Monday, June 5, 2023
6:00 p.m.

Brooklyn Park City Hall – Room A203
5200 85th Avenue North

CITY COUNCIL WORK SESSION – AGENDA #22

If you need these materials in an alternative format or need reasonable accommodations for a City Council meeting, please provide the City with 72-hours' notice by calling 763-424-8000 or emailing Josie Shardlow at josie.shardlow@brooklynpark.org.
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Our Vision: Brooklyn Park, a thriving community inspiring pride where opportunities exist for all.

Our Brooklyn Park 2025 Goals:

• A united and welcoming community, strengthened by our diversity • Beautiful spaces and quality infrastructure make Brooklyn Park a unique destination • A balanced economic environment that empowers businesses and people to thrive • People of all ages have what they need to feel healthy and safe • Partnerships that increase racial and economic equity empower residents and neighborhoods to prosper • Effective and engaging government recognized as a leader

A. CALL TO ORDER – Mayor Hollies Winston

B. GENERAL INFORMATION
None.

C. DISCUSSION ITEMS/GENERAL ACTION ITEMS – These items will be discussion items but the City Council may act upon them during the course of the meeting.

- **C.1** Discuss the Importance of Labor Protections in the City of Brooklyn Park
  - **A.** AN EXAMINATION OF MINNESOTA'S PREVAILING WAGE LAW
  - **B.** COSTS OF WAGE THEFT AND PAYROLL FRAUD IN CONSTRUCTION INDUSTRIES
  - **C.** KEY FINDINGS
  - **D.** POWERPOINT PRESENTATION
- **C.2** Wage Comparison Study
- **C.3** Sister City Policy Discussion – Human Rights
  - **A.** CRITERIA FOR SISTER CITY PARTNERSHIPS
- **C.4** Approval of the Annual Holiday Calendar
  - **A.** HOLIDAY LIST
- **C.5** Final Plat Amendment to DEV22-117, Tessman Ridge
  - **A.** RESOLUTION – AMENDMENT TO FINAL PLAT
  - **B.** LOCATION MAP
  - **C.** PLAN SET

D. VERBAL REPORTS AND ANNOUNCEMENTS
- **D.1 COUNCIL MEMBER REPORTS AND ANNOUNCEMENTS**
- **D.2 CITY MANAGER REPORTS AND ANNOUNCEMENTS**

E. ADJOURNMENT

City of Brooklyn Park
City Council Work Session

Agenda Item:	C.1	**Meeting Date:**	June 5, 2023
Agenda Section:	Work Session	**Prepared By:**	Kim Berggren, Community Development Director
Resolution:	N/A		
Attachments:	4	**Presented By:**	Kim Berggren
Item:	Discuss The Importance of Labor Protections in the City of Brooklyn Park		

Overview/Background:

This work session is for industry experts to present to the Mayor and City Council and answer questions on Labor Protections.

North Central States Regional Council of Carpenters represents 28,000 members in the states of Wisconsin, Minnesota, Iowa, Nebraska, North Dakota, and South Dakota. NCSRCC is indorsed with United Brotherhood of Carpenters and Joiners of America (UBC). They are dedicated to protecting and elevating the economic and social condition of all workers to ensure they are provided with pay, benefits, and working conditions they deserve.

Guest Speakers: Burt Johnson, General Counsel – North Central States Regional Council of Carpenters
Dan McConnell, Business Manager – The Minneapolis Building and Construction Trades of Council
Mike Wilde – Fair Contracting Foundation of MN

Budgetary/Fiscal Issues: N/A

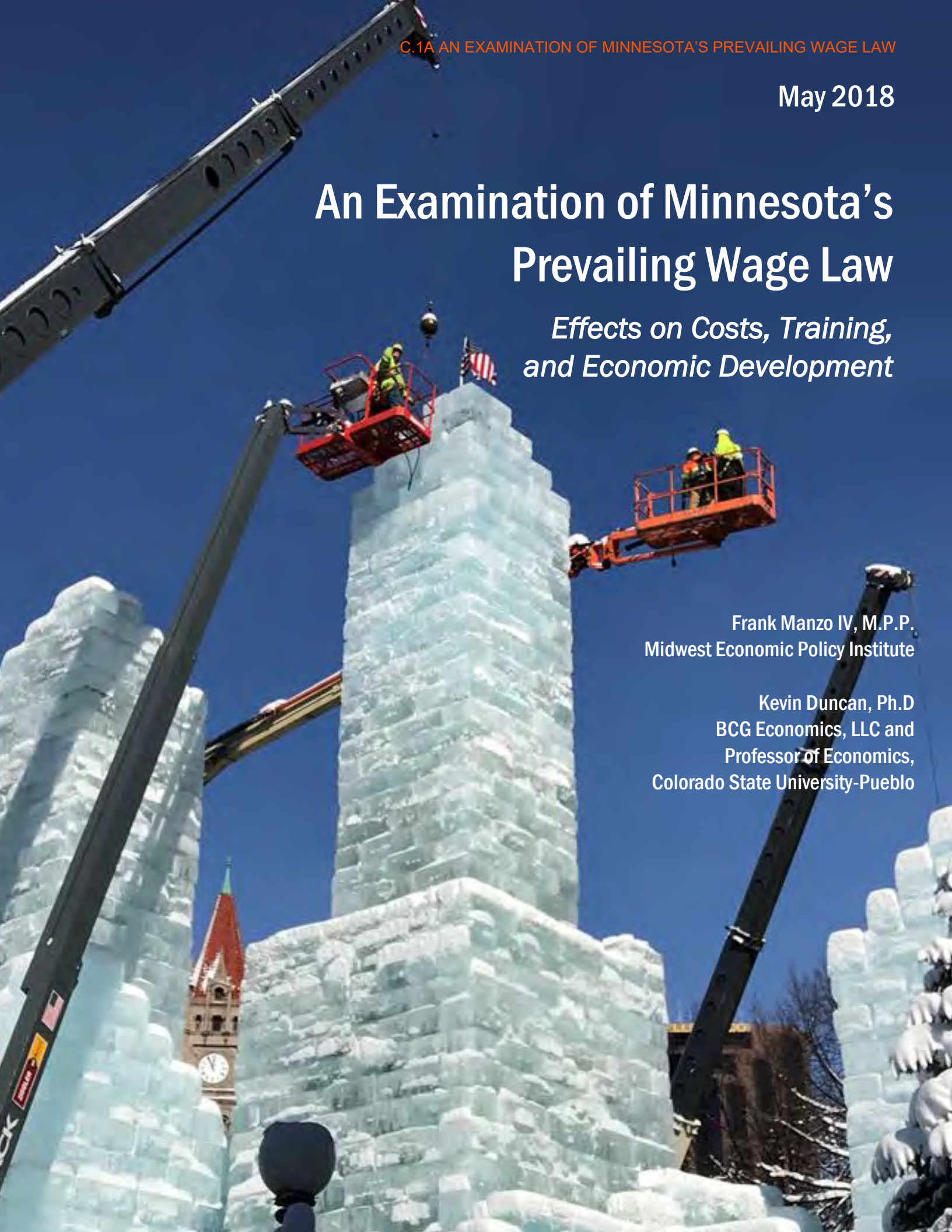
Attachments:

C.1A AN EXAMINATION OF MINNESOTA'S PREVAILING WAGE LAW
C.1B COSTS OF WAGE THEFT AND PAYROLL FRAUD IN CONSTRUCTION INDUSTRIES
C.1C KEY FINDINGS
C.1D POWERPOINT PRESENTATION

May 2018

An Examination of Minnesota's Prevailing Wage Law

Effects on Costs, Training, and Economic Development



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

Kevin Duncan, Ph.D
BCG Economics, LLC and
Professor of Economics,
Colorado State University-Pueblo

Executive Summary

The Minnesota Prevailing Wage Act provides minimum wages for construction workers employed on public projects. The main purpose of a prevailing wage law is to protect local construction standards in the required low-bid environment. Prevailing wage laws create a level playing field for all contractors by ensuring that public expenditures maintain and reflect local area standards for wages and benefits.

The Minnesota Prevailing Wage Act keeps construction costs stable.

- 72 percent of peer-reviewed studies conducted since 2000 find that prevailing wage laws have no effect on the cost of public construction projects.
- Labor costs are a low and historically declining share of total project costs– about 23 percent.
- Four economic studies since 1999 analyzing 2,183 bids on public projects find that prevailing wage has no effect on bid competition.
- A new analysis of 640 contractor bids on school construction projects in the Minneapolis-St. Paul metropolitan area finds that winning bids based on the payment of prevailing wages are no more costly than bids that do not require prevailing wages.

The Minnesota Prevailing Wage Act is an effective job skills advancement policy.

- Economic research finds that prevailing wage laws increase apprenticeship training, boost worker productivity, and reduce injury rates– helping to address the skilled labor shortage in construction.
- 93 percent of all registered apprentices in Minnesota are enrolled in joint labor-management programs– including the vast majority of African-American, Latino, and veteran apprentices.
- In 2015, the 10 largest joint labor-management apprenticeship programs had $29.8 million in annual revenue and $68.5 million in total assets while the program associated with the employer-only Associated Builders and Contractors had just $297,000 in revenue and $290,000 in total assets.

The Minnesota Prevailing Wage Act provides pathways into the middle class and boosts the economy.

- Economic research finds that prevailing wage laws foster middle-class careers that attract talented young workers to the construction trades.
- Minnesota's prevailing wage law increases blue-collar construction worker incomes by 5.2 percent.
- Minnesota's prevailing wage law expands health insurance coverage by 5.0 percentage points and increases the share of construction workers with pension plans by 5.3 percentage points.
- Minnesota's prevailing wage law reduces the share of construction workers who receive food stamp assistance by 2.1 percentage points.
- When school districts in the Twin Cities area include prevailing wages on projects, local contractors account for a 10 percent higher market share– with tax dollars staying in the local economy.
- By protecting work for in-state contractors and their employees, Minnesota's prevailing wage law improves the state economy by $981 million and generates $37 million in state and local tax revenue every year.
- Compared to Indiana, which recently repealed its prevailing wage law, per-worker productivity has grown 7.7 percentage-points faster and worker turnover rates have fallen further in Minnesota.

Minnesota's prevailing wage law produces positive impacts on the broader Minnesota economy. By protecting local standards, prevailing wage supports work for local contractors and their employees. The Minnesota Prevailing Wage Act is the best deal for taxpayers.

About the Authors[1]

Frank Manzo IV, M.P.P.

Policy Director, Midwest Economic Policy Institute

Frank Manzo IV is the Policy Director of the Midwest Economic Policy Institute, a division of the Illinois Economic Policy Institute. He holds 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. He specializes in labor market analysis, infrastructure investment, economic development, the low-wage labor force, and public finance. He has authored or coauthored several applied research papers specifically pertaining to prevailing wage laws, including studies for Illinois, Indiana, Kentucky, Michigan, New Hampshire, New Mexico, and Ohio. Other projects include analyses on the social and economic effects of labor unions, construction apprenticeship programs, public spending on transportation and water infrastructure, and public-private partnerships.

Kevin Duncan, Ph.D.

Professor of Economics, Colorado State University-Pueblo

Kevin Duncan is a Professor of Economics at Colorado State University-Pueblo and has been a visiting scholar at the Institute for Research on Labor and Employment at the University of California, Berkeley. He teaches business and regional economics in the Hasan School of Business. Duncan has conducted applied research for the local chamber of commerce, the economic development corporation, state and local agencies, non-profits, and labor unions. He has also examined the effect of prevailing wage laws on construction costs and productivity, construction worker poverty and reliance on public assistance, minority employment in the construction industry, and the economy. Duncan has provided testimony and research related to construction labor market policy to state legislatures in Colorado, Hawaii, Kentucky, New Hampshire, and Vermont. His research on prevailing wage laws has appeared in leading national and international peer-reviewed academic journals such as *Construction Management and Economics*, *Industrial and Labor Relations Review*, and *Industrial Relations*. He received his Ph.D. in Economics from the University of Utah and his B.A. in Economics from the University of California, Riverside.

[1]The authors wish to thank Aaron Sojourner, Ph.D., Associate Professor at the University of Minnesota Carlson School of Management, for his thoughtful review and helpful edits.

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Introduction to Prevailing Wage in Minnesota

> *"It is in the public interest that public buildings and other public works be constructed and maintained by the best means and highest quality of labor reasonably available and that persons working on public works be compensated according to the real value of the services they perform."*
>
> – Minnesota Prevailing Wage Act, Minnesota Statutes § 177.41 (1973)

The Minnesota Prevailing Wage Act supports blue-collar construction workers employed on public construction projects. Prevailing wage serves as a regional economic policy on Minnesota's publicly-funded projects that requires contractors to pay construction workers at least the wages and benefits that prevail in the local market. By preventing public bodies from awarding bids to contractors that pay less than the privately-established local market rate, the Minnesota Prevailing Wage Act ensures that workers can afford to live in the area where they are building a road, bridge, park, school, or other public project.

The main purpose of a prevailing wage law is to protect local construction labor standards in the competitive bidding process. Public construction bidding is different from private-sector construction. Public bodies in Minnesota are required to select the lowest bidder. In the low-bid model, contractors aim to lower their bids however possible, including through cutthroat reductions in worker wages, benefits, and apprenticeship training or benefits. Thus, long-term investments in workers through training, health, and well-being are often jettisoned by contractors to win bids on short-term projects.

Large infusions of government spending into an area, along with a contract award process that rewards the lowest bidder, may also attract contractors from areas with low wages and low skills. Any appreciable infusion of low-wage contractors could result in the erosion of local standards. In fact, Minnesota's prevailing wage law was enacted in 1973 in response to an incident in which out-of-state workers, who earned much less than local workers, were hired for a University of Minnesota farm project (Minnesota DLI, 2017a). Prevailing wage laws level the playing field for contractors by taking labor costs out of the equation, incentivizing them to compete based on core competencies and efficiencies in construction rather than on undermining middle-class compensation standards.

According to Minnesota's prevailing wage law, any construction project funded in whole or in part by state funds is covered by the policy (Minnesota DLI, 2017b). For example, state-funded construction involving highways, roads, wastewater treatment plants, public utilities, colleges, and parks and recreation improvements are covered by the policy. Other statutes allow municipalities and school districts to require the payment of local prevailing wages when state funding is not involved (Minnesota Statutes § 471.345).

The Department of Labor and Industry conducts an annual voluntary survey of construction industry stakeholders to determine state prevailing wage rates (Minnesota DLI, 2017c).

Surveys are sent to all segments of the construction industry to ascertain prevailing wage rates on construction projects in Minnesota. The Department recognizes six general categories, which cumulatively cover all the labor codes of trade and equipment used in construction. These are laborers; special trades (such as electricians, carpenters, and plumbers); operators of special equipment; operators of heavy and highway equipment; operators of commercial power equipment; and truck drivers (Minnesota DLI, 2017d).

Prevailing wage and benefit rates are based on the most common wage paid for a job classification in a county (Minnesota DLI, 2017b). Rates may be the same in neighboring counties, but typically vary between regions. Prevailing wages are required on state-funded projects with a value of $2,500 if a single trade is involved and $25,000 if multiple trades are involved (WHD, 2017).

Previous research has concluded that the Minnesota Prevailing Wage Act benefits the public. In 2006, policy researchers from Brevard College, the University of Illinois at Urbana-Champaign, the University of Minnesota, and Indiana University– South Bend found that the survey method used to gather data and ascertain prevailing wage rates in Minnesota was both valid and reliable, and that prevailing wage strengthens apprenticeship programs, reduces injury rates, and decreases project cost overruns. Minnesota's prevailing wage law, they estimated, boosts construction worker income in the state by between $193 million and $901 million and, as a result, improves tax revenues by between $38 million and $178 million annually (Jordan et al., 2006).

This report aims to update and expand upon that previous research from a decade ago. This study examines the effects of Minnesota's prevailing wage law on the cost of public construction, apprenticeship programs, and economic development outcomes– including impacts on worker incomes, government assistance programs, and the broader Minnesota economy. The results of this study indicate that Minnesota's prevailing wage law keeps construction costs stable, is an effective job skills advancement policy, and provides pathways into the middle class for blue-collar construction workers. Accordingly, Minnesota's prevailing wage law has positive effects on the state economy.

SECTION ONE: PUBLIC CONSTRUCITON COSTS

Peer-Reviewed Research on the Effect of Prevailing Wage Laws on Construction Costs

The preponderance of peer-reviewed research has concluded that prevailing wage laws have no impact on total construction costs (Duncan & Ormiston, 2017; Mahalia, 2008). Why don't prevailing wage laws increase construction costs? To begin, labor costs are a low and historically declining percentage of total costs in the construction industry– approximately 23 percent of all building costs in the United States (Census, 2012a). Next, peer-reviewed research indicates that, when wages rise in construction, contractors respond by utilizing more capital equipment and by hiring skilled workers in place of their less-productive counterparts (Balistreri et al., 2003; Blankenau & Cassou, 2011). Finally, recent evidence reveals that contractors also respond to higher wages by reducing expenditures on materials, fuels, and rental equipment and by accepting marginally lower profit margins (Duncan & Lantsberg, 2015). Since labor costs represent a small portion of overall costs, only minor changes are needed to offset the effect of prevailing wage laws.

Since 2000, there have been 18 studies on the effect of federal, state, and local prevailing wage policies on the cost of public projects that have been published in peer-reviewed academic journals. Peer review is the process of establishing credibility by submitting research to a group of anonymous, independent experts who critically evaluate the methodologies and conclusions before it can be accepted for publication. By contrast, studies that have not undergone peer review can suffer from errors, methodological defects, and misleading conclusions.

> **Labor costs are a low share of total costs in construction– just 23%.**

Of the 18 peer-reviewed studies on prevailing wage laws since 2000, 11 pertain to school construction costs, which is a key focus among economic researchers. Public school construction is more homogenous than other types of public works projects, which makes it easier to isolate the potential cost impact of prevailing wage laws. In addition to these 11 studies on school construction costs, three evaluate highway costs, two are focused on affordable housing, and two investigate public and municipal buildings. In total, 13 of these peer-reviewed studies (72 percent) find that prevailing wage laws have no effect on the cost of public construction projects, including 9 out of the 11 peer-reviewed studies (82 percent) on the impact of prevailing wage laws on school construction costs. The earliest peer-reviewed studies that used regression analyses to assess the effect of prevailing wage laws on school construction costs were authored by Professors Azari-Rad, Philips, and Prus. These economists examined more than 4,000 schools built across the United States and did

not find any statistically significant cost difference between schools built in states with prevailing wage laws and those constructed in states without prevailing wage laws (Azari-Rad et al., 2002; Azari-Rad et al., 2003).

Five studies have taken advantage of the introduction of a prevailing wage policy in British Columbia, Canada to compare school construction costs. British Columbia's Skill Development and Fair Wage Policy is similar to the relatively strong prevailing wage laws in states like Minnesota, Illinois, and Washington. Professors Bilginsoy and Philips were the first to examine the Skill Development and Fair Wage Policy. After accounting for the construction business cycle, the number of competitors, the project type, and a time trend, the authors find that school construction costs under the policy were not statistically different from costs of schools built prior to the introduction of prevailing wage (Bilginsoy & Philips, 2000).

Professors Duncan, Philips, and Prus examined the effect of British Columbia's prevailing wage policy by including a control group of private school projects (Duncan et al., 2014). This analysis indicates that, before the introduction of prevailing wage, public schools were more expensive to build than comparable private schools. The cost differential, however, was unchanged after the wage policy was enacted. These authors have also used British Columbia data to examine the effect of prevailing wage laws on productivity and efficiency. They found that public school projects were between 16 and 19 percent smaller than comparable private structures, in terms of square feet per project expenditure, before prevailing wage was introduced. This size differential did not change after the policy was in effect (Duncan et al., 2006). These results suggest that prevailing wage standards do not alter labor or other input utilization in a way that significantly affects projects. The authors further found that the policy, which implemented new apprenticeship training requirements, increased the average efficiency of public projects after 17 months, from 94.6 percent to 99.8 percent (Duncan et al., 2009). This improvement in overall construction efficiency is consistent with stable total costs. A similar pattern was observed with respect to cost efficiency (Duncan et al., 2012). Taken together, these studies of prevailing wages in British Columbia provide a comprehensive analysis which concludes that prevailing wages do not increase construction costs.

In two studies conducted in 2013, Professor Atalah introduced a new approach to test the hypothesis that prevailing wages increase school construction costs. Based on the examination of over 8,000 bids on 1,496

school projects in Ohio, the studies compare bids of contractors who are signatories to collective bargaining agreements and pay union wage and benefit rates to those submitted by open-shop contractors who typically pay lower rates. While schools are exempt from Ohio's prevailing wage law, union rates prevail for other construction funded by the state– meaning that the union-nonunion comparison offers an indirect test of the impact of prevailing wage. A comparison of average bid costs per square foot indicates that there is no statistically significant difference between union and nonunion contractors across the state; this is the case when evaluating all bids or just winning bids (Atalah, 2013a). When analyzing bids submitted by different trades, the average bid cost per square foot was not higher for 15 of the 18 trades (83 percent) that paid union rates (Atalah, 2013b). Professor Atalah's studies largely find that the payment of union wage rates is not associated with increased construction costs.

In addition to these studies that focus on school construction, three peer-reviewed studies have investigated the effect of prevailing wage laws on highway construction costs and four others have examined the impact on affordable housing and municipal projects (Vitaliano, 2002; Duncan, 2015a; Duncan, 2015b; Dunn et al., 2005; Palm & Niemeir, 2017; Kim et al., 2012; Kaboub & Kelsay, 2014). The majority of these studies also conclude that prevailing wage laws have no impact on total construction costs.

> **72% of all peer-reviewed studies conducted since 2000 find that prevailing wage laws have no effect on the cost of public construction projects.**

Finally, it is worth noting four additional studies that utilize regression analyses but have not been subject to peer review (Onsarigo et al., 2017; Kelsay; 2015; Philips, 2014; Ohio LSC, 2002). The four studies observe a total of 1,893 school projects in the Midwest and Mid-Atlantic regions. All four studies find that state prevailing wage laws have no statistically significant impact on total construction costs.

Research on the Effect of Prevailing Wage Laws on Bid Competition

Many opponents of prevailing wage laws assert that the wage policy reduces the level of bid competition, leading to higher costs on public projects. This claim is often made in the absence of any empirical evidence (e.g., Leef, 2010). However, there have been three peer-reviewed studies since 1999 and one recent report that empirically examine the effect of prevailing wage laws on the level of bid competition– an important determinant of construction costs (Figure 1).

Four recent studies evaluating more than 2,000 bids find that prevailing wage does not reduce bid competition.

All four economic studies conclude that prevailing wage standards do not reduce the number of bidders on public projects. In an examination of 565 bids on public works projects in five northern California cities, Professors Kim, Kuo-Liang, and Philips found no evidence that prevailing wage policies affect the number of bidders (Kim et al., 2012). Evaluating 497 bids on highway construction projects in Colorado, Professor Duncan found that the level of bid competition does not differ between federally-funded projects, which require the payment of prevailing wages and adherence to the Disadvantaged Business Enterprise policy, and state-funded projects, which are not subject to either of these policies (Duncan, 2015a). Similarly, Professor Bilginsoy analyzed 452 bids on school construction projects in British Columbia, Canada, and discovered that the introduction of prevailing wage standards was associated with an increase in bid competition that diminished over time (Bilginsoy, 1999). Finally, while a 2017 study on Ohio's prevailing wage law has not been peer-reviewed, the authors found that prevailing wage standards are actually associated with *increased* bid competition, based on 669 bids on school construction projects in the state (Onsarigo et al., 2017). All of these studies– investigating 2,183 total bids on public projects in four distinct states or provinces– find that prevailing wage standards do not reduce bid competition and do not increase construction costs.

Figure 1: Recent Studies on the Impact of Prevailing Wage on Contractor Bid Competition

Author(s)	Year	Project Focus	Projects	Geography	Effect
Onsarigo et al.	2017	School Construction	669	Ohio	+0.27 bids
Duncan	2015	Highways	497	Colorado	No Effect
Kim et al.	2012	Municipal	565	California	No Effect
Bilginsoy	1999	School Construction	452	British Columbia	+8.4 bids*

Source: Individual studies listed in table. *Bilginsory's (1999) prevailing wage effects diminish by -0.2 bids per year over time.

The Impact of Prevailing Wage on School Construction Costs in Minnesota: Evidence from the Twin-Cities Metropolitan Area

Minnesota statutes allow school districts to apply state prevailing wage and benefit rates to projects that do not involve state funding. Data from school construction projects in the seven-county Minneapolis-St. Paul metropolitan area are analyzed to determine whether projects requiring the payment of prevailing wage and benefits are more costly than projects that are not covered by the wage policy. Included in the seven-county region are Anoka, Hennepin, Ramsey, Washington, Carver, Scott, and Dakota Counties. The school construction cost data were obtained from applicable school board meeting minutes, construction manager bid tabulations, and from Dodge Data and Analytics, an organization that collects and distributes construction project information to industry stakeholders (Dodge, 2017).

Specifically, 640 subcontractor low bids submitted to construction managers between 2015 and 2017 were evaluated. Construction managers assist school districts with the design, planning, and management of construction. For the projects included in this study, construction managers did not self-perform any construction work, but instead assumed responsibility for work subcontracted to other construction establishments. Consequently, subcontractors submitted bids for specific project tasks, such as asphalt paving, carpentry, and concrete work. Subcontractor bids ranged between $4,000 and more than $12 million and included work on the construction of new schools, renovations, additions, and remodeling. The data also include information on overall project size and complexity, the address of the winning contractor, and whether the winning contractor was signatory to a collective bargaining agreement.

This study takes advantage of the fact that prevailing wage standards were applied on some school construction projects but not required on others in the metropolitan area. Of the 640 bids, prevailing wage standards were applied on 286 low bids. The remaining 354 low bids did not require the payment of prevailing wages. A full description of the data and statistical methods employed can be found in the Appendix.

The school project data and statistical analyses provide an opportunity to examine the effect of prevailing wage standards on school construction costs, taking into consideration other factors that may also affect costs– such as the size and complexity of the overall project, the specific type of work conducted, whether the winning contractor was from the metro area or party to a collective bargaining agreement, and if the project involved new construction work.

Three different regressions indicate that Minnesota's prevailing wage law has no statistically significant effect on school construction costs. The suggestive results range from a 1.8 percent decrease in school

project costs to a 2.6 percent increase in school project costs, but none are significant at the 95-percent level of confidence (Figure 2). A statistically insignificant result implies that any measured cost difference is due to chance and that the relationship between costs and the wage policy is not causal. Thus, with a high degree of certainty, it is accurate to conclude that the cost of building schools in the Twin Cities metropolitan area is not related to, or affected by, prevailing wage standards (Figure 2).[2]

This finding is consistent with the preponderance of peer-reviewed research regarding the effect of prevailing wages on construction costs. Additional results also indicate that the bids of winning contractors who are signatories to collective bargaining agreements are not statistically different from the bids of nonunion contractors.

An analysis of 640 subcontractor low bids finds that prevailing wage has no effect on school construction costs.

Furthermore, other information obtained from the school construction data indicate that the use of prevailing wage standards result in a greater share of public construction work awarded to local contractors. While 640 subcontractor low bids had complete information required for the regression analyses, there are 681 projects with sufficient information to determine the value of construction work awarded to contractors with business addresses inside or outside of the seven-county metropolitan area. Prevailing wage standards were applied to 315 of these low bids, with the remaining 366 low bids not covered by the wage policy. Based on this larger sample, the total bid value was approximately $339 million (Figure 3).

When Twin Cities area school districts choose to include prevailing wage on projects, local contractors account for a 10% higher market share.

Fully 74 percent of the total bid values of school projects requiring the payment of prevailing wages was won by metro-based contractors (Figure 3). For projects in the seven-county area that did not require the payment of prevailing wages, only 64 percent of the combined low bid values was awarded to contractors with business addresses located within the seven-county metro area. This difference indicates that, when a school district located within the seven-county Twin Cities metropolitan area chooses to include prevailing wage standards, about 10 percent more of the value of the project is completed by local contractors and workers, on average. This result corroborates the economic finding that prevailing wage standards protect work for local contractors.

[2]These findings did not change when the measures of contractor characteristics– such as whether the winning contractor was a union contractor or from outside of the metro area– were not included in the estimate. Please see the Appendix for details.

Figure 2: Summary of Regression Results on the Effect of Applying Prevailing Wage Standards on School Project Costs in the Seven-County Twin Cities Region, 2015-2017

Impact	Regression Type	Effect	Standard Error
ln(price of winning bid)	OLS regression	+0.026	(0.08)
ln(median winning bid)	Quantile (Median) regression	-0.018	(0.12)
ln(price of winning bid)	Endogenous Treatment Effects regression	-0.014	(0.33)

Source: Authors' analysis of School District Board Meeting minutes and Dodge Data and Analytics (Dodge, 2017). None of the results are statistically significant at p<|0.10|. All models include a sample size of 640 winning bids on school construction projects. For more information, please see the Appendix.

Figure 3: Share of School Construction Work Completed by Local Contractors in the Seven-County Twin Cities Region, by Prevailing Wage Status, 2015-2017

Summary Statistics	School Projects with Prevailing Wage	School Projects without Prevailing Wage
Number of school construction projects	315	366
Cumulative bid value of all school projects	$139 million	$200 million
Value awarded to metro-based contractors	$103 million	$128 million
Share of value awarded to metro-based contractors	74%	64%

Source: Authors' analysis of School District Board Meeting minutes and Dodge Data and Analytics (Dodge, 2017).

SECTION TWO: APPRENTICESHIP TRAINING

Research on the Effect of Prevailing Wage Laws on Apprenticeship Training

Construction is the most volatile major industry in the United States. The construction industry is seasonal, with major projects built and repaired during peak months. The construction industry is also cyclical, with more activity during the upswing in the business cycle when market conditions are favorable. Finally, when workers complete a project, there is often a period of unemployment while they look for another job. This inherent instability of building activity creates strong disincentives for employers and employees to invest in the type of training that leads to a highly skilled, efficient, and safe workforce. There is little incentive for contractors to incur the expenses associated with training because there is no guarantee that the trained worker will be retained and it is likely that at some point a trained employee may work for a competing contractor. From the worker's perspective, there is also little incentive to incur the costs of training out-of-pocket due to the possibility of prolonged spells of unemployment.

The end result is a "market failure" in which insufficient worker training is provided in construction without proactive public policies. Unlike manufacturing, where the product and the production processes are uniform, the majority of construction output is not standardized. Most building sites, designs, and logistics vary from project to project and require skilled workers who can build customized infrastructure. Broadly-trained craft workers, who complete a mix of on-the-job training and in-class theoretical education through registered apprenticeship programs, are needed.

Prevailing wage laws correct the market failure of insufficient worker training in construction.

A state prevailing wage law helps to correct this market failure by reflecting local market-based standards for wages, benefits, and training contributions in the community where the project is being built. Economic research shows that state prevailing wage laws increase apprenticeship training in the construction industry. Economist Cihan Bilginsoy has found that apprenticeship enrollments are 6 to 8 percent higher in states with prevailing wage and that apprentices complete their on-the-job and classroom training at a faster rate in these states (Bilginsoy, 2005). Another study found that the apprenticeship share of the construction workforce is 14.4 percent in states with prevailing wage laws compared to 7.7 percent in states without prevailing wage laws (Dickson Quesada et al., 2013). The result is that workers are more productive due to prevailing wage laws. Productivity per construction worker is 14 to 33 percent higher in states that have the wage policy (Philips, 2014). Prevailing wage promotes a skilled workforce that completes high-quality public construction projects on

time and under budget. This skilled workforce remains stable for public construction needs because prevailing wages strengthen private apprenticeship investments by recognizing existing training standards.

Conversely, economic research conducted after the repeal of prevailing wage have shown a strong correlation with a decrease in worker training. After Utah repealed its law, the rate of apprenticeship training declined to historical lows (Azari-Rad et al., 2003). Registered apprenticeships fell by 38 percent in Kansas following repeal (Philips, 2014). After repeal of Colorado's prevailing wage law in 1985, apprenticeship training decreased by 42 percent. In fact, in an analysis of nine states that repealed their prevailing wage laws from 1979 to 1988, researchers found that repeal was associated with a decrease in training by 40 percent and caused workplace injuries to rise by 15 percent (Philips et al., 1995). More recent data reveals that job-related disabilities are 12 percent higher and fatality rates are 18 percent higher in states without prevailing wage laws (Philips, 2014; Dickson Quesada et al., 2013).

> **Job-related disabilities are 12% higher and job-related fatality rates are 18% higher in states without prevailing wage laws.**

Apprenticeship Training in Minnesota: A Comparison of Joint Labor-Management and Employer-Only Programs

The Office of Apprenticeships at the U.S. Department of Labor works in conjunction with approved State Apprenticeship Agencies to set basic standards for programs that meet federal requirements for formal apprenticeship and prevailing wage work. Within this framework, sponsors have freedom to determine program content, applicant qualifications, and other aspects of the program (DOLETA, 2017). Apprenticeship data from the Minnesota Department of Labor and Industry is available through a Minnesota Government Data Practices Act open records request. The data– covering the three-year period from July 2014 through July 2017– contains information on active apprenticeships, enabling comparisons between joint labor-management programs and non-joint employer-only programs.

93% of construction apprentices in Minnesota are enrolled in joint labor-management programs.

In the non-joint segment of the construction industry, apprenticeship programs are sponsored by a single contractor or by groups of "open shop" employers. These employers unilaterally determine program content, set entry requirements, select apprentices, and monitor trainee progress. Sponsoring contractors typical pay directly for the costs of training apprentices.

By contrast, in the joint labor-management sector, apprenticeship training is cooperatively determined and managed by labor organizations and signatory contractors. Funding for training in joint labor-management programs is financed by a "cents per hour" rate that is part of the total wage and benefit package negotiated privately with contractors. The important distinction is that, under the joint labor-management system, the costs of training the next generation of workers are included in a project bid and paid by the project owner.

Three-year apprenticeship data for Minnesota are reported in Figure 4. While there were a larger number of employer-only programs (212 programs) that were active at any point during the three-year period compared to joint labor-management programs (68 programs), a significant majority of registered apprentices in Minnesota are enrolled in joint labor-management programs. Between July 2014 and July 2017, more than 30,600 active apprentices were enrolled in joint labor-management programs compared to about 2,400 trainees in employer-only programs. In total, approximately 93 percent of all

registered apprentices were enrolled in joint labor-management programs (Figure 4).

Figure 4 also breaks down active apprentices by demographic characteristics. Regardless of racial background, more than nine out of every 10 apprentices belong to joint labor-management programs. Joint programs, however, account for a greater share of people of color than nonjoint programs. Joint labor-management programs train 92 percent of all white apprentices, 92 percent of all African-American apprentices, 95 percent of all Latino and Latina apprentices, and 98 percent of apprentices from other racial backgrounds in Minnesota.

The two other demographic characteristics described by the Minnesota Department of Labor and Industry are gender identification and veteran status. Once again, joint labor-management programs account for a clear majority of active apprentices from these groups. By gender identification, about 94 percent of all male apprentices and 79 percent of all female apprentices are enrolled in joint labor-management programs.

Additionally, of the more than 1,800 veterans in registered apprenticeship programs between July 2014 and July 2017, over 1,500 were enrolled in joint labor-management programs (84 percent).

Financial information is publicly available for tax-exempt nonprofit organizations through Form 990 reports submitted to the Internal Revenue Service (IRS), including for those involved in educational activities such as apprenticeship training (ProPublica, 2017). Figure 5 presents financial data for the 10 largest joint labor-management apprenticeship programs, by active apprentices, and the non-joint apprenticeship program for the Associated Builders and Contractors (ABC) of Minnesota and North Dakota.

The Associated Builders and Contractors' training program in the state is called the Construction Education Foundation of Minnesota. Employer-only training programs associated with ABC chapters are typically characterized by task-driven and modular training with a lower priority placed on the full-scope craft training characteristic of joint labor-management training programs. In Fiscal Year 2015, the ABC's apprenticeship program had approximately $297,000 in annual revenue, $290,000 in total assets, and reported one employee (CEF, 2015). The Construction Education Foundation of Minnesota had 150 active apprentices between July 2014 and July 2017, or an average of 50 per year (Figure 5).

Figure 4: Characteristics of Joint Labor-Management Apprenticeship Programs and Non-Joint Employer-Only Training Programs in Minnesota, July 2014 to July 2017

Minnesota Registered Apprenticeships Category or Characteristic, 2014-2017	Joint Labor-Management Programs	Employer-Only Programs	Total for All Registered Programs	Joint Labor-Management Share
Number of programs	68	212	280	24.3%
Number of active apprentices	**30,658**	**2,448**	**33,106**	**92.6%**
Male apprentices	28,902	1,973	30,875	93.6%
Female apprentices	1,756	475	2,231	78.7%
White non-Latino apprentices	24,625	2,127	26,752	92.0%
African-American apprentices	2,049	177	2,226	92.0%
Latino or Latina apprentices	1,952	108	2,060	94.8%
Apprentices of other racial backgrounds	2,032	36	2,068	98.3%
Veteran apprentices	1,518	301	1,819	83.5%

Source: Minnesota Department of Labor and Industry's "Gender/Ethnicity/Veteran Reports" from July 2014 through July 2017. Information obtained through a Freedom of Information Act (FOIA) open records request.

By contrast, the 10 joint labor-management programs with the highest amounts of enrolled apprentices had a combined $29.8 million in annual revenue, $68.5 million in total assets, and 252 employees in Fiscal Year 2015 (Figure 5). These resources are used to train nearly 6,700 active apprentices per year, as 20,032 apprentices were registered in these programs over the three-year period. The program operated by the International Union of Operating Engineers Local 49 and the Associated General Contractors (AGC) of Minnesota had the highest amount of assets, at $20.0 million (IUOE 49, 2015). The program operated by the North Central States Regional Council of Carpenters and signatory contractors had the highest annual revenue, at $7.5 million (Carpenters, 2015).

These data illustrate the disparity in training resources between joint labor-management training programs and those offered by the local ABC chapter. Compared to the 10 largest joint labor-management programs, the ABC's Construction Education Foundation of Minnesota has just 1.0 percent as much funding and 0.4 percent as much in total assets. Put simply, joint labor-management apprenticeship programs account for the vast majority of human capital investment in Minnesota's construction industry.

These findings are consistent with the preponderance of research indicating that joint labor-management apprenticeship programs are characterized by larger numbers and more training resources. Across the United States, 79 percent of all apprenticeship graduates in construction come from joint labor-management programs (Bilginsoy, 2017). In the Midwest, joint labor-management programs have an even larger role in training construction workers. The shares of active apprentices in joint labor-management programs are 98 percent in Illinois, 94 percent in Indiana, 95 percent in Wisconsin, 82 percent in Ohio, and 79 percent in Kentucky (Manzo & Bruno, 2016; Philips, 2015a; Philips 2015b; Onsarigo et al., 2017; Duncan & Manzo, 2016). In Illinois, joint labor-management programs account for 99 percent of all privately-funded

apprenticeship expenditures and return $11 in economic and tax benefits per dollar invested over the long run (Manzo & Bruno, 2016).

Addressing the high demand by contractors for skilled labor requires support for policies that improve apprenticeship training. In a January 2018 survey of Minnesota construction firms by the Associated General Contractors, fully 72 percent reported that they are having a difficult time filling craft worker positions and 57 percent said that worker shortages are the biggest concern facing their company (AGC, 2018). By strengthening private apprenticeship investments, Minnesota's prevailing wage law is an essential policy to help meet the current demand for skilled workers.

> **Joint labor-management apprenticeship programs account for the vast majority of human capital investment in Minnesota's construction industry.**

Figure 5: Financial Information of the Ten Largest Joint Labor-Management Programs Compared to the Associated Builders and Contractors' Employer-Only Program in Minnesota, FY2015

Program Sponsor	Type	Total Revenue	Total Assets	Total Employees	Average Apprentices*
Construction Laborers Education JAC	Joint	$3,815,458	$9,089,178	22	2,986.0
Carpenters and Joiners JAC	Joint	$7,531,357	$10,451,716	59	931.0
Metro Area Roofers Local 96 JAC	Joint	$599,009	$1,830,149	4	535.3
Metro Sheet Metal JAC	Joint	$1,946,606	$4,664,418	24	488.3
Minneapolis Electrical JATC	Joint	$3,711,851	$6,578,581	32	473.3
Operating Engineers Local 49 JAC	Joint	$6,320,862	$19,978,166	31	298.0
St. Paul Pipefitters JAC	Joint	$2,386,737	$9,473,542	35	281.0
Limited Energy System JAC	Joint	$853,451	$929,734	15	255.7
Bricklayers Local 1 Minnesota JAC	Joint	$1,289,201	$2,865,315	27	241.3
Minneapolis Plumbers JAC	Joint	$1,311,469	2,685,332	3	187.3
10 Largest Joint Programs	**Joint**	**$29,766,001**	**$68,546,131**	**252**	**6,677.3**
Construction Education Foundation (ABC)	**Non**	**$296,803**	**$289,640**	**1**	**50.0**

Source: Authors' analysis of Form 990 tax information submitted to the Internal Revenue Service and listed publicly at ProPublica (2017). Data from Minnesota Department of Labor and Industry's "Gender/Ethnicity/Veteran Reports" are cross-referenced with Form 990 financial information from Fiscal Year 2015. *July 2014 through July 2017 data divided by three years.

SECTION THREE: ECONOMIC DEVELOPMENT

Research on the Effect of Prevailing Wage Laws on Economic Outcomes

In addition to ensuring that the next generation of construction workers is trained, state prevailing wage laws foster good, middle-class careers for construction workers. There is a significant disparity in wages paid to blue-collar construction workers between states with prevailing wage laws and states without the wage policy (Philips, 2014). A recent economic analysis found that prevailing wage statistically increases blue-collar construction worker earnings by about 16 percent per year. Effects are largest, however, among the poorest individuals, increasing earnings by about 18 percent for low-income construction workers– while having no effect on the salaries of managers and supervisors in the industry (Manzo et al., 2016a). By stabilizing the wage floor, prevailing wage laws have been found to reduce the number of blue-collar construction workers earning less than the official poverty line by 30 percent and reduce income inequality in the construction industry by as much as 45 percent (Manzo et al., 2016a; Manzo & Bruno, 2014).

By supporting middle-class lifestyles for blue-collar workers, prevailing wage laws encourage skilled individuals to join the construction trades (Philips, 2014). A January 2018 survey by the Associated General Contractors found that 64 percent of construction firms in Minnesota increased base pay in 2017 in order to retain or recruit skilled hourly craft professionals (AGC, 2018). With 72 percent of contractors reporting that they are experiencing difficulty in hiring skilled labor and extremely low unemployment in Minnesota, weakening or repealing the prevailing wage law would have a negative effect on worker wages and benefits, hurting recruitment into the construction trades.

> **Prevailing wage laws improve apprenticeship training, promote a strong middle class, and have positive impacts on public budgets.**

By improving apprenticeship training and safety, promoting a strong middle class, incentivizing skilled workers to enter the construction industry, and keeping construction costs stable, prevailing wage laws have a positive impact on public budgets. Because they earn higher incomes, blue-collar construction workers in states with prevailing wage laws contribute more in tax revenues than their counterparts in states without the law. In fact, the absence of prevailing wage standards reduces income tax and property tax revenues from blue-collar construction workers by 17

percent while raising the number of workers on government assistance programs (Philips & Blatter, 2017). Blue-collar construction workers in states without effective prevailing wage laws are statistically more likely to rely on Supplemental Nutrition Assistance Program (SNAP) food stamps and qualify for Earned Income Tax Credit (EITC) assistance (Manzo et al., 2016a).

Prevailing wage also produces critical social benefits. For example, veterans are more likely to populate the construction trades and to own construction firms than non-veterans. Any given blue-collar construction worker is 1.9 percentage-points more likely to be a military veteran in states that have strong or average prevailing wage laws. In addition to increasing veteran employment in blue-collar construction occupations, strong or average prevailing wage laws boost the annual incomes of veteran blue-collar construction workers by up to 11 percent, increase employer-provided health coverage for veterans by as much as 15 percent, and reduce veteran poverty by between 24 and 31 percent for those working in construction (Manzo et al., 2016b).

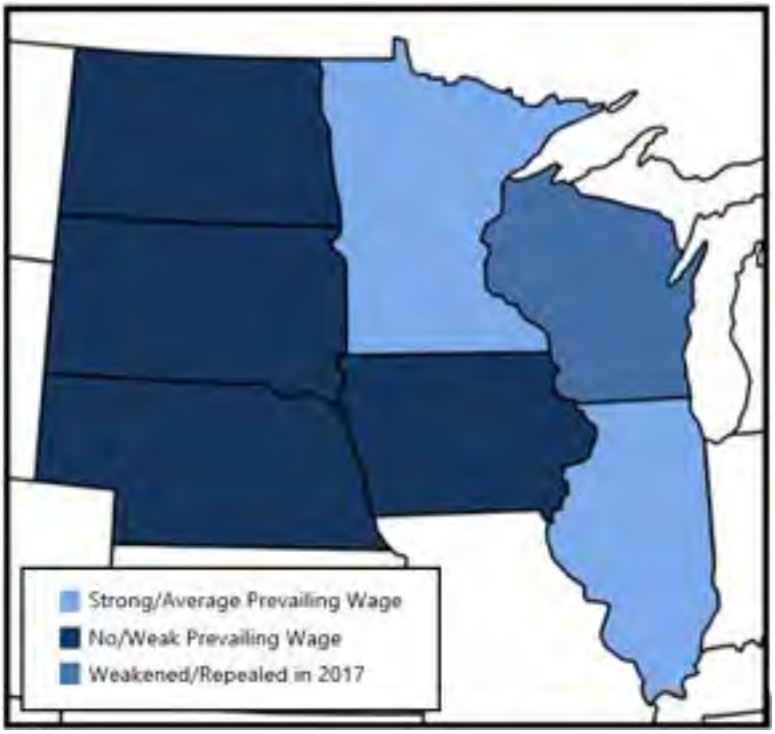
Economic research has found that prevailing wage helps workers of all races. While the empirical evidence has established this time and again, opponents of prevailing wage occasionally rely on spurious claims of racial disparities in the law. No racial disparities exist. In fact, prevailing wage levels the playing field for contractors and prohibits them from paying less than the local living wage to any group of workers, helping to reduce pay discrimination in construction.

For example, peer-reviewed studies have found no relationship between prevailing wage laws and the racial composition of the construction labor force. After accounting for individual factors such as age, gender, residence in a metropolitan area, marital status, educational attainment, and union coverage, there is no evidence that African-American workers are discriminated against as a result of prevailing wage laws (Belman & Philips, 2005). Another recent working paper, the most comprehensive analysis to date on African-American representation in construction, finds that any perceived discrimination attributable to prevailing wage laws completely disappears once a state's racial composition and economic conditions are considered (Belman et al., 2018; Duncan & Ormiston, 2017).

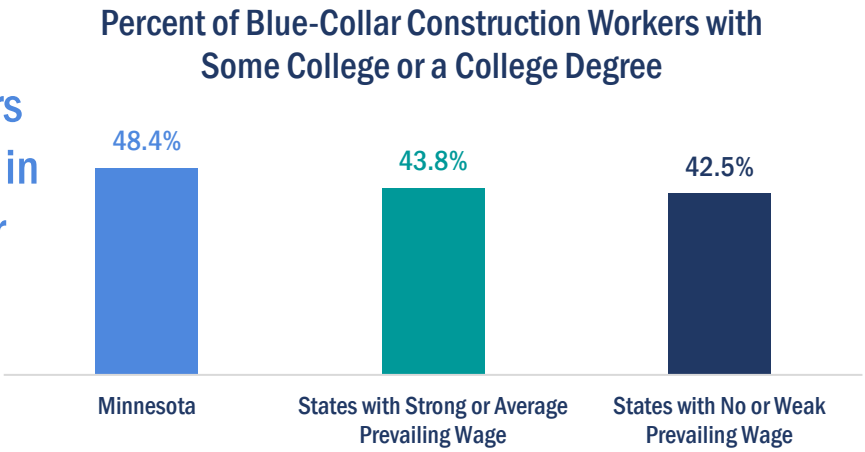
The Effect of Prevailing Wage on Construction Worker Incomes and Reliance on Public Assistance in Minnesota

This section compares labor market outcomes for construction workers residing in a seven-state region with Minnesota at the heart (Figure 6). The states are categorized by those with *strong or average* prevailing wage laws and those with *weak or no* prevailing wage policies. In 1995, Armand Thieblot rated state-level prevailing wage laws based on factors including coverage thresholds, type of work covered, and the determination of wage rates; this methodology is used to assess state prevailing wage laws in the seven-state region (Thieblot, 1995). States with strong or average prevailing wage laws include Minnesota and Illinois. States with weak or no laws include Iowa, North Dakota, South Dakota, and Nebraska. Wisconsin had a strong prevailing wage law that was weakened on January 1, 2017 to exclude projects funded by local governments and then fully repealed later in 2017 (Bauer, 2017). Thus, Wisconsin observations starting in January 2017 are classified as occurring in weak or no law states.

Figure 6: Map of Minnesota and Six Neighboring States Used in Analysis, 2008-2017



Construction workers are highly educated in states with strong or average prevailing wage laws.



The data included in this report are from the Annual Social and Economic Supplement (ASEC) to the March *Current Population Survey* (Flood et al., 2017). The *Current Population Survey* is a random poll of households, jointly sponsored by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics. Figure 7 provides summary statistics for all employed blue-collar construction workers in the dataset, by state of employment. Blue-collar construction workers are defined as all workers employed in "construction occupations," such as construction laborers, operating engineers, electricians, carpenters, plumbers, pipefitters, and painters.

The blue-collar construction workforce is better-educated in states with strong or average laws than in states with weak or no laws (Figure 7). The share of blue-collar construction workers with a college degree or some college-level instruction (which can include apprenticeship training) is 43.8 percent in states with strong or average prevailing wage laws compared to just 42.5 percent in states with weak or no laws. In Minnesota, fully 48.4 percent of blue-collar construction workers have a college degree or have some college-level training.

Personal economic and health outcomes are very different in states with strong or average prevailing wage laws compared with those in states without effective prevailing wage laws (Figure 7). The average real wage and salary income for blue-collar construction workers was nearly $49,600 in states with strong or average prevailing wage laws in the region, or about $8,600 more than their counterparts in states with weak or no laws (about $40,900). In Minnesota, blue-collar construction workers earned nearly $7,000 more annually (over $47,900) than their counterparts in states with weak or no laws. Similarly, 75.9 percent of blue-collar construction workers in Minnesota were covered by a private health insurance plan and 44.4 percent had a pension plan at work. By contrast, in neighboring states without effective prevailing wage laws, only 70.8 percent of construction workers were covered by a private health insurance plan and just 37.4 percent had a pension plan at work. Private health insurance and pension coverage are significantly higher in states with strong or

average prevailing wage laws than in states with weak or no prevailing wage laws.

Other important data reported in Figure 7 indicate that blue-collar construction workers in states with weak or no prevailing wage laws are more likely to be impoverished, more likely to receive Supplemental Nutrition Assistance Program (SNAP) food stamp assistance, and more likely to have worse health conditions. Fewer blue-collar construction workers earned an annual income that placed them below the official poverty line (6.9 percent) in states with strong or average prevailing wage laws than in those without (7.7 percent). Accordingly, fewer blue-collar construction workers relied on food stamps in states with strong or average prevailing wage laws (5.6 percent) than in states with weak or no laws (8.2 percent). Minnesota's construction workers are 0.9 percentage-point less likely to earn less than the poverty line (6.8 percent), 2.7 percentage-points less likely to receive SNAP food stamp assistance (5.5 percent), and 4.5 percentage-points more likely to be in "excellent" health (31.6 percent) than their peers in neighboring states with weak or no prevailing wage laws.

While the summary statistics of Figure 7 report "what is," the remainder of this section investigates "how much" strong or average prevailing wage legislation is responsible for these outcomes. A *difference-in-differences* regression model is utilized to understand the impact of Minnesota's prevailing wage law. This technique, a "curve fitting" method, allows researchers to account for other factors that may influence market outcomes, separating out the unique and

Figure 7: Information on Construction Workers in Minnesota and Six Neighboring States, 2008-2017

Summary Statistics	Minnesota	States with Strong or Average Prevailing Wage (including MN)	States with No or Weak Prevailing Wage
Employed construction worker observations	703	2,235	2,347
Weighted annual construction workers	109,306	439,921	160,780
Demographics			
White, non-Latino	89.2%	76.6%	82.3%
People of color (non-white)	10.8%	23.4%	17.7%
Female	1.7%	2.4%	3.5%
High school degree or less	50.6%	55.1%	56.4%
Some college, no degree	15.8%	19.5%	19.2%
College degree	32.6%	24.3%	23.3%
Income, Healthcare, and Poverty			
Real wage and salary income*	$47,920	$49,587	$40,945
Usual hours worked per week last year	41.3	40.5	41.4
Covered by private health insurance plan	75.9%	74.0%	70.8%
Has a pension plan at work	44.4%	42.1%	37.4%
Lives below official poverty line	6.8%	6.9%	7.7%
Worker receives SNAP food stamp assistance	5.5%	5.6%	8.2%

Source: *Current Population Survey,* Annual Social and Economic Supplement (2008-2017). *Reported only for those workers with positive earnings.

independent effect of a strong or average prevailing wage law relative to the overall labor market in each state. The analyses include all observations of employed workers in the seven states over 10 years, investigating how strong or average prevailing wage laws impact blue-collar construction workers through an "interaction term." A statistically significant finding is an indication that the relationship may be causal. The models include ordinary least squares (OLS), quantile, and probit regression models.

A strong or average prevailing wage law produces positive impacts on labor market compensation outcomes in Minnesota. Based on the regional model, a strong or average prevailing wage increases annual blue-collar construction worker incomes by 5.2 percent on average (Figure 8). In addition, strong or average prevailing wage laws increase the probability that a blue-collar construction worker is covered by a private health insurance plan by 5.0 percentage points and the probability that he or she has a pension plan at work by 5.3 percentage points on average. All of these results are statistically significant at the 95-percent level of confidence. These results are also consistent with a national study by Manzo, Lantsberg, and Duncan, which found that prevailing wage laws were associated with higher annual incomes and greater health and pension coverage for blue-collar construction workers (Manzo et al., 2016a). By maintaining prevailing wage, Minnesota significantly expands private health and retirement coverage, thereby reducing costs to taxpayers as blue-collar construction workers remain self-sufficient instead of relying on public social insurance programs.

Construction workers in prevailing wage states have better wages, are more likely to have health insurance, and are less likely to rely on government assistance.

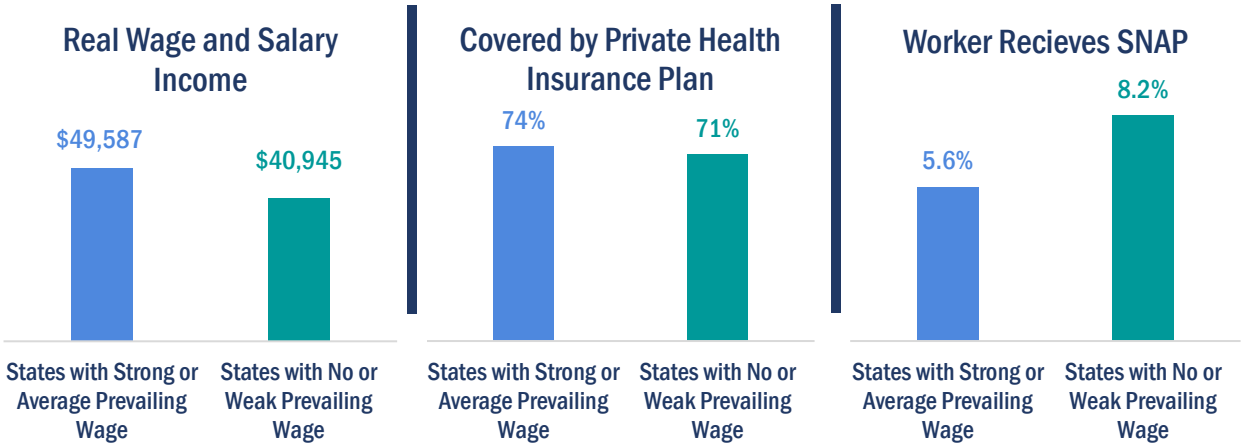
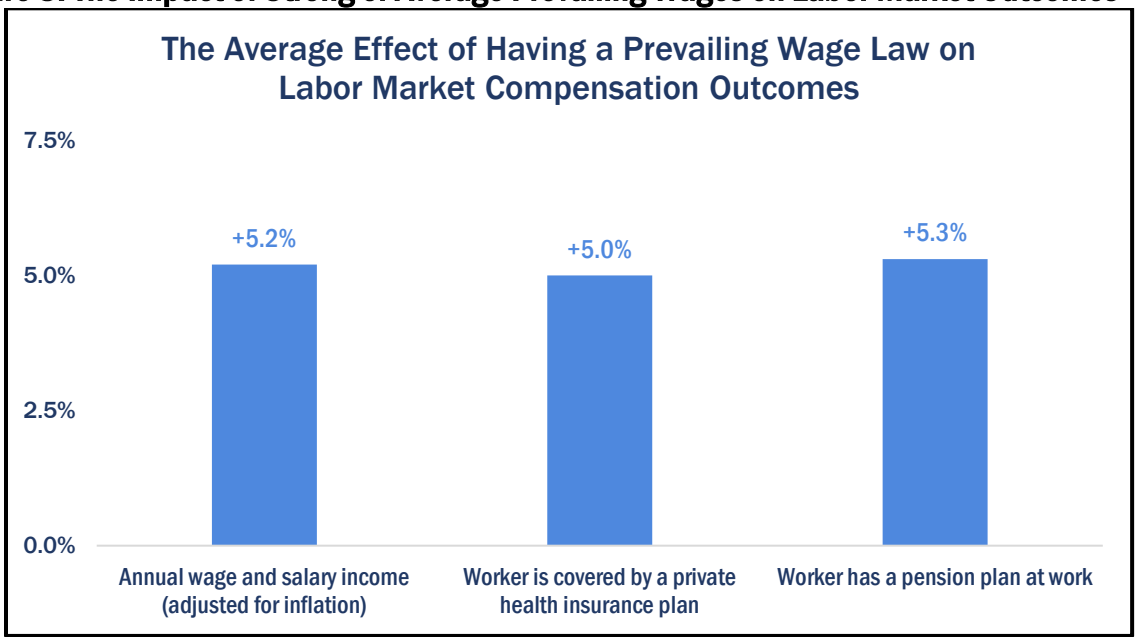


Figure 8: The Impact of Strong or Average Prevailing Wages on Labor Market Outcomes



Source: Authors' analysis of the *Current Population Survey*, Annual Social and Economic Supplement (2008-2017). For full regression results in .txt format, please contact author Frank Manzo IV at fmanzo@illinoisepi.org. All results are significant at p<|0.05|.

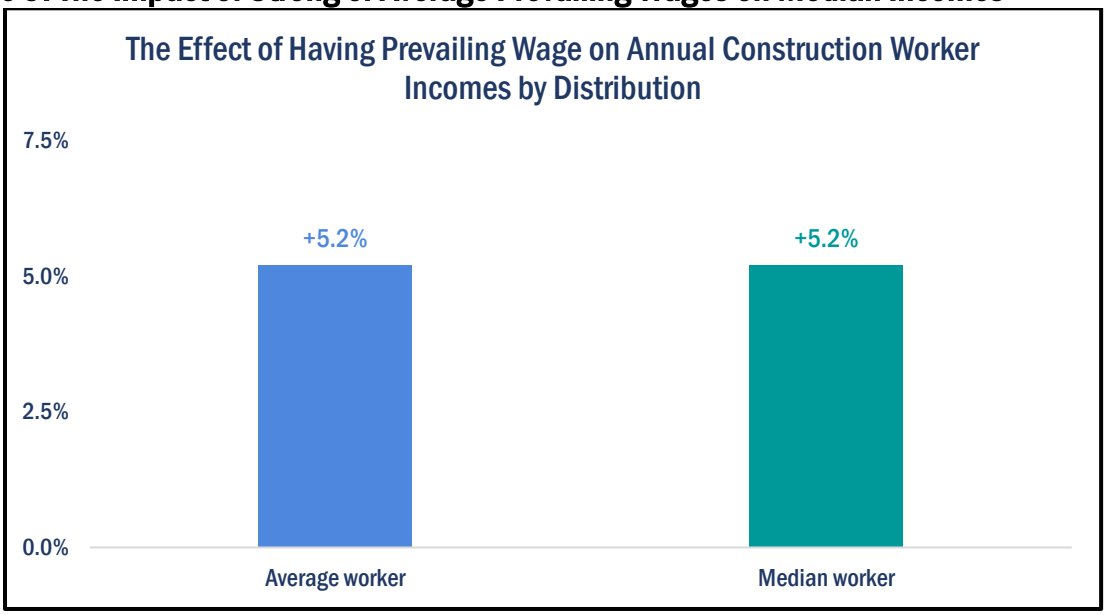
Prevailing wage increases blue-collar construction worker incomes by 5.2%.

Strong or average prevailing wage laws promote a strong middle class (Figure 9). Figure 9 presents results from a second analysis of prevailing wage on the median incomes of blue-collar construction workers. This model, a quantile regression, is a another way of evaluating the effect of strong or average prevailing wage laws that reduces the influence of outliers. The effect on the median blue-collar construction worker, at a 5.2 percent is consistent with the effect on the average worker. Taken together, these effects– which are all statistically significant at the 95 percent level of confidence– demonstrate that repeal of prevailing wage would result in an across-the-board pay cut for middle-class construction workers in Minnesota.

Strong or average prevailing wage laws increase worker earnings and improve employee benefits, resulting in more construction workers in the middle class. These economic benefits have spillover effects on government assistance programs.

As shown in Figure 10, the regional analysis provides statistical evidence that strong or average prevailing wage laws are associated with a 2.1 percentage-point decrease in the number of construction workers who qualify for and receive SNAP food stamp assistance. Minnesota's prevailing wage law helps reduce the financial burden on taxpayers in the state, because fewer construction workers need to rely on government assistance programs such as food stamps.

Figure 9: The Impact of Strong or Average Prevailing Wages on Median Incomes



Source: Authors' analysis of the *Current Population Survey*, Annual Social and Economic Supplement (2008-2017). For full regression results in .txt format, please contact author Frank Manzo IV at fmanzo@illinoisepi.org. All results are significant at p<|0.05|.

Figure 10: The Impact of Strong or Average Prevailing Wages on Food Stamp Recipiency

Impact on the Probability of Receiving Food Stamps	Average Marginal Effect
Strong or Average Prevailing Wage Law (Interaction)	–2.1%

Source: Authors' analysis of the *Current Population Survey*, Annual Social and Economic Supplement (2008-2017). For full regression results in .txt format, please contact author Frank Manzo IV at fmanzo@illinoisepi.org. Result is significant at p<|0.01|..

Figure 11 aggregates the findings to predict the number of affected workers in Minnesota due to the prevailing wage law. Figure 11 provides only a "static" assessment and assumes that nothing else would be different in an alternative scenario without prevailing wage. The top-line number is the average annual number of blue-collar construction workers in Minnesota from 2008 through 2017. These estimates do not include workers in extraction occupations, who are often grouped with construction workers, or white-collar employees in the construction industry.

The rest of the table incorporates the data to illustrate how Minnesota benefits by having a strong prevailing wage law, reported in percentage values and total worker values. Note that, given the finding by Professors Meyer and Mittag that government assistance is underreported by the *Current Population Survey* Annual Social and Economic Supplement (ASEC), Figure 11 likely provides conservative estimates (Meyer & Mittag, 2015).

Figure 11: Estimated Social Impact of Maintaining the Prevailing Wage Law in Minnesota

Economic or Budget Outcome for Blue-Collar Construction Workers	Actual (2008-2017)	If Minnesota Did Not Have Prevailing Wage	Estimated Benefit
Average workers in blue-collar construction occupations	109,300	109,300	--
Construction workers receiving SNAP food stamp assistance	5.5% *6,000*	7.6% *8,300*	–2.1% *-2,300*
Construction workers with a pension plan at work	44.4% *48,500*	39.1% *42,700*	+5.3% *+5,800*
Construction workers covered by private health insurance plan	75.9% *83,000*	70.9% *77,500*	+5.0% *+5,500*

Source: Authors' analysis of the *Current Population Survey*, Annual Social and Economic Supplement (2008-2017). All estimates rounded to the nearest hundred.

The data reveal that Minnesota's strong prevailing wage law prevents thousands of Minnesota construction workers from relying on government assistance programs (Figure 11). The average annual income of Minnesota's blue-collar construction workforce is 5.3 percent higher due to the state's prevailing wage law. For 2,300 of these workers, the pay raise associated with prevailing wage is so significant that they no longer qualify for Supplemental Nutrition Assistance Program (SNAP) food stamp assistance. In addition, the state's prevailing wage law increases health insurance and pension plan coverage for thousands of blue-collar construction workers in Minnesota. In fact, an estimated 5,800 construction workers have pension plans and 5,500 have private health insurance coverage due to Minnesota's prevailing wage law. By improving pension and health coverage, Minnesota's prevailing wage law prevents thousands of blue-collar construction workers from relying on public retirement and public health programs, further reducing costs to taxpayers.

> **Minnesota's prevailing wage law disproportionately benefits veterans who populate the trades at higher rates.**

It may be worth noting that, separate from Minnesota' prevailing wage law, construction trades unions also positively impact public budgets in Minnesota. A recent 2018 working paper by Professor Aaron Sojourner and José Pacas at the University of Minnesota finds that "union membership has a large, positive net fiscal impact." Union members, they find, contribute approximately $1,100 more in federal income taxes, state income taxes, and local property taxes while receiving about $180 less in public benefits such as food stamps, Medicaid, and welfare payments than

comparable non-union workers (Sojourner & Pacas, 2018).

Lastly, Figure 12 summarizes conclusions from a previous report on the benefits of prevailing wage to military veterans in Minnesota (Manzo et al., 2016c). In Minnesota, 10.9 percent of all construction firms with paid employees are owned by veterans, compared to 8.0 percent of all non-construction companies– a 2.9 percentage-point difference. Thanks to Minnesota's prevailing wage law, nearly 2,400 blue-collar veterans have pursued careers in construction occupations, as prevailing wage standards have improved the attractiveness of working in construction. Similarly, over 400 veterans are covered by employer-provided health plans and 100 veterans earn more than the poverty line as a result of Minnesota's prevailing wage law (Figure 12). Minnesota's strong prevailing wage law disproportionately benefits veterans who populate the trades at higher rates than non-veterans, and who increasingly utilize apprenticeship programs to transition into civilian careers.

Figure 12: Estimated Impact of Maintaining the Prevailing Wage Law on Veterans in Minnesota

Economic or Budget Outcome for Military Veterans in Construction	Actual (2015)	If Minnesota Did Not Have Prevailing Wage	Estimated Benefit
Total military veterans employed as blue-collar construction workers	10,600	8,200	+2,400
Total military veterans in construction without health insurance coverage	3,200	3,600	–400
Total military veterans in construction earning less than the official poverty line	100	200	–100

Source: Manzo et al., 2016c.

The Impact of Minnesota's Prevailing Wage Law on the Minnesota Economy

Prevailing wage laws are intended to protect local construction labor standards from distortions associated with publicly-funded construction (Montana DLI, 2017). Large infusions of government spending into an area, along with a contract award process that rewards the lowest bidder, may attract contractors from areas where construction worker wage rates and skill levels are comparatively low. Competition between these nonlocal and local contractors may result in the erosion of local construction standards. Concern over the use of low-wage, out-of-state construction workers on a University of Minnesota project was the motivation for Minnesota's wage policy in 1973 (Minnesota DLI, 2017a). Prevailing wage laws create a level playing field for all contractors by ensuring that public works expenditures maintain and support local area standards.

By protecting local wages, prevailing wage laws also protect work for local contractors and construction workers. The policy allows local contractors to submit competitive and profitable bids based on the wage rates needed to attract local workers possessing the skills required of the project. Local contractors thus have an advantage over out-of-area, out-of-state, and foreign competitors. When local companies and workers are employed on a project applying the payment of prevailing wages, more project funds remain in the local economy and stimulate additional economic activity. Without adequate prevailing wage protection, more work is completed by out-of-area contractors with more project funds, jobs, income, spending, and economic activity leaking out of the local economy.

Evidence of this benefit is illustrated by the examination of 681 subcontractor low bids on school projects built within the seven-county Minneapolis-St. Paul metro area since 2016, revealing that 74 percent of total bid values for prevailing wage projects were awarded to metro-based contractors (Figure 3). For projects in the seven-county area that did not apply prevailing wage standards, only 64 percent of combined bid values were awarded to local contractors. This difference indicates that, when a school district located within the seven-county metro area chooses to include prevailing wages, about 10 percent more of the project value will be awarded to contractors located within the metro area.

Several studies and publicly-available data also support the claim that prevailing wage laws are associated with more work for local contractors and construction workers. An examination of library construction in Santa Clara County, California reveals that 39 percent of subcontractors employed on prevailing wage projects were county-resident businesses. The corresponding figure when prevailing wages did not apply was 23 percent. Since local contractors are three times more likely to use local construction workers, more labor income and spending remained in the county when prevailing wages applied (Duncan, 2011). Another study

illustrates how the weakening and eventual repeal of Indiana's prevailing wage law benefited low wage, out-of-state construction workers in Kentucky (Manzo, 2016). Along the southern border with Kentucky, public works construction employment in Indiana decreased by about 800 jobs after the wage policy was weakened. Along the bordering counties in Kentucky, public works construction employment grew by about 800 jobs over the same period. Average construction wages were lower in Kentucky, suggesting that weakening the wage policy resulted in greater demand for low wage, out-of-state workers. Finally, data from the *Economic Census of Construction* indicates that states with weak or no prevailing wage laws have about 2.4 percent more of the total value of construction completed by contractors from other states, compared to states with average or strong wage policies (Census, 2012b). This is a 2.4% reduction in the value of all public *and* private construction– and is statistically significant.

The amount of work completed by out-of-state contractors depends on the presence of prevailing wage laws, the size of a state's construction industry, the size of the industry in neighboring states, and the skills of a state's construction workforce. Minnesota has a prevailing wage law, a border with Canada that limits competition, and is relatively large compared to many of its neighbors. As a consequence, 95.2 percent of the total value of construction is completed by Minnesota-resident contractors (Figure 13).

Because of the relative size of Minnesota's construction industry and the state's prevailing wage law, a small amount of construction value– 4.8 percent– is completed by contractors from other states (Figure 13). Contractors from Wisconsin, North Dakota, Iowa, Illinois, Michigan, and South Dakota, are responsible for all of Minnesota's construction work completed by contractors from other states (Census, 2012b). If the state did not have prevailing wage standards, Minnesota contractors would be expected to experience increased competition from out-of-state builders for two reasons. First, inadequate prevailing wage protection opens state-funded construction to deleterious competition from fly-by-night contractors from neighboring states with low wages. Second, the absence of prevailing wage may result in less work for local contractors participating in joint labor-management apprenticeship programs, which are responsible for the preponderance of worker training in construction. This reduces training resources, reduces infrastructure quality, and harms the recruitment of technologically-proficient workers with high skill levels.

Figure 13: Value of Construction Work Completed in Minnesota by Contractors from Neighboring States

State	Work Completed in Minnesota *	Percent of Minnesota Construction Value
Wisconsin	$893,000,000	2.6%
North Dakota	$312,000,000	0.9%
Iowa	$171,000,000	0.5%
Illinois	$164,000,000	0.4%
Michigan	$138,000,000	0.4%
South Dakota	$60,000,000	0.1%

Source: Authors' analysis of the *Economic Census of Construction* (Census, 2012a) using IMPLAN (IMPLAN, 2017). *Adjusted to 2017 dollars.

Economic data indicates that Minnesota's strong prevailing wage law increases the market share by 2.4 percent for state-resident contractors. Based on the most-recent data from the *Economic Census of Construction*, 2.4 percent is equal to about $802 million (in constant 2017 dollars) in construction work in Minnesota (Census, 2012a). In the absence of adequate prevailing wage standards, this $802 million in construction work would be completed by out-of-state or foreign contractors.

Minnesota's prevailing wage law performs an important economic development function by protecting and retaining construction spending in the state. This additional spending circulates throughout the economy, benefiting industries that are not related to the construction industry. When measuring the economic impact of the $802 million in protected construction work, it is important to net out spending that would remain in the state regardless of whether in-state or out-of-state contractors perform the work. After removing the cost of supplies, materials, power, fuel, and other cost components (34.2 percent of total construction costs in Minnesota), as well as construction worker income that would remain in Minnesota regardless of who does the work (2.9 percent of total construction costs), the net effect of $802 million in retained construction is $505 million.[2]

The economic impact of this additional in-state work is measured with the IMPLAN economic impact software using data for the State of Minnesota (IMPLAN, 2017). This economic impact analysis is based on the multiplier, or ripple effect, associated with the retention of construction incomes and spending in Minnesota's economy. IMPLAN measures the inter-industry relationships within an economy, measuring market transactions between businesses and households. The results are reported in constant 2017 dollars. For background on IMPLAN, and its connection to the University of Minnesota, please see the Appendix.

The impact results obtained from IMPLAN are reported in Figure 14. The net benefit of $505 million in protected construction business and spending results in an overall increase in economic activity in Minnesota of approximately $981 million. The corresponding employment increase is about 7,200 jobs. Specifically, Minnesota's prevailing wage law saves or creates about 5,000 direct jobs in the construction industry and supports 2,200 additional jobs through in-state construction worker spending in sectors such as retail, service, and restaurants. The increase in economic activity is also associated with an approximate $37 million increase in state and local tax revenue. This is a statewide impact that is experienced each year.

[2] According to information from the Colorado Building Trades Council, traveling construction workers typically spend about 20 percent of their earning supporting themselves while working away from home. Based on data from the *Economic Census of Construction*, wage income (excluding required and voluntary benefits) is, on average, 14.6 percent of construction costs in the states that neighbor Minnesota (weighted by a neighboring state's portion of work completed in Minnesota). If 20 percent of this income is spent supporting out-of-state workers during their time in Minnesota, approximately $23 million is also netted out because this amount would remain in the state if local workers completed the project.

Figure 14: Economic Impact of Construction Work Supported by Minnesota's Prevailing Wage Law

Category	Direct Effect	Total Impact
Economic Activity	+$505 million	+$981 million
Jobs	+4,350 jobs	+7,200 jobs
State and Local Tax Revenue	–	+$37.2 million

Source: Authors' analysis of the *Economic Census of Construction* (Census, 2012a) using IMPLAN data for the of Minnesota (IMPLAN, 2017).

Figure 15: Industry-Level Economic Impacts of Construction Work Supported by Minnesota's Prevailing Wage Law, Selected Industries

Industry	Revenue/Income Gain ($)	Employment Gain (Jobs)
Wholesale trade	+$45.0 million	+192
Retail trade (general, non-store, clothing, gas, etc.)	+$29.6 million	+212
Imputed rent, owner-occupied dwellings	+$24.8 million	–
Real estate	+$12.9 million	+79
Hospitals	+$11.2 million	+69
Restaurants (full and limited service)	+$10.0 million	+130
Offices of physicians	+$5.8 million	+34

Source: Authors' analysis of the *Economic Census of Construction* (Census, 2012a) using IMPLAN data for the of Minnesota (IMPLAN, 2017).

The total economic impact is the sum of all industry-level impacts. The impacts for selected industries are reported in Figure 15. For example, with the additional construction business supported by Minnesota's prevailing wage law, sales for wholesale and retail businesses in the state increase by over $70 million, creating about 400 jobs in these industries per year. The overall increase in economic activity also raises home values, reported through the $25 million annual increase in imputed rental value should home owners rent out their dwellings. Real estate is particularly sensitive to economic activity and the boost from prevailing wage increases annual sales revenue in this sector by about $13 million and employment by about 80 jobs. Minnesota's prevailing wage law also increases in-state construction employment that results in more spending and employment in hospitals, doctors' offices, and restaurants. These industry-level impacts reveal the economic development role of prevailing wage laws. By protecting work for local contractors and construction workers, prevailing wages direct more spending into the state's economy and support industries that are unrelated to the construction industry.

> Minnesota's prevailing wage law boosts the economy by $981 million and saves or creates about 7,200 jobs annually.

A Case Study: Construction Market Outcomes in Minnesota and Indiana Since 2014

Indiana offers a case study to compare and contrast with Minnesota. On July 1, 2015, Indiana lawmakers completely repealed the state's prevailing wage law, called the Indiana Common Construction Wage Act. While other states have recently repealed their prevailing wage laws, such as border-state Wisconsin in 2017, Indiana was the first state to repeal its law since 1995, when Oklahoma's law was invalidated by a court decision (WHD, 2017). Data has become available to begin assessing the early effects of repealing Indiana's prevailing wage law (Manzo & Duncan, 2018).

To evaluate the construction markets in Minnesota and Indiana, an intuitive approach called "difference-in-differences" is utilized. This technique is used in both the social sciences and the medical field to isolate the impact of a change in one group (the "treatment group") from a similar group (the "control group"). In a scientific experiment, Minnesota would be considered the "control group" because the state had and continues to have a prevailing wage law. Indiana would be the "treatment group" as a state that experienced a change, from having a state prevailing wage law to repealing the policy.

Economists generally agree that a worker's contribution to national gross domestic product (GDP) is a good measure of his or her annual productivity. The Bureau of Economic Analysis (BEA) at the U.S. Department of Commerce collects information on annual gross domestic product (GDP) by state that can be deconstructed by industry (BEA, 2017). Additionally, the BEA reports total full-time and part-time employment levels by industry in each state. Dividing the construction industry's contribution to GDP (value added) by the total number of employees in the construction industry provides a measure of per-worker productivity.

Figure 16 shows GDP per employee in the construction industry in 2014, 2015, and 2016. The two years of interest are 2014, which serves as the baseline because it is the year prior to Indiana repealing its prevailing wage law, and 2016. In 2014, annual GDP per worker (not adjusted for inflation)– including both blue-collar workers and white-collar employees– was $73,400 in Minnesota's construction industry and $64,400 in Indiana's construction industry. Construction productivity grew to $82,300 in Minnesota by 2016, an increase of 12.1 percent (over $8,900). Conversely, in Indiana– which repealed prevailing wage in July 2015– annual GDP per construction employee only increased to $67,300, a growth rate of 4.4 percent (about $2,900). As a result, construction productivity per worker grew 7.7 percentage-points faster in Minnesota than it did in Indiana after the latter repealed prevailing wage (Figure 16).

Figure 16: Change in Annual Construction Productivity, Minnesota vs. Indiana, Difference-in-Differences

Gross Domestic Product Per Worker, Construction Industry (Bureau of Economic Analysis)					
Area	2014 (Pre-Repeal)	2015 (Repealed in July)	2016 (Post-Repeal)	Growth Rate Since 2014	Dollar Change Since 2014
Minnesota	$73,438	$78,306	$82,344	+12.1%	+$8,906
Indiana	$64,374	$65,873	$67,227	+4.4%	+$2,853
Minnesota Advantage	**+$9,064**	**+$12,433**	**+$15,117**	**+7.7%**	**+$6,053**

Source(s): Authors' analysis of BEA (2017).

Construction productivity grew 7.7 percentage-points faster in Minnesota than it did in Indiana.

In addition, Quarterly Workforce Indicators (QWI) are compiled by the U.S. Census Bureau in the *Longitudinal Employer-Household Dynamics* survey and made available through their Local Employment Dynamics (LED) Extraction Tool (LEHD, 2017). Instead of studying all blue-collar construction workers or the entire construction industry, the QWI dataset includes information on the "heavy and civil engineering construction" sector. The vast majority of heavy and civil engineering construction involves public works, including the construction and maintenance of highways, streets, bridges, dams, parks, and trails. Dredging, land drainage, and utility line construction are also included in heavy and civil engineering construction (Census, 2017). In the QWI dataset, turnover data and employment counts are available on a quarterly (three-month) basis.

Figure 17 presents turnover data for heavy and highway contractors, showing the turnover rate for the four quarters leading up to repeal of prevailing wage in Indiana and the four quarters immediately following repeal. Turnover is highest in the third quarter of every year as firms hire additional workers to complete summer jobs. In the year prior to Indiana repealing its prevailing wage law, worker turnover in the heavy and civil engineering construction sector averaged 12.6 percent in Minnesota and 12.3 percent in Indiana. After Indiana repealed its prevailing wage law, however, average quarterly turnover in the sector fell to 12.2 percent in Minnesota but increased to 13.2 percent in Indiana (Figure 17).

Construction worker turnover decreased in Minnesota, while it increased in Indiana.

Figure 17: Descriptive Statistics on the Quarterly Turnover Rates in Heavy and Civil Engineering Construction

Turnover Rate	Minnesota	Indiana
2014Q3	32.6%	23.0%
2014Q4	6.3%	9.4%
2015Q1	6.2%	8.6%
2015Q2	5.4%	8.3%
Average	**12.6%**	**12.3%**
Indiana Repeals Prevailing Wage		
2015Q3	31.7%	23.6%
2015Q4	5.5%	10.6%
2016Q1	6.0%	8.6%
2016Q2	5.5%	10.1%
Average	**12.2%**	**13.2%**

Source(s): Authors' analysis of LEHD (2017).

Figure 18 shows the year-over-year change in turnover rates and provides a "difference-in-differences" estimate of the Minnesota advantage of maintaining prevailing wage compared to Indiana repealing its law. In Minnesota's heavy and civil engineering construction sector, worker turnover fell year-over-year in three out of four quarters, with an average decrease of 0.5 percentage point. Meanwhile, in Indiana's heavy and civil engineering construction sector, worker turnover went up year-over-year in three out of four quarters, with an average increase of 0.9 percentage point. By repealing its prevailing wage law, Indiana may have forced productive workers out of construction in search of another career while low-skilled employees entered the industry. In any case, relative worker turnover was 1.4 percentage-points lower in Minnesota than in Indiana in the year after the policy change in Indiana.

QWI data also offer a measure of public works employment. Because the U.S. Census Bureau uses payroll records from contractors for QWI data, employment counts for the heavy and civil engineering construction sector should align with the actual number of workers employed on public works construction projects. Figure 19 displays employment data for heavy and highway

Figure 18: Change in Turnover Rate in Heavy and Civil Engineering Construction, Minnesota vs. Indiana

Turnover Rate Change	Minnesota	Indiana	Minnesota Advantage
Q3 Year over Year	–0.9%	+0.6%	–1.5%
Q4 Year over Year	–0.8%	+1.2%	–2.0%
Q1 Year over Year	–0.2%	0.0%	–0.2%
Q2 Year over Year	+0.1%	+1.8%	–1.7%
Average	**-0.5%**	**+0.9%**	**–1.4%**

Source(s): Authors' analysis of LEHD (2017).

Figure 19: Descriptive Statistics on Quarterly Employment Counts in Heavy and Civil Engineering Construction

Employment	Minnesota	Indiana
2014Q3	28,782	17,166
2014Q4	27,535	17,422
2015Q1	18,465	12,951
2015Q2	21,034	15,580
Average	**23,954**	**15,780**
	Indiana Repeals Prevailing Wage	
2015Q3	29,730	17,678
2015Q4	28,584	18,338
2016Q1	18,729	13,071
2016Q2	21,513	15,173
Average	**24,639**	**16,065**

Source(s): Authors' analysis of LEHD (2017).

contractors in Minnesota and in Indiana. In the year prior to Indiana repealing its prevailing wage law, there were an average of about 24,000 employees in the heavy and civil engineering construction sector in Minnesota and an average of about 15,800 in Indiana. In the year after, average sectoral employment improved to more than 24,600 workers in Minnesota and 16,100 workers in Indiana (Figure 19).

Similar to the previous analysis of worker turnover rates, Figure 20 shows year-over-year changes by quarter and provides a "difference-in-differences" estimate of the Minnesota advantage of maintaining prevailing wage compared to Indiana repealing its law. In Minnesota's heavy and civil engineering construction sector, total employment increased year-over-year in all four quarters, with an average increase of 2.9 percent. Meanwhile, in Indiana after the policy change, heavy and civil engineering construction employment increased in only three out of four quarters, growing by a smaller 1.8 percent. Accordingly, heavy and civil engineering construction employment grew 1.1 percentage points faster in Minnesota than it did in Indiana (Figure 20).

Minnesota's construction market has fared better than Indiana's construction market since Indiana repealed its prevailing wage law. Per-worker productivity has grown faster in Minnesota and turnover rates have fallen in Minnesota while rising in Indiana. While public works employment has increased in both states, it has grown faster in Minnesota than in Indiana following repeal of prevailing wage in the latter state. Ultimately, maintaining the prevailing wage law has produced positive effects on construction market outcomes in Minnesota while repeal has had negative consequences in Indiana.

Figure 20: Change in Employment in Heavy and Civil Engineering Construction, Minnesota vs. Indiana

Employment Change	Minnesota	Indiana	Minnesota Advantage
Q3 Year over Year	+3.3%	+3.0%	+0.3%
Q4 Year over Year	+3.8%	+5.3%	–1.5%
Q1 Year over Year	+1.4%	+0.9%	+0.5%
Q2 Year over Year	+2.3%	-2.6%	+4.9%
Average	**+2.9%**	**+1.8%**	**+1.1%**

Source(s): Authors' analysis of LEHD (2017).

Conclusion

The Minnesota Prevailing Wage Act keeps construction costs stable. The preponderance of peer-reviewed studies conducted since 2000 finds that prevailing wage laws have no effect on the cost of public construction projects, including 82 percent of the studies focused on school construction costs. An analysis of 640 subcontractor low bids on school construction projects in the Twin Cities region also finds that winning bids based on the payment of prevailing wages are no more costly than bids that do not require prevailing wages.

Prevailing wage promotes a skilled, middle-class construction workforce that completes high-quality public construction projects on time and on budget. Joint labor-management programs, which train 93 percent of all registered apprentices in Minnesota, account for the vast majority of human capital investment in the construction industry. By increasing apprenticeship training in these and other programs, prevailing wage also fosters self-sufficient construction workers. For blue-collar construction workers in Minnesota, prevailing wage boosts incomes, expands health insurance and pension coverage, and reduces reliance on government assistance programs. This attracts talented young workers into the construction trades and helps to meet contractor demand for skilled labor.

Minnesota's prevailing wage law also produces positive impacts on the broader Minnesota economy. By protecting local standards, prevailing wage supports work for local contractors and their employees. In total, prevailing wage increases employment in Minnesota by 7,200 jobs and boosts the economy by $981 million while generating $37 million in state and local tax revenue. Ultimately, the prevailing wage is the best deal for Minnesota taxpayers.

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Appendix

School Construction Costs in the Seven-County Twin Cities Region

Data for the examination of prevailing wage requirements on school construction costs in the seven-county Minneapolis-St. Paul metro area are based on 35 school projects that were supervised by construction managers– including three involving the construction of new schools. Construction managers provide assistance to project owners with the planning, design, and management of the construction project (CMAA, 2017). Several school districts in the seven-county metro area rely on construction managers to oversee projects that are, and are not, covered by prevailing wage standards. For the projects examined in this study, construction managers replace general contractors who typically self-perform some of the work and hire subcontractors to compete different portions of a project. Construction managers did not conduct any of the work on the school projects included in this study; rather, these managers assumed responsibility for subcontracting all work.

Under the construction manager approach, subcontractors submit bids for each specific work type (such as asphalt, carpentry, and concrete work) for the project. These specific-work bids are called "package bids." This means that each of the 35 school projects has multiple package bids for the specific types of work required by the project. One of the school projects included in this study has as few as three package bids while another has a total of 57 package bids. As a consequence, there were 761 subcontractor low bids for the 35 school projects. After removing bids for equipment and material purchases, as well as a few bids that do not have complete information, there are a total of 640 subcontractor low bids. These projects involve 26 different types of work ranging from asphalt paving to waterproofing.

Detailed information on these projects was obtained from Dodge Data and Analytics (Dodge, 2017). This organization collects and distributes project bid information to the construction industry and is the standard source of data for the research on prevailing wage laws (Duncan & Ormiston, 2017). Additional information on package bids was obtained from applicable school board meeting minutes. Between the Dodge data and the meeting minutes, information was collected on bid dates, whether prevailing wages were required, the amount of the winning bid for each package, and the winning contractor. As previously described, school districts can choose to apply state prevailing wage and benefit rates to projects that do not involve state funds. For the projects between 2015 and 2017 included in this study, prevailing wages were applied on school projects built in Districts 12, 191, 196, 271, and 833. Prevailing wages were not required for the projects built in Districts 110, 112, 273, 284, and 728. Prevailing wages applied to 286 of the projects. The other 354 projects did not require the payment of prevailing wage and benefit rates.

The advantage that this dataset has over the typical information available to researchers is that it includes detailed measures of the specific type of work ordered. This is an important consideration. For example, if prevailing wage projects are concentrated in particularly expensive types of work such as carpentry (and projects that do not require prevailing wages are concentrated in less-expensive work types such as asphalt paving), then statistical models would attribute higher costs to prevailing wages simply because

the type and complexity of work is not considered. Controlling for these detailed measures of the specific type of work performed allows for an apples-to-apples comparison on the effect of prevailing wage standards on schools that are, and are not, covered by the wage policy.

The data for the 640 package bids are used in the following model:

$$\textit{Log of Package Bid} = \beta_0 + \beta_1\ \textit{Prevailing Wage Project} + \beta_2\ \textit{Union Contractor} + \beta_3\ \textit{Total Project Cost} + \beta_4\ \textit{Out-of-Metro Contractor} + \beta_5\ \textit{New School} + \beta_6\ \textit{Work Type} + \beta_8\ \textit{Year} + \mu$$

Where *Log of Package Bid* is the natural log of the winning contractor's low package bid for the type of work performed. *Prevailing Wage Project* is equal to one if the project required the payment of prevailing wages and is equal to zero for projects that do not require prevailing wages. *Union Contractor* is equal to one if the winning contractor is signatory to a collective bargaining agreement and zero if not. *Total Project Cost* is the cost of the school project inclusive of construction costs, expenditures on furniture, fixtures, and equipment, as well as contingency funds. The total cost of the project is a measure of the size and complexity of a project. The square foot size of a project is typically used as the measure of project size, but this standard is not applicable to the detailed work types included in this study, such as plumbing and electrical work. It is expected that the larger the school project, in terms of its total cost, the larger the individual packages will be as more aggregate work means more work at the package level. *Out-of-Metro Contractor* is equal to one if the winning contractor has a business address outside of the seven-county metro area and zero otherwise. *New School* is equal to one for package bids on the construction of a new school. This variable is equal to zero if the package bids are for renovations, remodels, or additions. There are 26 dummy variables in the *Work Type* vector that capture cost differences from asphalt to waterproofing projects. *Year* is a vector of dummy variables for bids submitted in 2015, 2016, and 2107. The error term is μ. This specification provides the opportunity to examine the effect of prevailing wages on school construction costs at the level of the package bid, taking into consideration the overall size of the project, whether or not a contractor was signatory to a collective bargaining agreement or from outside the metro area, whether the construction was new or a renovation or addition, the type of work involved, and the time period.

Summary statistics for the variables included in the regression model are presented in Table A. These data indicate that average package bids and the total project costs for prevailing wage projects are lower than comparable cost data for projects that do not require the payment of prevailing wages. Package bids on prevailing wage projects range from about $8,000 to over $4 million, with a mean of $411,323. The project costs of prevailing wage projects range from a low of $1.9 million to $37 million, with a mean of $11.3 million. For projects that do not require the payment of prevailing wages, package bids are as low as $4,000 and as high as $12 million, with a mean of $554,929. Total project costs range from $2.8 million to approximately $53 million, with a mean of $17.5 million for non-prevailing wage projects. The standard deviations are larger than the variable means because the data for all of the cost measures are skewed. For example, the median low package bid for both prevailing wage and non-prevailing wage projects is approximately $193,000. This is less than half of the average package bid for projects that do or do not require the payment of prevailing wages. Skewed data for the dependent variable may affect average-based (ordinary least squares) regression analysis. This issue is addressed by also including an estimate based on quantile (median) regression.

Union contractors won 77 percent of prevailing wage projects and about 66 percent of bids that were not based on prevailing wages (Table A). The high percentage of union contractors participating in school construction regardless of the wage policy is due to union density in the metro area. For example, data from the *Current Population Survey Outgoing Rotation Groups* for construction and extraction occupations indicate that the Minneapolis metropolitan area has the second-highest rate of unionization (44.9 percent) among the cities included. The Chicago metro area had the highest rate of unionization over the 2005-2013 period (45.9 percent).

Table A: Summary Statistics of Subcontractor Low Bids on School Construction Projects in the Seven-County Minneapolis-St. Paul Metropolitan Region, 2015-2017

Variable	School Projects with Prevailing Wage	School Projects without Prevailing Wage
Winning Package Bid	$411,323** (602,091)	$554,929 (1,178,372)
Union Subcontractor	0.773** (0.42)	0.661 (0.47)
Project Cost	$11.3 million** (11.4 million)	$17.5 million (15.3 million)
Out-of-Metro Area Subcontractor	0.301 (0.46)	0.285 (0.45)
New School	0.105** (0.31)	0.172 (0.38)
Work Type (Asphalt)	0.028 (0.16)	0.023 (0.15)
2015	0.231** (0.42)	0.073 (0.26)
2016	0.378** (0.49)	0.779 (0.40)
2017	0.392** (0.49)	0.127 (0.33)
N	286	354

Source: Authors' analysis of School District Board Meeting minutes and Dodge Data and Analytics (Dodge, 2017). Standard deviations in parentheses. **Indicates the mean for prevailing wage projects is significantly different at p<|0.05| compared to the mean for projects that do not require the payment of prevailing wages.

Finally, Table A includes other interesting summary statistics. About 10 percent of subcontractor low bids on prevailing wage projects involved new school construction while the comparable share was 17 percent

on projects that were not covered by prevailing wages. There is no statistically significant difference, however, in the percent of work that involves asphalt paving between projects that do and do not require prevailing wages. More prevailing wage projects were awarded in 2015 and 2017 and more non-prevailing wage projects were awarded in 2016. Differences between years are significant that the 95-percent level of confidence.

Regression results are reported in Table B, with standard errors corrected for heteroskedasticity. Model 1 is based on an average ordinary least squares (OLS) regression. To determine if the skewed package bid data influence the results, a quantile (median) regression is used in Model 2. However, since school districts may choose to apply prevailing wages to a project, the prevailing wage variable may be endogenous. That is, both the outcome measure (school construction costs) and the treatment effect (prevailing wage project) may be related to omitted characteristics of the Minneapolis metro area that contribute to more expensive school construction and to the greater likelihood that a school project will require prevailing wages. For example, urban schools with relatively high enrollments and greater resources may build schools with more amenities that are more expensive. To address this issue, Model 3 is based on an endogenous treatment effects regression (Stata, 2017).[2]

Regardless of the approach, all models indicate that the effect of prevailing wage regulations on construction costs is small, ranging between -1.8 percent and 2.6 percent, and statistically insignificant (Table B). Results also indicate that winning bids by union contractors are no different, in terms of statistical significance, than the low bids of nonunion contractors. The elasticity of the subcontractor low bid with respect to the overall cost of the project indicates that winning package bids increase by approximately 0.7 percent for each 1 percent increase in total project costs. Low bids by subcontractors with business addresses outside of the seven-county metro area are 30 percent to 35 percent lower than the low bids of metro-based subcontractors. These latter two effects are statistically significant at the 99-percent level of confidence. Subcontractor low bids on new school construction are no different than subcontractor low bids on other types of projects. Results for all 25 work type dummy variables are not reported to conserve space. For illustration purposes, the results for the carpentry work dummy variable are reported. These findings indicate that work involving carpentry is from 65 percent to 72 percent more expensive than the reference work type (asphalt paving). Package bids involving carpentry work are from 65 percent to 72 percent more expensive than the reference work type (asphalt paving). Subcontractor low bids do not differ in a statistically significant way with respect to the year they were submitted.

[2] This procedure involves the auxiliary estimation of a probit model of the treatment variable. It is hypothesized that the likelihood of prevailing wage coverage depends on two factors: 1) the road distance between the school construction site and the city core (Minneapolis City Hall) and 2) the complexity of the project. Road distance is a proxy for union density and union influence over a district's decision to include prevailing wages, with the effect of union density decreasing as distance from the urban core increases. Project complexity is measured by the number of separate package bids for a project under the assumption that construction managers may recommend that districts not add prevailing wage standards to large and complex projects. The results of the probit model are consistent with expectations. The coefficient for the miles of distance variable is -0.032 (p-value= 0.000) and the coefficient for the number of package bids is -0.022 (p-value= 0.000). While the results of the probit are strong, the Wald test statistic of independence is 0.17 (p-value= 0.921), suggesting weak identification of endogeneity. The endogeneity of prevailing wage decisions remains a subject for further research.

Table B: Regression Results for Package Bids on School Construction Projects in the Seven-County Minneapolis-St. Paul Metropolitan Region, 2015-2017

Dependent Variable = Natural Log of the Wining Package Bid; Model 1 = Ordinary Least Squares (Mean) Regression, Model 2 = Quantile (Median) Regression, Model 3 = Endogenous Treatment Effects Regression.

Variable	Model 1 Coefficient	Model 2 Coefficient	Model 3 Coefficient
Prevailing Wage Project	0.026 (0.08)	-0.018 (0.12)	-0.014 (0.33)
Union Contractor	0.059 (0.09)	0.120 (0.11)	0.063 (0.09)
Log of Project Cost	0.702*** (0.05)	0.736*** (0.05)	0.697*** (0.05)
Out-of-Metro Area Contractor	-0.350*** (0.09)	-0.296*** (0.10)	-0.353*** (0.09)
New School	0.170 (0.11)	0.202 (0.14)	0.168 (0.11)
Work Type (Carpentry)	0.712*** (0.19)	0.647* (0.34)	0.720*** (0.19)
2016	0.083 (0.12)	-0.023 (0.15)	0.080 (0.12)
2017	0.068 (0.13)	-0.004 (0.95)	0.069 (0.13)
Constant	1.015 (0.82)	0.595 (0.95)	1.140 (0.95)
N	640	640	640
R^2 Pseudo R^2 F Wald χ^2 Wald Test of Independence χ^2	0.622 – 48.80 – –	– 0.441 – – –	– – – 1557.88 0.170

Source: Authors' analysis of School District Board Meeting minutes and Dodge Data and Analytics (Dodge, 2017). Standard deviations in parentheses. ***p<|0.01|; **p<|0.05|; *p<|0.10| (two-tailed tests).

Results with respect to the prevailing wage coefficients do not change substantially when the models are estimated without measures of contractor characteristics. When the variables for union subcontractor and out-of-metro area subcontractor are omitted from models 1 through 3, the prevailing wage coefficients (and standard errors) are 0.038 (0.08), –0.021 (0.09), and 0.053 (0.44), respectively. Consistent with the results reported in Table B, the prevailing wage coefficients remain statistically insignificant when

contractor characteristics are omitted. Similarly, the effects of contractor characteristics are stable when the prevailing wage dummy variable is not included in the estimate. Results from models 1 and 2 indicate coefficients (and standard errors) for union subcontractor equal to 0.062 (0.08) and 0.114 (0.11) for models one and two, respectively. The coefficients for out-of-metro area contractor are –0.351 (0.09) and –0.302 (0.10) for models one and two when the prevailing wage dummy variable is omitted.

Additional Information on the Effect of Prevailing Wage on Income, Poverty, and Reliance on Public Assistance

To understand the actual and unique impact that having a strong or average prevailing wage law has on labor market outcomes, the statistical method of *difference-in-differences* regression analysis is utilized. This statistical technique, a "curve fitting" method, allows researchers to compare outcomes between workers in the two groups of states, taking other individual characteristics as well as the broader labor market into consideration. Statistical analysis also allows researchers to determine if a measured difference is statistically significant or not. A statistically significant finding is an indication of that the relationship may be causal. All wage and salary income are adjusted by the Consumer Price Index (CPI-U) and reported in constant 2017 dollars.

"Interaction terms" are included to more precisely assess the relationships. For instance, there are a number of factors that influence the annual incomes of an individual worker, such as demographic and educational factors. A regression can account for these variables when evaluating the impact of strong or average prevailing wage laws. However, states with strong or average prevailing wage laws may have other public policies– such as collective-bargaining laws, higher minimum wages, or more investment in education and human training– that raise annual incomes of non-construction workers. Through an interaction term, a difference-in-differences analyses accounts for the relatively higher incomes of all workers in these states and separates out the association between strong or average prevailing wage laws and blue-collar construction workers.

Table C: Summary of Regression Results on the Effect of Having An Effective Prevailing Wage Law on Blue-Collar Construction Workers in the Seven-State Region, 2008-2017

Impact	Regression Type	Effect	Standard Error	Constant	N =
ln(wage and salary income)	OLS Diff-in-Diff	+0.052**	(0.02)	5.652	112,030
ln(wage income | median)	Quantile D-I-D	+0.052**	(0.03)	5.764	112,030
P(has private health insurance)	Probit D-I-D	+0.050***	(0.02)	0.601	119,247
P(has pension plan at work)	Probit D-I-D	+0.053***	(0.02)	0.548	119,247
P(receives food stamps)	Probit D-I-D	-0.021***	(0.01)	0.054	119,247

***p<|0.01|; **p<|0.05|; *p<|0.10|. All samples are weighted using sample weights provided by the Census Bureau (*wtsupp*). In all regressions, controls include: age, age^2, female. race dummies, marital status, veteran status, immigration status, educational attainment dummies, usual weeks worked, usual hours worked, and year dummies. For full regressions in .txt format, please contact study author Frank Manzo IV at fmanzo@illinoisepi.org.

The income, health coverage, pension coverage, and food stamps statistical analyses also include quantile and probit regressions on March data from 2008 through 2017. A *quantile regression* fits data to

understand impacts for different points, such as the median point of the income distribution. Median regression is more robust to outliers than ordinary least squares (OLS) regressions, which report the *average* relationship. Quantile regressions can help understand the effect, if any, on the middle class. Finally, probabilistic models called *probit regressions* help in calculating how much a certain factor increases a given individual's chance of achieving a certain binary outcome. Probits control for other variables and separate out the effect that having a strong or average prevailing wage law has on the likelihood that a blue-collar construction worker has health insurance or a pension plan at work.

Table D: Regression Results for the Effect of Having An Effective Prevailing Wage Law on the Incomes of Blue-Collar Construction Workers in the Seven-State Region, 2008-2017

Dependent Variable = Natural Log of Annual Wage and Salary Income; Model 1 = Ordinary Least Squares (Mean) Regression, Model 2 = Quantile (Median) Regression.

Variable	Model 1: Average Coefficient	Model 2: Median Coefficient
Interaction term: Strong or Average PWL x Construction Occupation	**0.052** **(0.02)**	**0.052** **(0.02)**
Strong or Average PWL	0.105*** (0.00)	0.088*** (0.00)
Construction Occupation	0.092*** (0.01)	0.101*** (0.02)
Usual Hours Worked Per Week	0.031*** (0.00)	0.034*** (0.00)
Weeks Worked Last Year	0.040*** (0.00)	0.038*** (0.00)
Educational Attainment Variables	Y	Y
Demographic Variables	Y	Y
Year Dummy Variables	Y	Y
Constant	5.652*** (0.03)	5.764*** (0.02)
N	112,030	112,030
R^2	0.597	0.373

***p<|0.01|; **p<|0.05|; *p<|0.10|. All samples are weighted using sample weights provided by the Census Bureau (*wtsupp*). In all regressions, demographic controls include: age, age^2, female. race dummies, marital status, veteran status, and immigration status. For full regressions in .txt format, please contact study author Frank Manzo IV at fmanzo@illinoisepi.org.

Table D provides example regression results for the analyses of the relationship between strong or average prevailing wage laws on the annual incomes of blue-collar construction worker wages. The models demonstrate that strong or average prevailing wage laws are statistically associated with an 8.8 to

10.5 percent increase in incomes for all workers (i.e., not just construction workers). The models also indicate that blue-collar construction trades earn 9.2 to 10.1 percent more than their counterparts in other occupations after controlling for other factors– a pay premium that exists regardless of whether a state has a strong or average prevailing wage laws (e.g., construction employees may be compensated for the occupational hazards and risks that they have taken on by entering the trades). The variable of interest, however, is the interaction term between strong or average prevailing wage laws and blue-collar construction occupations, which reveals that the wage policy is statistically associated with a 5.2 percent increase in the annual incomes of blue-collar construction workers, both on average and on median.

The Costs of Wage Theft and Payroll Fraud in the Construction Industries of Wisconsin, Minnesota, and Illinois

Impacts on Workers and Taxpayers

January 14, 2021

Nathaniel Goodell
Principal Investigator

Frank Manzo IV, M.P.P.
Policy Director

A Higher Road for a Better Tomorrow
MIDWEST ECONOMIC POLICY INSTITUTE

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Executive Summary

Payroll fraud is a pervasive problem in the construction industry, costing taxpayers hundreds of millions of dollars every year. Payroll fraud often occurs when employers either misclassify workers as independent contractors or pay workers "off-the-books" in cash. This is also known as *wage theft*. In recent years, elected officials in Wisconsin, Minnesota, and Illinois have acknowledged this problem and have taken steps to combat it.

Using a generally accepted method in the economics research that compares household survey data from the U.S. Census Bureau with payroll records submitted to state unemployment insurance programs, this Midwest Economic Policy Institute report investigates the extent of construction payroll fraud from misclassification and "off-the-books" employment in these three Upper Midwest states.

- Across the region, one-in-five construction workers (18 percent) experiences some form of wage theft.
- In Wisconsin, about 14,500 construction workers are misclassified or are paid off the books, accounting for 10 percent of the workforce.
- In Minnesota, about 30,100 construction workers are misclassified or are paid off the books, accounting for 23 percent of the workforce.
- In Illinois, about 52,800 construction workers are misclassified or are paid off the books, accounting for 20 percent of the workforce.

Misclassified workers lose access to basic labor protections, including minimum wage, overtime pay, unemployment insurance, and workers' compensation insurance.

- In Wisconsin, illegally employed construction workers earn 31 percent less ($23,500 annually) in combined wages and fringe benefits.
- In Minnesota, illegally employed construction workers earn 36 percent less ($29,700 annually) in combined wages and fringe benefits.
- In Illinois, illegally employed construction workers earn 29 percent less ($24,100 annually) in combined wages and fringe benefits.

Unscrupulous contractors who misclassify workers or illegally pay their employees in cash commit payroll fraud that costs taxpayers millions of dollars per year.

- Wisconsin annually loses $40 million in state tax revenues due to construction payroll fraud– including $8 million in income taxes, $6 million in unemployment insurance contributions, and $26 million in workers' compensation premiums.
- Minnesota annually loses $136 million in state tax revenues due to construction payroll fraud– including $65 million in income taxes, $13 million in unemployment insurance contributions, and $58 million in workers' compensation premiums.
- Illinois annually loses $186 million in state tax revenues due to construction payroll fraud– including $60 million in income taxes, $23 million in unemployment insurance contributions, and $103 million in workers' compensation premiums.

Wage theft is rampant in the construction industries of Wisconsin, Minnesota, and Illinois. To combat the problem, states can increase enforcement efforts or strengthen punitive actions against offenders, including making payroll fraud a crime. Payroll fraud from worker misclassification and illegal employment in the construction industry has severe negative consequences for workers, law-abiding contractors, and taxpayers.

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About the Authors

Nathaniel Goodell is a Researcher at the Midwest Economic Policy Institute, a division of the Illinois Economic Policy Institute (ILEPI). He earned a Bachelor of Business Administration in Economics with a Minor in Philosophy from the University of Wisconsin-Eau Claire and is pursuing his Master of Science in Econometrics and Mathematical Economics from the University of Wisconsin-Madison. He was the *principal investigator* on this report.

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

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Introduction

Payroll fraud, also known as wage theft, is a pervasive problem in the U.S. construction industry. Payroll fraud occurs when employers either misclassify workers as independent contractors or pay workers "off-the-books" in cash-only arrangements. Payroll fraud also occurs when employers pay less than the minimum wage, refuse to pay workers for all hours worked, and fail to pay overtime or premium compensation. In construction, employers– either knowingly or unknowingly– engage in this illicit activity in order to reduce labor costs by skirting overtime pay and evading taxes that fund social insurance programs (Ormiston et al., 2020). These employers also often avoiding the payment of voluntary benefits such as health, retirement, and apprenticeship training benefits. This gives unscrupulous contractors an unfair advantage against law-abiding competitors.

While there are some benefits to being a legitimate independent contractor, especially in terms of flexibility and entrepreneurial activity, workers who are improperly classified as independent contractors face serious consequences (Xu & Erlich, 2019). Misclassified workers lose protections to basic labor standards, such as minimum wage, overtime pay, paid leave, and the ability to join a union and collectively bargain. Workers who should legally be in employer-employee relationships with construction companies (often called "W-2 employees") but who are either considered independent contractors or paid in cash also forgo any legal right to unemployment insurance if they are laid off and workers' compensation insurance if they suffer on-the-job injuries.

Over recent years, elected officials in three Upper Midwest states have taken steps to combat this problem. In Wisconsin, Governor Tony Evers acknowledged that "worker misclassification denies vulnerable workers legal protections" and that "this fraudulent practice also results in millions of dollars of losses to state government and taxpayers" in an Executive Order creating a Task Force on Payroll Fraud and Worker Misclassification in April 2019 (Evers, 2019). In May 2019, Illinois Governor J.B. Pritzker signed a law creating a Worker Protection Unit Task Force to combat wage payment violations and unfair labor practices, including misclassification in the construction industry (Illinois AG, 2019). Most significantly, in July 2019, Minnesota Governor Tim Walz invested $3 million in the state's Department of Labor and Industry (DLI) to enforce wage and hour laws and penalize companies that misclassify workers (Forum News Service, 2019).

Although elected officials recognize that worker misclassification and illegal employment afflict the construction industry, the magnitude of the problem is not well understood. This report– conducted by researchers at the Midwest Economic Policy Institute, a division of the Illinois Economic Policy Institute– identifies the extent of payroll fraud and wage theft in the construction industries of Wisconsin, Minnesota, and Illinois using statistical methods consistent with the general approach taken in other studies on worker misclassification. After a brief review of pertinent research, estimates on construction misclassification and illegal employment are presented. These estimates are based on multiple sources of data officially released by the federal government. Then, the

costs of payroll fraud on worker earnings and state tax revenues are quantified before a concluding section recaps key findings and discusses potential policy options.

Previous Studies on Payroll Fraud and Wage Theft in Construction

To date, economic research on worker misclassification and illegal employment has produced a range of estimates that vary by study methodology (Figure 1). Quantifying worker misclassification is difficult because unscrupulous employers attempt to conceal their fraud, employees may not know they are being considered independent contractors, and state governments have limited resources to monitor, investigate, and take punitive action against offenders. Despite these limitations, academic researchers have found that payroll fraud and wage theft are rampant in construction markets across the United States.

In 2020, Professors Russell Ormiston, Dale Belman, and Mark Erlich published the most authoritative research on worker misclassification and payroll fraud in the construction industry (Ormiston et al., 2020). These Allegheny College, Michigan State University, and Harvard University researchers utilized previously-established techniques and also created their own to estimate that between 12 percent and 21 percent of the construction workforce was misclassified or illegally employed across the United States in 2017. During August, the peak construction employment month, the rate of misclassification and illegal employment was even higher, between 13 percent and 22 percent. Additionally, the authors illustrated three hypothetical annual earnings values for the typical construction worker to estimate the cost of worker misclassification to taxpayers.

The State of Wisconsin Department of Workforce Development (DWD) published another important study on payroll fraud and worker misclassification in 2020 (DWD, 2020). The report by the Task Force– which included members from state government, legislators from the State Senate and State Assembly, and representatives from business groups and building trades unions– audited unemployment insurance (UI) data. The report found that statewide underreported taxes due to misclassification of workers in all sectors more than tripled over two decades, from $17 million in 2000 to $57 million in 2019. In 2019 alone, the DWD's Equal Rights Division processed more than 4,000 complaints and recovered more than $1 million in wages owed to Wisconsin workers. Consequently, as much as $91 million in personal income tax revenue was lost in 2019 due to worker misclassification. In addition, 40 percent of UI audits of construction employers over the seven-year period from 2013 through 2019 were found to have misclassified employees. Assuming that 5 percent of business income is attributable to construction companies, the Wisconsin Department of Revenue (DOR) estimated that forgone business taxes from the construction industry amount to $51 million annually.

A 2007 report by the Minnesota Office of the Legislative Auditor (OLA) also found a high prevalence of misclassification across the border in Minnesota. The state's rate of worker misclassification in 2005 was an estimated 15 percent, with a reported confidence

between 11 percent and 21 percent. Minnesota's construction industry comprised a disproportionate share of misclassified employees in 2005 UI audits, accounting for about 11 percent of all misclassified workers but just 6 percent of total audits (OLA, 2007).

Three additional reports published between 2006 and 2011 focused on the three nearby states of Illinois, Indiana, and Kentucky. The studies were all published by Professors Michael Kelsay, James Sturgeon, and Kelly Pinkham from the University of Missouri-Kansas City. In Illinois, the economists found that misclassification is both a cause and contributor to increasing deficits in the unemployment insurance trust fund. The 2006 study found that more than 6,200 construction contractors had misclassified employees in 2005, accounting for approximately 28 percent of workers at those companies. In total, more than 22,400 construction workers (9 percent) had been misclassified, costing the UI system nearly $3 million, state income tax revenues $17 million, and workers compensation premiums as much as $35 million (Kelsay et al., 2006). The Indiana and Kentucky reports incorporated the same auditing methods and found that 15 percent of construction employees were misclassified in Indiana and 8 percent were misclassified in Kentucky (Kelsay & Sturgeon, 2010; Kelsay & Sturgeon, 2011).

FIGURE 1: RESEARCH ON CONSTRUCTION WORKER MISCLASSIFICATION AND PAYROLL FRAUD, 2006-2020

Authors of Study (Year)	Geography	Summary of Misclassification Results
Ormiston, Belman and Erlich (2020)	United States	12%-21% estimated illegal employment rate nationally
Wisconsin Task Force (2020)	Wisconsin	40% of unemployment insurance audits in construction found misclassified workers
Xu and Erlich (2019)	Washington	19% estimated misclassification by employers in construction
Yen Liu, Flaming, and Burns (2014)	California	16% of construction workers were not reported or were misclassified
Kelsay and Sturgeon (2011)	Kentucky	8% of construction employees misclassified
Kelsay and Sturgeon (2010)	Indiana	15% of construction employees misclassified
Minnesota State Auditor (2007)	Minnesota	11%-21% estimated misclassification by employers in construction
Kelsay, Sturgeon, and Pinkham (2006)	Illinois	9% of construction employees misclassified

Source(s): Individual studies listed in the table.

Outside of the Midwest region, a recent 2019 report analyzed the economic consequences of misclassification and payroll fraud in the State of Washington. The study by Professors Lisa Xu and Mark Erlich, law professors from Harvard University, found that the prevalence of misclassification increased from 5 percent in 2008 to 14 percent in 2017. The industries with the highest rates of worker misclassification were construction, clerical

services, and hotels and restaurants. In construction, an estimated 19 percent of workers were misclassified in Washington (Xu & Erlich, 2019).

Additionally, a 2014 study by the Economic Roundtable on California's construction industry found that 16 percent of California construction workers were not reported by their employers or were misclassified as independent contractors. Payroll fraud and wage theft in California's construction industry increased by 400 percent between 1972 and 2011. The authors also found that misclassified workers earn only 67 percent as much as their counterparts who work legally as W-2 employees (Yen Liu et al., 2014).

Previous economic research has demonstrated that worker misclassification and illegal employment can have negative consequences for both the construction industry and for taxpayers. Because fair and competitive markets are undermined by these practices, unscrupulous companies that engage in these forms of fraud and wage theft can underbid law-abiding contractors who play by the rules. This puts compliant firms at a distinct competitive disadvantage. Lawmakers and public officials can take steps to address worker misclassification and take punitive action against black-market contractors.

Construction Misclassification and Payroll Fraud in the Upper Midwest

This study draws inspiration from the comprehensive methodology discussed by Ormiston, Belman, and Erlich to estimate the incidence of misclassification in the construction industry for three upper Midwest states: Wisconsin, Minnesota, and Illinois (Ormiston et al., 2020). In general, payroll data and household surveys are used to compare total employment with "compliant" (i.e. legal) employment in construction, consistent with the general approach taken in the seven studies discussed in the previous section.[1]

These comparisons provide a straightforward difference between the "total" and "compliant" groups. The total group is composed of workers who report that they are either employed or self-employed in the construction industry, while the compliant group is determined by employer payroll records. Self-employment poses an issue because misclassified workers often believe they are employed by firms, but the firms report that they are self-employed. As a result, once the extent of illegal self-employment is identified, these workers become the target group of analysis. This target group is comprised of a mixture of misclassified and off-the-books workers, both of which are illegal.[2] For estimates on the total employment in construction, two U.S. government data sources are utilized– the

[1] The term "compliant" is appropriate because employers may correctly classify their workforce but nevertheless engage in other illicit activities, meaning that the term "legal" may not be accurate in all cases if used when referring to all contractors that do not misclassify workers.

[2] The difference between the "total" and "compliant" groups consists of legitimate self-employed workers, those who know themselves to be self-employed and operate illegally, and those who consider themselves to be employees but are no reported as such by their employers through W-2 forms. For this reason, Ormiston, Belman, and Erlich use income underreporting rates from the Internal Revenue Service (Ormiston et al., 2020).

American Community Survey (ACS) and the Current Population Survey (CPS). However, a 2002 report found that a significant number of workers surveyed in the Current Population Survey (CPS) were being paid in cash (Roemer, 2002).[3] The "compliant" employment in construction is measured using two additional federal government data sources– the Quarterly Census of Employment and Wages (QCEW) and the Bureau of Economic Analysis (BEA).

One consideration could be job flows into and out of an area, given that some construction workers may live in one state but travel to another state to work on projects. Data from the Longitudinal-Employer Household Dynamics Origin-Destination Employment Statistics by the U.S. Census Bureau shows that about 2 percent of workers employed in Wisconsin, Minnesota, and Illinois live outside the study area, and 3 percent of workers who live in Wisconsin, Minnesota, and Illinois are employed outside the study area (LODES, 2017). This is an important note given that the "total employment estimates" are based on the location of workers' employment but the "compliant employment" estimates are based on the location of workers' residences.

Estimates Using the Monthly Data Method: Prime Construction Season

One way to estimate worker misclassification and illegal employment in the construction industries of Wisconsin, Minnesota, and Illinois is to investigate monthly data. This method makes use of construction employment statistics from the Current Population Survey (CPS) and payroll data from the Quarterly Census of Employment and Wages (QCEW) (Census, 2018a; BLS, 2018a). The value in this method is that it captures important differences between months. Averaging over the year may not be a problem for industries where year-round employment is typical and steady. That is because seasonality impacts every worker in the construction industry. Annual estimates could fail to account for seasonal workers; for example, if a worker only works four months during the year, then there is a two-thirds chance that an annual survey would miss him or her. This study of Wisconsin, Minnesota, and Illinois spans the 12 months from January 2018 to December 2018, and estimates drawn from summer months with the highest employment may be more informative than the winter months when construction activity is limited. Accordingly, the particular focus of this section is on prime construction months from April to November.

The QCEW is an administrative payroll survey that captures over 95 percent of jobs across the United States. However, for some information regarding state and local construction employment, the Bureau of Labor Statistics (BLS) determined that there was not enough data to meet disclosure standards. The employment figures provided by the Bureau of Economic Analysis (BEA) offer more accurate employment estimates (BEA, 2018). The BEA's estimate is adjusted to account for employment and wages that are not covered by state unemployment insurance and unemployment compensation programs for federal employees, following the technique used by Professors Ormiston, Belman, and Erlich

[3] Even the most rigorous U.S. surveys can have inaccuracies due to misleading or unsure responses.

(Ormiston et al., 2020). The percent difference between the BEA and QCEW estimates is used to determine an adjustment factor for the prime construction months (Figure 2).

The CPS is monthly survey sent to 60,000 households nationally that is conducted by the Census Bureau and the BLS. Monthly data on employment by sector (e.g. public, private, or self-employed) are used for workers whose main job or second job is in construction in order to develop a complete picture of industry employment. However, all results using CPS data have sample size limitations.[4] It should also be noted that CPS surveys are reported by workers as what they see as their employment status, so it may be the case that some survey responses reflect workers who mistook their status. While there may be some misreporting, the CPS is nevertheless considered the "gold standard" survey among economists and a primary source of U.S. labor statistics, including monthly data on the unemployment rate.

FIGURE 2: STATE QCEW-BEA ADJUSTMENTS – METHODOLOGY BY ORMISTON, BELMAN, & ERLICH (2020)

Methodology: QCEW-BEA Adjustments	Total 2018 Industry Employment (BEA)	Total 2018 Industry Employment (QCEW)	Adjustment Factor Needed
Wisconsin	125,575	124,734	1.007
Minnesota	124,682	125,291	0.995
Illinois	231,642	226,705	1.022
Upper Midwest	**481,899**	**476,730**	**1.011**

Source(s): Authors' analysis of data from the Bureau Of Economic Analysis (BEA, 2018) and Quarterly Census of Employment and Wages (BLS, 2018a).

In all three Midwestern states, there are consistently more workers who report to being employees in construction than reported in the payroll data, indicating worker misclassification (Figure 3). In total, over the prime construction months of April to November, about 14 percent of construction workers are misclassified across the Upper Midwest. This includes a worker misclassification rate of 6 percent in Wisconsin, 10 percent in Minnesota, and 20 percent in Illinois.

FIGURE 3: SHARE OF MISCLASSIFIED WORKERS DURING PRIME CONSTRUCTION SEASON BY STATE

Prime Construction Season (2018 Estimates)	Total Industry Employment (CPS)	Compliant Industry Employment (QCEW-Adjusted)	Misclassified Workers (Difference)	Share of Workforce Misclassified
Wisconsin	139,057	130,913	8,144	6%
Minnesota	147,331	132,187	15,144	10%
Illinois	300,804	241,789	59,015	21%
Upper Midwest	**587,192**	**504,920**	**82,272**	**14%**

Source(s): Authors' analysis of data from the Current Population Survey (Census, 2018a) and Quarterly Census of Employment and Wages (BLS, 2018a), with an adjustment factor by Bureau Of Economic Analysis (BEA, 2018).

Misclassification is not the only form of payroll fraud in the construction industry (Figure 4). Some workers may report that they are self-employed independent contractors and accept payment from project owners or from prime contractors "under the table" in

[4] For this study, there were approximately 200 observations for each month. Over the year, Illinois had more than 1,000 observations while Wisconsin and Minnesota both had more than 500 observations. These were adjusted to match the actual population in each state using sampling weights.

cash. Focusing on self-employed workers who reported their own earnings to tax agencies during the prime construction season, it is possible to determine the level of illegal self-employment in the construction industry. Using data from the U.S. Census Bureau's Nonemployer Statistics series, only about 171,000 self-employed independent contractors reported earnings to tax agencies in these three Upper Midwest states (Census, 2020). However, more than 212,000 individuals in construction said they were self-employed in the industry in 2018, suggesting that approximately 41,000 construction workers were paid off-the-books. Illegal employment in the construction industry is highest in Minnesota, followed by Illinois and subsequently by Wisconsin (Figure 4).

FIGURE 4: SHARE OF ILLEGALLY EMPLOYED WORKERS DURING PRIME CONSTRUCTION SEASON BY STATE

Prime Construction Season (2018 Estimates)	1st or 2nd Job Self-Employed in Construction (CPS)	Self-Employed Nonemployers in Construction (Census)	Illegally Self-Employed: Off-the-Books (Difference)
Wisconsin	42,531	39,474	3,057
Minnesota	63,621	39,494	23,672
Illinois	106,576	91,482	15,094
Upper Midwest	**212,349**	**170,905**	**41,444**

Source(s): Authors' analysis of data from the Current Population Survey (Census, 2018a) and the Nonemployer Statistics (Census, 2020).

Combining the estimates on workers who believe they are employees and self-employed individuals who are paid off-the-books reveals the extent of construction payroll fraud (from these activities) in each state (Figure 5). During the prime construction season, an estimated 8 percent of construction workers are misclassified or illegally employed in Wisconsin, 26 percent are in Minnesota, and 25 percent suffer from payroll fraud in Illinois. As a region, 21 percent of construction workers are misclassified or illegally employed.

FIGURE 5: WORKERS SUFFERING FROM PAYROLL FRAUD DURING PRIME CONSTRUCTION SEASON BY STATE

Prime Construction Season (2018 Estimates)	Total Industry Employment (CPS)	Total Misclassified and Illegally Employed Workers in Industry (Differences)	Share of Workforce Suffering from Payroll Fraud
Wisconsin	139,057	11,202	8%
Minnesota	147,331	38,816	26%
Illinois	300,804	74,108	25%
Upper Midwest	**587,192**	**123,716**	**21%**

Source(s): Authors' analysis of data from the Current Population Survey (Census, 2018a), Quarterly Census of Employment and Wages (BLS, 2018a) with an adjustment factor by Bureau Of Economic Analysis (BEA, 2018), and Nonemployer Statistics (Census, 2020).

Estimates Using the Annual Data Method: Full Year

Another way to estimate worker misclassification and illegal employment in the construction industries of Wisconsin, Minnesota, and Illinois is to investigate annual data. The advantage to this approach is that it is based on more data and may be more accurate. On the other hand, the disadvantage of an annual analysis is that the American Community Survey (ACS) fails to capture the seasonality of construction, so the less time a worker is employed during the year, the less likely they will be captured in the employment data.

Like the first method, the "compliant" group comes from employer payroll records from the Bureau of Economic Analysis (BEA), which reports data by industry (BEA, 2018). The total employment estimate is derived from the 2018 American Community Survey (ACS) one-year estimates for Wisconsin, Minnesota, and Illinois (Census, 2018b). However, the ACS does not ask individuals about any second jobs they may have. As a result, the ACS observations are be augmented with CPS data collected previously.

Once again, there are consistently more workers who report to being employees in construction than reported in the payroll data, indicating worker misclassification (Figure 6). In total, about 10 percent of construction workers were misclassified across the Upper Midwest over 2018. This includes a worker misclassification rate of 9 percent in Wisconsin, 5 percent in Minnesota, and 13 percent in Illinois.

FIGURE 6: SHARE OF MISCLASSIFIED WORKERS DURING THE FULL YEAR BY STATE

Full Year (2018 Estimates)	Total Industry Employment (ACS)	Compliant Industry Employment (BEA)	Misclassified Workers (Difference)	Share of Workforce Misclassified
Wisconsin	138,718	125,575	13,143	9%
Minnesota	131,914	124,682	7,232	5%
Illinois	267,051	231,642	35,409	13%
Upper Midwest	**537,683**	**481,899**	**55,784**	**10%**

Source(s): Authors' analysis of data from the American Community Survey (Census, 2018b) and Bureau Of Economic Analysis (BEA, 2018).

Figure 7 includes annual estimates of worker misclassification from Figure 6 and annual estimates of off-the-books self-employment from Figure 4 to determine the extent of payroll fraud in the three Upper Midwest states.[5] It is estimated that 10 percent of construction workers are misclassified or illegally employed in Wisconsin, 23 percent are in Minnesota, and 20 percent suffer from payroll fraud in Illinois. As a region, 18 percent of construction workers were misclassified or illegally employed in the Upper Midwest in 2018. Although different, these findings are very close to the prime construction season estimates that use different datasets– increasing confidence in the accuracy of the estimates.

FIGURE 7: WORKERS SUFFERING FROM PAYROLL FRAUD DURING THE FULL YEAR BY STATE

Full Year (2018 Estimates)	Total Industry Employment (ACS)	Total Misclassified and Illegally Employed Workers in Industry (Differences)	Share of Workforce Suffering from Payroll Fraud
Wisconsin	138,718	14,519	10%
Minnesota	131,914	30,080	23%
Illinois	267,051	52,761	20%
Upper Midwest	**537,683**	**97,320**	**18%**

Source(s): Authors' analysis of data from the American Community Survey (Census, 2018b), Bureau Of Economic Analysis (BEA, 2018), and Nonemployer Statistics (Census, 2020).

[5] The off-the-books self-employment found in the previous monthly data method was already annualized. CPS data are utilized because the ACS does not ask individuals about any second jobs they may have.

Earnings and Tax Consequences of Payroll Fraud in the Upper Midwest

There are both labor market and fiscal consequences when workers are misclassified or paid off-the-books. Misclassified workers are often denied access to minimum labor protections, such as minimum wage, overtime compensation, and unemployment insurance (DOL, 2020). Misclassified workers are also often denied access to voluntary benefits, such as health insurance and retirement plans. As a result, misclassified workers have been found to earn lower incomes than workers paid as employees (NELP, 2015). Unscrupulous contractors also contribute significantly less towards social insurance programs and other taxes.

Impacts on Worker Wages

This section estimates lost wages in the construction industry for Wisconsin, Minnesota, and Illinois in 2018 using annual data from the American Community Survey (ACS). Typically, misclassification occurs when employees are illegitimately considered independent contractors. Given this fact, Figure 8 compares the annual average wage and salary income of all W-2 employees and all individuals who report that they are "unincorporated self-employed," which is the most common type of classification for contractors and freelancers (Coate & Kersey, 2019).

Unincorporated self-employed individuals in construction earn between 13 percent and 22 percent less than construction industry employees (Figure 8). In 2018, Wisconsin's construction industry employees averaged about $52,500 in annual income from wages. In comparison, independent contractors only made an average of $43,200, which is about $8,300 less (16 percent less) per year. The discrepancy is even larger in Minnesota: construction industry employees earned about $56,000 over the year while independent contractors made just $43,600 annually, a difference of more than $12,400 (22 percent less). On the other hand, Illinois' construction industry employees earned more than $57,200 annually while independent contractors in the state took home about $49,700 over the year (13 percent less). As a region, independent contractors earn 18 percent less per year than traditional employees in the construction industry (Figure 8).

FIGURE 8: ANNUAL WAGE INCOME BY CLASSIFICATION, EMPLOYEES VS. UNINCORPORATED SELF-EMPLOYED

2018 Annual Income from Wages (ACS)	Wage and Salary (W-2) Employees	Independent Contractors	Pay Difference	Percent Difference
Wisconsin	$51,490	$43,199	$8,290	16%
Minnesota	$56,045	$43,584	$12,460	22%
Illinois	$57,245	$49,696	$7,549	13%
Upper Midwest	**$55,463**	**$45,292**	**$10,171**	**18%**

Source(s): Authors' analysis of data from the American Community Survey (Census, 2018b). Independent contractors are represented by those who report that they are self-employed, not incorporated to the Census Bureau.

Impacts on Worker Fringe Benefits

In December 2018, the BLS reported on "Employer Costs for Employee Compensation" in September 2018 (BLS, 2018b). This news release included information on hourly wages and total benefits, such as paid leave, retirement and savings, and legally-required Social Security and Medicare. Estimates are included for all employees in "natural resources, construction, and maintenance" jobs and for all employees in the Midwest states. After averaging the two groups to create a compensation breakdown that is more reflective of the construction industry in the Midwest, it is estimated that base wages account for 68 percent of total compensation for legally-employed construction workers in the region. Fringe benefits account for the remaining 32 percent. These include voluntary fringe benefits such as paid leave (6 percent), overtime and supplemental pay (3 percent), insurance (9 percent), and retirement savings (5 percent). Also included are legally-required benefits such as contributions to Social Security and Medicare (6 percent), state and federal unemployment insurance programs (1 percent), and workers' compensation programs (2 percent) (Figure 9).

Using these regional estimates, construction industry employees in Wisconsin earned about $24,100 in average fringe benefits on top of their $51,500 average income from wages in 2018, for a total annual compensation of about $75,600 on average (Figure 10). Properly classified employees earn $6,900 in paid leave benefits and overtime and supplemental pay, $10,600 in retirement, health insurance, and related benefits, and $6,600 in legally-required benefits.

FIGURE 9: ESTIMATED EMPLOYER COSTS FOR EMPLOYEE COMPENSATION, SEPTEMBER 2018

Employer Costs for Employee Compensation (September 2018)	Natural Resources, Construction, and Maintenance		Midwest States Average		Merged Estimate for Construction in the Upper Midwest	
	Value	Share	Value	Share	Value	Share
Total Compensation	**$36.20**	**100%**	**$31.17**	**100%**	**$33.69**	**100%**
Wages and Salaries	**$24.21**	**67%**	**$21.68**	**70%**	**$22.95**	**68%**
Total Benefits	**$11.99**	**33%**	**$9.49**	**30%**	**$10.74**	**32%**
Paid Leave	$1.93	5%	$2.10	7%	$2.02	6%
Supplemental Pay	$1.12	3%	$1.01	3%	$1.07	3%
Insurance (Voluntary)	$3.33	9%	$2.70	9%	$3.02	9%
Retirement and Savings (Voluntary)	$2.22	6%	$1.22	4%	$1.72	5%
Social Security and Medicare	$2.04	6%	$1.86	6%	$1.95	6%
Federal Unemployment Insurance	$0.03	0%	$0.03	0%	$0.03	0%
State Unemployment Insurance	$0.20	1%	$0.15	1%	$0.18	1%
Workers' Compensation	$1.14	3%	$0.43	1%	$0.79	2%

Source(s): Authors' analysis of data from the Employer Costs for Employee Compensation (BLS, 2018b).

In contrast, unscrupulous contractors misclassify workers as independent contractors or pay them in cash in order to avoid paying voluntary fringe benefits and

legally-required benefits. Misclassified workers "typically do not get overtime pay" and "are not often compensated for their lost access to workers' compensation and UI programs" (Ormiston et al., 2020). As a result, misclassified construction workers in Wisconsin receive only $52,1000 in total compensation– $43,200 in wages and $8,900 in benefits. The state government loses about $400 in annual unemployment insurance per misclassified construction worker and $1,800 in annual workers' compensation premiums per misclassified construction worker. In total, the cost to a misclassified construction worker is a 16 percent cut in base pay and a 63 percent cut in fringe benefits in Wisconsin. On the other hand, unscrupulous contractors in Wisconsin can reduce their total labor costs by 31 percent by engaging in payroll fraud and wage theft, giving them a false edge over their law-abiding competitors (Figure 10).

FIGURE 10: TOTAL COMPENSATION, EMPLOYEES VS. INDEPENDENT CONTRACTORS IN WISCONSIN, 2018

Difference in Construction Worker Earnings in Wisconsin	Legally Employed Construction Worker	Illegally Employed Construction Worker	Difference Due to Payroll Fraud
Total Compensation	**$75,591**	**$52,114**	**-31%**
Wages and Salaries	**$51,490**	**$43,199**	**-16%**
Total Benefits	**$24,101**	**$8,915**	**-63%**
Paid Leave	$4,522	$0	-100%
Supplemental Pay	$2,390	$0	-100%
Insurance (Voluntary)	$6,766	$5,676	-16%
Retirement and Savings (Voluntary)	$3,860	$3,238	-16%
Social Security and Medicare	$4,376	$0	-100%
Federal Unemployment Insurance	$67	$0	-100%
State Unemployment Insurance	$393	$0	-100%
Workers' Compensation	$1,762	$0	-100%

Source(s): Authors' analysis of data from the American Community Survey (Census, 2018b) and the Employer Costs for Employee Compensation (BLS, 2018b).

Results are similar in Minnesota (Figure 11). Construction industry employees in Minnesota earned a total compensation of about $82,300 on average, including $56,000 in base wages and $26,200 in fringe benefits. Conversely, misclassified workers only received $52,600 in total compensation (36 percent less) from $43,600 in base wages (22 percent less) and $9,000 in fringe benefits (66 percent less). Misclassification annually costs the state about $400 in unemployment insurance contributions and $1,800 in workers' compensation contributions for every victimized construction worker. Unscrupulous contractors in Minnesota can reduce their labor costs by 36 percent by engaging in payroll fraud and wage theft, an unfair advantage over law-abiding local businesses.

Finally, in Illinois, unscrupulous contractors can reduce their labor costs by 29 percent by engaging in payroll fraud and wage theft (Figure 12). Construction workers who are misclassified earn a compensation package of just under $60,000 per year, which is 29 percent less than the $84,000 in total wages and benefits for legal employees. Misclassified

construction workers earn 13 percent lower base wages and 62 percent less in fringe benefits. The State of Illinois annually loses approximately $400 in unemployment insurance contributions and $2,000 in workers compensation premiums for every misclassified construction worker.

FIGURE 11: TOTAL COMPENSATION, EMPLOYEES VS. INDEPENDENT CONTRACTORS IN MINNESOTA, 2018

Difference in Construction Worker Earnings in Minnesota	Legally Employed Construction Worker	Illegally Employed Construction Worker	Difference Due to Payroll Fraud
Total Compensation	**$82,278**	**$52,579**	**-36%**
Wages and Salaries	**$56,045**	**$43,584**	**-22%**
Total Benefits	**$26,233**	**$8,994**	**-66%**
Paid Leave	$4,922	$0	-100%
Supplemental Pay	$2,601	$0	-100%
Insurance (Voluntary)	$7,364	$5,727	-22%
Retirement and Savings (Voluntary)	$4,201	$3,267	-22%
Social Security and Medicare	$4,763	$0	-100%
Federal Unemployment Insurance	$73	$0	-100%
State Unemployment Insurance	$427	$0	-100%
Workers' Compensation	$1,917	$0	-100%

Source(s): Authors' analysis of data from the American Community Survey (Census, 2018b) and the Employer Costs for Employee Compensation (BLS, 2018b).

FIGURE 12: TOTAL COMPENSATION, EMPLOYEES VS. INDEPENDENT CONTRACTORS IN ILLINOIS, 2018

Difference in Construction Worker Earnings in Illinois	Legally Employed Construction Worker	Illegally Employed Construction Worker	Difference Due to Payroll Fraud
Total Compensation	**$84,040**	**$59,951**	**-29%**
Wages and Salaries	**$57,245**	**$49,696**	**-13%**
Total Benefits	**$26,795**	**$10,255**	**-62%**
Paid Leave	$5,027	$0	-100%
Supplemental Pay	$2,657	$0	-100%
Insurance (Voluntary)	$7,522	$6,530	-13%
Retirement and Savings (Voluntary)	$4,291	$3,725	-13%
Social Security and Medicare	$4,865	$0	-100%
Federal Unemployment Insurance	$75	$0	-100%
State Unemployment Insurance	$437	$0	-100%
Workers' Compensation	$1,958	$0	-100%

Source(s): Authors' analysis of data from the American Community Survey (Census, 2018b) and the Employer Costs for Employee Compensation (BLS, 2018b).

Impacts on Taxpayers

The fiscal impacts of worker misclassification and illegal employment are relatively straightforward. First, misclassified workers would have earned higher wages, on average, if they had not been incorrectly considered independent contractors. That *additional* income would have been subject to state income taxes. Second, if they were not paid in cash, off-the-

books construction workers would have earned closer to the average annual wages of their legally-employed counterparts. This assumption can be made because the workers would move from the unregulated underground economy to the legal labor market governed by a level tax and regulatory playing field, collective bargaining agreements, and the laws of supply and demand. Accordingly, while the *entire* income of these off-the-books workers is currently untaxed, it would all be subject to state income taxes if the black market was eliminated. Third, both misclassified workers and off-the-books workers would have employer contributions made on their behalf into state unemployment insurance programs and state workers' compensation programs if they were deemed legal employees.

FIGURE 13: FISCAL IMPACT OF CONSTRUCTION WORKER PAYROLL FRAUD IN WISCONSIN, 2018

Impact of Construction Payroll Fraud on State Tax Revenues in Wisconsin	Workers Misclassified As Independent Contractors	Workers Paid Off the Books in Cash	Total Workers Suffering from Payroll Fraud
Estimated Workers Suffering from Payroll Fraud	13,143	1,376	14,519
Lost Income Subject to Income Tax (Average)	$8,290*	$51,490	$12,384
Net Total Taxable Wages	$108,959,939	$70,849,635	$179,809,573
Lost Income Tax Per Worker (4.62% effective rate)	$383	$2,379	$572
Lost Unemployment Insurance Per Worker	$393	$393	$393
Lost Workers' Compensation Per Worker	$1,762	$1,762	$1,762
Lost Income Tax Contributions	**$5,033,949**	**$3,273,253**	**$8,307,202**
Lost Unemployment Insurance Contributions	**$5,161,354**	**$540,365**	**$5,701,720**
Lost Workers' Compensation Contributions	**$23,152,361**	**$2,423,925**	**$25,576,286**

*Source(s): Authors' analysis of data from the American Community Survey (Census, 2018b), Bureau Of Economic Analysis (BEA, 2018), Nonemployer Statistics (Census, 2020), and Employer Costs for Employee Compensation (BLS, 2018b). Effective state income tax rates for the average annual income from wages for legally employed construction worker reported by SmartAsset (SmartAsset, 2020). *This is the difference between the average wage and salary income of W-2 employees and individuals who report that they are "unincorporated self-employed" in Wisconsin (see Figure 8).*

In Wisconsin, this translates into tens of millions of dollars in lost state tax revenues every year (Figure 13). With a total misclassification and illegal employment rate of 10 percent in its construction industry, an estimated $180 million in wages went untaxed in the State of Wisconsin, resulting in an $8 million loss in personal income tax revenues in 2018. The State of Wisconsin also loses an estimated $6 million in unemployment insurance contributions in one year due to payroll fraud in the construction industry. Finally, the State of Wisconsin loses $26 million annually in workers' compensation premiums as a result of worker misclassification and illegal employment in construction. In total, Wisconsin taxpayers lose $40 million annually from these three sources of revenue due to construction

industry payroll fraud and wage theft. Because the state government has a balanced budget requirement, this lost revenue produces either de facto tax increases on other taxpayers or cuts to essential public services such as education, health care, and infrastructure.

These findings are larger than those calculated in the *Task Force on Payroll Fraud and Worker Misclassification Report* released by the Wisconsin Department of Workforce Development (DWD) in 2020. Over seven years from January 2013 through November 2019, the DWD identified $58 million in taxable wages and $3 million in unemployment insurance tax from UI audits, respectively about $8 million and $430,000 per year. The DWD's conservative numbers are likely the result of scare state resources to conduct UI audits. However, the difference suggests that DWD audits may only be uncovering about 5 percent of misclassified earnings and off-the-books wages that should be subject to the state's income tax and 8 percent of lost unemployment insurance contributions in a typical year.

FIGURE 14: FISCAL IMPACT OF CONSTRUCTION WORKER PAYROLL FRAUD IN MINNESOTA, 2018

Impact of Construction Payroll Fraud on State Tax Revenues in Minnesota	Workers Misclassified As Independent Contractors	Workers Paid Off the Books in Cash	Total Workers Suffering from Payroll Fraud
Estimated Workers Suffering from Payroll Fraud	7,232	22,848	30,080
Lost Income Subject to Income Tax (Average)	$12,460*	$56,045	$45,566
Net Total Taxable Wages	$90,113,251	$1,280,509,077	$1,370,622,328
Lost Income Tax Per Worker (4.63% effective rate)	$577	$2,662	$2,164
Lost Unemployment Insurance Per Worker	$427	$427	$427
Lost Workers' Compensation Per Worker	$1,917	$1,917	$1,917
Lost Income Tax Contributions	**$4,172,244**	**$60,824,181**	**$64,996,425**
Lost Unemployment Insurance Contributions	**$3,091,312**	**$9,766,358**	**$12,857,670**
Lost Workers' Compensation Contributions	**$13,866,744**	**$43,809,092**	**$57,675,836**

*Source(s): Authors' analysis of data from the American Community Survey (Census, 2018b), Bureau Of Economic Analysis (BEA, 2018), Nonemployer Statistics (Census, 2020), and Employer Costs for Employee Compensation (BLS, 2018b). Effective state income tax rates for the average annual income from wages for legally employed construction worker reported by SmartAsset (SmartAsset, 2020). *This is the difference between the average wage and salary income of W-2 employees and individuals who report that they are "unincorporated self-employed" in Minnesota (see Figure 8).*

Construction worker misclassification and illegal construction employment have greater consequences across the border in Minnesota (Figure 14). In Minnesota, an estimated 23 percent of construction workers were either misclassified or paid in cash in 2018. This underground construction economy accounts for more than $1 billion in untaxed wages that would have been taxed if the workers were instead in the legal construction market.

Consequently, the State of Minnesota annually loses an estimated $65 million in income tax revenues, $13 million in unemployment insurance contributions, and $58 million in workers' compensation premiums due to payroll fraud in the construction industry. In total, Minnesota taxpayers lose about $136 million in revenue from these three sources. Because the state must balance its budget, this lost revenue results in either tax increases on other taxpayers or cuts to essential services such as education, health care, and infrastructure.

Payroll fraud in the construction industry has the most damaging fiscal impact on Illinois, the largest of the three states (Figure 15). Due to an estimated 20 percent of construction workers who are either misclassified or paid in cash, approximately $60 million in income tax revenues go uncollected each year from more than $1 billion in wages in the underground economy. In addition, the State of Illinois annually loses an estimated $23 million in unemployment insurance contributions and $103 million in workers' compensation premiums due to payroll fraud and wage theft in the construction industry. In total, Illinois taxpayers lose about $186 million in revenue from these three sources alone.

FIGURE 15: FISCAL IMPACT OF CONSTRUCTION WORKER PAYROLL FRAUD IN ILLINOIS, 2018

Impact of Construction Payroll Fraud on State Tax Revenues in Illinois	Workers Misclassified As Independent Contractors	Workers Paid Off the Books in Cash	Total Workers Suffering from Payroll Fraud
Estimated Workers Suffering from Payroll Fraud	35,409	17,352	52,761
Lost Income Subject to Income Tax (Average)	$7,549*	$57,245	$23,893
Net Total Taxable Wages	$267,303,603	$993,312,464	$1,260,616,067
Lost Income Tax Per Worker (4.30% effective rate)	$359	$2,719	$1,135
Lost Unemployment Insurance Per Worker	$437	$437	$437
Lost Workers' Compensation Per Worker	$1,958	$1,958	$1,958
Lost Income Tax Contributions	**$12,696,921**	**$47,182,342**	**$59,879,263**
Lost Unemployment Insurance Contributions	**$15,459,662**	**$7,575,929**	**$23,035,591**
Lost Workers' Compensation Contributions	**$69,347,627**	**$33,983,451**	**$103,331,078**

*Source(s): Authors' analysis of data from the American Community Survey (Census, 2018b), Bureau Of Economic Analysis (BEA, 2018), Nonemployer Statistics (Census, 2020), and Employer Costs for Employee Compensation (BLS, 2018b). Effective state income tax rates for the average annual income from wages for legally employed construction worker reported by SmartAsset (SmartAsset, 2020). *This is the difference between the average wage and salary income of W-2 employees and individuals who report that they are "unincorporated self-employed" in Illinois (see Figure 8).*

These findings are considerably higher than previous estimates on the economic costs of employee misclassification in Illinois (Kelsay et al., 2006). In 2006, three University of Missouri-Kansas City economists estimated that about 22,400 construction workers had

been misclassified in Illinois, resulting in a $17 million loss in income taxes, a $3 million loss in unemployment insurance taxes, and a $35 million loss in workers' compensation premiums– a combined $55 million loss. With an estimated 52,800 construction workers misclassified or paid off-the-books in cash in 2018, the extent of payroll fraud and wage theft in the construction industry is more than two times larger than previously thought. Moreover, the total impact of payroll fraud and wage theft in the construction industry on income tax revenues, workers' compensation premiums, and unemployment insurance taxes is more than three times larger than previous estimates.

Conclusions and Potential Policy Options

Payroll fraud and wage theft are rampant in the construction industries of Wisconsin, Minnesota, and Illinois. A significant amount of payroll fraud and wage theft occurs when unscrupulous construction employers either misclassify workers as independent contractors or pay them off-the-books in cash in order to evade the payment of taxes that fund critical social safety net programs and state government budgets. Results from this study reveal that about one-in-five construction workers in the Upper Midwest are either misclassified or illegally employed, annually costing taxpayers $40 million in Wisconsin, $136 million in Minnesota, and $186 million in Illinois from lost income taxes, unemployment insurance contributions, and workers' compensation premiums.

There are two reasons why the combined rate of misclassification and illegal employment may be lower in Wisconsin than in neighboring Illinois and Minnesota. The first is that Illinois and Minnesota have greater shares of foreign-born workers. Fully 18 percent of all civilian workers in Illinois are immigrants and 10 percent of Minnesota's workers are immigrants, compared with just 6 percent in Wisconsin (MPI, 2018). Immigrants are the most susceptible to worker misclassification, and sectors with higher shares of immigrant labor also tend to have higher rates of worker misclassification (Kazemi & Hasani, 2018; Ordonez & Locke, 2014; NELP, 2010). The second is that construction worker wages are higher, on average, in Illinois and Minnesota. This is, in part, due to the state's prevailing wage laws, which promote middle-class construction careers by establishing minimum wages for skilled construction workers on public construction projects (Manzo & Duncan, 2018; Dickson Quesada et al., 2013). Unscrupulous contractors in the underground economy have an even greater competitive advantage over law-abiding contractors in states where wages are higher, because they avoid paying higher social insurance taxes. Nevertheless, despite lower rates of misclassification and illegal employment, payroll fraud and wage theft remain major problems in Wisconsin.

There are three primary ways that policymakers can combat payroll fraud and wage theft. First, states can increase enforcement efforts by hiring more unemployment insurance (UI) auditors, especially those who speak multiple languages, and more prevailing wage compliance monitors. Second, states can strengthen punitive actions by enacting larger fines, creating escalating penalties for repeat offenders, and debarring contractors from winning

bids on publicly-funded construction projects. Furthermore, in the summer of 2019, the State of Minnesota officially made wage theft a crime when an employer, with intent to defraud, fails to pay employees all wages required by law or attempts to make it appear that wages paid to employees were greater than actually paid. Sanctions for committing payroll fraud include imprisonment for up to 20 years and fines of up to $100,000 for the gravest violations (DLI, 2019). This new law is likely to reduce the incidence of worker misclassification and illegal employment in Minnesota. Similar laws could be considered in Wisconsin and Illinois, especially in light of new proposed federal rules by the U.S. Department of Labor that would make it easier to misclassify workers as independent contractors (NELP, 2020). Finally, local procurement bodies can improve wage enforcement by certifying compliance with wage and hour laws, enacting responsible bidder ordinances or prequalification surveys, and excluding known violators from being awarded public projects. For example, a 2020 anti-wage theft ordinance in Columbus, Ohio terminates city contracts with construction companies that engage in payroll fraud or misclassify workers. It also imposes stop-work orders, prohibits tax breaks and construction permits for known violators, and prevents them from being awarded any other city-funded projects for four years (Jaworski, 2020). Another 2016 ordinance from Berkeley, California prohibits contractors from getting occupancy permits for buildings unless they detail how they pay their employees (Magdaleno, 2016).

This study provides the most accurate measure of payroll fraud and wage theft from worker misclassification and "off-the-books" employment in the construction industries of Wisconsin, Minnesota, and Illinois, based on recently developed statistical techniques. The data reveal that employee misclassification and illegal employment are not only issues in the Upper Midwest, but their costs are likely to be even larger than previously thought. Ultimately, worker misclassification and illegal employment in the construction industry have severe negative consequences for workers, law-abiding contractors, and taxpayers.

Statistical Note

In general, a study is only as good as its data. For this reason, two methods of estimating worker misclassification and illegal employment are provided. The first, monthly data method is given to capture the seasonality of the construction industry. The monthly employment estimation was done as follows: CPS data was retrieved for each state on construction employment by first and second job occupation types (public employment, private employment, and self-employed) and QCEW employment data for each quarter, which was adjusted with respect to BEA estimates, was retrieved. The difference between CPS "total" employed and QCEW-BEA-adjusted "compliant" employed gives an estimate of misclassified workers. To complete the picture with off-the-books workers paid in cash, self-employment data was taken from the Nonemployer Statistics (NES) series, with the difference between CPS "total" self-employed and NES legally self-employed providing a measure of illegally self-employed individuals in construction. The second, annual data method follows the same steps as the monthly method, but uses annual BEA employment estimates as the measure of "compliant" employment and ACS employment data as the measure of "total" employment. However, the ACS only surveys workers on their primary job. As a result, ACS data must be augmented with CPS second-job data to provide a complete picture. All results are weighted to match the overall population (FRBKC, 2020).

Cover Photo Credits

Canva.com. (2020). "Free Photos." Free pictures found on Canva.com searching the words, "pay with cash" and "construction worker."

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An Examination of Minnesota's Prevailing Wage Law

Effects on Costs, Training, and Economic Development

By Frank Manzo IV, M.P.P. and Kevin Duncan, Ph.D.

A Higher Road for a Better Tomorrow
MIDWEST ECONOMIC POLICY INSTITUTE

May 2018

Key Findings

At a time when unemployment is historically low and 72% of contractors are having trouble filling craft positions, one policy has helped recruit and retain skilled workers into Minnesota's construction industry: the Minnesota Prevailing Wage Act. The policy provides local minimum wages for construction workers employed on public projects and levels the playing field for contractors.

The Minnesota Prevailing Wage Act keeps construction costs stable.

- The vast majority studies find that prevailing wage laws have no effect on public construction costs.
- Labor costs are a low and historically declining share of total project costs– about 23%.
- A new analysis of 640 bids on school construction projects in Minnesota finds that winning bids on projects with prevailing wages are no more costly than bids on projects without prevailing wages.

The Minnesota Prevailing Wage Act is an effective job skills advancement policy.

- Prevailing wage laws increase apprenticeship training, boost worker productivity, and reduce injury rates– helping to address the skilled labor shortage in construction.
- 93% of all registered apprentices in Minnesota are enrolled in joint labor-management programs.
- In 2015, the 10 largest joint labor-management apprenticeship programs had $29.8 million in annual revenue and $68.5 million in total assets while the program associated with the employer-only Associated Builders and Contractors had just $297,000 in revenue and $290,000 in total assets.

The Minnesota Prevailing Wage Act provides pathways into the middle class and boosts the economy.

- Minnesota's prevailing wage law increases annual incomes by 5.2%, expands health insurance coverage by 5.0%, and improves pension coverage by 5.3% for blue-collar construction workers.
- Prevailing wage reduces the share of construction workers receiving food stamps by 2.1%.
- When school districts in Minnesota include prevailing wages on projects, local contractors account for a 10% higher market share– with tax dollars staying in the local economy.
- By protecting work for in-state contractors, Minnesota's prevailing wage law improves the state economy by $981 million and generates $37 million in state and local tax revenue.
- Compared to Indiana, which recently repealed its prevailing wage law, construction worker productivity has grown 7.7% faster and worker turnover rates have fallen further in Minnesota.

Minnesota's prevailing wage law produces positive impacts on the economy. By protecting local standards, prevailing wage supports work for local contractors and makes it easier for contractors to recruit, train, and retain skilled workers. The Minnesota Prevailing Wage Act is the best deal for taxpayers.

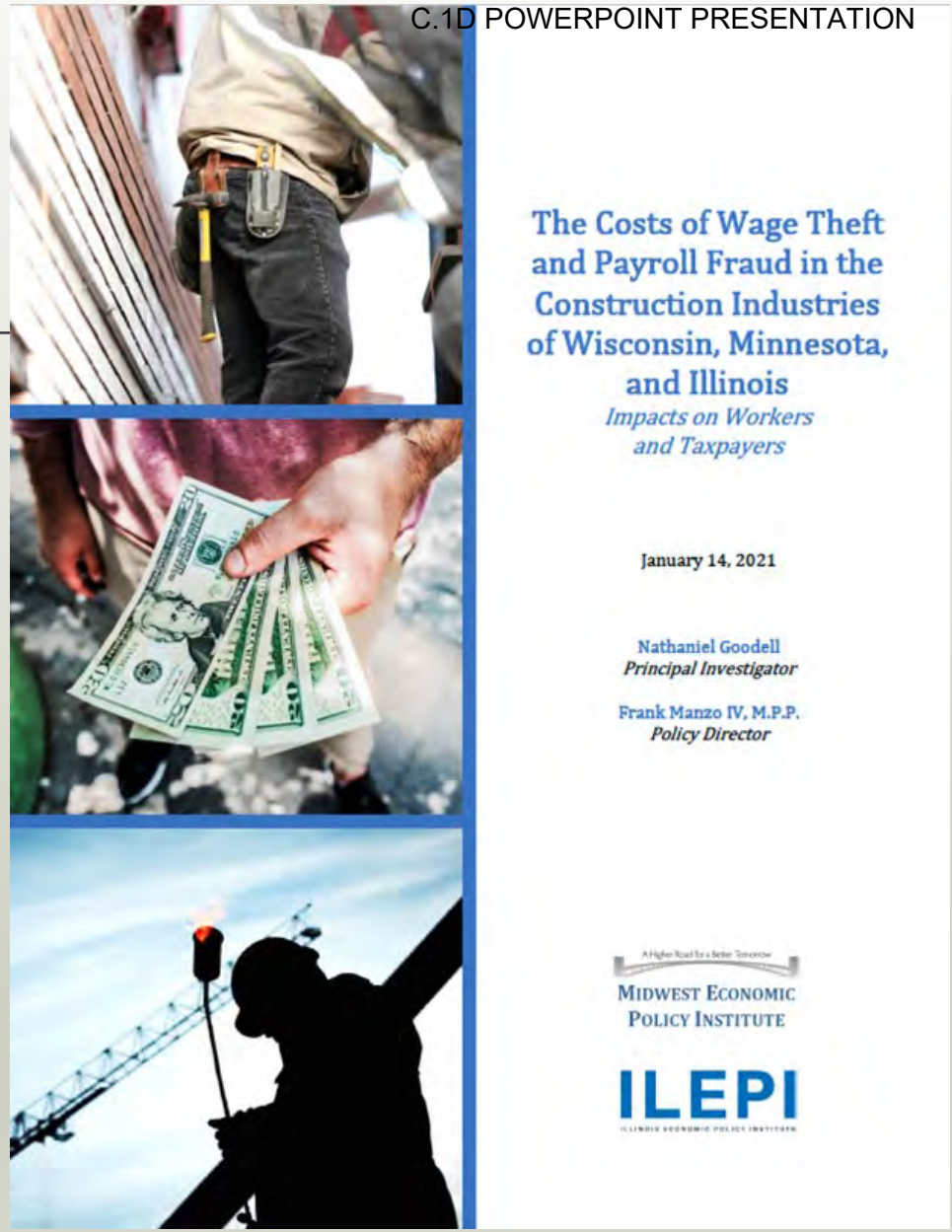
Why Labor Protections are Needed in Brooklyn Park

Construction Industry Payroll and Tax Fraud: A Growing Epidemic

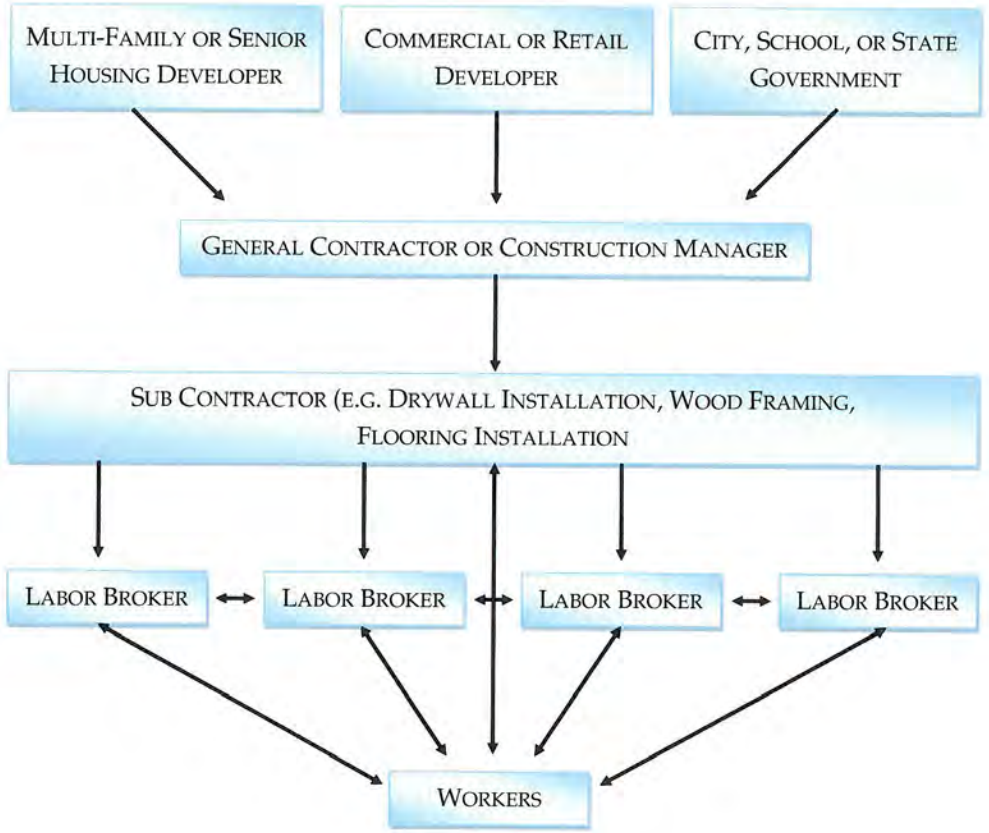
- UBC Represents approximately 500,000 construction workers.
- North Central States Regional Council of Carpenters represents 28,000 members in the states of Wisconsin, Minnesota, Iowa, Nebraska, North Dakota and South Dakota.
- UBC has resources and bandwidth. NCSRCC has tracked construction wage theft in MN for 15 years.

Minnesota annually loses $136 million in state tax revenues to construction payroll fraud.

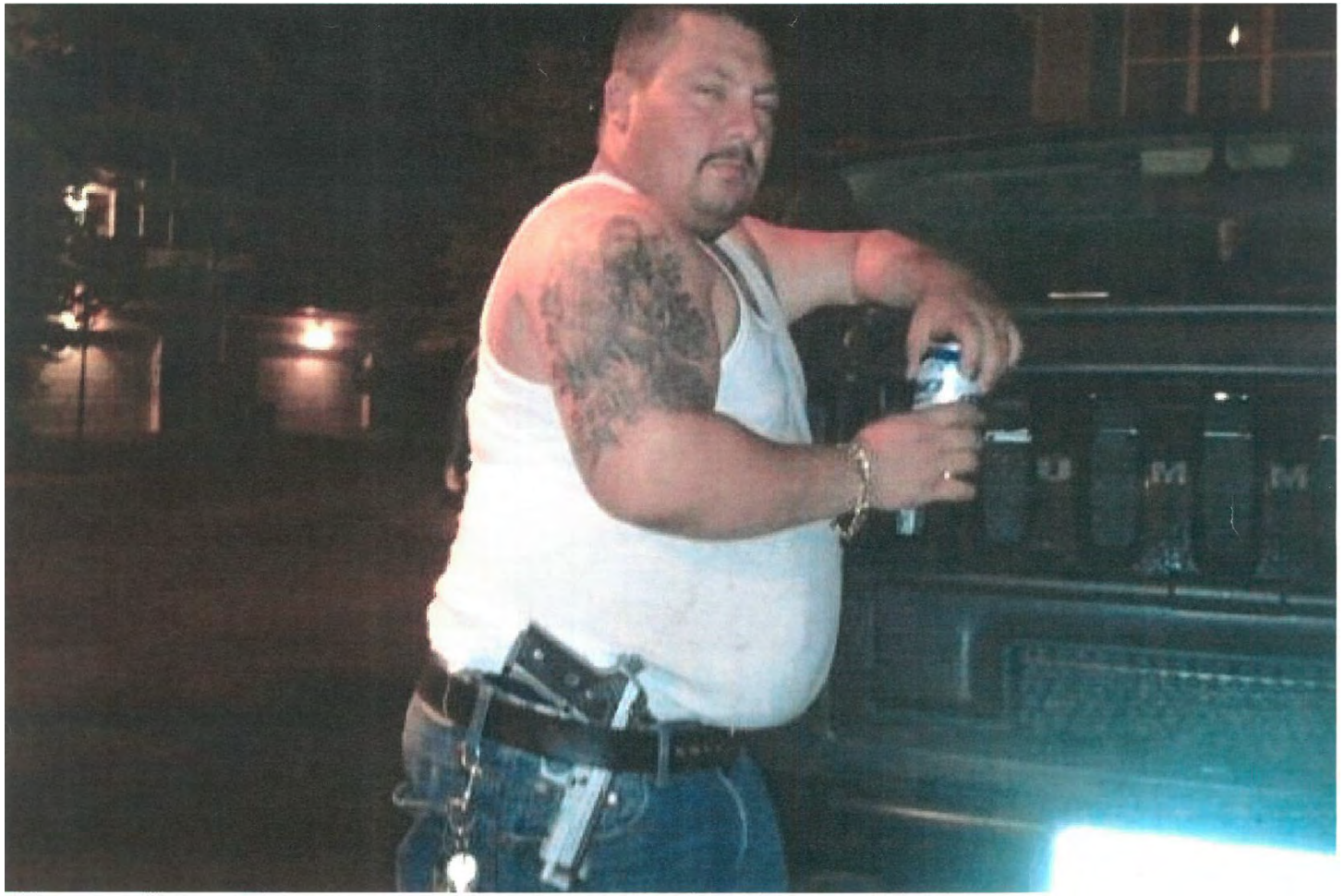
- $65 million in income taxes
- $13 million in unemployment insurance contributions
- $58 million in workers' compensation premiums.



Payroll Fraud in a Construction Project




Crush



THE RICARDO BATRES PROSECUTION

- Hennepin County (MN) Attorney Mike Freeman issued a criminal complaint against Ricardo Batres on 9/25/18 for three felonies:
  - Workers Comp Premium Fraud, Theft (of medical aid) and Labor Trafficking
  - Case investigated by MN Commerce Fraud Bureau
  - Workers threatened with deportation, suffered work injuries and were denied treatment. Then arrested by ICE.
  - Batres pleaded guilty 11/18/2019 to Trafficking, Work Comp Fraud

THE MERIT DRYWALL (MEHR) PROSECUTION

- Hennepin County (MN) Attorney Mike Freeman issued a criminal complaint against Merit Drywall owners Joyce and LeRoy Mehr on 1/21/20 for three felonies:
  - Workers Comp Premium Fraud and 2 counts of theft by swindle
  - Case investigated by MN Commerce Fraud Bureau*
  - Workers paid cash through labor brokers (lower tiered drywall subs).
  - October 8, 2020: Joyce and Leroy Mehr plead guilty to felony theft and $300,000 restitution.

Developer Nick Walton sells construction business to his partners

Oct 25, 2019, 5:00am CDT

Nick Walton, whose Reuter Walton development firm has quickly become one of the largest in the Twin Cities, has sold off his construction business to three of his operating partners.

Walton said he sold his stake in the construction business this week to focus on development and a re-launched property-management business.

"I want to narrow my focus down to development and want to kick back off property management," he said. "There were not enough hours in the day to also be doing construction."

As a developer, Nick Walton broke ground on eight ground-up apartment projects in the past 14 months, which is well ahead of his pace of about two per year between 2007 and 2017.

One of the partners who bought the construction business is Troy Wenck, the president and chief manager of the construction business who has been with the company since 2012. The construction company will be re-named, but Wenck wasn't ready to discuss the name or the other partners who are buying Walton out. The roughly 50 Reuter Walton construction employees will continue their jobs as before, he said.

NANCY KUEHN

Nick Walton has sold his stake in Reuter Walton Commercial, the construction business he's owned for 12 years.

"I HAVE LEARNED A LOT ABOUT SOME OF THE SUBCONTRACTORS IN THE INDUSTRY"

ENFORCEMENT RAMPING UP

Sept, 2018: Ricardo Batres charged with Labor Trafficking, Theft, Workers Compensation Insurance Fraud

Feb, 2019: Attorney General Ellison establishing labor unit to investigate and prosecute labor and employment cases.

Summer, 2019: "Wage Theft Prevention Bill," HF6 becomes law. $3.2 million allocated annually to fight wage theft. Wage theft cost Minnesotans over $100 million each year.

October 2020: Joyce and Leroy Mehr of Merit Drywall plead guilty to workers compensation premium fraud.

October 2021: Humberto Rangel-Torres pleads guilty to sex trafficking of a minor for a scheme that also involved exploitation of construction labor.

April 2022: City Leaders Against Wage Theft & Tax Fraud hosts conference. Ramsey and Hennepin County Attorney Offices endorse prevailing wage, discuss co-enforcement with cities.

May 2022: Dozens of workers from Viking Lakes project come forward about major wage theft case.

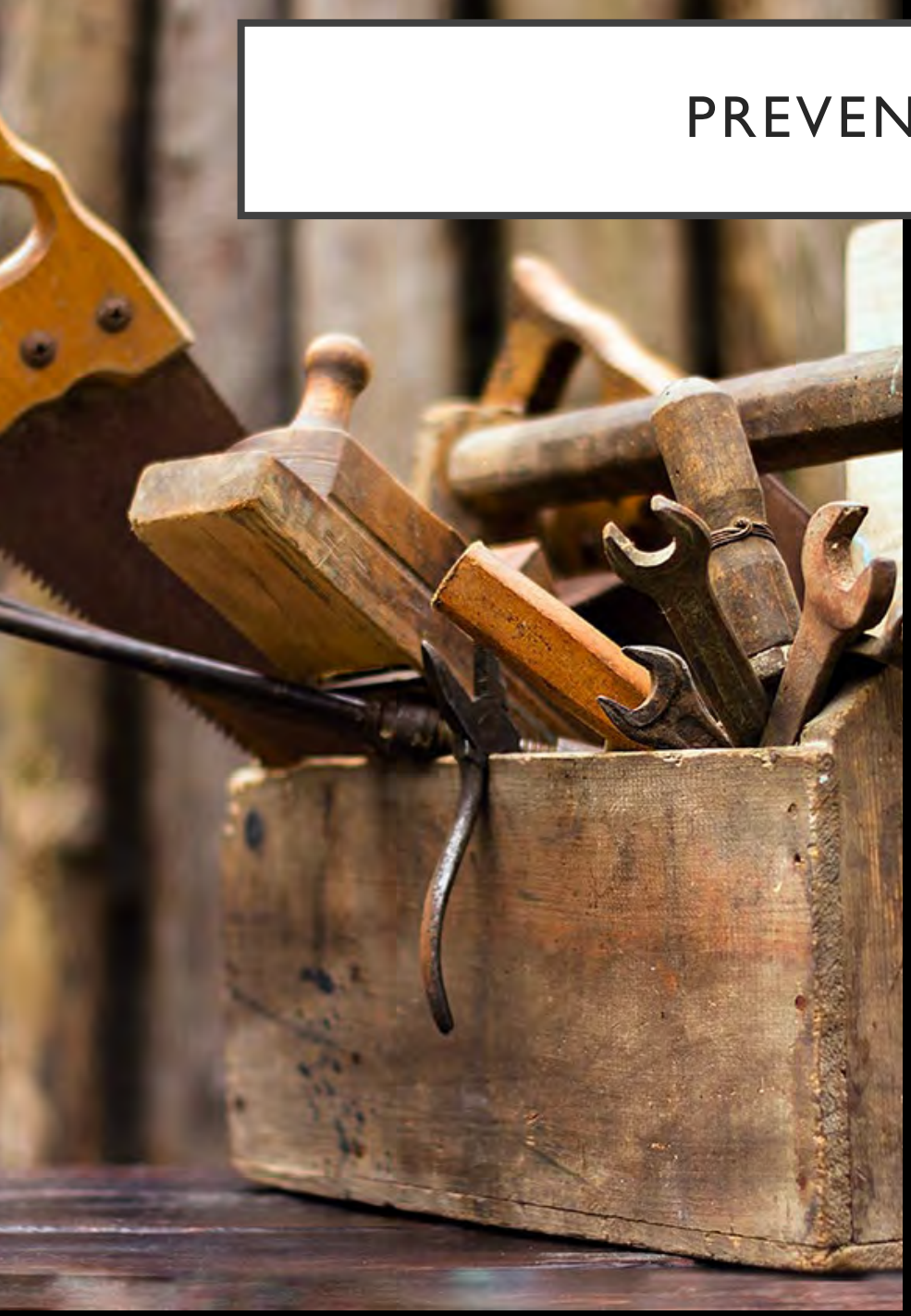
July 2022: Diego Medina charged with sexual assault of coworker at Viking Lakes project.

October 2022: Attorney General files obstruction lawsuit against subcontractor from Viking Lakes project.

NUMEROUS CASES CURRENTLY UNDER INVESTIGATION

PREVENTION & DETERRENTS

PREVENTION & DETERRENT TOOLS



PREVAILING WAGE

PROJECT LABOR AGREEMENTS

CITY VALUES REFLECTED IN CONSTRUCTION AGREEMENTS

PREVAILING WAGE

Low bid requirements created the need to protect industry standards. Kansas wrote first law in 1891. Davis-Bacon in 1931.

Creates middle class careers and funds apprenticeship programs.

More work completed by local contractors (2018 MN study).

Peer-reviewed studies show that prevailing wage laws have no effect on public construction costs.

Enforcement: certified payrolls, recordkeeping, and deterrence. FCF offers training on conducting payroll audits.

PROJECT LABOR AGREEMENTS

Agreement between an owner and regional building trades council.

Establishes uniform terms and conditions for all construction employees and uniform responsibilites for construction contractors on an individual project.

CITY VALUES REFLECTED IN BROOKLYN PARK CONSTRUCTION

Construction agreements that reflect diversity, equity, and inclusion.

Default language (a.k.a. claw back) tied to TIF.

Wage theft ordinance and enforcement.

Participate in learning opportunities regarding potential labor exploitation: city council, city staff, local law enforcement.

WOULD ADOPTING A PREVAILING WAGE ORDINANCE HELP DETER CONSTRUCTION WAGE THEFT , WHILE PROVIDING A BENEFIT TO THE WORKERS, EMPLOYERS AND TAXPAYERS OF BROOKLYN PARK?

BAJOHNSON@NCSRCC.ORG
651-341-4441
BURT JOHNSON, NCSRCC

City of Brooklyn Park
Council Work Session

Meeting Date:	June 5, 2023	**Originating Department:**	Administration
Agenda Item:	C.2	**Prepared By:**	Sarah Kriewall, HR Director
Agenda Section:	Discussion Items/ General Action Items	**Presented By:**	Sarah Kriewall David Drone and Associates
Item:	Wage Comparison Study		

Summary:

The City of Brooklyn Park last completed a compensation study in 2014. In the years since the study the employment market has changed significantly, and the City's compensation has fallen behind comparable cities and other employers. We have selected David Drone and Associates, consultant Tessia Melvin, to conduct a comprehensive compensation study. The study will review our market competitiveness and will develop a salary structure that is externally competitive, internally equitable and legally defensible. The consultant will also recommend a compensation strategy and implementation options.

Attachments: N/A

City of Brooklyn Park
Council Work Session

Meeting Date:	June 5, 2023	**Originating Department:**	Administration
Agenda Item:	C.3	**Prepared By:**	Josie Shardlow, Community Engagement Manager
Agenda Section:	General Action Items	**Presented By:**	Josie Shardlow
Item:	Sister City Policy Discussion – Human Rights		

Summary:

When the City Council was considering the sister city proposal from Udu, Local Government Area, Nigeria, there were questions around Brooklyn Park's sister city criteria.

The Council can discuss whether they want to amend the criteria or process to include vetting potential sister cities for human rights concerns and how that could be implemented.

Attachments:

C.3A CRITERIA FOR SISTER CITY PARTNERSHIPS

City of Brooklyn Park

Process and Criteria for Sister City Relationships

A. Process for establishing new sister city relationships

Organizations interested in starting a sister city relationship should contact the City of Brooklyn Park Community Engagement Division to discuss the requirements for submitting a proposal. To be considered, a proposal must meet the requirements described below. Submission of a proposal does not guarantee that Brooklyn Park will enter into a sister city relationship.

The City Manager, or his/her designee, will review the proposal and may recommend that the proposal be submitted to the City Council for review and approval. All sister city relationships must be approved by the City Council and Mayor before an official invitation to proceed can be extended.

The following definitions are used for the purpose of this document:

Sponsor organization: A Brooklyn Park organization that will manage the sister city relationship. The organization must be based in Minnesota, and either designated by the Internal Revenue Service as a 501(c)(3) non-profit and registered with the Minnesota Secretary of State or have a fiscal agent that meets the same criteria.

Sister city committee: The same as the sponsor organization or a committee of the sponsor organization organized to manage the sister city relationship.

Sister City: A city that has a formal relationship with Brooklyn Park recognized by a Sister City Agreement.

Sister City Agreement: A memorandum of understanding between Brooklyn Park and another city outlining the terms of the sister city relationship.

Sponsor Agreement: A memorandum of understanding between the City of Brooklyn Park and a sponsor organization outlining the requirements for managing the sister city relationship.

B. Proposal Requirements

1. Demographic profile of the proposed sister city.
2. Description of the benefits to both cities.
3. Description of how the sister city relationship will support the goals of the City of Brooklyn Park.
4. Membership list for the proposed sister city committee.
5. Description of the proposed sister city's expectations for the relationship with Brooklyn Park.
6. Letter of invitation from the Mayor of the proposed sister city.
7. List of at least 20 Brooklyn Park residents interested in participating in the sister city relationship. This must include address, phone number and e-mail address for each person.

8. Optional: Letters of support

C. Criteria

1. Brooklyn Park does not have a sister city relationship with any other cities in the country.
2. The relationship is multi-purpose and presents the opportunity for benefits to both cities.
3. The sister city relationship supports the City of Brooklyn Park's goals and objectives.
4. There is solid current and long-term local support for the new relationship:
    a. Business connections
    b. Financial support from groups and individuals
    c. Governmental, educational and cultural interest
5. The potential sister city has demonstrated strong interest in and commitment to the relationship.
6. There is involvement from Brooklyn Park residents.

D. Requirements for creating and maintaining a sister city relationship

If a sister city relationship is approved, the following steps will be followed:

1. The mayor of Brooklyn Park will send a letter to the mayor of the proposed sister city.

2. The sponsor organization will be required to enter into a Sponsor Agreement with the City of Brooklyn Park.

    a. As part of the Agreement the sponsor organization will be required to:
        i. Be designated by the Internal Revenue Service as a 501(c)(3) non-profit and registered with the Minnesota Secretary of State or have a fiscal agent that meets the same criteria.
        ii. Present an annual report.
        iii. Facilitate exchanges between Brooklyn Park and the proposed sister city.
        iv. Provide volunteer and financial resources to support the Sister City Agreement.
        v. Maintain an active sister city committee, including the recruitment of new participants.

3. The Sister City Agreement and Sponsor Agreement will be developed and approved by City Council.

4. The mayors sign the Sister City Agreement.

5. The Sister City Agreement is filed with Sister Cities International.

E. Brooklyn Park 2025 Community Goals

Working together to make Brooklyn Park a thriving community, inspiring pride where opportunities exist for all

By 2025, our community wants to accomplish these goals by 2025:

1. A united and welcoming community, strengthened by our diversity
2. Beautiful spaces and quality infrastructure make Brooklyn Park a unique destination
3. A balanced economic environment that empowers businesses and people to thrive
4. People of all ages have what they need to feel healthy and safe
5. Partnerships that increase racial and economic equity empower residents and neighborhoods to prosper
6. Effective and engaging government recognized as a leader

F. Objectives for a sister city relationship

1. Explore economic development synergies between cities and develop avenues for local businesses who want to establish or expand international commercial initiatives.
2. Increase community awareness of the influence and impact that foreign policy and the global marketplace have on our community.
3. Provide more options for residents to experience, understand and appreciate other cultures.
4. Share best practices for city government.
5. Develop and support educational, cultural and people-to-people exchanges.

City of Brooklyn Park
Council Work Session

Meeting Date:	June 5, 2023	**Originating Department:**	Administration
Agenda Item:	C.4	**Prepared By:**	Katrina Dosher, Program Assistant and Risikat Adesaogun, Communications Manager
Agenda Section:	General Action Items	**Presented By:**	Risikat Adesaogun
Item:	Approval of the Annual Holiday Calendar		

Overview:

City Council members have discussed the City's annual holiday calendar at work sessions and in official Council meetings. They must now consider the proposed final list of holidays to recognize as a city. Council must also consider the proposed final proclamations list.

In prior meetings, Council members discussed the connection between holiday acknowledgments, proclamations, and cultural events. Cultural events are primarily organized and executed by Recreation and Parks staff. The discussion on which cultural events to retain, modify, add, or eliminate will occur on July 31.

Attachments:

C.4A HOLIDAY LIST

Proposal: Brooklyn Park Holidays and Proclamations

Note: Federal holidays are highlighted in green. Proposed new holidays are highlighted in blue.

Month	Holiday	Planned Proclamation
	New Year's Day	
Jan	MLK Jr Day	X
	Black History Month	X
	President's Day	
	Valentine's Day	
Feb	Lunar New Year	
	Ramadan	
	Women's History Month	X
	International Women's Day	
March	Easter	
	Eid	
	National Volunteer Month	
	National Autism Month	
	National Public Health Week (CD Director Addition)	
	Earth Day	
April	Arbor Day	X
	Asian Pacific Islander Heritage Month	X
	Memorial Day	
	Mental Health Awareness Month	
	Older Americans Month	X
	National Economic Development Week (CD Director Addition)	
	Peace Officers Memorial Day	
May	National Police Week	X
	National Public Works Week	X
	Pride month	X
	Immigrant Heritage Month	
June	Juneteenth	X
	Independence Day	
July	Liberian Independence Day	X
	Igbofest	X
August	National Night Out	X
	Labor Day	
	Hispanic Heritage Month	X
	Patriot Day	
	Rosh Hashanah	
	Yom Kippur	
September	Constitution Day/week	X

	Nigerian Independence Day	X
	Domestic Violence Awareness Month	X
	Breast Cancer Awareness Month	
	National Community Planning Month (CD Director Addition)	
	National Code Compliance Month (CD Director Addition)	
	Halloween	
October	Indigenous People's Day	
	Native American Heritage Month	X
	Veterans' Day	
	Thanksgiving	
November	Small Business Day	X
	Hanukkah	
	Human Rights Day	X
	Hmong New Year	
	Kenyan Independence Day	
	Kwanzaa	
	Christmas Eve	
	Christmas Day	
December	New Year's Eve	

There are 11 federal holidays (green). All holidays on the above list will receive, at minimum, social media promotion. Cultural events may include additional communications such as educational website content or a city email.

City of Brooklyn Park
Council Work Session

Meeting Date:	June 5, 2023	**Originating Department:**	Community Development
Agenda Item:	C.5	**Prepared By:**	Amber Turnquest, Principal Planner
Agenda Section:	General Action Item	**Presented By:**	Paul Mogush, Planning Director
Item:	Final Plat Amendment to DEV22-117, Tessman Ridge		

City Manager's Proposed Action:

MOTION _____, SECOND _____, TO WAIVE THE READING AND ADOPT RESOLUTION #2023-___ AMENDING RESOLUTION #2023-42 APPROVING FINAL PLAT FOR "TESSMAN RIDGE" SUBDIVIDING 6.16 ACRES INTO THREE LOTS AND ONE OUTLOT AT 6900 85TH AVENUE NORTH, SUBJECT TO CONDITIONS CONTAINED IN THE RESOLUTION.

Overview:

City Council
The Final Plat was approved unanimously on March 27, 2023 by the City Council. The applicant subsequently made technical corrections to the Final Plat. Per §151.006(J), any amendments after approval must be presented and approved by City Council.

Planning Commission
At the October 12, 2022 Planning Commission Regular Meeting, the commission recommended approval (6-2 with one member not voting) of the preliminary plat, site plan, and variances. There was one party present to speak at the public hearing.

Summary
In the Spring of 2020, the Brooklyn Park Economic Development Authority (EDA) solicited qualifications from developers to provide a plan that would develop affordable or mixed-income housing with a potential for mixed use. Duffy Development responded with a proposal of a multi-phased, mixed-use development to eventually include 150 units of mixed-income housing and a small commercial use area. Duffy Development was selected by the EDA to build out the site, which is currently owned by North Hennepin Community College (NHCC). The EDA holds an option to purchase the site from NHCC to resell in phases to the developer.

Duffy Development proposes to construct a 75-unit multifamily mixed-income housing development on the site located to the east of College Parkway, north of 85th Avenue North and west of Tessman Parkway. A multiple family dwelling is a permitted use in the Transit Oriented Development Center District (TOD-C) (§ 152.606). This application is for Phase I of the multi-phased development, which is intended to begin construction this spring.

Since the March approval, Hennepin County requested a technical change as to how an easement was shown on the plat.

This application has been reviewed for conformance with City Code Chapter 151: Subdivisions, as well as Chapter 152: Zoning, and it was found that this request meets all relevant requirements.

Primary Issues/Alternatives to Consider:

1. Approve the Final Plat as presented.
2. Approve Final Plat with modifications.
3. Deny the Final Plat based on certain findings.

Budgetary/Fiscal Issues:

There are no budgetary or fiscal impacts anticipated by this application.

Attachments:

C.5A RESOLUTION – AMENDMENT TO FINAL PLAT
C.5B LOCATION MAP
C.5C PLAN SET

RESOLUTION #2023-

RESOLUTION AMENDING RESOLUTION #2023-42 APPROVING FINAL PLAT FOR "TESSMAN RIDGE" SUBDIVIDING 6.16 ACRES INTO THREE LOTS AND ONE OUTLOT AT 6900 85TH AVENUE NORTH SUBJECT TO CONDITIONS CONTAINED IN THE RESOLUTION

Planning Commission File #22-122

WHEREAS, the plat of "Tessman Ridge" has been submitted in the manner required for platting of land under the Brooklyn Park City Codes and under Chapter 462 of the Minnesota Statutes and all proceedings have been duly had thereunder; and

WHEREAS, said plat is in all respects consistent with the City plan and the regulations and requirements of the laws of the State of Minnesota and codes of the City of Brooklyn Park, Chapters 151 and 152; and

WHEREAS, the granting of this plat will not be detrimental to the public welfare nor injurious to the other property in the neighborhood; and

WHEREAS, the granting of this plat will not have an adverse effect upon traffic and traffic safety; and

WHEREAS, the proposed subdivision meets the minimum requirements of the High Density Residential designation of the Comprehensive Plan.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Brooklyn Park, Final Plat Request #22-117 "Tessman Ridge" shall be approved subject to the following conditions:

A. Title review by the City Attorney and all conditions therein.
B. Easement review by the City Engineer and all conditions therein.
C. Submission of a CAD copy of the plat.
D. Conformance to all Hennepin County comments. If Hennepin County requires changes to the final plat prior to filing, all changes must be approved by the Brooklyn Park City Council.

BE IT FURTHER RESOLVED that such execution of the certificate upon said plat by the Mayor and City Manager shall be conclusive showing of proper compliance therewith by the subdivider and City officials and shall entitle such plat to be placed on record forthwith without further formality, all in compliance with M.S.A. 462 and the Ordinance of the City.

Preliminary Plat, Site Plan Review, Variance
Case #22-117 – Tessman Ridge
Area of Request (Spring 2018 Air Photo)
6900 85th Avenue North

Brooklyn Park

R.T. DOC. NO. _____
C.R. DOC. NO. _____

TESSMAN RIDGE

KNOW ALL PERSONS BY THESE PRESENTS: That the State of Minnesota, by and through the Board of Trustees of the Minnesota State Colleges and Universities, owner of the following described property:

OUTLOT B, BROOKLYN PARK LIBRARY ADDITION

The Torrens portion being:

That part of OUTLOT B, BROOKLYN PARK LIBRARY ADDITION, embraced within the Southwest Quarter of Section 17, Township 119, Range 21. (C.O.T. No. 1330357)

Has caused the same to be surveyed and platted as TESSMAN RIDGE and does hereby dedicate to the public for public use the drainage and utility easements as created by this plat.

In witness whereof, said State of Minnesota, by and through the Board of Trustees of the Minnesota State Colleges and Universities, has caused these presents to be signed by its proper officer this _____ day of _____, 20___.

Signed: State of Minnesota

By: _____
William D. Maki, Vice Chancellor for Finance and Facilities, Minnesota State Colleges and Universities

STATE OF MINNESOTA
COUNTY OF _____

This instrument was acknowledged before me this _____ day of _____, 20___ by William D. Maki, the Vice Chancellor for Finance and Facilities of the Minnesota State Colleges and Universities, on behalf of the State of Minnesota, by and through the Board of Trustees of Minnesota State Colleges and Universities.

_____ _____
(Notary's Signature) (Notary's Name Printed)

Notary Public, _____ County, Minnesota

My Commission Expires: _____

SURVEYOR CERTIFICATE

I Steven F. Hough do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been, or will be correctly set within one year; that all water boundaries and wet lands, as defined in Minnesota Statutes, Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____, 20___.

_____
Steven F. Hough, Licensed Land Surveyor
Minnesota License No. 54850

STATE OF MINNESOTA
COUNTY OF _____

This instrument was acknowledged before me on this _____ day of _____, 20___, by Steven F. Hough.

_____ _____
(Notary's Signature) (Notary's Name Printed)

Notary Public, _____ County, Minnesota

My Commission Expires: _____

CITY COUNCIL, CITY OF BROOKLYN PARK, MINNESOTA

This plat of TESSMAN RIDGE was approved and accepted by the City Council of the City of Brooklyn Park, Minnesota at a regular meeting thereof held this ____ day of _____, 202___, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2.

City Council, City of Brooklyn Park, Minnesota

By: _____ *By:* _____
Mayor *City Manager*

RESIDENT AND REAL ESTATE SERVICES, Hennepin County, Minnesota

I hereby certify that taxes payable in 20___ and prior years have been paid for land described on this plat, dated this _____ day of _____, 202___.

Daniel Rogan, County Auditor By_____ Deputy

SURVEY DIVISION, Hennepin County, Minnesota

Pursuant to MN. STAT. Sec. 383B.565 (1969) this plat has been approved this _____ day of_____, 202___.

Chris F. Mavis, County Surveyor By_____

REGISTRAR OF TITLES, Hennepin County, Minnesota

I hereby certify that the within plat of TESSMAN RIDGE was filed in this office this _____ day of _____, 202___, at ___ o'clock __.M.

Amber Bougie, Registrar of Titles By_____ Deputy

COUNTY RECORDER, Hennepin County, Minnesota

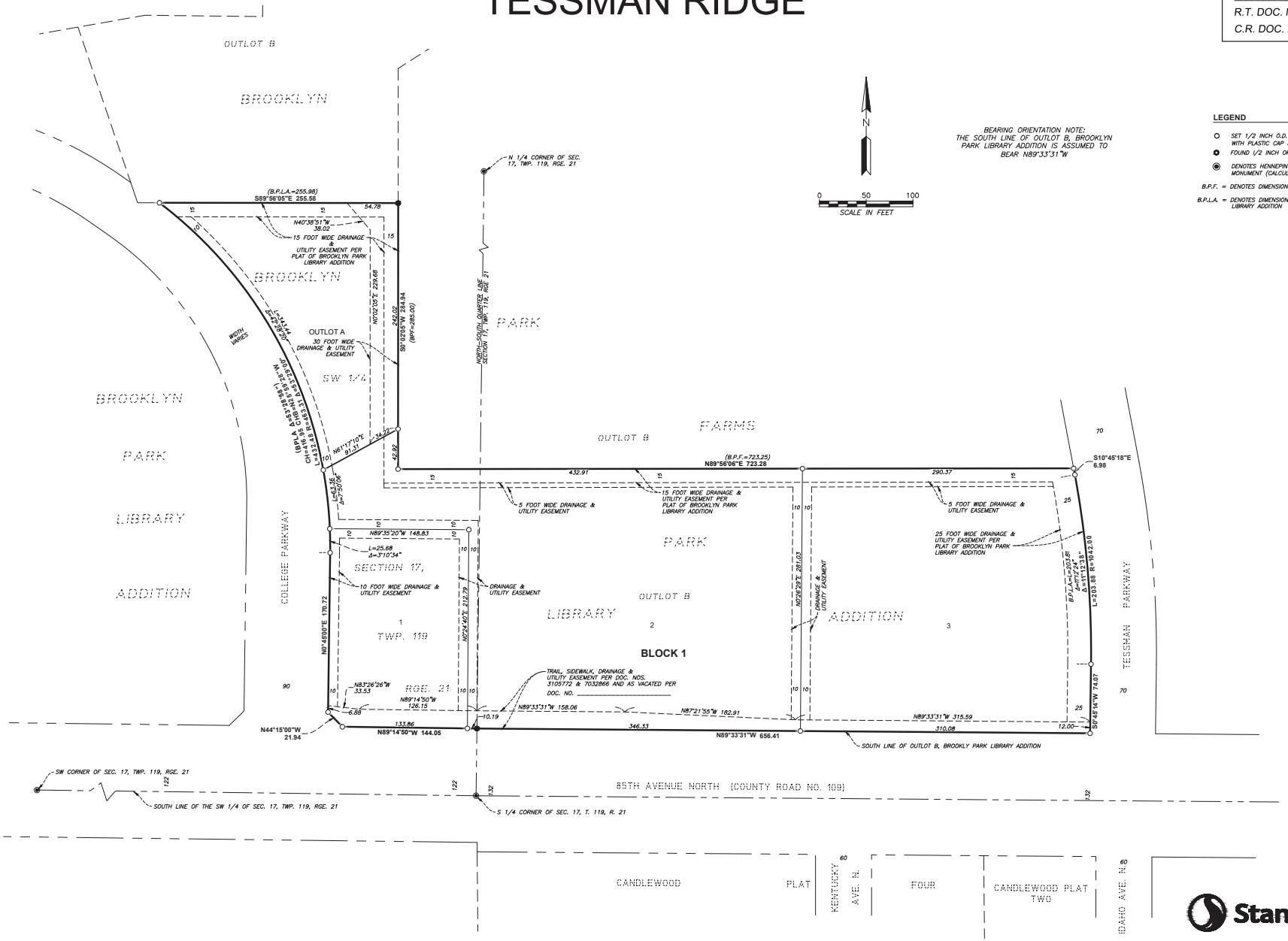
I hereby certify that the within plat of TESSMAN RIDGE was recorded in this office this _____ day of _____, 202___, at ___ o'clock __.M.

Amber Bougie, County Recorder By_____ Deputy

Stantec

TESSMAN RIDGE

R.T. DOC. NO. _____
C.R. DOC. NO. _____



Stantec