

Nonstandard work arrangements in the construction industry

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Employment in the construction industry is based on relatively short-term contracts (Ringen et al., 2018). Therefore, few construction jobs are under the “standard work arrangement” typically found in manufacturing and other industry sectors (Howard, 2017). In recent years, new types of nontraditional or nonstandard-work arrangements have emerged in the U.S. economy, such as on-call workers, day laborers, workers provided by contract firms, and gig workers (GAO 2006, 2015, 2019). Studies have demonstrated a disproportionate risk for occupational injuries and illnesses and other adverse health outcomes resulting from these nonstandard work arrangements (Benach and Muntaner, 2004; GAO, 2015; Smith, 2009; Virtanen, 2005). The National Occupational Research Agenda (NORA) for Construction has emphasized this burden and the need to study high risk worker groups including those with nonstandard work arrangements (NIOSH, 2018; NIOSH NORA, 2018).

Despite the importance, data sources that can be used to measure risks among workers employed in different work arrangements remain scarce, and definitions of “standard” and “nonstandard” work arrangements are inconsistent in existing research (BLS, 2018; GAO, 2006; Katz and Krueger, 2016). Within these constraints, CPWR conducted a series of studies on work arrangements in construction using available data sources (CPWR, 2002, 2008, 2015, 2018). This Quarterly Data Report provides updated information on work arrangements in construction by analyzing data from the 2017 Contingent Worker Supplement to the Current Population Survey (CPS), a household survey conducted by the U.S. Bureau of Labor Statistics (BLS). Because of the complexity of terms and definitions used in this report, readers are advised to not only study the charts, but also read the definitions and accompanying text.



KEY FINDINGS

- About 30% of construction workers were employed in nonstandard work arrangements; 22% were independent contractors and 8% were in alternative arrangements, including temporary workers, day laborers, on-call workers, and workers provided by contract firms.
- Half of the construction workers in alternative arrangements would have preferred a different work arrangement.
- Compared to workers in standard arrangements, workers in alternative arrangements were more likely to be Hispanic, foreign born, and to have less than a high school diploma.
- Workers in nonstandard work arrangements worked fewer hours and had a lower annual family income than those in standard arrangements.
- Workers in alternative arrangements were less likely to have health insurance from any source, employer-sponsored health insurance, and retirement benefits.

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SECTION 1: Definitions of nonstandard and standard work arrangements

For this report, workers are classified into one of three mutually exclusive categories: *independent contractors*, *alternative arrangements* (including four subcategories), and *standard arrangement*. Together, independent contractors and alternative arrangements will be referred to as *nonstandard work arrangements*. The definition of each group is below and Chart 1 diagrams their relationship.

More information about the Current Population Survey is available at the [BLS website](#). Estimates according to BLS definitions of contingent workers are provided in the supplement to this report.

Forms of Work Arrangement

Independent contractors are analyzed separately from other types of alternative arrangements in this report because they account for a large proportion of the construction workforce and their characteristics are different from other alternative arrangements. Workers classified as independent contractor include:

- Workers who reported being an independent contractor in the Contingent Worker Supplement
- Workers who did not report being an independent contractor, but were an unincorporated self-employed worker – who are typically regarded as independent contractor in the construction industry

Alternative Arrangements include four categories of workers who were grouped together to create reliable estimates:

- **On-call workers and day laborers** only work when they are needed. These two types of nonstandard work arrangement are grouped together in this analysis. Workers are included if they answered “yes” to the question, “Some people are in a pool of workers who are ONLY called to work as needed, although they can be scheduled to work for several days or weeks in a row... These people are sometimes referred to as ON-CALL workers. Were you an ON-CALL worker last week?” or “Some people get work by waiting at a place where employers pick up people to work for a day. These people are sometimes called DAY LABORERS. Were you a DAY LABORER last week?” Workers who reported being both an on-call work and being provided by a contract firm are only counted category for on-call workers.

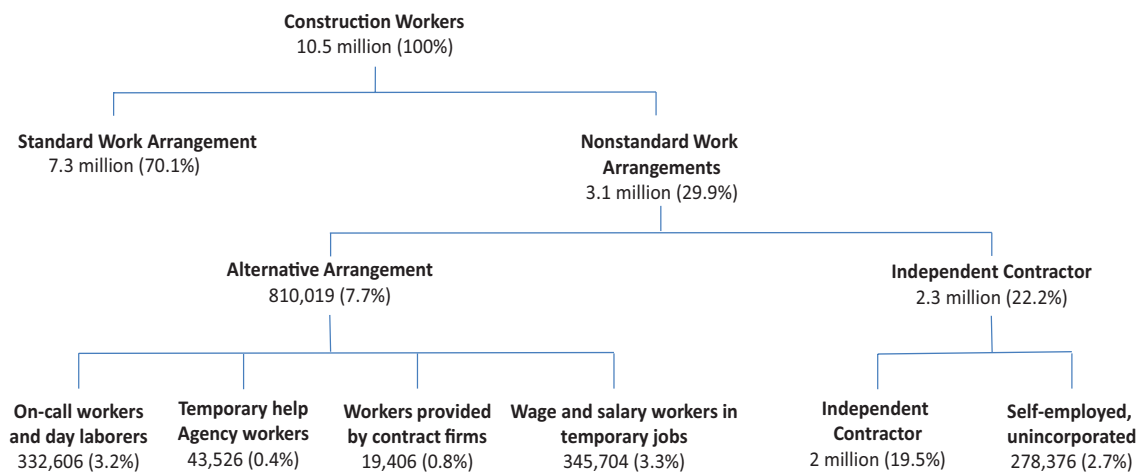
- **Temporary help agency workers** are workers paid by a temporary help agency. This category includes both the permanent staff of the agencies and those who are placed with other companies in temporary assignments. This category includes workers who answered “yes” to the question, “Are you paid by a temporary help agency?”

- **Workers provided by contract firms** are those who work for a contract company, usually work for only one customer, and usually work at the customer’s worksite. This category includes workers who answered “yes” to the question, “Some companies provide employees or their services to others under contract... Did you work for a company that contracts out you or your services last week?” Workers who reported being both an on-call worker and being provided by a contract firm are only counted category for on-call workers.

- **Other contingent wage and salary workers** are wage and salary workers who do not expect their employment to last, except those who, for personal reasons, expect to leave jobs that they would otherwise be able to keep. These workers are identified in the BLS Contingent Worker estimate 3 but were not classified in any of the other nonstandard work arrangements listed above.

Standard Work Arrangement refers to workers who are not in any of the above categories.

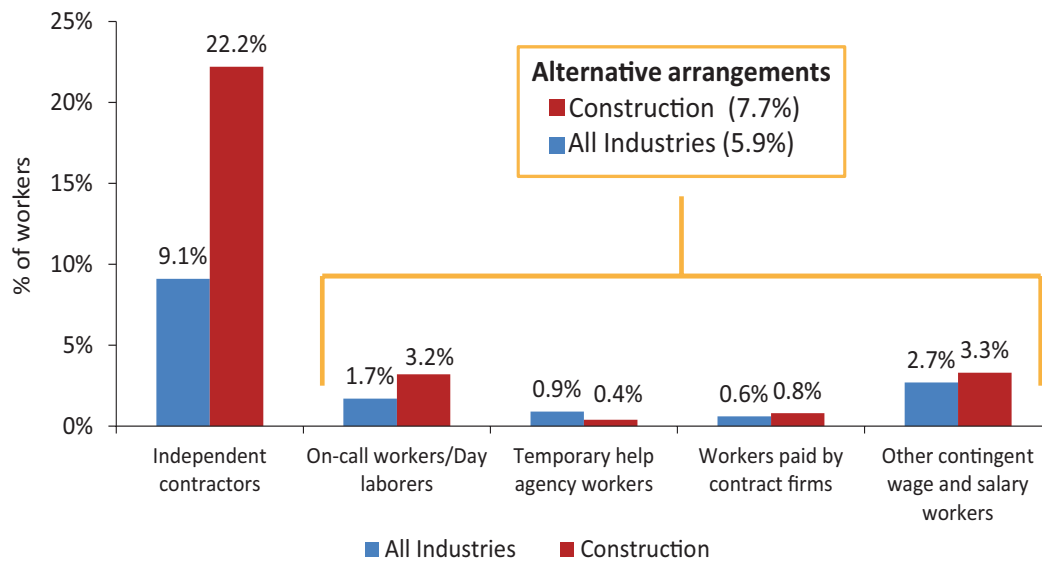
1. Types of work arrangement in construction



Note: Numbers may not add to 100% due to rounding.

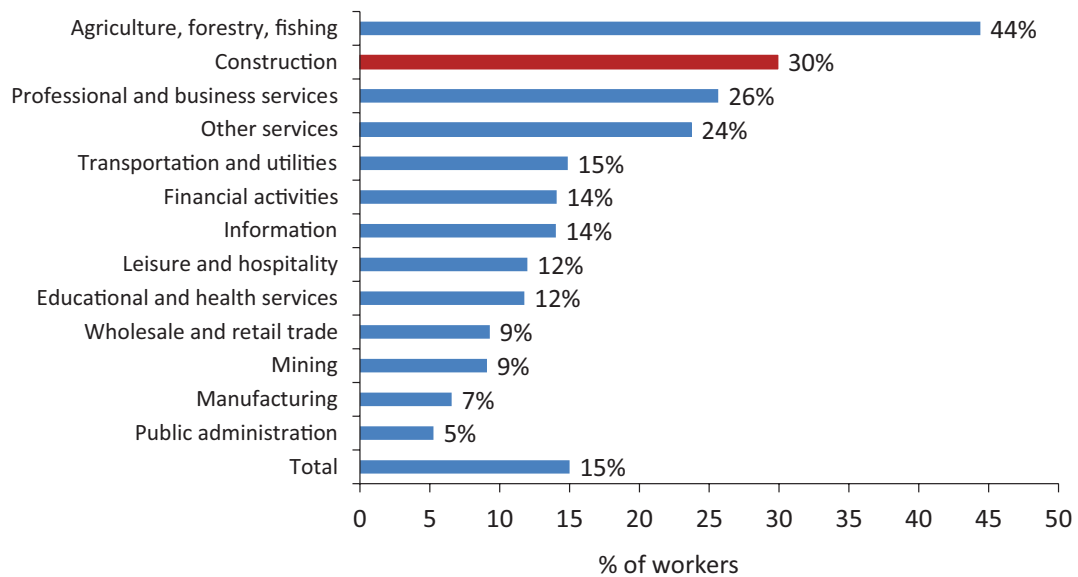
According to these definitions, of 10.5 million construction workers, 7.3 million construction workers (70%) had standard arrangements, and 2.3 million (22.2%) were independent contractors. Another 810,000 (8%) were in alternative arrangements, including 3.2% on-call or day laborers, 0.8% who were paid by a contract firm, and 0.4% who worked for temporary help agencies. With the exception of temporary help agency workers, construction had a higher percentage of workers in each category of nonstandard work arrangement than all industries combined, and more than twice as many construction workers were independent contractors than the 9.1% of workers in all industries (Chart 2).

2. Nonstandard work arrangements as a percent of total employment



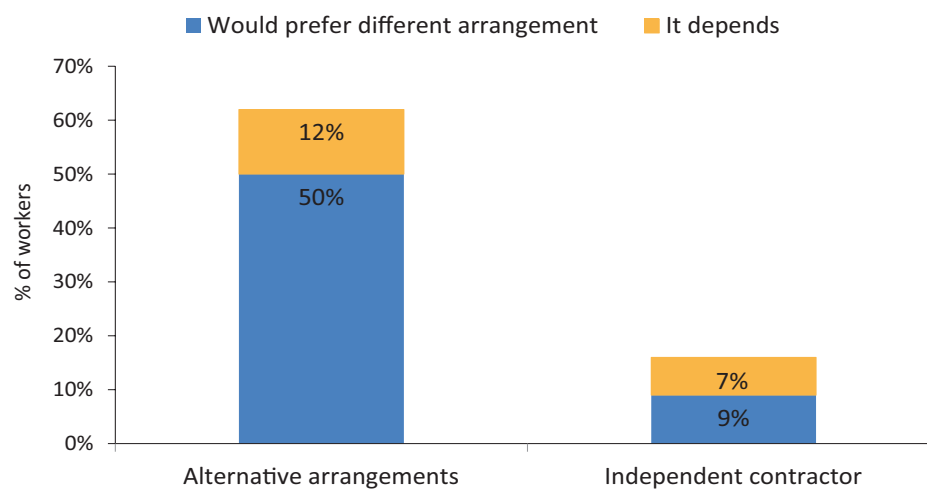
The construction industry had the second highest proportion of workers in nonstandard work arrangements (combining independent contractors and alternative arrangements) among the major industry sectors (Chart 3).

3. Percent of workers in nonstandard work arrangements by industry

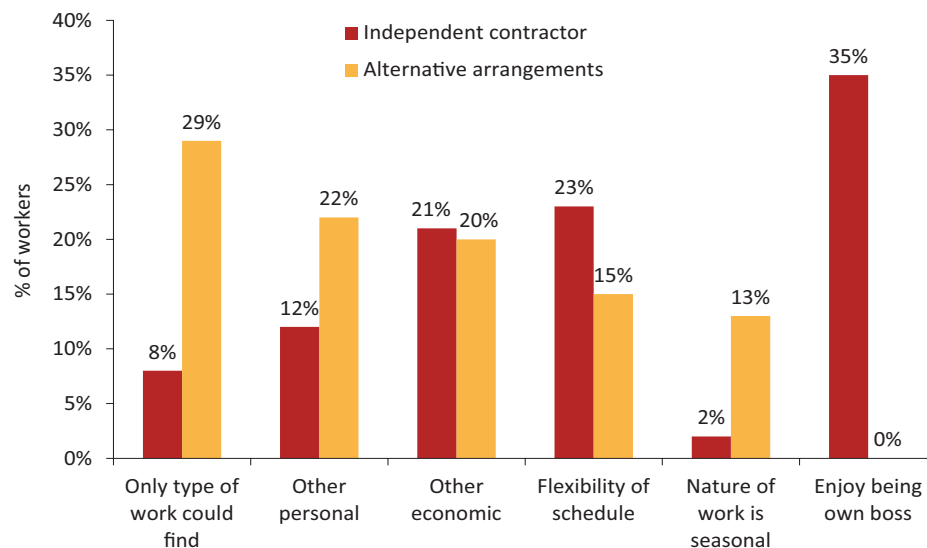


Half of the construction workers in alternative arrangements would have preferred a different work arrangement (Chart 4). These preferences are very different from independent contractors, only 9% of whom would have preferred a different arrangement. When asked why they were working in an alternative arrangement, 29% of workers said that it was the only type of work they could find, and 22% cited personal reasons.¹ Independent contractors cited very different reasons for not working in a standard job; 35% were working as independent contractors because they enjoy being their own boss and 23% because of the flexibility of the schedule (Chart 5).

4. Preference for different work arrangement among construction workers



5. Primary reason for employment arrangement among construction workers



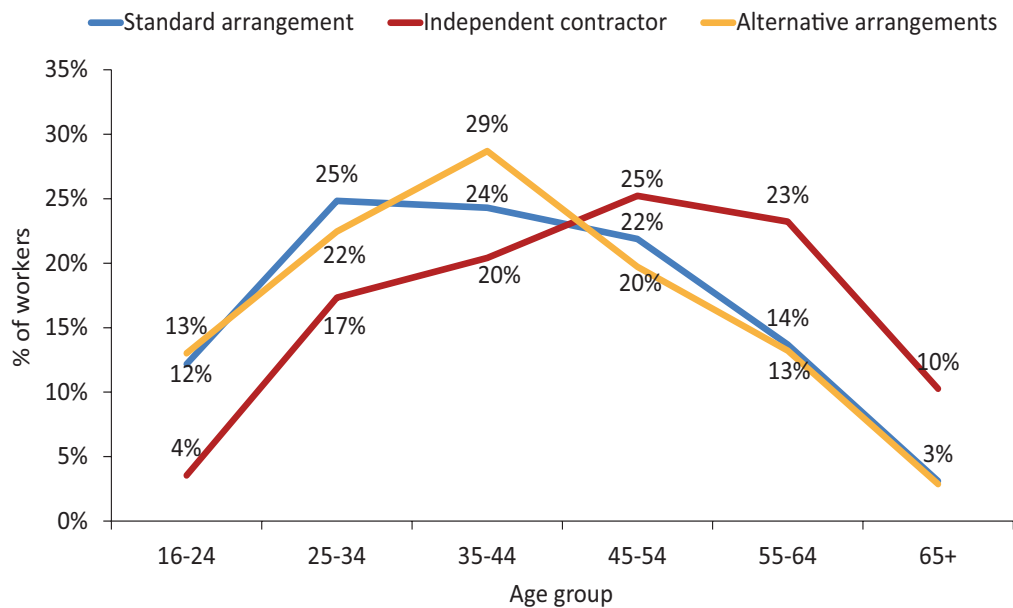
¹Personal reasons included child care problems, other family/personal obligation, being in school or training, to obtain experience or training, health limitations or “other personal.”

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SECTION 2: Worker demographics

In all work arrangements, over 90% of construction workers were male. Independent contractors were older than workers in both standard and alternative arrangements; on average they were 47 years old; workers in standard arrangements were 41 years old, and workers in alternative arrangement were 40 years old. Thirty-three percent (33%) of independent contractors were over 55 years old, compared to 17% among workers in standard arrangements and 16% among workers alternative arrangements (Chart 6). However, workers in alternative arrangements were more likely to be young; 13% were under 24 years old, compared with 12% of standard workers, and only 4% of independent contractors.

6. Age distribution among construction workers

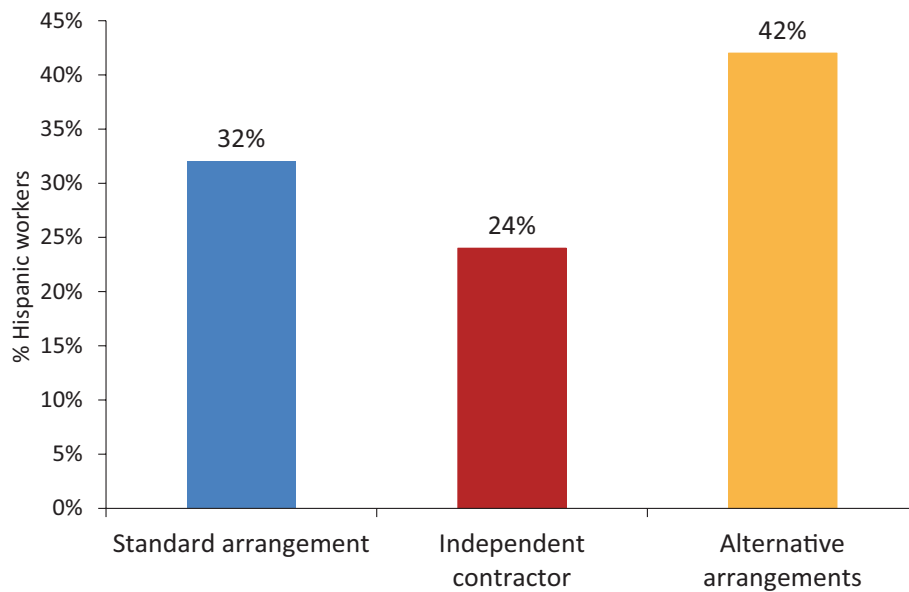


Section 2: Worker demographics

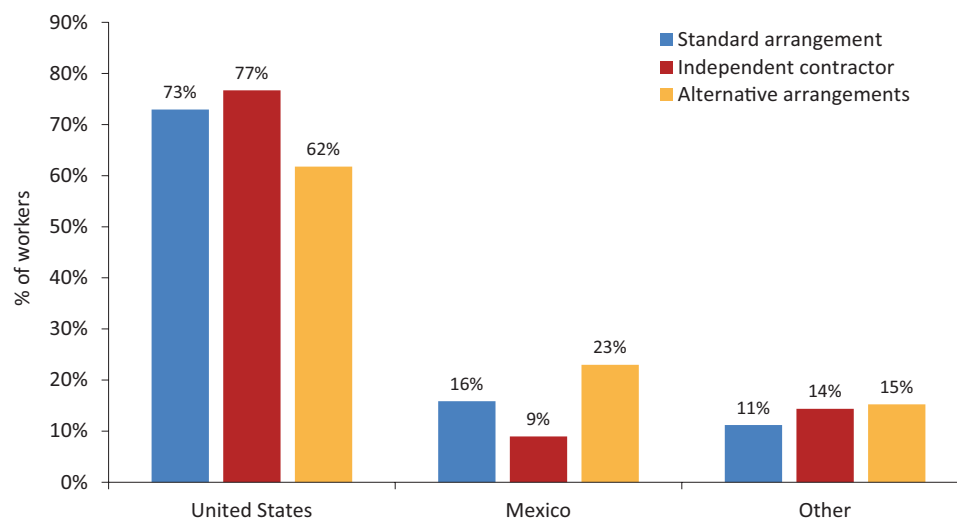
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Hispanic ethnicity was more common among workers in alternative arrangement (42%) than among workers either in standard arrangements (32%) or independent contractors (24%) (Chart 7). Compared to workers in standard arrangements, 40% more of the workers in alternative arrangements were foreign born, and 23% were born in Mexico (Chart 8).

7. Hispanic construction workers in each work arrangement



8. Country of birth among construction workers

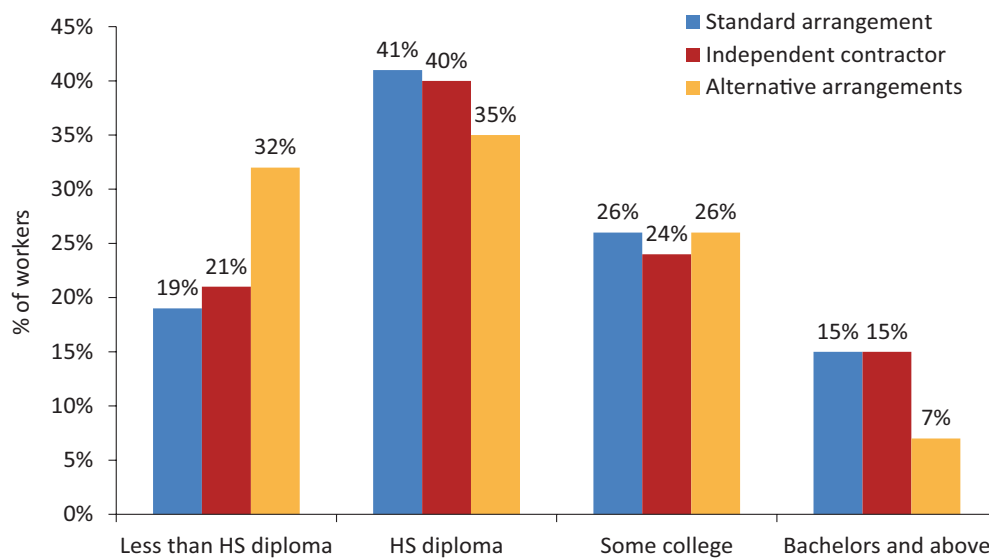


Section 2: Worker demographics

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Workers in alternative arrangements were more likely to have not obtained a high school diploma (32%) compared to workers in standard arrangements (19%) and independent contractors (21%) (Chart 9). Less than half as many workers in alternative arrangements had a Bachelor’s degree or higher (7%) compared with other workers in standard arrangements and independent contractors (15%).

9. Educational attainment among construction workers

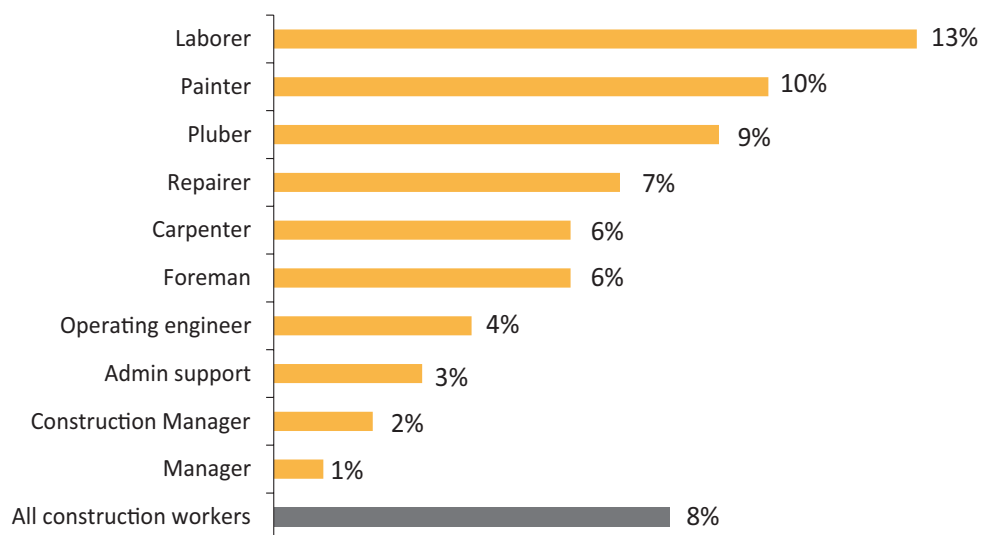


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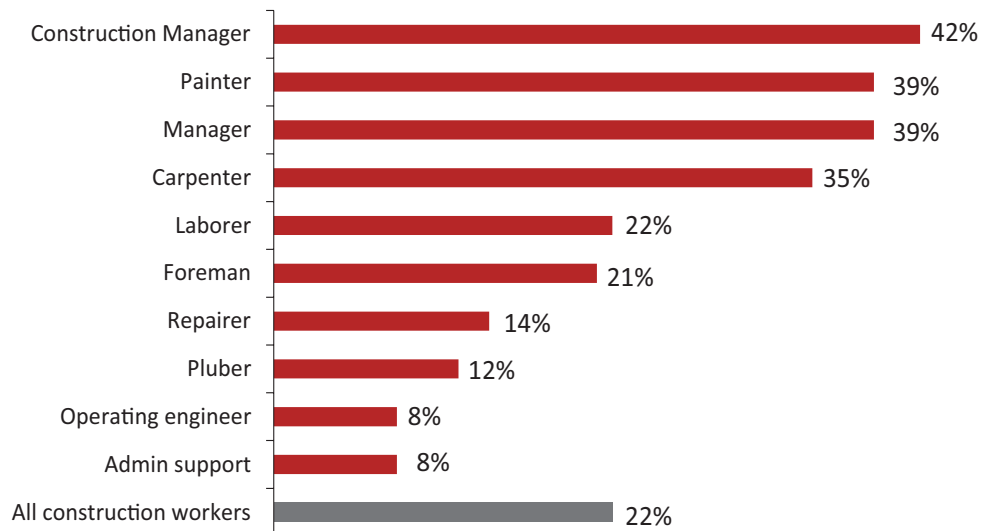
SECTION 3: Job characteristics

Some occupations in construction were more likely to have workers in alternative arrangements and independent contractors. A higher percentage of laborers (13%), painters (10%), and plumbers (9%) were in alternative arrangements (Chart 10), and a larger percentage of construction managers (42%), painters (39%), and managers (39%) were independent contractors (Chart 11).

10. Percent of construction workers in alternative arrangements by occupation

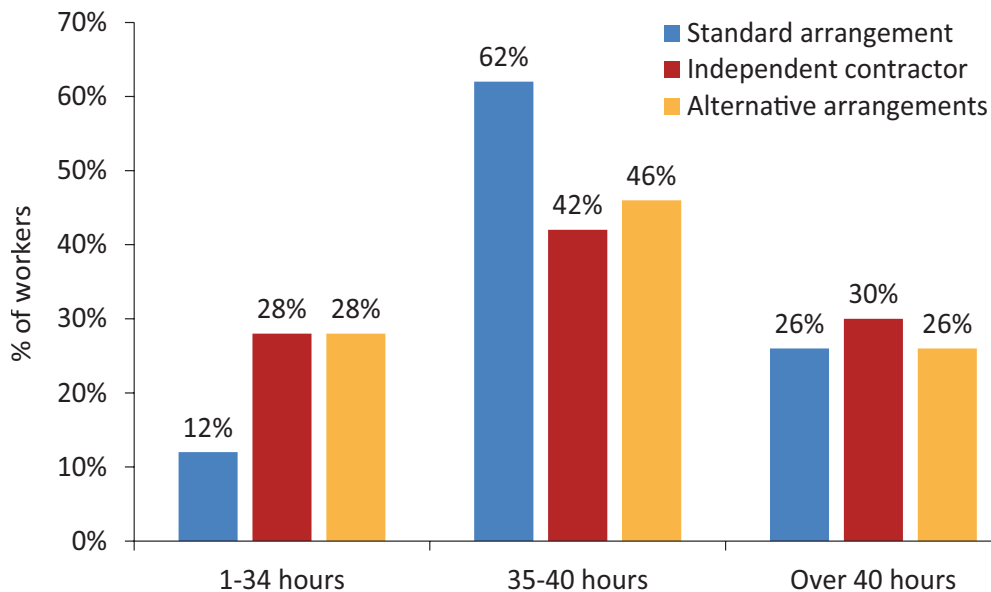


11. Percent of construction workers who are independent contractors by occupation



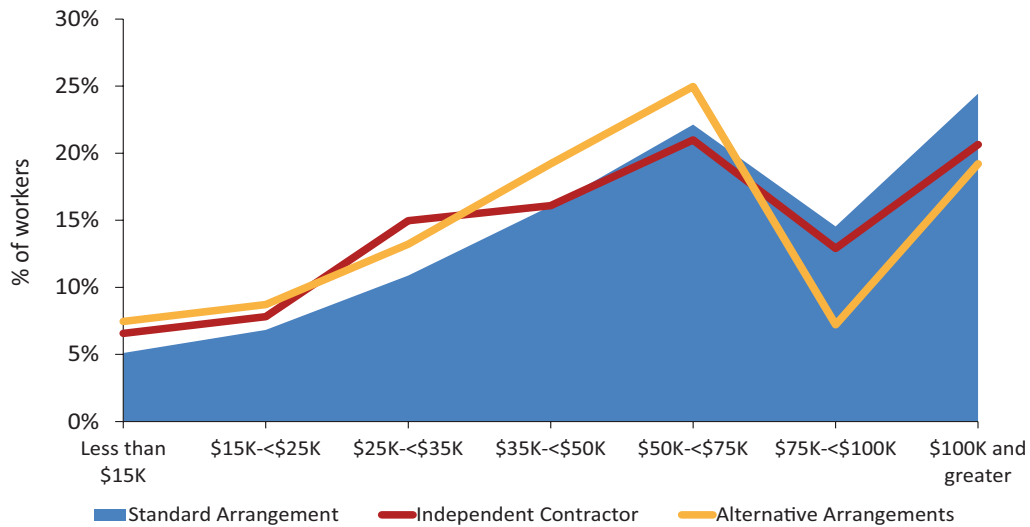
When asked about their usual hours worked, fewer workers in alternative arrangements reported a full-time schedule of 35-40 hours per week and more reported part-time work. Only 46% of workers in alternative arrangements reported working full-time, compared with 62% of workers in standard arrangements (Chart 12). Twenty-eight percent (28%) of both workers in alternative arrangements and independent contractors worked part-time (less than 35 hours per week), more than double the percentage of workers in standard arrangements who worked part-time.

12. Hours worked per week among construction workers



Workers in standard arrangements and alternative arrangements had similar average and median wages (both weekly and monthly). However, workers in nonstandard work arrangements reported a lower annual family income than those in standard arrangements. Five percent (5%) of workers in standard arrangements reported a family income of less than \$15,000, compared with 7% of workers in alternative arrangements and independent contractors. Further, only 26% of workers in alternative arrangements report a family income at or above \$75,000, 33% less than workers in standard arrangements (Chart 13).

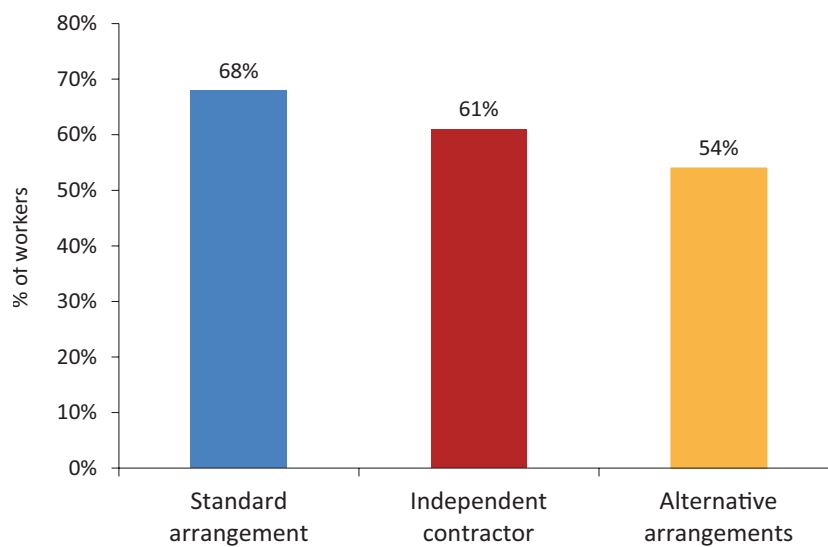
13. Annual family income among construction workers



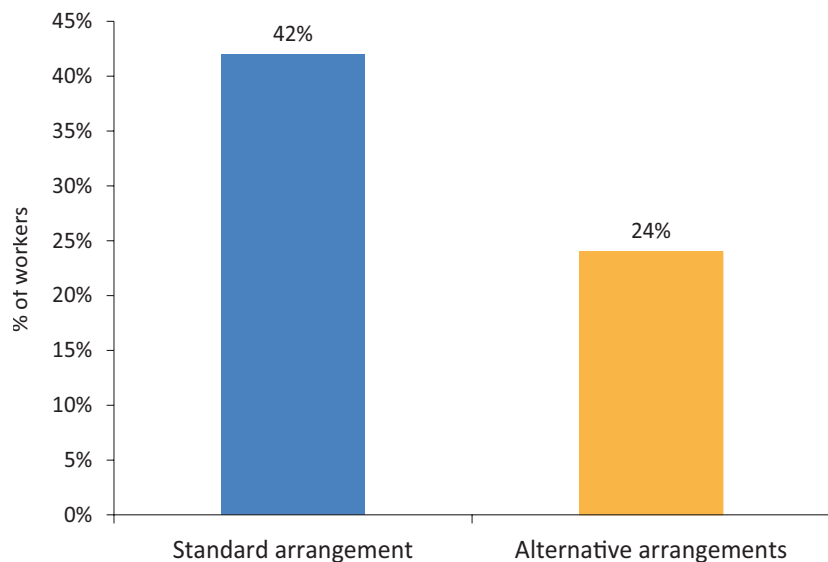
Workers in alternative arrangements were less likely to be offered benefits than their counterparts in standard arrangements. Because independent contractors almost never receive health insurance or retirement benefits they are excluded from these calculations.

Only 54% of workers in alternative arrangements reported having health insurance, compared with 68% of workers in standard arrangements (Chart 14). Twenty-four percent (24%) of workers in alternative arrangements received health insurance from their employer, compared with 42% of workers in standard arrangements (Chart 15).

14. Health insurance from any source among construction workers

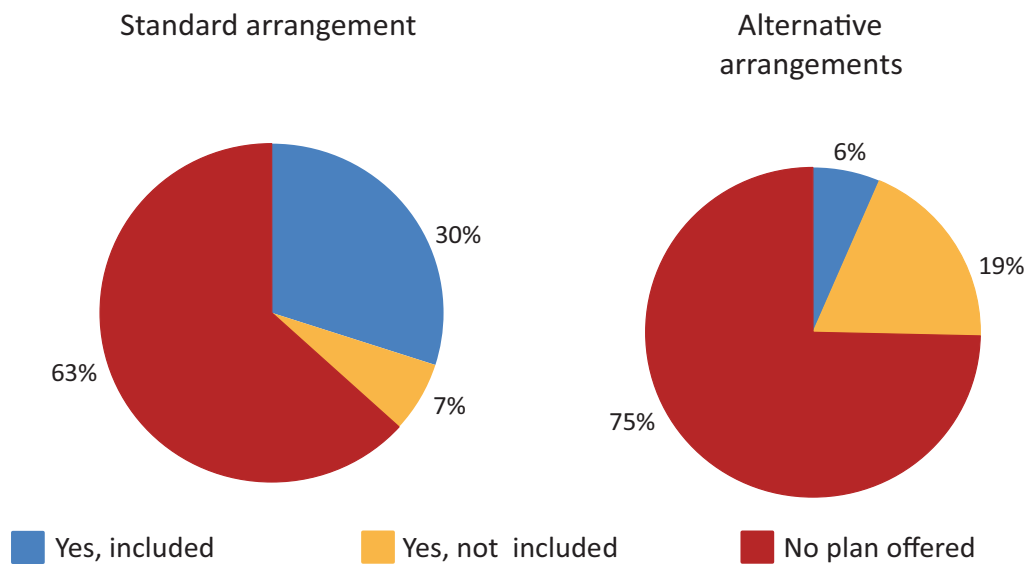


15. Employment-based health insurance among construction workers



Workers in alternative arrangements were less likely to report being offered a retirement plan from their employer, and were less likely to participate in a retirement plan when it was offered. Among workers in alternative arrangements, 25% of workers were offered a retirement plan, and 6% participated in the plan, compared with 37% and 30% of workers in standard arrangements, respectively (Chart 16).

16. Eligibility and participation of employment-based retirement plans among construction workers



Conclusion/Discussion

This report shows that nonstandard work arrangements are more common in construction than for all industries combined, and nonstandard work arrangements in construction feature more independent contractors and less temporary help agency workers than other industries. Demographically, workers in alternative arrangements are more likely to be Hispanic, foreign born, and have less than a high school diploma. Significant disparities exist in the number of hours worked, family income, and employer-provided health and retirement benefits between workers in alternative arrangements and standard arrangements. Such socioeconomic inequality and job uncertainty can have significant adverse effects on workers' physical and mental health (Benach and Muntaner, 2008; Marmot et al., 2001). While some of these results are consistent with existing expectations, this report quantifies those disparities among workers in the construction industry in particular.

This report has a few limitations for consideration. The amount of nonstandard work arrangements in construction reported here is likely underestimated. In addition to the features of construction jobs described in the introduction, construction workers in nonstandard work arrangements may be less likely to be included in the CPS interview or less likely to provide accurate information to interviewers or both. Confusion about terms might lead to more workers being classified as having standard arrangements than is true. Moreover this data source does not allow us to monitor differences in occupational risks and health outcomes between standard and nonstandard work arrangements. As a result, whether nonstandard workers experience more occupational exposures or injuries remains unknown. Clearly, collecting information on nonstandard work arrangements in existing safety and health surveillance systems is essential to accurately understand complex, overlapping vulnerabilities and to prevent occupational injuries and illnesses among these workers.

²In 2004, BLS reported that 22.94% of eligible households did not complete the CPS in 2004, including around 7.5% who were not interviewed because no one was home, the building was temporarily absent, or the interview was refused (US Census Bureau, 2006). *See* citation.

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Supplement

In addition to providing estimates of work arrangement, BLS calculated three estimates of contingent workers, which they define as workers who do not expect their jobs to last or who report that their jobs are temporary (BLS, 2018).

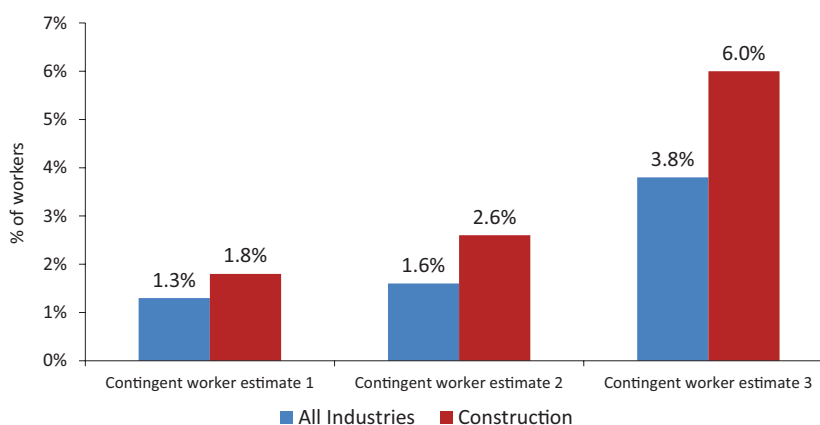
Estimate 1 is the narrowest definition of contingent work and includes wage and salary workers who expect to work in their current job for one year or less and who have worked for their current employer for one year or less. All self-employed workers and independent contractors are excluded. Individuals who work for temporary help agencies or contracting companies are included if they expect their employment arrangement with the temporary help or contracting company to last for one year or less and they have worked for that company for one year or less.

Estimate 2 expands the definition by including incorporated and unincorporated self-employed workers and independent contractors who have been in their employment arrangement for one year or less and expect to be in their work arrangement for one year or less. In addition, temporary help and contract company workers are included if they expect their assignment to a specific customer to last for one year or less and they have been in that assignment for one year or less.

Estimate 3 is the broadest definition of contingent work and includes all workers who do not expect their jobs to last. Estimate 3 removes the one year requirement on both expected duration of the job and current tenure for wage and salary workers. The estimate includes all wage and salary workers who do not expect their employment to last, except for those who, for personal reasons, expect to leave jobs that they would otherwise be able to keep. The one year requirement on expected and current tenure is retained for the self-employed and independent contractors.

According to these definitions, the construction industry had a higher percentage of contingent workers than the overall percentage for each of the three BLS contingent worker definitions. The percent of construction workers who met estimate 1 was 1.8%, 38% higher than in all industries; 2.6% of construction workers met the conditions for estimate 2, and 6% met the definition for contingent worker estimate 3 (Chart 17).

17. Contingent workers as a percent of total employment (supplemental chart)



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About the CPWR Data Center

The CPWR Data Center is part of CPWR – The Center for Construction Research and Training. CPWR is a 501(c)(3) nonprofit research and training institution created by North America’s Building Trades Unions, and serves as its research arm. CPWR has focused on construction safety and health research since 1990. The Quarterly Data Reports – a series of publications analyzing construction-related data, is part of our ongoing surveillance project funded by the National Institute for Occupational Safety and Health (NIOSH).

Please visit CPWR’s other resources to help reduce construction safety and health hazards:

Construction Solutions <http://www.cpwrconstructionsolutions.org/>

Construction Solutions ROI Calculator <http://www.safecalc.org/>

Exposure Control Database <http://ecd.cpwrconstructionsolutions.org/>

The Electronic Library of Construction OSH <http://www.elcosh.org/index.php>

Falls Campaign <http://stopconstructionfalls.com/>

Hand Safety <http://choosehandsafety.org/>

Safety and Health Network <https://safeconstructionnetwork.org/>

Work Safely with Silica <http://www.silica-safe.org/>

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