output economic impact analysis called IMPLAN (IMPLAN, 2020).

FIGURE 12: IMPACT OF CONSTRUCTION INDUSTRY CBAS ON JOBS IN OTHER INDUSTRIES BASED ON TOTAL SALES, 2019

Rank	Sector	Jobs Created or Saved
1	Hospitals and Health Care Services	8,566
2	Retail and Wholesale Trade	7,990
T-3	Accommodation and Food Services	5,766
T-3	Professional and Business Services	5,766
5	Finance, Insurance, and Real Estate	5,438
6	Social Assistance and Nonprofits	4,058
7	Educational Services	2,103
8	Transportation and Warehousing	1,996
9	Arts, Entertainment, and Recreation	1,479
10	Manufacturing	501
--	All Other Sectors	5,606

Source(s): Authors’ analysis using Mid-America Regional Bargaining Association CBAs (MARBA, 2020), average hours worked by all construction workers in Illinois according to the Economic Census of Construction (Census, 2017), and LM-2 union reports from the U.S. Department of Labor (USDOL, 2020) and annual funding notices for pension funds (see Figure 10). Data are inputted into an input-output economic impact analysis called IMPLAN (IMPLAN, 2020).

Collective bargaining agreements in the construction industry expand the tax base in Illinois (Figure 13). By boosting the earnings of construction workers, CBAs result in higher income tax revenue for the State of Illinois. With higher incomes, construction workers are able to afford to buy homes in the communities where they build schools, roads, bridges, parks, and other essential infrastructure, leading to greater property tax revenues for local governments and public schools. As discussed previously, construction industry CBAs also drive consumer spending, resulting in more state sales tax revenues as well as the creation of additional jobs for indirectly-impacted workers who also contribute towards income taxes, sales taxes, and property taxes. Accordingly, middle-class workers belonging to these eight northeastern Illinois construction unions contribute \$1.1 billion every year in income taxes, sales taxes, and property taxes. Through their consumer spending supporting businesses and workers in other sectors of the economy, their induced effects generate an additional \$540

million in income taxes, sales taxes, and property taxes. Combined, collective bargaining agreements in the Chicago area’s construction industry support over \$1.6 billion in total state and local tax revenues– including \$499 million in state income tax revenues, \$500 million in state sales tax revenues, and \$651 in local property tax revenues (Figure 13).

FIGURE 13: IMPACTS OF CONSTRUCTION INDUSTRY CBAs ON STATE AND LOCAL TAX REVENUES, 2019

Tax Impacts	State Income Taxes	State Sales Taxes	Local Property Taxes	Total
Direct (Construction Workers)	\$361,074,992	\$320,679,284	\$429,415,343	\$1,111,169,619
Induced (Consumer Spending)	\$137,898,914	\$179,283,907	\$222,229,918	\$539,412,739
Total Annual Impacts	\$498,973,906	\$499,963,190	\$651,645,261	\$1,650,582,358

Source(s): Authors’ analysis using Mid-America Regional Bargaining Association CBAs (MARBA, 2020), average hours worked by all construction workers in Illinois according to the Economic Census of Construction (Census, 2017), LM-2 union reports from the U.S. Department of Labor (USDOL, 2020) and annual funding notices for pension funds (see Figure 10). Data are inputted into an input-output economic impact analysis called IMPLAN (IMPLAN, 2020). State income taxes are based on a rate of 4.80 percent, which is the effective income tax rate for individuals with \$77,293 in annual income (SmartAsset, 2020a). Average property taxes are based on 2.31 percent of the home value (SmartAsset, 2020b), with a median home value of \$252,000 in the Chicago metro area (Rodkin, 2019).

Collective bargaining agreements also create direct jobs at labor unions and in registered apprenticeship programs that otherwise would not occur.² In the Chicago metro area, these collective bargaining agreements directly create about 1,300 jobs at union halls and around 900 workers at registered apprenticeship programs annually, according to Form 990 tax data disclosed to the Internal Revenue Service (IRS) and made publicly available on online databases (ProPublica, 2020; Candid, 2020) (Figure 14). These roughly 2,200 positions include middle-class careers such as apprenticeship instructors, apprenticeship coordinators, organizers, business agents, accountants, lawyers, administrative assistants, and benefits representatives.

FIGURE 14: UNION JOBS AND APPRENTICESHIP JOBS, FISCAL YEAR 2017 OR FISCAL YEAR 2018

Union	Local Union Employees	Apprenticeship Program Employees
Automobile Mechanics Local 701	176	4
Bricklayers District Council No 1	25	10
Teamsters Joint Council No. 25	23	5
Chicago Regional Carpenters	169	78
Cement Masons Union 11	9	Not available
Operating Engineers Local 150	345	140
Chicago Journeymen Plumbers Local 130	356	60
Laborers’ District Council	183	600
Total for All Eight Unions	1,286	897

Source(s): Authors’ analysis of IRS Form 990 reports (ProPublica, 2020; Candid, 2020) for most recent year available, either fiscal year 2018 or fiscal year 2017.

What has been the effect of the most recent collective bargaining agreements in the construction industry of northeastern Illinois? While Figures 10 through 14 present the annual impacts of construction industry CBAs, these outcomes are the result of decades of CBA negotiations that have built upon one another over time. The most recent CBAs are no exception. On average, the most recent CBAs increased the wages of skilled union construction workers by about 3.6 percent per year, significantly higher than the rate of inflation (see Figure 5). In total, these CBAs have annually lifted construction worker incomes by an estimated \$166 million after

² As a reminder, just 3 percent of all construction apprentices in Illinois are not enrolled in joint labor-management apprenticeship programs cooperatively managed by unions and signatory contractors (Manzo & Bruno, 2020b).

accounting for the rising cost of living. Since 2017, this \$166 million relative boost to construction worker earnings alone has saved or created 1,100 jobs and generated \$36 million in extra state and local tax revenues simply by outpacing the rate of inflation (Figure 15).

FIGURE 15: NET ANNUAL EMPLOYMENT, ECONOMIC, AND TAX IMPACTS OF MOST RECENT CONSTRUCTION INDUSTRY CBAs

Economic and Tax Impacts	Inflation-Adjusted Increase in Wages	Jobs Created or Saved	State Income Taxes	State Sales Taxes	Local Property Taxes
Net Effects	\$165,644,630	1,129	\$10,977,426	\$10,999,190	\$14,336,196

Source(s): Authors’ analysis using Mid-America Regional Bargaining Association CBAs (MARBA, 2020), average hours worked by all construction workers in Illinois according to the Economic Census of Construction (Census, 2017), LM-2 union reports from the U.S. Department of Labor (USDOL, 2020) annual funding notices for pension funds (see Figure 10), and the national rise in the average cost of living between July 2017 and July 2020 according to the Consumer Price Index for All Urban Consumers (CPI-U) (BLS, 2020). Data are inputted into an input-output economic impact analysis called IMPLAN (IMPLAN, 2020).

Lastly, what is impact of collective bargaining agreements in construction compared with the alternative nonunion segment of the industry? Figure 16 displays the difference based on a comparative model that simulates outcomes if all 97,000 construction workers suddenly worked without collective bargaining agreements. The results are primarily based on the union wage premium for blue-collar construction and extraction trades workers in Illinois. The data reveal that the total incomes of skilled construction workers would decrease by \$2.8 billion annually without CBAs. These workers would experience pay cuts that would move them from solidly middle-class into the lower-middle class. Because people with lower incomes spend a higher proportion of their earnings back in the economy, total economic sales would only drop by \$2.2 billion annually in the Illinois economy (Fisher et al., 2019; Dynan et al., 2004). However, more than 13,000 jobs would be lost in indirectly-impacted sectors due to this loss of economic activity. Ultimately, the State of Illinois would forgo \$315 million in combined income taxes and sales taxes per year and local governments would lose an estimated \$251 million in property tax revenues per year if northeastern Illinois did not have collective bargaining agreements in the construction industry (Figure 16).

FIGURE 16: IMPACTS OF CONSTRUCTION CBAs ON JOBS, ECONOMIC ACTIVITY, AND TAXES, RELATIVE TO NO CBAs, 2019

Relative Economic and Social Impacts	Total Income from Wages	Jobs Created or Saved	Total Economic Output	State Income and Sales Taxes	Local Property Taxes
Effects Without CBAs	\$4,769,718,651	36,254	\$6,071,590,822	\$684,280,707	\$400,792,480
Effects With CBAs	\$7,522,395,668	49,268	\$8,251,151,277	\$998,937,096	\$651,645,261
Impact of No CBAs	-\$2,752,677,017	-13,014	-\$2,179,560,455	-\$314,656,389	-\$250,852,781

Source(s): Authors’ analysis using Mid-America Regional Bargaining Association CBAs (MARBA, 2020), average hours worked by all construction workers in Illinois according to the Economic Census of Construction (Census, 2017), LM-2 union reports from the U.S. Department of Labor (USDOL, 2020) annual funding notices for pension funds (see Figure 10), the national rise in the average cost of living between July 2017 and July 2020 according to the Consumer Price Index for All Urban Consumers (CPI-U) (BLS, 2020), marginal propensities to consume by income quintile by the Federal Reserve Bank of Boston (Fisher et al., 2019), and the inflation-adjusted hourly wage premium of 36.6 percent for union members in construction and extraction occupations according to 2010-2019 data from the Survey Outgoing Rotation Groups (CPS-ORG) (CEPR, 2020). Data are inputted into an input-output economic impact analysis called IMPLAN (IMPLAN, 2020).

CBAs Promote a Strong Middle Class and Reduce Poverty in Construction

The final section of the report utilizes data from the *Current Population Survey Outgoing Rotation Groups* (CPS-ORG) and the *Current Population Survey Annual Social and Economic Supplement* (CPS-ASEC). The Current Population Survey is collected, analyzed, and released by the Bureau of Labor Statistics (BLS) at the U.S. Department of Labor. The dataset 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. Ten years of data from the beginning of 2010 through the end of 2019 were collected (CEPR, 2020; Flood et al., 2020).

Collective bargaining agreements expand access to the American Dream for Illinois' blue-collar construction workers (Figure 17). As noted previously, collective bargaining agreements boost the annual earnings of construction workers, which enables them to afford homes in the communities where they build schools, roads, bridges, parks, and other essential infrastructure. Over the past decade, union construction workers have been more likely to own homes than their nonunion counterparts. Fully 76 percent of households with union construction workers report that they own their homes, 3 percent higher than households with nonunion construction workers (73 percent). This expansion of homeownership likely increases the wealth of skilled construction workers through the appreciation in home prices and the accumulation of equity as mortgage payments are made (Herbert et al., 2013; Schuetz, 2019).

FIGURE 17: MIDDLE-CLASS OUTCOMES FOR ILLINOIS CONSTRUCTION WORKERS BY UNION STATUS, 2010-2019

Middle-Class Metrics: Construction and Extraction Workers	Union	Nonunion	Difference
Homeownership Rate	75.8%	72.8%	3.0%
Marriage Rate	62.6%	57.2%	5.4%
Private Health Insurance Coverage Rate	98.0%	70.2%	27.7%

Source(s): 2010-2019 Current Population Survey Outgoing Rotation Groups (CPS-ORG) (CEPR, 2020) for marital status and 2010-2019 Current Population Survey Annual Economic and Social Supplement (CPS-ASEC) (Flood et al., 2020) for homeownership and private health insurance.

Collective bargaining agreements also appear to produce other outcomes that are traditionally associated with the American middle class (Figure 17). For example, more than 6-in-10 middle-class Americans are married compared with just less than 4-in-10 low-income adults (Reeves & Pulliam, 2020). In Illinois, 63 percent of union construction workers are currently married, which is more than 5 percent higher than the nonunion average (57 percent). In addition, almost every union construction worker (98 percent) has private health insurance coverage, compared with just 7-in-10 nonunion construction workers (70 percent), a difference of 28 percent. Collective bargaining agreements ensure that skilled construction workers have access to middle-class incomes and high-quality fringe benefits that support families and promote the American Dream (Figure 17).

FIGURE 18: POVERTY OUTCOMES FOR ILLINOIS CONSTRUCTION WORKERS BY UNION STATUS, 2010-2019

Poverty Metrics: Construction and Extraction Workers	Union	Nonunion	Difference
Share Earning Less than \$15 Per Hour	7.9%	28.7%	-20.7%
Share Living in Household Below Official Poverty Line	0.5%	5.3%	-4.8%
Share Receiving Earned Income Tax Credit (EITC) Assistance	3.1%	11.6%	-8.5%

Source(s): 2010-2019 Current Population Survey Outgoing Rotation Groups (CPS-ORG) (CEPR, 2020) for share earning less than \$15 per hour and 2010-2019 Current Population Survey Annual Economic and Social Supplement (CPS-ASEC) (Flood et al., 2020) for the official poverty rate and the share receiving EITC assistance.

Collective bargaining agreements also decrease poverty and reduce reliance on safety net programs for construction workers in Illinois (Figure 18). Construction workers who are represented by collective bargaining agreements are significantly less likely to earn below \$15 an hour, to live in poverty, and to receive government assistance through the Earned Income Tax Credit (EITC). Fully 29 percent of nonunion construction workers in Illinois earned less than \$15 per hour, adjusted for inflation to constant 2019 dollars. Many of these workers were young and employed in the residential construction sector, which is a lower-paying segment of the industry. However, only 8 percent of union construction workers earned less than \$15 per hour, a 21 percent difference. Similarly, very few union construction workers (less than 1 percent) report that they live in households that are below the official federal poverty line. By contrast, 5 percent of employed nonunion construction workers were below poverty in Illinois from 2010 through 2019. As a result, more than one-in-10

nonunion construction workers (12 percent) received government assistance in the form of EITC benefits compared with less than one-in-30 union construction workers (3 percent) (Figure 18).

The Impacts of Construction CBAs Compared with the Alternative: Ten Outcomes

What are the economic and fiscal impacts of collective bargaining agreements in construction compared with the alternative? Figure 19 presents estimates for 10 economic, fiscal, and social outcomes for an alternative scenario where all 97,000 construction workers suddenly worked without collective bargaining agreements. The data reveal that the average construction worker would see his or her annual income from wages decrease by more than \$28,000 per year, a 37 percent pay cut. Construction apprentices would face less rigorous standards in employer-only programs and be required to complete about 1,000 fewer hours of on-the-job and classroom instruction, a 14 percent decrease (Manzo & Bruno, 2020b). However, employer-only programs in Illinois' construction industry graduate fewer apprentices than joint labor-management programs supported by CBAs, resulting in a 43 percent expected decrease in total completers from these programs (Figure 19)

An alternative scenario without collective bargaining agreements in construction would produce negative fiscal and social impacts as well (Figure 19). Without CBAs, total economic activity stimulated by skilled construction workers in northeastern Illinois would fall by \$2.2 billion annually, a 26 percent loss in gross domestic product (GDP). State tax revenues from income taxes and sales taxes would decrease by an estimated \$315 million per year (-31 percent) and local property tax revenues would fall by nearly \$251 million (-38 percent). The drop in local property tax revenues would be driven both by the loss in construction worker earnings and approximately 2,900 additional construction workers who would be unable to afford to own homes (-4 percent). At the same time, the number of skilled construction workers in the local labor market with private health insurance coverage would decrease by about 27,100, a 28 percent increase in construction workers either without insurance or who are forced to rely on public options like Medicaid. Similarly, an additional 8,300 construction workers would be newly eligible for Earned Income Tax Credit (EITC) government assistance— a threefold (274 percent) increase— a negative effect that is due to a loss in construction worker earnings that would cause about 4,700 workers to fall below the official poverty line— a tenfold (960 percent) increase compared to current outcomes in the local construction market.

FIGURE 19: ECONOMIC, FISCAL, AND SOCIAL IMPACTS OF CONSTRUCTION CBAs, RELATIVE TO NO CBAs, 2019

Economic, Fiscal, and Social Impacts	Effects With CBAs	Effects Without CBAs	Net Change	Percent Change
<u>Economic Outcomes for Construction Workers</u>				
Annual Income from Wages	\$77,293	\$49,009	-\$28,284	-36.6%
Apprenticeship Training Hours	7,306	6,257	-1,049	-14.4%
Apprenticeship Training Completion Rate	54%	31%	-23%	-42.6%
<u>Fiscal Impacts for State of Illinois</u>				
Total Economic Output	\$8,251,151,277	\$6,071,590,822	-\$2,179,560,455	-26.4%
Total State Income and Sales Taxes	\$998,937,096	\$684,280,707	-\$314,656,389	-31.5%
Total Local Property Taxes	\$651,645,261	\$400,792,480	-\$250,852,781	-38.5%
<u>Social Outcomes for Construction Workers</u>				
Workers Covered by Private Health Insurance	95,378	68,321	-27,056	-28.4%
Workers Owning Homes	73,772	70,852	-2,920	-4.0%
Workers Living Below Poverty	487	5,158	4,672	+960.0%
Workers Receiving EITC Assistance	3,017	11,290	8,273	+274.2%

Source(s): Authors' analysis using inputs from Figures 1 through 18.

Conclusion

Collective bargaining agreements in Illinois' construction industry promote ladders of access into the middle class, fund the largest privately financed system of higher education in the state, and boost economic activity in Illinois. By raising construction worker wages and spurring consumer demand, these agreements from the Chicago metro area increase state and local tax revenues by at least \$1.6 billion per year. Across all of Illinois, collective bargaining agreements promote the American Dream, expand health insurance coverage, decrease poverty, and reduce reliance on government assistance programs among skilled construction workers. In an era when the state is in urgent need of good jobs following the COVID-19 pandemic, elected officials, the media, and the public should look to the example of Illinois' more heavily unionized construction industry as a way to promote family-sustaining careers and economic growth. This essential industry demonstrates that both a robust middle class and a strong economy are outcomes produced by effective collective bargaining agreements.

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