

UC Berkeley Center for Labor Research and Education
January 2022

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

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

Summary

*Construction in the United States was historically known as an industry where workers without a college education could find family-supporting jobs. Now, job quality for some construction workers has deteriorated to the point that they earn wages too low to make ends meet and therefore fall back on the public safety net to make up the difference. In this paper we look at the use by construction workers and their families in the United States of five means-tested safety net programs. **We find that 39% of families of construction workers are enrolled in one or more safety net program at a cost of almost \$28 billion per year. In comparison, 31% of all workers have a family member enrolled in a safety net program. Three times as many construction workers as all workers lack health insurance (31% compared to 10%).***

Introduction

Construction is one of the largest industries in the United States. There are approximately 10 million people employed in the construction industry, about 1 in 16 workers nationally.¹ Just prior to the COVID-19 pandemic, in 2019, construction contributed \$903.6 billion, or 4.2%, of U.S. GDP.² It accounted for \$812 billion in personal income, or \$1 out of every \$23 in total national earnings in 2019.³

The construction industry is bifurcated into low-road and high-road sectors, which have strikingly different working conditions. For many non-college-educated blue-collar workers in many parts of the country, the construction industry provides a high-road, viable path to the middle class: workers are paid family-supporting wages and benefits, receive good training, and are provided with safe worksites backed by workers' compensation protection. The low-road sector of construction, however, "feature[s] some of the worst labor practices in the United States"—low wages, no benefits, exploitation, and often illegalities including wage theft and payroll fraud.⁴

This split into high-road and low-road sectors in construction began in the late 1960s and tracked with sharp declines in unionization in the industry.⁵ In 1971, 42% of construction workers were union members; by 2019 the rate had fallen to 12.6%.⁶ Erlich and Grabelsky (2005) explain major regional differences in unionization: building trades unions have a relatively strong presence in urban areas of the Northeast, Midwest, and West Coast. However, the number of such markets is shrinking and, even in these markets, there are “large and growing segments of the industry [that] are outside the union sphere of influence.”⁷ In residential construction specifically, according to Ormiston et al. (2020), unionization was as high as 50% in 1950, but it fell swiftly to around 20% in the 1970s. “Currently in the single digits industry-wide, the residential sector operates virtually union-free in many trades and regions.”⁸ Significantly, these union-free cities, primarily in the Sunbelt, are some of the fastest growing in the country.⁹ The low-road model is not confined to residential construction, however; it has spread into the commercial and industrial sectors as well.¹⁰

The decline in union density significantly eroded the quality of construction jobs overall. Between 1973 and 2006, there was a 17% drop in average real hourly earnings for all construction workers.¹¹ From 1980 to 1991, the percent of construction workers with employer-provided health insurance declined from 55% to 45%.¹² Participation in employment-based retirement plans went from 39% in 2000 to 27% in 2015.¹³ Unionized construction workers are in a far better situation than nonunion workers; in 2015, their wages were 42% higher and their total compensation 78% higher than their non-union counterparts.¹⁴ Regionally, blue-collar construction workers in the South earn wages around 18% lower than those in the West, 20% lower than wages in the Midwest, and 21% lower than wages in the Northeast.¹⁵ A survey of construction workers in six major Southern cities found that over half (57%) earn less than \$15 per hour.¹⁶

Besides depressing wages and benefits in the industry, the decline of unionization also diminished the role unions have been able to play in protecting against exploitative labor practices. This is an especially problematic development given the weakness at all levels of government in enforcement of labor standards, combined with structural incentives that put lawful construction employers at a significant competitive disadvantage. Throughout the country, construction is a highly competitive industry in which projects are frequently awarded on the sole basis of the lowest bid.¹⁷ One of the most effective ways to minimize costs and win contracts is to “reduce labor costs through whatever means possible.”¹⁸ The primary strategies to this end are paying low wages without benefits, misclassifying employees as independent contractors, and paying workers under the table.

Mark Erlich calls construction “the original gig economy,” noting that while independent contractors comprise 7% of the national workforce, around 20% of all independent contractors are construction workers.¹⁹ A significant portion of these workers are misclassified. State-level studies have found misclassification rates in construction of almost 15% in New York and 30% in Virginia.²⁰ In 2011 an estimated 19% of California construction workers who were independent contractors were misclassified; these workers earned only 67 cents for every dollar earned by comparable workers with employee status.²¹ An investigation by McClatchy news found that more than a third of construction workers in Southern states were misclassified.²² The reason for the excessive use of independent contractors and the high levels of misclassification is obvious. Around one-third of labor costs can be eliminated by classifying workers as independent contractors; employers do not have to pay unemployment insurance, Social Security, Medicare, or workers’ compensation premiums.²³

Even larger than the problem of misclassification in construction is the practice of paying workers completely off the books. The Alliance for Construction Excellence reported in 2019 that there are fully four times as many construction workers being paid off the books as the number being misclassified as independent contractors (1.2 million to 300,000).²⁴ The cash-only nature of under-the-table work leaves workers particularly vulnerable to wage theft, though misclassified workers and even legally employed workers can be subject to this as well. A 2009 study of three cities found over 70% of residential construction workers had experienced not being paid overtime or for work done off the clock.²⁵ Ormiston et al. (2020) estimate that throughout the country in 2017 workers lost between \$811 million and over \$1 billion in overtime and premium pay due to payroll fraud.²⁶ A study of construction workers in California found that workers paid under the table earn just 52 cents for every dollar earned by workers with employee status.²⁷

The practices of misclassification and paying off the books are most likely to occur in industries where it is most profitable and most easily hidden, both true of the construction industry. Employers in construction can accrue tremendous savings by avoiding employment taxes and workers' compensation premiums, and the layers and layers of subcontracting characteristic of the industry make these practices easy to conceal.²⁸ In most states, general 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.”²⁹ Overall, between 12.4 and 20.5% of construction workers are either misclassified or paid under the table.³⁰

More than one in five of the construction workers in the six Southern cities study did not have enough money for groceries or bills at some point in the previous year.³¹ The impact of low wages and lack of benefits in low-road construction goes beyond the direct effects on workers and their families. It also has costs to society at large. When workers do not earn enough money to meet their basic needs, they often turn to safety net programs to make up the difference.

In this brief we will estimate the public cost to the states and the federal government from the use of safety net programs by construction workers and their families as a result of the low-road practices that are becoming more and more commonplace in the industry.

Data and Definitions

We examine 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 the states and the federal government. We include only the cash assistance portion of TANF, and this program too receives funding from both the states and the federal government. While there are state-level EITC programs in over half of the states, 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. We exclude workers 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 between 2015 and 2019. We estimate that 39% of construction working families are enrolled in at least one program, significantly more than the 31% of all working families. Construction working families have higher enrollment than all working families in every program except TANF, where both groups have a low enrollment of 1%.

Nationwide, construction working families are overall 26% more likely than all working families to participate in one or more means-tested safety net program. These families are 36% more likely to be enrolled in Children’s Medicaid and 38% more likely to be enrolled in EITC.

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

Program	Number of Construction Working Families Enrolled	Share of Construction Working Families Enrolled	Share of ALL Working Families Enrolled
Adult Medicaid	1,321,000	17%	15%
Children’s Medicaid/CHIP	1,218,000	15%	11%
EITC	2,288,000	29%	21%
TANF	61,000	1%	1%
SNAP	1,173,000	15%	12%
Any program	3,087,000	39%	31%

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 states and the federal government on the safety net programs for construction working families and all working families, again averaged over the years 2015-2019. In total, \$28 billion is spent on safety net program utilization annually by construction working families in the United States, compared to \$275 billion for all working families.

Construction working families account for 10% of the total safety net expenditures for all working families nationwide.

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

Program	Amount Spent on Construction Working Families	Amount spent on ALL Working Families
Adult Medicaid	10,808,000,000	116,867,000,000
Children’s Medicaid/CHIP	7,766,000,000	63,400,000,000
EITC	6,212,000,000	60,682,000,000
TANF	210,000,000	2,696,000,000
SNAP	2,933,000,000	31,269,000,000
All Programs	27,930,000,000	274,913,000,000

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. Almost one-third (31%) of construction workers lack insurance coverage. **The rate at which construction workers lack health insurance is three times the rate for all workers nationally (10%).**

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

	Construction Workers	All Workers
No health insurance coverage	31%	10%
With health insurance coverage	69%	90%

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, 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.³²

Discussion

Construction was once an industry that could reliably provide family-supporting jobs to its blue-collar workforce. Conditions in the industry have deteriorated so much that construction workers are now more likely than the average worker to utilize public safety net programs. Importantly, the numbers provided in this analysis do not fully reflect the deprivation among this workforce. Undocumented immigrants currently comprise 13% of the construction workforce (compared to 5% of the overall US workforce),³³ and with rare exceptions they are ineligible for state and federal assistance.³⁴ Their working conditions, among the worst in the industry, are not reflected in this analysis.

The low wages and exploitative practices in the construction industry that cause profound hardship for many workers and their families also cost 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. Ormiston et al. (2020) conservatively estimate that fraud in the construction industry yields Social Security and Medicare shortfalls of between \$1.36 and \$4.28 billion annually; federal income tax losses of \$319 million to \$1.26 billion; and state income tax revenue losses of \$160 to \$552 million.³⁵ Overall, misclassification is estimated to cost state and federal coffers at least \$3,000 annually for every worker that is misclassified.³⁶ The lack of both employer-provided insurance and access to workers' compensation leaves many construction workers unprotected and uninsured. And, as found in this analysis, low-road employment practices cause above-average utilization of safety net programs by construction working families.

The labor standards enforcement void created by declining unionization in the industry has not been filled. Without government intervention, construction workers should expect to continue to be exploited and cheated, and lawful contractors should expect to find it more and more difficult to remain in operation.

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*.³⁷

Endnotes

1 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 the construction industry" excludes self-employed in own incorporated business workers. Accessed 12/2/2021.

2 Bureau of Economic Analysis, [Value Added by Industry](#), accessed 12/2/2021.

3 U.S. Bureau of Economic Analysis, [SAINC5N Personal Income by Major Component and Earnings by NAICS Industry 1/](#), accessed 12/2/2021.

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, 2, <https://stoptaxfraud.net/wp-content/uploads/2020/03/National-Carpenters-Study-Methodology-for-Wage-and-Tax-Fraud-Report-FINAL.pdf>.

5 There are several complementary explanations for the development of the bifurcated construction industry and the decline of unionization. See Erlich (2020), Theodore (2015), Weil (2005), and Ormiston et al. (2020). Mark Erlich, "Misclassification in Construction: The Original Gig Economy," *ILR Review*, November 26, 2020, 1–29, <https://doi.org/10.1177/0019793920972321>; Nik Theodore, "Rebuilding the House of Labor: Unions and Worker Centers in the Residential Construction Industry," *WorkingUSA* 18 (March 1, 2015): 59–76, <https://doi.org/10.1111/wusa.12153>; David Weil, "The Contemporary Industrial Relations System in Construction: Analysis, Observations and Speculations," *Labor History* 46, no. 4 (November 1, 2005): 447–71, <https://doi.org/10.1080/00236560500266258>; Russell Ormiston et al., "Rebuilding Residential Construction," in *Creating Good Jobs: An Industry-Based Strategy*, ed. Paul Osterman (Cambridge, MA: MIT Press, 2020), 75–113.

6 "Union Membership and Coverage Database from the CPS," <http://www.unionstats.com>; 1971 figure from Andrew Elrod, "Built Trades," *Phenomenal World* (blog), August 11, 2021, <https://www.phenomenalworld.org/analysis/built-trades/> When considering only blue-collar construction workers, the numbers are significantly higher, though the trend of deunionization remains: the Bureau of Labor

Statistics found that in 1971, fully 60% of blue-collar construction workers were covered by a collective bargaining agreement (Elrod, "Built Trades") compared to 18.1% in 2016 (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.)

7 Mark Erlich and Jeff Grabelsky, "Standing at a Crossroads: The Building Trades in the Twenty-First Century," *Labor History* 46, no. 4 (2005): 424–25, <https://doi.org/10.1080/00236560500266241>.

8 Ormiston et al., "Rebuilding Residential Construction," 2020.

9 Elrod, "Built Trades."

10 Erlich, "Misclassification in Construction."

11 CPWR – The Center for Construction Research and Training, "The Construction Chart Book: The U.S. Construction Industry and Its Workers, Fourth Edition," December 2007, https://www.cpwr.com/wp-content/uploads/publications/CB4_Final-for-web.pdf.

12 Katharine R. Levit, Gary L. Olin, and Suzanne W. Letsch, "Americans' Health Insurance Coverage, 1980-91," *Health Care Financing Review* 14, no. 1 (1992): 31–57.

13 CPWR – The Center for Construction Research and Training, "The Construction Chart Book, Sixth Edition."

14 CPWR – The Center for Construction Research and Training.

15 CPWR – The Center for Construction Research and Training.

16 Nik Theodore, Bethany Boggess, and Emily Timm, "Build a Better South: Construction Working Conditions in the Southern U.S." (Workers Defense Project, Partnership for Working Families, and the University of Illinois at Chicago, 2017), <https://workersdefense.org/wp-content/uploads/2020/10/research/Build%20a%20Better%20South.pdf>.

17 Matthew F. Capece, "Fraudulent Schemes and Violations of Employment, Tax and Other Laws in the Construction Industry" (United Brotherhood of Carpenters, July 16, 2021).

18 Russell Ormiston et al., "Rebuilding Residential Construction," in *Creating Good Jobs: An Industry-Based Strategy*, ed. Paul Osterman (Cambridge, MA: MIT Press, 2020), 76.

19 Erlich, "Misclassification in Construction."

20 Ormiston et al., "Rebuilding Residential Construction," 2020.

21 Yvonne Yen Liu and Daniel Flaming, "Sinking Underground: The Growing Informal Economy in California Construction" (Economic Roundtable, September 2014), <https://economicrt.org/publication/sinking-underground/>.

22 Franco Ordoñez and Mandy Locke, "IRS' 'Safe Harbor' Loophole Frustrates Those Fighting Labor Tax Cheats," *McClatchy Washington Bureau*, December 14, 2014, <https://www.mcclatchydc.com/news/nation-world/national/economy/article24777397.html>.

23 Erlich, "Misclassification in Construction."

24 Matt Capece, "Construction Industry Tax Rip-Off Estimated at \$2.6 Billion -1.2 Million Construction Workers Paid Off-the Books" (Alliance for Construction Excellence, March 15, 2019), <http://www.allianceforconstructionexcellence.org/construction-industry-tax-rip-off-estimated-at-2-6-billion-1-2-million-construction-workers-paid-off-the-books/>.

- 25 Annette Bernhardt et al., "Broken Laws, Unprotected Workers: Violations of Employment and Labor Laws in America's Cities" (Center for Urban Economic Development; National Employment Law Project; UCLA Institute for Research on Labor and Employment, 2009), <https://www.nelp.org/wp-content/uploads/2015/03/BrokenLawsReport2009.pdf>.
- 26 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>.
- 27 Liu and Flaming, "Sinking Underground: The Growing Informal Economy in California Construction."
- 28 Françoise Carré, "(In)Dependent Contractor Misclassification" (Economic Policy Institute, June 8, 2015), <https://www.epi.org/publication/independent-contractor-misclassification/>.
- 29 Capece, "Fraudulent Schemes and Violations of Employment, Tax and Other Laws in the Construction Industry," 1.
- 30 Ormiston, Belman, and Erlich, "An Empirical Methodology to Estimate the Incidence and Costs of Payroll Fraud in the Construction Industry," January 2020.
- 31 Theodore, Boggess, and Timm, "Build a Better South."
- 32 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/>.
- 33 CPWR – The Center for Construction Research and Training, "The Construction Chart Book, Sixth Edition."
- 34 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/.
- 35 Ormiston, Belman, and Erlich, "An Empirical Methodology to Estimate the Incidence and Costs of Payroll Fraud in the Construction Industry," January 2020. Under their most aggressive assumptions, the authors estimate construction payroll fraud causes Social Security and Medicare shortfalls of up to \$6 billion per year; federal income tax losses of more than \$2 billion; and state tax revenue shortfalls of \$917 million.
- 36 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/>.
- 37 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 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/>.

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.