

UC Berkeley Center for Labor Research and Education
January 2022

The Public Cost of Low-Wage Jobs in the Pennsylvania Construction Industry

By Ken Jacobs, Kuochih Huang, Jenifer MacGillvary, and Enrique Lopezlira

Our recently published paper “The Public Cost of Low-Wage Jobs in the United States Construction Industry” explored the use of five safety net programs by construction workers and their families. Though construction used to provide well-paying jobs to workers without a college education, job quality has deteriorated to the point that many construction workers earn wages too low to make ends meet and therefore turn to the public safety net to make up the difference. We found that nationwide, 39% of families of construction workers are enrolled in one or more safety net program at a cost of almost \$28 billion per year, and three times as many construction workers as all workers lack health insurance (31% compared to 10%).¹

Throughout the country, construction is a highly competitive industry in which projects are frequently awarded on the sole basis of the lowest bid.² One of the most effective ways to minimize costs and win contracts is to “reduce labor costs through whatever means possible.”³ The primary strategies to this end are paying low wages without benefits, misclassifying employees as independent contractors, and paying workers under the table. Overall, between 12.4 and 20.5% of construction workers are either misclassified or paid under the table.⁴ These practices drive a “race to the bottom” in the industry, which degrades job quality and leaves many workers unable to support themselves and their families.⁵

In this research brief we provide estimates of safety net use among families of construction workers in Pennsylvania. **We find that 28% of families of construction workers in Pennsylvania are enrolled in one or more safety net programs at a cost to the state and the federal government of \$428 million per year. Compared to all Pennsylvania workers, construction workers are more than twice as likely to lack health insurance (7% compared to 16%).**

About Pennsylvania's Construction Industry

Data and Definitions

We examine Pennsylvania construction workers' and their families' utilization of the five largest means-tested safety net programs for which data are available: Medicaid; Children's Health Insurance Program (CHIP); basic household income assistance under Temporary Aid for Needy Families (TANF); Earned Income Tax Credit (EITC); and Supplemental Nutrition Assistance Program (SNAP). Responsibility for funding the health programs is shared by Pennsylvania and the federal government. We include only the cash assistance portion of TANF, and this program too receives funding from both Pennsylvania and the federal government. While there is a state-level EITC program, in this analysis we include only the federal EITC. The federal government alone funds SNAP. We analyze only programs that function as income supplements, omitting job-training, housing cost assistance, educational, and other programs that indirectly assist low-income families.

To calculate the numbers of working families who participated in safety net programs, we restrict the sample to those who work 27 or more weeks per year and 10 or more hours per week in all industries in Pennsylvania. We exclude observations who live in institutional group quarters. To identify construction workers, we further use the 1990 Census Bureau industrial code All Construction (60), and the 2010 Census Bureau occupation codes from First-Line Supervisors of Construction Trades and Extraction Workers (6200) to Construction Workers, n.e.c. (6765), and we include W2 workers and the not-incorporated self-employed but exclude the incorporated self-employed.

Results

Table 1 shows the annual enrollment in safety net programs of construction workers and their families in Pennsylvania between 2015 and 2019. We estimate that 28% of construction working families are enrolled in at least one program, approximately the same percentage as all working families (29%). Construction working families in Pennsylvania have similar enrollment to all working families for all five means-tested safety net programs.

- In Pennsylvania there are approximately 358,000 people employed in construction, about 1 in 18 workers statewide.⁶
- Just prior to the COVID-19 pandemic, in 2019, construction contributed \$31.4 billion, or 3.9%, of Pennsylvania's GDP.⁷
- Construction accounted for \$31.2 billion in personal income, or \$1 out of every \$24 in total state earnings in 2019.⁸
- In Pennsylvania, 24.1% of workers in the construction industry are covered by collective bargaining agreements, significantly higher than the national rate of 13.6%.⁹

Table 1. Annual Enrollment in Safety Net Programs for Working Families, Pennsylvania, 2015-2019

Program	Number of Construction Working Families Enrolled	Share of Construction Working Families Enrolled	Share of ALL Working Families Enrolled
Adult Medicaid	28,000	13%	14%
Children’s Medicaid/CHIP	20,000	10%	10%
EITC	39,000	19%	18%
TANF	1,400	1%	1%
SNAP	24,000	12%	12%
Any program	59,000	28%	29%

Source: Authors’ calculations based on the 2015-2019 American Community Survey, 2016–2020 March Current Population Survey, 2019 Occupational Employment Statistics, and administrative data from Medicaid, CHIP, EITC, SNAP, and TANF programs.

Note: The analysis is restricted to workers who work at least 27 weeks in a year and 10 or more hours per week.

Table 2 presents the combined annual expenditures by the State of Pennsylvania and the federal government on safety net program usage by construction working families and all families, again averaged over the years 2015-2019. ***In total, \$428 million is spent on safety net program utilization annually by construction working families in Pennsylvania.***

Table 2. Annual State and Federal Spending on Safety Net Programs for Working Families, Pennsylvania, 2015-2019 (2019 dollars)

Program	Amount Spent on Construction Working Families	Amount spent on ALL Working Families
Adult Medicaid	160,000,000	3,172,000,000
Children’s Medicaid/CHIP	107,000,000	2,006,000,000
EITC	97,000,000	1,983,000,000
TANF	4,000,000	105,000,000
SNAP	60,000,000	1,282,000,000
All Programs	428,000,000	8,547,000,000

Source: Authors’ calculations based on the 2015-2019 American Community Survey, 2016–2020 March Current Population Survey, 2019 Occupational Employment Statistics, and administrative data from Medicaid, CHIP, EITC, SNAP, and TANF programs.

Notes: The analysis is restricted to workers who work at least 27 weeks in a year and 10 or more hours per week. Numbers may not add due to rounding.

Table 3 presents the health insurance coverage status of construction workers and all workers in Pennsylvania. **More than twice as many construction workers lack insurance coverage (16%) as all workers (7%).**

Table 3. Health Insurance Coverage of All Workers and Construction Workers, Pennsylvania, 2015-2019

	Construction Workers	All Workers
No health insurance coverage	16%	7%
With health insurance coverage	84%	93%

Source: Authors’ analysis of 2015-2019 IPUMS American Community Survey (ACS) data.

Note: The analysis is restricted to workers who work at least 27 weeks in a year and 10 or more hours per week.

Determining the full cost of uninsurance in Pennsylvania, let alone the cost for uninsured construction workers, is beyond our scope. But in addition to causing hardship for uninsured construction workers, uninsurance creates significant expenses for states, counties, and the federal government. The Kaiser Family Foundation reports that in the years 2015-2017, uncompensated health care costs for the uninsured nationwide averaged \$42.4 billion per year, with the public picking up around 80% of these costs.¹⁰

Discussion

According to the Keystone Research Center, though data is sparse there is “suggestive evidence” that worker misclassification in the construction industry is widespread in Pennsylvania.¹¹ Low wages and exploitative practices in construction cause profound hardship for workers and their families. It also costs the public. When employers misclassify their workers or pay them under the table, they are defunding and defrauding government programs, including workers’ compensation, Social Security, and Medicare. Overall, misclassification is estimated to cost state and federal coffers at least \$3,000 annually for every worker that is misclassified.¹²

It is important to point out that the numbers provided in this analysis do not fully reflect conditions for construction workers in Pennsylvania. Undocumented immigrants currently comprise 13% of the construction workforce nationwide (compared to 5% of the overall US workforce),¹³ and with rare exceptions they are ineligible for state and federal assistance.¹⁴ Their working conditions, among the worst in the industry, are not reflected in this analysis.

In most states, general contractors and subcontractors are not liable for—and in fact benefit from—payroll fraud found further “down the chain” of subcontractors; these practices continue “with or without the knowledge, assistance or willful ignorance of the owners, developers, general contractors, or construction managers.”¹⁵ In the absence of legislation preventing these practices, construction workers in Pennsylvania will remain subject to misclassification, and lawful contractors may well find it increasingly difficult to compete in the industry.

Appendix: Methods

We mainly rely on four sources of data: the US Census Bureau’s American Community Survey (ACS), the March Supplement of the US Bureau of Labor Statistics Current Population Survey (CPS), the US Bureau of Labor Statistics Occupational Employment Statistics (OES), and administrative data from the Medicaid, CHIP, TANF, EITC, and SNAP programs. Medicaid figures exclude aged, blind, and disabled enrollees. The ACS surveys a large number of respondents and asks them about their work history, income, and family structure. The March Supplement of CPS, also known as the Annual Demographic Supplement, asks respondents about receipts of cash and noncash transfer payments during the past year and includes questions about the programs we examine in this analysis.

Survey databases like the ACS and CPS frequently have safety net program utilization counts that differ from program administrative data. We adjusted the CPS so that its program utilization estimates match the program administrative data. The CPS does not provide a large enough sample size to accurately estimate program utilization for construction workers at the state or county levels. The ACS does have sufficient sample size for this analysis but lacks specific questions about program utilization, and its occupational employment counts differ from more accurate data like the OES. On the other hand, while the OES has accurate employment counts for wage workers, it does not include independent contractors. To overcome these issues, we built a model using CPS data to predict program utilization based on income, demographics, and family structure. We then used that model to impute program utilization onto the ACS data. We calculated the ratio of wage workers to non-incorporated self-employed workers based on the ACS and used it to adjust the OES data for non-incorporated self-employed workers, and then adjusted the employment counts in the ACS to match the adjusted OES data. Finally, we used that imputed and adjusted ACS data to analyze safety net program utilization in families of construction workers.

For a detailed explanation of methodology, please see Appendix A: Methodology from *Fast Food, Poverty Wages: The Public Cost of Low-Wage Jobs in the Fast-Food Industry*.¹⁶

Endnotes

- 1 Ken Jacobs, Kuochih Huang, Jenifer MacGillvary, and Enrique Lopezlira, “The Public Cost of Low-Wage Jobs in the US Construction Industry” (UC Berkeley Labor Center, January 2022), <https://laborcenter.berkeley.edu/the-public-cost-of-low-wage-jobs-in-the-US-construction-industry/>.
- 2 Matthew F. Capece, “Fraudulent Schemes and Violations of Employment, Tax and Other Laws in the Construction Industry” (United Brotherhood of Carpenters, July 16, 2021).
- 3 Russell Ormiston et al., “Rebuilding Residential Construction,” in *Creating Good Jobs: An Industry-Based Strategy*, ed. Paul Osterman (Cambridge, MA: MIT Press, 2020), 76.
- 4 Russell Ormiston, Dale Belman, and Mark Erlich, “An Empirical Methodology to Estimate the Incidence and Costs of Payroll Fraud in the Construction Industry,” January 2020, <https://stoptaxfraud.net/wp-content/uploads/2020/03/National-Carpenters-Study-Methodology-for-Wage-and-Tax-Fraud-Report-FINAL.pdf>.
- 5 See our [national study](#) for a short literature review of research on the use of misclassification and other payroll fraud in the construction industry. Jacobs et al., “The Public Cost of Low-Wage Jobs in the US Construction Industry.”

- 6 US Census Bureau, ACS 2019 1-year estimates, table [C24070](#), Industry By Class Of Worker For The Civilian Employed Population 16 Years And Over. "People employed in construction" excludes self-employed in own incorporated business workers. Accessed 12/2/2021.
- 7 Bureau of Economic Analysis, [SAGDP2N Gross domestic product \(GDP\) by state 1/](#), accessed 12/2/2021.
- 8 U.S. Bureau of Economic Analysis, [SAINC5N Personal Income by Major Component and Earnings by NAICS Industry 1/](#), accessed 12/2/2021.
- 9 "Union Membership and Coverage Database from the CPS," <http://www.unionstats.com>. Due to the small sample size, we averaged collective bargaining coverage in Pennsylvania for the years 2018-2020.
- 10 Teresa A. Coughlin, Haley Samuel-Jakubos, and 2021, "Sources of Payment for Uncompensated Care for the Uninsured" (Kaiser Family Foundation, April 6, 2021), <https://www.kff.org/uninsured/issue-brief/sources-of-payment-for-uncompensated-care-for-the-uninsured/>.
- 11 Stephen Herzenberg and Mark Erlich, "Worker Misclassification Has Reached Epidemic Proportions in the Pennsylvania Job Market," Pennsylvania Senate Democratic Policy Committee Hearing (2021), <https://www.senatormuth.com/wp-content/uploads/2021/11/Herzenberg-Testimony-Misclass-Final.pdf>.
- 12 Sara Hinkley, Annette Bernhardt, and Sarah Thomason, "Race to the Bottom: How Low-Road Subcontracting Affects Working Conditions in California's Property Services Industry" (UC Berkeley Center for Labor Research and Education, March 8, 2016), <http://laborcenter.berkeley.edu/race-to-the-bottom/>.
- 13 CPWR – The Center for Construction Research and Training, "The Construction Chart Book: The U.S. Construction Industry and Its Workers, Sixth Edition," February 2018, https://www.cpwr.com/wp-content/uploads/publications/The_6th_Edition_Construction_eChart_Book.pdf.
- 14 Undocumented immigrants have long been excluded from receiving assistance from federal benefit programs, except under specific circumstances. For more information see: National Immigration Law Center, Overview of Immigrant Eligibility for Federal Programs, https://www.nilc.org/issues/economic-support/table_ovrw_fedprogs/.
- 15 Capece, "Fraudulent Schemes and Violations of Employment, Tax and Other Laws in the Construction Industry."
- 16 Sylvia A. Allegretto et al., "Fast Food, Poverty Wages: The Public Cost of Low-Wage Jobs in the Fast-Food Industry," October 15, 2013, <http://laborcenter.berkeley.edu/fast-food-poverty-wages-the-public-cost-of-low-wage-jobs-in-the-fast-food-industry/>.

University of California, Berkeley
2521 Channing Way
Berkeley, CA 94720-5555
(510) 642-0323
laborcenter.berkeley.edu



UC Berkeley Labor Center

The Center for Labor Research and Education (Labor Center) is a public service project of the UC Berkeley Institute for Research on Labor and Employment that links academic resources with working people. Since 1964, the Labor Center has produced research, trainings, and curricula that deepen understanding of employment conditions and develop diverse new generations of leaders.

Acknowledgements

We would like to thank Dale Belman for reviewing a draft of this report. We also thank Laurel Lucia for help understanding medicaid data and Scott Littlehale for guidance on industry data sources.

The United Brotherhood of Carpenters provided funding for this research.

Suggested Citation

Jacobs, Ken, Kuochih Huang, Jenifer MacGillvary, and Enrique Lopezlira. *The Public Cost of Low-Wage Jobs in the Pennsylvania Construction Industry*. UC Berkeley Labor Center, January 2022. <https://laborcenter.berkeley.edu/the-public-cost-of-low-wage-jobs-in-the-pennsylvania-construction-industry/>.

The analyses, interpretations, conclusions, and views expressed in this brief are those of the authors and do not necessarily represent the UC Berkeley Labor Center, the Regents of the University of California, the United Brotherhood of Carpenters, or collaborating organizations or funders.