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## The Public Cost of Low-Wage Jobs in the Arizona 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%).<sup>1</sup>

Throughout the country, construction is a highly competitive industry in which projects are frequently awarded on the sole basis of the lowest bid.<sup>2</sup> One of the most effective ways to minimize costs and win contracts is to “reduce labor costs through whatever means possible.”<sup>3</sup> 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.<sup>4</sup> 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.<sup>5</sup>

In this research brief we provide estimates of safety net use among families of construction workers in Arizona. ***We find that 45% of families of construction workers in Arizona are enrolled in one or more safety net programs at a cost to the state and the federal government of over \$700 million per year. By comparison, among all Arizona workers, 32% have a family member enrolled in one or more safety net programs. Over one-third (36%) of construction workers lack health insurance, almost three times the rate for all workers in Arizona (13%).***

# About Arizona's Construction Industry

- In Arizona there are approximately 239,000 people employed in construction, about 1 in 14 workers statewide.<sup>6</sup>
- Just prior to the COVID-19 pandemic, in 2019, construction contributed \$18.8 billion, or 5.1%, of Arizona's GDP.<sup>7</sup>
- Construction accounted for \$15.4 billion in personal income, or \$1 out of every \$22 in total state earnings in 2019.<sup>8</sup>
- In Arizona, 4.7% of workers in the construction industry are covered by collective bargaining agreements, significantly lower than the national rate of 13.6%.<sup>9</sup>

## Data and Definitions

We examine Arizona 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 Arizona and the federal government. We include only the cash assistance portion of TANF, and this program too receives funding from both Arizona and the federal government. While 31 states have state-level EITC programs, this analysis includes only the federal EITC.<sup>10</sup> 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 Arizona. 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 in Arizona between 2015 and 2019. We estimate that 45% of construction working families are enrolled in at least one program, significantly more than the 32% of all working families. Construction working families have higher enrollment than all working families in every program except TANF, which has negligible enrollment among both groups.

***Overall, construction working families are 41% more likely than all working families to participate in one or more means-tested safety net programs in Arizona. These families are 33% more likely to be enrolled in Adult Medicaid, 67% more likely to be enrolled in Children's Medicaid, 50% more likely to be enrolled in EITC, and 42% more likely to be enrolled in SNAP.***

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

<b>Program</b>	<b>Number of Construction Working Families Enrolled</b>	<b>Share of Construction Working Families Enrolled</b>	<b>Share of ALL Working Families Enrolled</b>
Adult Medicaid	37,000	28%	21%
Children’s Medicaid/CHIP	26,000	20%	12%
EITC	44,000	33%	22%
TANF	*	0%	0%
SNAP	22,000	17%	12%
<b>Any program</b>	<b>59,000</b>	<b>45%</b>	<b>32%</b>

\* indicates enrollment was less than 1,000

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.

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 Arizona and the federal government on safety net program usage by construction working families and all working families, again averaged over the years 2015-2019. ***In total, \$709 million is spent on safety net program utilization annually by construction working families in Arizona.***

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

<b>Program</b>	<b>Amount Spent on Construction Working Families</b>	<b>Amount Spent on ALL Working Families</b>
Adult Medicaid	313,000,000	3,261,000,000
Children’s Medicaid/CHIP	201,000,000	1,553,000,000
EITC	135,000,000	1,345,000,000
TANF	1,000,000	15,000,000
SNAP	59,000,000	638,000,000
<b>All Programs</b>	<b>709,000,000</b>	<b>6,812,000,000</b>

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 Arizona. Over one-third (36%) of construction workers lack insurance coverage. ***The rate at which construction workers lack health insurance is almost three times the rate for all workers in Arizona (13%).***

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

	<b>Construction Workers</b>	<b>All Workers</b>
No health insurance coverage	36%	13%
With health insurance coverage	64%	87%

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 Arizona, 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.<sup>11</sup>

## Discussion

The low wages and exploitative practices in the construction industry, both in Arizona and nationally, 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.<sup>12</sup> And, as found in this analysis, low-road employment practices cause significantly above-average utilization of safety net programs by construction working families in Arizona.

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 nationwide (compared to 5% of the overall US workforce),<sup>13</sup> and with rare exceptions they are ineligible for state and federal assistance.<sup>14</sup> Their working conditions, among the worst in the industry, are not reflected in this analysis. A community outreach specialist for the DOL’s wage and hour division noted that exploitation of migrant construction workers is an especially acute problem in border states such as Arizona. “It’s a culture in which employees think in order to keep a job, they can put up with these illegal practices. Migrants have no options and that creates an additional obstacle for us. I think here, locally, more than 60 percent of employees who have been misclassified are Hispanic.”<sup>15</sup>

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.”<sup>16</sup> In the absence of legislation preventing these practices, construction workers in Arizona should expect to continue to be exploited and cheated, and lawful contractors should expect to find it more and more 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*.<sup>17</sup>

## 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 3/3/2022.
- 7 Bureau of Economic Analysis, [SAGDP2N Gross domestic product \(GDP\) by state 1/](#), accessed 3/3/2023.
- 8 U.S. Bureau of Economic Analysis, [SAINC5N Personal Income by Major Component and Earnings by NAICS Industry 1/](#), accessed 3/3/2022.
- 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 Arizona for the years 2018-2020.
- 10 Samantha Waxman and Iris Hinh, "States Can Adopt or Expand Earned Income Tax Credits to Build Equitable, Inclusive Communities and Economies" (Center on Budget and Policy Priorities, February 24, 2022), <https://www.cbpp.org/research/state-budget-and-tax/states-can-adopt-or-expand-earned-income-tax-credits-to-build>. Arizona does not have a state-level EITC program.
- 11 Teresa A. Coughlin, Haley Samuel-Jakubos, and Rachel Garfield, "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/>.
- 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](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/](https://www.nilc.org/issues/economic-support/table_ovrw_fedprogs/).
- 15 Amanda Ventura, "DOL Cracks down on Illegal Practices in Construction Industry," AZ Big Media, July 20, 2015, <https://azbigmedia.com/real-estate/dol-cracks-illegal-practices-construction-industry/>.
- 16 Capece, "Fraudulent Schemes and Violations of Employment, Tax and Other Laws in the Construction Industry."
- 17 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/>.

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## UC Berkeley Labor Center

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