

Report to Congressional Requesters

December 2023

WORK ARRANGEMENTS

Improved
Collaboration Could
Enhance Labor Force
Data

Highlights of GAO-24-105651, a report to congressional requesters

Why GAO Did This Study

Millions of U.S. workers are in nonstandard work arrangements. Studies also indicate that increasing numbers of workers participate in contract arrangements, as employers outsource business functions once managed internally. Several federal agencies collect and use data on these work arrangements, with the Department of Labor having a prominent role. The Office of Management and Budget (OMB) supports, coordinates, and oversees federal statistical agencies' efforts.

GAO was asked to review what data are available on these arrangements. This report examines the (1) prevalence of these work arrangements and worker outcomes, such as access to benefits; (2) data federal agencies collect and any limitations of the data; and (3) extent to which agencies have addressed limitations in available data.

GAO reviewed studies on work arrangements and interviewed agency officials and a nongeneralizable sample of seven subject matter experts (selected in part for authoring widely cited studies). GAO also compared agency collaboration efforts against federal guidance and leading collaboration practices identified in its prior work.

What GAO Recommends

GAO recommends that Labor lead efforts to develop or adapt an interagency collaborative mechanism to improve the measurement of nonstandard and contract work, and that OMB support this effort. Labor and OMB generally agreed with the recommendations.

View GAO-24-105651. For more information, contact Thomas Costa at (202) 512-4769 or costat@gao.gov or Michael E. Clements at (202) 512-8678 or clementsm@gao.gov.

December 2023

WORK ARRANGEMENTS

Improved Collaboration Could Enhance Labor Force Data

What GAO Found

Federal agency estimates vary widely with respect to the share of workers in nonstandard and contract work arrangements—that is, work that is not permanent, year-round employment with predictable full-time hours. Estimates range from less than 5 percent to over 30 percent of the total workforce, depending on the type of arrangement measured, how it is defined, and methodology used. In addition, limited data are available on worker outcomes, such as those relating to workplace safety, wages, and access to benefits. However, available data indicate that nonstandard and contract workers generally have fewer benefits and workplace protections than permanent, full-time employees.

Data collection on nonstandard work arrangements is fragmented across at least seven federal agencies, which measure different populations and use varied terms and methodologies to meet specific purposes. This fragmentation contributes to limitations in data quality and results in varying estimates of nonstandard and contract work arrangements that are not directly comparable. As shown below, multiple terms may be used by one or more agencies to describe a single job—such as a dog walker—depending on specific circumstances.

Selected Terms That May Be Applied to the Same Work (Dog Walker), by Federal Entity Terms that might be used Census Department Internal to apply to a dog walker: **Revenue Service** Contingent worker Contractor Freelance work(er) Independent contractor Leased employee from a leasing service Nonemplovee Part-time work(er) Self-employ(ed) Sole proprietor Subcontractor Term was used on the data source's survey questionnaire or administrative form

Sources: GAO analysis of agency documentation; Adrian Hillman/stock.adobe.com (image). | GAO-24-105651

Federal agencies have taken some steps to address data limitations relating to nonstandard and contract workers, such as commissioning a panel to review a key survey of these workers. However, interagency efforts do not include an ongoing collaborative mechanism, such as a committee or working group, and have not been effective in addressing data quality issues or fragmentation. Agencies reported prioritizing the needs of their individual programs in their data collection efforts. Without an ongoing interagency collaborative mechanism in place—and agencies providing coordination and leadership for such an effort—agencies can risk working at cross purposes and lack incentives to prioritize crosscutting concerns. Data improvements from such an effort could help policymakers and others better understand this labor market segment and worker outcomes in it.

Contents

Letter		1
	Background	4
	Estimates of Nonstandard and Contract Work Vary Widely and Outcome Data Are Limited	12
	Fragmented Efforts to Define and Measure Work Arrangements Contribute to Variation in Estimates	25
	Agencies Have Taken Some Steps to Address Data Limitations, but Interagency Efforts Have Not Been Sustained or Effective	36
	Conclusions	43
	Recommendations for Executive Action	44
	Agency Comments and Our Evaluation	44
Appendix I	Objectives, Scope, and Methodology	46
Appendix II	Key Federal Labor Laws and their Potential Application to Certain	
	Nonstandard and Contract Work	51
Appendix III	GAO Contacts and Staff Acknowledgments	57
Tables		
	Table 1: Principal Statistical Agencies in the Federal Statistical System	7
	Table 2: General Federal Tax Responsibilities of Employees and	
	Independent Contractors	11
	Table 3: General Summaries of Key Federal Laws Pertaining to Discrimination and Equal Employment for Workers and Their Potential Application to Certain Nonstandard and	
	Contract Work Arrangements Table 4: General Summaries of Key Federal Laws Pertaining to Wages, Access to Benefits, and Workplace Safety and	52
	Their Potential Application to Certain Nonstandard and Contract Work Arrangements	53

Figures

Figure 1: Examples of Nonstandard Work Arrangements	6
Figure 2: Roles of Selected Federal Entities Regarding Data on	
Nonstandard and Contract Work Arrangements	13
Figure 3: Selected Surveys and Other Sources of Data on	
Nonstandard and Contract Work Arrangements	14
Figure 4: Selected Estimates of Prevalence of Nonstandard and	
Contract Work Arrangements	17
Figure 5: Selected Estimates of Prevalence of Self-Employed	
Workers, by Data Source, 1996–2016	19
Figure 6: Selected Worker Benefits and Protections	21
Figure 7: Terms Used in Selected Data Sources to Describe	
Nonstandard and Contract Work Arrangements	26
Figure 8: Selected Terms That May Be Applied to the Same Work	
(Dog Walker), by Federal Entity	27
Figure 9: Information on Selected Data Sources Measuring	
Nonstandard and Contract Work Arrangements, and	
Selected Methodological Factors	29
Figure 10: Components of Data Quality According to the Federal	
Committee on Statistical Methodology	30
	30
Figure 11: Extent to Which Federal Agency Efforts Followed	
Selected Leading Practices for Interagency Collaboration	
in Relation to Nonstandard and Contract Work	
Arrangements	40

Abbreviations

ACS	American Community Survey
AUS	American Community Survey

ASEC Annual Social and Economic Supplement

BEA Bureau of Economic Analysis
BLS Bureau of Labor Statistics
CPS Current Population Survey
DER Detailed Earnings Record
DOL Department of Labor

ERISA Employee Retirement Income Security Act

Federal Reserve Board of Governors of the Federal

Reserve System

IRS Internal Revenue Service

NIOSH National Institute for Occupational Safety

and Health

OMB Office of Management and Budget

OSHA Occupational Safety and Health Administration

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December 12, 2023

The Honorable Sherrod Brown Chairman Committee on Banking, Housing, and Urban Affairs United States Senate

The Honorable Mark Warner United States Senate

Millions of U.S. workers participate in nonstandard work arrangements—that is, work that is not permanent, year-round, wage and salary employment with predictably scheduled full-time hours. In addition, some studies indicate that increasing numbers of workers participate in contract work arrangements, as employers outsource business functions that were once managed internally.¹

In November 2022, we issued a report describing nonstandard and contract work arrangements, based on our review of data from the 2020 Annual Business Survey and analysis of regulatory filings by companies in the S&P 500 Index.² We found that 33 percent of companies that responded to the 2020 survey reported using contractors, subcontractors, independent contractors, or outside consultants. We also estimated that 89 percent of the annual 10-K financial reports submitted by S&P 500 companies in 2021 mentioned use of some type of contractor arrangement.³

¹For example, see David Weil, "Understanding the Present and Future of Work in the Fissured Workplace Context," *Russell Sage Foundation Journal of the Social Sciences*, 5, no. 5 (2019): 147-65; National Academies of Sciences, Engineering, and Medicine, *Measuring Alternative Work Arrangements for Research and Policy* (Washington, D.C.: National Academies Press, 2020); and Katharine G. Abraham and Susan N. Houseman, "Contingent and Alternative Employment: Lessons from the Contingent Worker Supplement, 1995–2017," prepared for the Department of Labor (Washington, D.C.: October 2020).

²The Annual Business Survey is a joint effort by the Census Bureau and the National Center for Science and Engineering Statistics in the National Science Foundation. Census has administered the survey annually since 2018. GAO, *Nonstandard and Contracted Work Arrangements: Data from the 2020 Annual Business Survey and Analysis of 2021 10-K Filings*, GAO-23-106212 (Washington, D.C.: Nov. 10, 2022).

³GAO-23-106212. This estimate has a margin of error no greater than plus or minus 10 percentage points at the 95 percent level of confidence.

Workers in certain nonstandard or contract arrangements may have less access to company-provided retirement benefits and health insurance or be less likely to qualify for unemployment insurance and other government benefits. Information on these work arrangements is therefore important to understand the extent to which government programs cover workers and address risks they may face. Measuring employment in all its forms—including nonstandard and contract work—may have implications for accurately understanding the labor force.

You asked us to review issues related to nonstandard and contract work arrangements and the data federal agencies collect on these workers. This report examines (1) what is known about the prevalence of nonstandard and contract work arrangements and their effects on workplace safety, wages, access to benefits, and other outcomes for workers; (2) what data selected federal agencies collect on these work arrangements and any limitations of these data; and (3) the extent to which selected federal agencies have taken steps to address any limitations in available data to meet or anticipate data needs related to these work arrangements.

For all our objectives, we reviewed 27 studies concerning nonstandard and contract work arrangements that met several criteria for inclusion.⁴ We also reviewed reports and other documents on federal agencies' data collection and incorporated analysis from our November 2022 report.⁵

⁵GAO-23-106212.

⁴We first identified more than 250 studies through (1) multistage, librarian-assisted searches of databases using key terms, (2) internet searches, (3) reviews of other literature cited by studies we identified (snowball method), and (4) reviews of studies cited during our interviews with selected experts. To be included in our selection, studies had to have appeared in a peer-reviewed journal or a federally sponsored or research institution publication; directly pertained to measuring the prevalence of nonstandard and contract work arrangements; and reviewed the effects of these work arrangements on worker outcomes or evaluated the strengths or limitations of data available on nonstandard and contract work arrangements. We reviewed the studies' methodologies and determined them to be sufficiently sound and reliable for our purposes.

In addition, for our first and second objectives, we interviewed seven subject matter experts who were selected primarily from academic institutions and public policy organizations.⁶

For our second and third objectives, we interviewed selected federal agency officials from the Department of Labor (DOL), including its Bureau of Labor Statistics (BLS), Office of the Assistant Secretary for Policy, Wage and Hour Division, and Occupational Safety and Health Administration (OSHA): Department of Commerce, including its Bureau of Economic Analysis (BEA) and Census Bureau; Department of the Treasury, including its Office of Tax Policy and the Internal Revenue Service (IRS), and its Statistics of Income Division: Securities and Exchange Commission; Centers for Disease Control and Prevention's National Institute for Occupational Safety and Health (NIOSH); Board of Governors of the Federal Reserve System (Federal Reserve); and Office of Management and Budget (OMB). We discussed the data they collect on these work arrangements. We also compared the strengths and limitations of these data with selected aspects of data quality in the Federal Committee on Statistical Methodology's Framework for Data Quality.7 In this report, we identify data limitations as factors or issues that may threaten or detract from the quality of data, as specified in the framework for data quality.

For our third objective, we collected information on selected agencies' intra- and interagency activities (from sources such as agency strategic plans, learning agendas, and evidence building plans) in relation to data on nonstandard and contract work arrangements. We compared these activities against OMB guidance and selected leading practices for interagency collaboration identified in our prior work and in *Principles and*

⁶Our selection criteria for our nonprobability sample of experts included that they authored studies on related topics that were published in peer-reviewed journals or research institution publications, represented a variety of academic disciplines and professions, and had knowledge of different types of nonstandard and contract work arrangements. The information from this sample cannot be generalized to the larger population of all knowledgeable individuals.

⁷See Federal Committee on Statistical Methodology, *A Framework for Data Quality*, FCSM-20-04 (Washington, D.C.: September 2020). The Federal Committee on Statistical Methodology is an advisory committee with volunteer membership that informs and advises OMB and the Interagency Council on Statistical Policy on methodological and statistical issues that affect the quality of federal data. We focused our review on two of the three domains of data quality—objectivity and utility—based on their relevance to our objectives. We did not review a third domain—data integrity—which deals in part with technical issues such as computer and physical security that were less specific to our objectives.

Practices for a Federal Statistical Agency.⁸ We also interviewed officials from the selected entities to describe internal and external collaboration on data needs related to such work arrangements and limitations and steps to address them. Appendix I describes our scope and methodology in greater detail.

We conducted this performance audit from January 2022 to December 2023 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Nonstandard and Contract Work Arrangements

Nonstandard and contract work arrangements do not have consistent, uniform definitions, but for this report, we define them as follows:

 Nonstandard work arrangements refer to work that is not permanent, year-round, wage and salary employment with predictably

8See Office of Management and Budget, Phase 1 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Learning Agendas, Personnel, and Planning Guidance, M-19-23 (Washington, D.C.: July 10, 2019); and Improving Statistical Activities through Interagency Collaboration, M-15-15 (Washington, D.C.: July 8, 2015). Also see Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, 67 Fed. Reg. 8,452 (Feb. 22, 2002). We selected five of the eight leading collaboration practices we identified in prior work, based on their relevance for our topic and related prerequisite actions for the remaining three practices. The five practices were (1) defining common outcomes, (2) bridging organizational cultures, (3) identifying and sustaining leadership, (4) including relevant participants, and (5) leveraging resources and information. See GAO, Government Performance Management: Leading Practices to Enhance Interagency Collaboration and Address Crosscutting Challenges, GAO-23-105520 (Washington, D.C.: May 24, 2023). The work we did for the 2023 report validates and updates our 2012 report, Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms, GAO-12-1022 (Washington, D.C.: Sept. 27, 2012). We also used practices for collaboration discussed in National Academies of Sciences, Engineering, and Medicine, Principles and Practices for a Federal Statistical Agency, seventh ed. (Washington, D.C.: 2021).

scheduled full-time hours. Nonstandard arrangements include temporary, on-call, or part-time work (see fig. 1).9

Contract work arrangements include independent contractors (both incorporated and unincorporated self-employed), electronically mediated workers (those who find short-term jobs through websites or digital apps that connect them with customers and arrange payment for the jobs), and contract firms that employ or contract with workers to provide services.¹⁰

⁹BLS does not include part-time work arrangements in its related definition of alternative work arrangements. However, because these workers have nonstandard hours and may have less access to worker protections and benefits, we include them in this report. As with other work arrangements, individuals may work part-time for economic reasons, noneconomic reasons, or both. For example, they may not be able to find full-time work or may have family obligations. Additionally, part-time arrangements may be temporary, permanent, or open-ended. According to BLS, alternative work arrangements include those of independent contractors, on-call workers, temporary help agency workers, and workers provided by contract firms.

¹⁰Throughout the report, we also use the specific terms used by the studies we reviewed, as appropriate. According to BLS, incorporated self-employed individuals own an incorporated business (one that has been incorporated or otherwise legally designated as a corporation or other entity). Official BLS statistics consider the incorporated self-employed to be wage and salary workers because they are employees of their own business. Unincorporated self-employed workers do not work for an incorporated business.

Figure 1: Examples of Nonstandard Work Arrangements

Work arrangement		Example	
Contingent workers	Workers whose jobs are temporary or not expected to last, and with no implicit or explicit contract for continuing employment.		A substitute teacher hired to cover a class while the permanent teacher is unavailable.
Day laborers	Individuals who are hired and paid on a daily basis.		A construction worker who is hired and paid to perform manual labor one day at a time.
Temporary direct-hires	Temporary workers hired directly by companies to work for a specified period of time. They may have an employment contract or receive benefits for the duration of their employment.		An archaeologist hired by a company to perform field survey work for 6 months.
On-call workers	Individuals who are called to work only on an as-needed basis.		A nurse required by the employer to be available for work on an as-needed basis due to unpredictable needs.
Standard part-time	Individuals who regularly work less than 35 hours a week for a particular employer and are wage and salary workers.		A security officer who works three 10-hour shifts under an open-ended employment agreement.

Source: GAO analysis and icons. | GAO-24-105651

Note: Categories of work arrangements are not exclusive and may overlap. For example, a restaurant server's work arrangement could simultaneously include temporary direct-hire, on-call, and standard part-time work.

Federal Statistical System and Reporting Guidance

The federal statistical system is a decentralized network that includes 13 principal statistical agencies located in different federal departments (see table 1).¹¹ A statistical agency or unit is an entity within the executive branch whose activities predominantly are the collection, compilation, processing, or analysis of information for statistical purposes.

¹¹According to OMB, the federal statistical system is a decentralized, interconnected network of 13 principal statistical agencies and three recognized statistical units, 24 statistical officials (across 24 major cabinet agencies), approximately 100 additional federal statistical programs engaged in statistical activities, and several cross-system interagency and advisory bodies. The three recognized statistical units are the Center for Behavioral Health Statistics and Quality in the Substance Abuse and Mental Health Services Administration of the Department of Health and Human Services; Microeconomic Surveys Section of the Federal Reserve; and National Animal Health Monitoring System Program Unit of the Animal and Plant Health Inspection Service in the Department of Agriculture.

Table 1: Principal Statistical Agencies in the Fe	Table 1: Principal Statistical Agencies in the Federal Statistical System						
Principal statistical agency	Federal agency						
Bureau of Economic Analysis	Department of Commerce						
Census Bureau	2 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
Statistics of Income Division, Internal Revenue Service	Department of the Treasury						
Bureau of Justice Statistics	Department of Justice						
Bureau of Labor Statistics	Department of Labor						
Economic Research Service	Department of Agriculture						
National Agricultural Statistics Service	_ opanament or / tg. roantar o						
Bureau of Transportation Statistics	Department of Transportation						
Energy Information Administration	Department of Energy						
National Center for Education Statistics	Department of Education						
National Center for Health Statistics	Department of Health and Human Services						
National Center for Science and Engineering Statistics	National Science Foundation						
Office of Research, Evaluation, and Statistics	Social Security Administration						

Source: National Academies of Sciences, Engineering, and Medicine. | GAO-24-105651

Note: A statistical agency or unit is an entity in the executive branch whose activities predominantly are the collection, compilation, processing, or analysis of information for statistical purposes. The U.S. federal statistical system is a decentralized network of 13 principal statistical agencies (listed in table) and three recognized statistical units, 24 statistical officials (across 24 major cabinet agencies), approximately 100 additional federal statistical programs engaged in statistical activities, and several cross system interagency and advisory bodies.

Under the Paperwork Reduction Act of 1995, OMB's Office of Information and Regulatory Affairs is charged with overseeing the use of information resources to improve the efficiency and effectiveness of governmental operations to serve agency missions, including burden reduction and service delivery to the public.¹²

Specifically, OMB's statutory statistical responsibilities include the following:

Oversight and approval of data collection: OMB is charged with reviewing and approving federal agency information collections that will be administered to 10 or more people, including minimizing the

¹²⁴⁴ U.S.C. § 3504(a)(1).

information collection burden and maximizing the practical utility of information collected by or for the federal government.¹³

Guidance and standards: OMB is to develop and oversee federal information resources management policies and principles, standards, and guidelines.¹⁴

Coordination: OMB is to coordinate the activities of the federal statistical system to ensure the integrity, objectivity, and utility of information. ¹⁵

Oversight of budgets: OMB is charged with ensuring that statistical agencies' budget proposals are consistent with system-wide priorities for maintaining and improving the quality of federal statistics.¹⁶

Various statutes and related guidance from OMB establish standards for quality and collaboration that apply to the federal statistical system.¹⁷ In addition, a series of federal laws and related guidance established and expanded frameworks for federal evidence-building and decision-making.¹⁸ OMB guidance direct agencies to use relevant, high-quality evidence—such as statistical data and other research and analysis—to better understand and address challenges, set priorities, and assess whether their programs and activities are achieving intended results. For

¹³44 U.S.C. § 3504(c), 5 C.F.R. § 1320.3(c).

¹⁴44 U.S.C. § 3504(a)(1)(A).

¹⁵44 U.S.C. § 3504(e)(1).

¹⁶44 U.S.C. § 3504(e)(2).

¹⁷GAO, Federal Statistical System: Agencies Can Make Greater Use of Existing Data, but Continued Progress Is Needed on Access and Quality Issues, GAO-12-54 (Washington, D.C.: Feb. 24, 2012). For example, see the Paperwork Reduction Act (44 U.S.C. §§ 3501-3521) and the Foundations for Evidence-Based Policymaking Act of 2018 (Pub. L. No. 115-435, 123 Stat. 5529). Also see Office of Management and Budget, Phase 1 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Learning Agendas, Personnel, and Planning Guidance, M-19-23 (Washington, D.C.: July 10, 2019); and Improving Statistical Activities through Interagency Collaboration, M-15-15 (Washington, D.C.: July 8, 2015).

¹⁸For example, see the Information Quality Act of 2000 (Pub. L. No. 106-554, § 515, 114 Stat. 2763, 2763A-153 (2000)) and the Foundations for Evidence-Based Policymaking Act of 2018 (Pub. L. No. 115-435, 123 Stat. 5529). Also see guidance in Office of Management and Budget, *Evidence-Based Policymaking: Learning Agendas and Annual Evaluation Plans*, M-21-27 (Washington, D.C.: June 30, 2021); *Phase 4 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Program Evaluation Standards and Practices*, M-20-12 (Washington, D.C.: Mar. 10, 2020); and M-19-23.

instance, OMB's guidance calls for agencies to ensure and maximize the quality of their information. Quality includes utility (information is useful for its intended users and purpose), objectivity (information is accurate, reliable, and unbiased), and integrity (information is secure). ¹⁹ The Federal Committee on Statistical Methodology published a framework that describes aspects of data quality. ²⁰

Other entities also provide guidance to agencies that conduct statistical work. For example, the Committee on National Statistics at the National Academies of Sciences, Engineering, and Medicine publishes Principles and Practices for a Federal Statistical Agency, which discusses basic principles for statistical agencies to carry out their missions effectively. It also provides leading practices, such as those for coordination and collaboration with other statistical agencies.²¹

The Interagency Council on Statistical Policy, which is chaired by the Chief Statistician of the United States at OMB, also plays a role in coordinating the federal statistical system and setting statistical policy, including identifying current, unmet, and emerging data needs. Its membership includes the heads of the 13 OMB-recognized statistical agencies and three units, as well as Statistical Officials of other agencies.²² It provides advice and assistance to the Chief Statistician of the United States on statistical policy and methods, according to OMB officials.

¹⁹Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies; republication, 67 Fed. Reg. 8,452 (Feb. 22, 2002). See also Pub. L. No. 106-554, § 515(b), 114 Stat. 2763, 2763A-154 (2000).

²⁰Federal Committee on Statistical Methodology, A Framework for Data Quality, FCSM-20-04 (September 2020). The Federal Committee on Statistical Methodology is an advisory committee with volunteer membership that informs and advises OMB and the Interagency Council on Statistical Policy on methodological and statistical issues that affect the quality of federal data.

²¹National Academies of Sciences, Engineering, and Medicine, *Principles and Practices* for a Federal Statistical Agency.

²²The council consists of the 24 designated statistical officials at each Chief Financial Officers Act agency, as well as all heads of the OMB-recognized statistical agencies and units. See 44 U.S.C. § 3504(e)(8), 5 U.S.C. § 314(b).

Classification of Workers and Implications for Federal Benefits, Protections, and Taxes

Employers choose to hire employees or nonemployees (such as independent contractors) for various reasons, including those related to their operational needs and finances, willingness to pay benefits, or offer a flexible schedule. Workers may not always be aware of whether they are an employee or a nonemployee. The facts surrounding a worker's employment are key to determining how their employment is classified under various laws that determine employer and worker rights and responsibilities.

The classification of a worker's employment has implications for the worker's access to federal workforce benefits and protections. Employers are generally not required to provide certain benefits, such as health insurance or overtime pay to independent contractors. In addition, nonemployees generally are not covered under some nondiscrimination laws. See appendix II for more information on key federal laws related to nonstandard and contract work arrangements.

We previously reported that employers may have financial and operational incentives to hire—or misclassify employees as—independent contractors.²³ Use of independent contractors can allow businesses to easily expand or contract their workforces to accommodate workload fluctuations, fill temporary absences, reduce labor costs (such as through reduced health and benefit contributions), or stimulate innovation through outside staff. Workers, for their part, may seek independent contractor status to be paid in cash, or forego providing proof of immigration status.²⁴ However, they also may seek independent contractor status in the belief that this affords additional autonomy over tasks or scheduling flexibility.

Worker classification also affects payment of certain taxes. Employers are generally responsible for paying half of the Social Security and Medicare taxes for their employees and paying all federal unemployment taxes and

²³Employee misclassification occurs when an employer improperly classifies a worker as an independent contractor when the worker should be classified as an employee. See GAO, *Employee Misclassification: Improved Coordination, Outreach, and Targeting Could Better Ensure Detection and Prevention*, GAO-09-717 (Washington, D.C.: Aug. 10, 2009).

²⁴See GAO-09-717. DOL officials stated that under the Fair Labor Standards Act, it is the employer's responsibility to classify workers correctly and that generally, based on Supreme Court precedent, employees may not waive their rights under the Act. According to DOL officials, worker autonomy and scheduling flexibility may exist for employees (not just independent contractors).

a portion of or all state unemployment taxes.²⁵ In contrast, independent contractors are generally responsible for paying all Social Security and Medicare tax liabilities and do not pay unemployment taxes because they generally are not eligible to receive unemployment insurance benefits.²⁶ See table 2 for more information on key tax differences between employees and independent contractors. Our prior work found that tax noncompliance was estimated to be greater among self-employed filers than among employees.²⁷

Table 2: General Federal Tax Responsibilities of Employees and Independent Contractors

Type of tax	Individuals classified as	employees	Individuals classified as independent contractors		
	Businesses' general responsibilities	Workers' general responsibilities	Businesses' general responsibilities	Workers' general responsibilities	
Federal income tax	Withhold tax from employees' pay	Pay full amounts owed, generally through withholding	Generally, none ^a	Pay full amounts owed, generally through estimated tax payments	
Social Security and Medicare taxes	Withhold one-half of taxes from employees' pay and pay other half	Pay half of total amounts owed, generally through withholding	None	Pay full amounts owed, generally through self- employment tax	
Federal unemployment tax	Pay full amount	None	None	None	

Source: GAO analysis. | GAO-24-105651, WORK ARRANGEMENTS: Improved Collaboration Could Enhance Labor Force Data. | GAO-24-105651

Note: See GAO, *Employee Misclassification: Improved Coordination, Outreach, and Targeting Could Better Ensure Detection and Prevention*, GAO-09-717 (Washington, D.C.: Aug. 10, 2009). This table does not include state unemployment taxes. There are various exceptions to the general responsibilities included in this table.

^aBusinesses generally must withhold taxes (currently at a rate of 24 percent) from independent contractors who do not provide, or provide incorrect, taxpayer identification numbers.

²⁵States, which audit employers' payment of unemployment taxes, must know which workers are paid as contractors, and for whom employers have no unemployment tax liability. For this purpose, IRS generally has agreements to share data on reported payments to contractors with state unemployment insurance agencies.

²⁶In response to the COVID-19 pandemic, the CARES Act created the Pandemic Unemployment Assistance Program, which temporarily extended unemployment benefits to workers generally ineligible for these benefits, such as self-employed and contingent workers. See GAO, *Unemployment Insurance: Estimated Amount of Fraud During Pandemic Likely Between \$100 Billion and \$135 Billion*, GAO-23-106696 (Washington, D.C.: Sept. 12, 2023).

²⁷GAO, *Tax Gap: IRS Needs Specific Goals and Strategies for Improving* Compliance, GAO-18-39 (Washington, D.C.: Oct. 31, 2017).

As we previously reported, the tests federal entities use to determine whether a worker is an independent contractor or an employee are complex and differ from law to law.²⁸ For example, IRS generally relies on factors cited by courts, such as relevant case law, including the degree of control an employee has over their behavior and finances.²⁹ In contrast, according to DOL's Wage and Hour Division, under the Fair Labor Standards Act, a worker is an employee and not an independent contractor if economically dependent on an employer for work.³⁰

Estimates of Nonstandard and Contract Work Vary Widely and Outcome Data Are Limited

Multiple entities collect data on nonstandard or contract work through surveys or administrative forms or use these data. Federal estimates of various types of nonstandard and contract work arrangements ranged from less than 5 percent to more than 30 percent of the total workforce, depending on the source of the data, definition used, and estimation methodology. Limited available data and research show that workers in nonstandard or contract arrangements generally receive lower wages and fewer benefits and protections than those in permanent full-time employment.

Multiple Federal Entities Collect or Use Data on Nonstandard or Contract Work At least eight federal entities—in seven agencies—collect data through surveys or administrative forms that could shed light on nonstandard or contract work arrangements, or their effects on workplace safety, wages, and access to benefits (see fig. 2). These entities use the data for various purposes, but measuring the prevalence of work arrangements generally is not their primary focus. Additional entities also use these data, but do not collect them.

²⁸GAO-09-717.

²⁹See Internal Revenue Service, *Independent Contractor or Employee*, Publication 1779; and *Employer's Supplemental Tax Guide*, Publication 15-A.

³⁰DOL's 2021 rule on independent contractors applies two core factors and three additional guidepost factors, to determine whether a worker is an employee under the Fair Labor Standards Act. Independent Contractor Status Under the Fair Labor Standards Act, 86 Fed. Reg. 1168 (Jan. 7, 2021). On October 13, 2022, DOL published a Notice of Proposed Rulemaking to revise its guidance on how to determine who is an employee or independent contractor under the Fair Labor Standards Act but had not enacted a final rule as of November 2023. Employee or Independent Contractor Classification Under the Fair Labor Standards Act, 87 Fed. Reg. 62218 (Oct. 13, 2022).

Figure 2: Roles of Selected Federal Entities Regarding Data on Nonstandard and Contract Work Arrangements

	Entity's roles with respect to data on nonstandard and contract work					
	Collects	Uses data:				
Entity and mission (as defined in agency documentation)	data		For mission- related goals	To inform enforcemen		
Board of Governors of the Federal Reserve System						
To foster the stability, integrity, and efficiency of the nation's monetary, financial, and payment systems so as to promote optimal macroeconomic performance	Ø	\bigcirc	\bigcirc			
Department of Commerce - Bureau of Economic Analysis						
To promote a better understanding of the U.S. economy by providing the most timely, relevant, and accurate economic accounts data in an objective and cost-effective manner			\bigcirc			
Department of Commerce - Census Bureau						
To serve as the nation's leading provider of quality data about its people and economy	Ø	Ø	\bigcirc			
Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health						
To develop new knowledge in the field of occupational safety and health and to transfer that knowledge into practice			\bigcirc			
Department of Labor - Bureau of Labor Statistics						
To measure labor market activity, working conditions, price changes, and productivity in the U.S. economy to support public and private decision-making	Ø	\bigcirc	\bigcirc			
Department of Labor - Occupational Safety and Health Administration						
To ensure safe and healthful working conditions for workers by setting and enforcing standards and by providing training, outreach, education, and assistance				Ø		
Department of Labor - Wage and Hour Division						
To promote and achieve compliance with labor standards to protect and enhance the welfare of the nation's workforce	Ø			⊘		
Department of the Treasury - Internal Revenue Service						
To provide America's taxpayers service by helping them understand and meet their tax responsibilities and to enforce the law with integrity and fairness to all	Ø	③	\bigcirc	③		
Department of the Treasury - Office of Tax Policy						
To maintain a strong economy by promoting conditions that enable equitable and sustainable economic growth at home and abroad; combating threats to, and protecting the integrity of the financial system; and managing the U.S. government's finances and resources effectively (Department of the Treasury)		⊘	\bigcirc			
Federal Trade Commission						
To protect the public from deceptive or unfair business practices and from unfair methods of competition through law enforcement, advocacy, research, and education				③		
National Labor Relations Board						
To advance the policies of the National Labor Relations Act to promote collective bargaining by ensuring that workers can freely express their wishes regarding union representation and protecting workers' fundamental right to act together for their mutual aid or protection			\bigcirc			
National Science Foundation						
To promote the progress of science; advance the national health, prosperity, and welfare; and secure the national defense	Ø					
Securities and Exchange Commission						
To protect investors; maintain fair, orderly, and efficient markets; and facilitate capital formation	Ø		\bigcirc			

Source: GAO analysis of agency documentation and interviews with agency officials. | GAO-24-105651

Data sources on nonstandard and contract work arrangements include household surveys, employer surveys, federal administrative data (such as 10-K filings, tax filings, and earnings from Social Security records), private commercial data, and integrated data (such as combined survey and administrative data). For examples, see figure 3.

Figure 3: Selected Surveys and Other Sources of Data on Nonstandard and Contract Work Arrangements

				$\overline{\mathcal{L}}$	F	reque	ncy	
Job data	Entity collecting data	Measure(s) of nonstandard and contract work		Wo.	App.	Wien.	Pori Pori	Sample
Household survey: Current Population Survey	Census Bureau administers survey for the Department of Labor's Bureau of Labor Statistics	Unincorporated self-employment						60,000 households
Household survey: American Community Survey	Census Bureau	Unincorporated self-employment			•			3.5 million households
Household survey: Current Population Survey Annual Social and Economic Supplement	Census Bureau, which administers survey for Bureau of Labor Statistics	Unincorporated self-employment						95,000 households
Household survey: Current Population Survey Contingent Worker Supplement	Census Bureau administers survey for the Bureau of Labor Statistics	Selected temporary and contract work arrangements; online platforms						60,000 households
Household survey: National Longitudinal Survey of Youth 1979 and 1997 cohorts	Bureau of Labor Statistics	Selected temporary and contract work arrangements; work schedule (1997 cohort only)				•		10,000 individuals (1979 cohort) 9,000 individuals (1997 cohort)
Household survey: American Time Use Survey 2017–2018 Leave and Job Flexibilities Module	Sponsored by Bureau of Labor Statistics (survey) and Women's Bureau (module), and administered by Census Bureau	Work schedule	•					10,000 individuals
Household survey: General Social Survey Quality of Worklife Module	Sponsored by the National Institute for Occupational Safety and Health and National Science Foundation, conducted by NORC at the University of Chicago	Selected temporary and contract work arrangements; work schedule					•	1,500 employed individuals (average)
Household survey: Gallup Education Consumer Pulse Survey 2018–2019, module on contract and other nonemployee work	Gallup, Inc.	Selected temporary and contract work arrangements; informal work activity; online platforms	•					61,000 individuals
Household survey: National Health Interview Survey, Occupational Health Supplement	National Center for Health Statistics; Supplement sponsored by National Institute for Occupational Safety and Health	Selected temporary and contract work arrangements; work schedule						30,000 households
Household survey: Survey of Informal Work Participation	Federal Reserve Bank of Boston	Informal work activity						1,300 heads of household
Household survey: Enterprising and Informal Work Activities Survey	Board of Governors of the Federal Reserve System	Informal work activity	•					6,898 individuals
Household survey: Survey of Household Economics and Decisionmaking ^a	Board of Governors of the Federal Reserve System	Informal work activity; work schedule						5,642–12,447 individuals
Employer survey: Economic Census	Census Bureau	Business services associated with contracting					•	About 4 million establishments
Employer survey: Current Employment Statistics	Bureau of Labor Statistics	Business services associated with contracting						122,000 business- es and government agencies
Employer survey: Annual Business Survey	Census Bureau and National Science Foundation	Selected temporary and contract work arrangements			•			350,000–850,000 firms
Tax data (data from Forms W-2, 1099-K, 1099-NEC, Schedule SE, Schedule C) ^b	Internal Revenue Service	Wage and salary income, nonemploy- ee compensation, self-employment income, income from online platforms, and credit card payments			•			All entities who report to tax authorities
Commercial data: JP Morgan Chase	JP Morgan Chase Institute	Income from online platforms			nsacti vel da			2.3 million families

Source: GAO analysis of academic research and agency documentation. | GAO-24-105651

Notes: Based on GAO analysis of the study by Katharine G. Abraham and Susan N. Houseman, "What Do We Know about Alternative Work Arrangements in the United States? A Synthesis of

Research Evidence from Household Surveys, Employer Surveys, and Administrative Data," prepared for the Department of Labor (Washington, D.C.: Sept. 5, 2021). We provided this information to the Census Bureau, Bureau of Labor Statistics, Board of Governors of the Federal Reserve System, and Internal Revenue Service for review. We did not independently verify the information and it may pertain only to certain periods. The types of temporary and contract work arrangements vary across surveys but generally include independent contractors and temporary agency workers. Unincorporated self-employed persons work for themselves and are not employed by or do not own a business that has been incorporated or otherwise legally designated as a corporation or other entity.

^aAnnual survey with occasional supplements added. Survey definitions and measures of nonstandard and contract work varied over the past decade.

^bResearchers have used data from Form 1099-MISC to measure historical trends in nonemployee compensation. Beginning with the 2020 tax year, nonemployee compensation is reported on Form 1099-NEC.

Specifically, BLS—in partnership with the Census Bureau—sponsors two key national household surveys that provide information on the U.S. labor force and work arrangements. The Current Population Survey provides monthly estimates of employment, as well as measures of unincorporated self-employment. A periodic addition to this survey, the Contingent Worker Supplement, contains focused questions on contingent workers (those who do not expect their jobs to last or who report their jobs are temporary). The Contingent Worker Supplement also includes questions on workers in alternative employment arrangements, such as independent contractors, on-call workers, temporary help agency workers, and workers provided by contract firms.

In addition, every 4 years, NIOSH designs the Quality of Working Life Module to be administered as part of the General Social Survey. The module collects employment information on health and safety, worker autonomy, job security, and schedules from survey respondents.³¹ Moreover, the Census Bureau administers the Annual Business Survey, which collects data on various business and owner characteristics—including types of workers.³²

Apart from these surveys, some private entities, universities, nonprofit organizations, and states also collect data related to nonstandard and contract work arrangements. Commercial sources, such as private

³¹The General Social Survey is conducted by NORC at the University of Chicago and funded by the National Science Foundation.

³²The Annual Business Survey is not generalizable to all U.S. companies, partly because Census considers it supplementary to key survey statistics and does not adjust it for nonresponse. Census adjusts key statistics in the survey (such as number of firms, receipts, payroll, and employment) for nonresponse and regards them as generalizable. The survey is targeted towards companies that employ workers and does not collect data on sole proprietors or unincorporated independent contractors.

financial records from bank and credit card accounts, contain detailed, real-time information on dynamics and trends in platform work participation.³³ However, commercial data sources typically are not generalizable or representative of all nonstandard and contract workers. They also likely underrepresent certain locations and workers who do not use banks.

Estimates of Prevalence Vary Widely and Measure Different Work Arrangements

There are no comprehensive federal estimates of the prevalence of nonstandard and contract work arrangements. Estimates vary depending on the type of arrangement measured, definition used, and estimation methodology (see fig. 4). At the low end, BLS' Contingent Worker Supplement to the Current Population Survey estimated that contingent workers represented 3.8 percent of the total workforce in 2017.³⁴ At the high end, the Federal Reserve's Survey of Household Economics and Decisionmaking, using different terminology and measuring a longer time period, estimated 31 percent of adults in 2019 participated in the gig economy.³⁵ In addition, another federally funded data source from 2010 estimated that a broader range of nonstandard and contract work arrangements combined to make up more than 40 percent of the labor

³³See GAO, *Taxpayer Compliance: More Income Reporting Needed for Taxpayers Working through Online Platforms*, GAO-20-366 (Washington, D.C.: May 28, 2020). In a platform work arrangement, workers offer goods or services by connecting with customers through online marketplaces or platforms accessed from a personal computer or smart phone.

³⁴This estimate has a margin of error no greater than plus or minus 0.2 percentage points at the 95 percent level of confidence. This percentage uses the broadest definition of contingent work in the Contingent Worker Supplement, which is defined as wage and salary workers, self-employed workers, and independent contractors who have been at their job for 1 year or less and do not expect they could continue at the job for more than another year. The Contingent Worker Supplement to the Current Population Survey is administered periodically and collects information on different types of work arrangements. BLS and Census jointly administered another supplement in July 2023, the data for which will be available in 2024.

³⁵This estimate has a margin of error no greater than plus or minus 1 percentage point at the 95 percent level of confidence. In 2019, the Survey of Household Economics and Decisionmaking defined gig work to cover three types of nontraditional activities: offline service activities, such as childcare or house cleaning; offline sales, such as selling items at flea markets or thrift stores; and online services or sales, such as driving using a ridesharing app or selling items online. This definition is no longer used. In a subsequent version in 2022, the survey no longer asked about people who found work through online apps or platforms. The revised definition of gig activities includes sales of items at places such as flea markets and garage sales or through online marketplaces, short-term rentals of items or property, and freelance work such as ridesharing or other roles in which people are paid for specific tasks and generally have flexibility about when and how to work.

force, including independent contractors, and freelance, self-employed, on-call, and temporary agency workers.³⁶

Figure 4: Selected Estimates of Prevalence of Nonstandard and Contract Work Arrangements

Data source	Entity collecting data	Types of work arrangements measured	Target population	Estimate and 95% confidence interval
2010 General Social Survey, Quality of Working Life Module	NORC at the University of Chicago, funded by the National Science Foundation	Alternative workers including independent contractors, independent consultants, freelance workers, self-employed, and on-call, those paid by a temporary agency, and those who work for a contractor that provides workers and services to others under contract.	Employed workforce	H 40.4%
2019 Survey of Household Economics and Decisionmaking ^a	Board of Governors of the Federal Reserve System	Gig activity or informal paid activities including childcare, house cleaning, ridesharing, selling goods, and renting out property.	Adults	H 31.0%
2005 Contingent Worker Supplement	Census Bureau, which administers survey for Bureau of Labor Statistics	Alternative work arrangements, defined as temporary help agency workers, on-call workers, standard self-employed, contract workers, and independent contractors or freelancers.	Employed workforce	H 30.6%
2022 Survey of Household Economics and Decisionmaking ^a	Board of Governors of the Federal Reserve System	Gig activities including selling items at places such as flea markets or through online marketplaces, short-term rentals of items or property, and freelance gig work such as ridesharing or payment for specific tasks.	Adults	H 16.0%
2015 National Health Interview Survey, Occupational Health Supplement	National Center for Health Statistics; Supplement sponsored by National Institute for Occupational Safety and Health	Independent contractors, freelance workers, temporary agency workers, and contract company workers.	Employed workforce	H 12.8%
2017 Contingent Worker Supplement to the Current Population Survey ^b	Census Bureau, which administers survey for Bureau of Labor Statistics	Contingent workers, or persons who do not expect their jobs to last or who report that their jobs are temporary.	Employed workforce	3.8%

Source: GAO analysis of academic studies. | GAO-24-105651

Note: These estimates were reported in an academic study and federal studies that were determined to be methodologically sufficient for our purposes and illustrate the range of estimates. The lines overlapping the bars display the 95 percent confidence intervals calculated for the estimates.

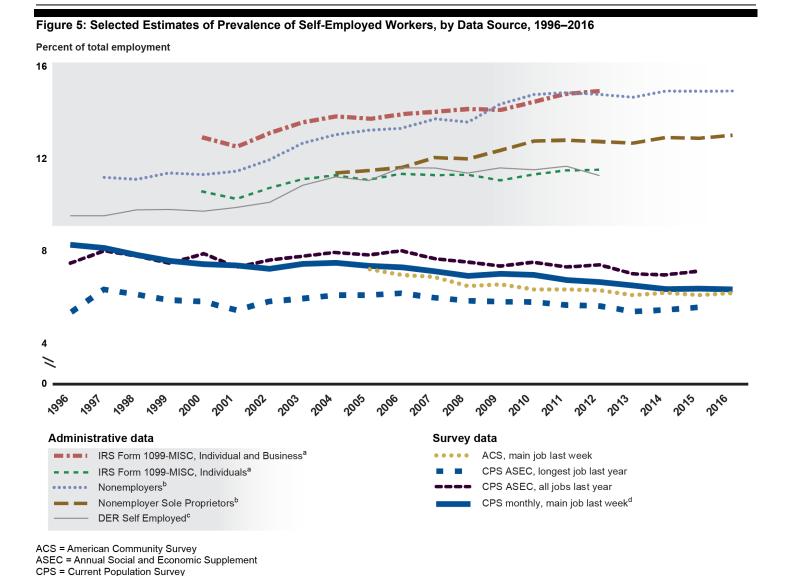
^a2019 Survey of Household Economics and Decisionmaking features supplemental data from April 2020. In general, the survey is annual; however, occasional supplements have been added. The survey's definitions and measures of nonstandard and contract work have varied.

^bThe Contingent Worker Supplement is an addendum to the monthly Current Population Survey. Because the 2017 Contingent Worker Supplement does not estimate an aggregate of alternative work arrangements (independent contractors, on-call workers, temporary help agency workers, and workers provided by contract firms), this figure includes an aggregate estimate of these arrangements from the prior version of the Supplement (2005). Individual components of alternative work arrangements in the 2017 Contingent Worker Supplement were estimated from under 1 percent to approximately 7 percent.

³⁶2010 General Social Survey, Quality of Working Life Module; NORC at the University of Chicago, funded by the National Science Foundation. The margin of error for this estimate is plus or minus 3.8 percentage points at the 95 percent level of confidence.

Estimates of self-employment (which may include contract work) also differ across data sources. For example, data from the Current Population Survey and its Annual Social and Economic Supplement show the percentage of self-employed workers had not increased since 1996 (see fig. 5). In contrast, some measures from administrative data—including tax filings and other financial records—show that self-employed work arrangements grew steadily after 2000. These differences have multiple potential explanations. For example, the observed increase in tax filings could result from an increase in self-employment but also could be partially explained by changes in reporting requirements and reimbursable credits.³⁷

³⁷Andrew Garin, Emilie Jackson, and Dmitri Koustas, *New Gig Work or Changes in Reporting? Understanding Self-Employment Trends in Tax Data*, Internal Revenue Service Statistics of Income Working Paper 2022-67 (Washington, D.C.: May 2022).



DER = Detailed Earnings Record
IRS = Internal Revenue Service
Source: GAO presentation of data in academic research and analysis of federal agency documents. | GAO-24-105651

Note: GAO presentation of data in Katharine G. Abraham, et al., "Measuring the Gig Economy: Current Knowledge and Open Issues," National Bureau of Economic Research, Working Paper 24950 (Cambridge, Mass.: August 2018). These estimates are not GAO analysis or federal agency analysis of data. Estimates that come from survey data are statistical estimates with sampling error associated with them.

^aAccording to IRS officials, payments made to self-employed individuals generally are reported to IRS on forms such as the 1099-MISC (prior to 2020 tax year), 1099-NEC (beginning with 2020 tax year), or 1099-K. IRS data may have limitations in accurately estimating certain populations of self-employed workers due to underreporting and other methodological issues. See GAO, *Taxpayer*

Compliance: More Income Reporting Needed for Taxpayers Working through Online Platforms, GAO-20-366 (Washington, D.C.: May 28, 2020).

^bData on nonemployers was obtained by study authors from the Census Bureau website. Nonemployer Statistics are data provided by Census (using IRS records) on businesses that have no paid employees, which may include the self-employed. According to Census, these data are used by state labor market information officers and other stakeholders.

^cData on DER self-employed was obtained by study authors' calculations from integrated CPS and DER data.

^dAccording to the Bureau of Labor Statistics, these survey data reflect unincorporated selfemployment in a main job collected from the Current Population Survey monthly. The Current Population Survey also collects data on incorporated self-employment.

Data from companies also reflect widespread use of at least some nonstandard and contract work arrangements but cannot be used to comprehensively establish prevalence of these work arrangements. In our November 2022 report, we found 33 percent of companies responding to the 2020 Annual Business Survey reported using "contractors, subcontractors, independent contractors, or outside consultants." Fifty percent reported using part-time workers.³⁸ We also estimated that 89 percent of 10-K filings from 2021 mentioned using contractors of some type, including independent contractors or firms.³⁹

Studies and experts suggest that secondary employment or multiple job holding is a major factor in the prevalence of nonstandard and contract work arrangements. Data analysis from the Survey of Household Economics and Decisionmaking indicates that over the course of a month, more than one-quarter of adults who responded to the survey engaged in some informal work outside of a main job.⁴⁰ Consistent with those findings, analysis from a Gallup survey indicated that just under one-quarter of workers held multiple jobs.⁴¹ Some data sources focus

³⁸See GAO-23-106212. The Annual Business Survey provides information on selected economic and demographic characteristics for businesses and business owners, including on certain nonstandard work arrangements and contractors, and for workers who do not receive a Form W-2.

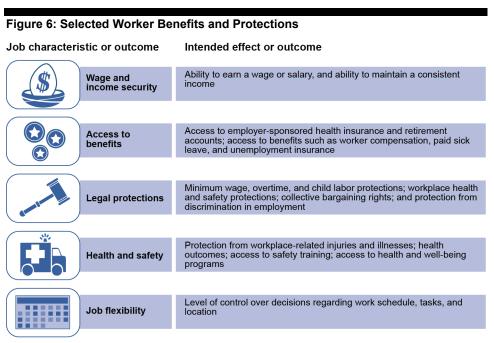
³⁹GAO-23-106212. Estimate is plus or minus 10 percentage points at the 95 percent level of confidence. Federal securities laws require publicly reporting companies in the United States to annually submit a report on Form 10-K, which provides an overview of the company's business and financial condition and includes audited financial statements. See 15 U.S.C. §§ 78m, 78o(d).

⁴⁰See Katharine G. Abraham and Susan N. Houseman, "Making Ends Meet: The Role of Informal Work in Supplementing Americans' Income," *Russell Sage Foundation Journal of the Social Sciences*, 5, no. 5 (2019): 110–31. These data are pooled from 2016–2017.

⁴¹Katharine G. Abraham, Brad Hershbein, and Susan Houseman, "Independent Contract, Informal, and Online Intermediary Work: Preliminary Evidence on Developing Better Measures in Household Surveys," working paper (June 2019).

solely on characteristics of a worker's main job, which may result in lower estimates of the prevalence of nonstandard and contract work.

Limited Data on Outcomes for Workers in Nonstandard or Contract Arrangements Show Generally Lower Benefits and Fewer Protections Many of the federal laws and programs pertaining to worker protections and benefits have limited coverage for workers in certain nonstandard and contract work arrangements. This includes protections and benefits related to wages, discrimination, and workplace safety (see fig. 6 for selected benefits and protections). Factors such as length of employment and hours worked may affect whether workers are covered under some of these laws. For example, employers are not required to provide health insurance for part-time employees and independent contractors generally are not covered under some nondiscrimination laws. See appendix II for more information on federal laws pertaining to protections for workers.



Source: GAO analysis and icons. | GAO-24-105651

Limited available data show that workers in nonstandard or contract arrangements generally received lower wages and fewer benefits and protections than those in standard full-time employment. Of the 16 studies we reviewed that conducted original quantitative data analysis and used a quantitative method to compare nonstandard or contract workers with standard employees, six reported on worker outcomes, such as wages, access to benefits, and health and safety. Four studies addressed

workforce costs and wages, and all documented lower wages for nonstandard workers than for standard employees.⁴²

Wages and income security. Studies generally showed that on-call workers, day laborers, and part-time workers tended to earn lower pay than standard employees, although outcomes for independent contractors and other self-employed workers were less clear. ⁴³ For example, one study analyzing data from the 2017 Contingent Worker Supplement found that the average weekly earnings of those in temporary help, on-call, and day laborer positions were lower than the average weekly earnings of those in standard wage and salary positions. ⁴⁴ In contrast, the weekly earnings of independent contractors and other self-employed workers were—on average—not significantly different than those in standard wage and salary positions.

Nonstandard or contract work arrangements also may be related to an individual's income security because they may reduce the predictability and reliability of earnings or be used to supplement income for periods of unusually low earnings. For instance, one study found a higher proportion of survey respondents who reported their monthly income often varies also reported having engaged in informal work activities in the prior month, compared to respondents who reported their monthly income varied little.⁴⁵ A study examining tax returns found that the increase in self-employment filings (Form 1099s) from 2013 to 2016 resulted primarily from an increase in gig work mediated through online labor

⁴²Katharine G. Abraham and Susan N. Houseman, "Contingent and Alternative Employment: Lessons from the Contingent Worker Supplement, 1995–2017"; Katharine G. Abraham and Susan N. Houseman, "Making Ends Meet: The Role of Informal Work in Supplementing Americans' Income"; Emilie Jackson, Adam Looney, and Shanthi Ramnath, "The Rise of Alternative Work Arrangements: Evidence and Implications for Tax Filing and Benefit Coverage," Department of the Treasury, Office of Tax Analysis, Working Paper 114 (Washington, D.C.: 2017); and Lawrence F. Katz and Alan B. Krueger, "The Rise and Nature of Alternative Work Arrangements in the United States, 1995-2015," *Industrial Labor Relations Review*, 72, no. 2 (Ithaca, N.Y.: March 2019): 382–416.

⁴³For example, Katharine G. Abraham and Susan N. Houseman, "Contingent and Alternative Employment: Lessons from the Contingent Worker Supplement, 1995–2017"; National Academies of Sciences, Engineering, and Medicine, "Measuring Alternative Work Arrangements for Research and Policy"; and GAO, *Contingent Workforce: Size, Characteristics, Earnings, and Benefits*, GAO-15-168R (Washington, D.C.: Apr. 20, 2015).

⁴⁴"Contingent and Alternative Employment: Lessons from the Contingent Worker Supplement, 1995–2017."

⁴⁵Katharine G. Abraham and Susan N. Houseman, "Making Ends Meet: The Role of Informal Work in Supplementing Americans' Income."

platforms. The study found this work provided small amounts of income to individuals with no other jobs or served to supplement wage or salary employment.⁴⁶

Access to benefits. Certain workers who rely primarily or exclusively on self-employment, temporary, or on-call work may have less access to employer-sponsored health insurance or retirement accounts.⁴⁷ Moreover, analysis of data from the 2017 Contingent Worker Supplement found that wage and salary independent contractors were roughly one-third less likely than regular employees to receive health insurance or a retirement plan through their employer.⁴⁸ Independent contractors generally have not been eligible to receive unemployment insurance benefits.⁴⁹ We also previously reported that contingent workers were less likely to be satisfied with their benefits and employment arrangements than standard full-time workers.⁵⁰

Legal protections: Nonstandard and contract workers may not be guaranteed federal legal protections relating to minimum wage, discrimination, and workplace safety. For example, protection from discrimination in employment based on race, color, religion, sex, or national origin applies only to job applicants and to workers who meet the statutory definition of an employee and work for a covered employer.⁵¹ See appendix II for more information on federal laws pertaining to protections for workers.

⁴⁶Brett Collins, et al., "Is Gig Work Replacing Traditional Employment? Evidence from Two Decades of Tax Returns" (Washington, D.C.: Mar. 25, 2019).

⁴⁷For example, see Emilie Jackson, Adam Looney, and Shanthi Ramnath, "The Rise of Alternative Work Arrangements: Evidence and Implications for Tax Filing and Benefit Coverage"; and "Contingent and Alternative Employment: Lessons from the Contingent Worker Supplement, 1995–2017."

⁴⁸These percentages are estimated effects from linear regression models fit to data that come from the Contingent Worker Supplement to the Current Population Survey. See Katharine G. Abraham and Susan N. Houseman, "Contingent and Alternative Employment: Lessons from the Contingent Worker Supplement, 1995–2017."

⁴⁹During the COVID-19 pandemic, temporary federal benefits were offered to those not normally eligible for unemployment insurance, including the self-employed, independent contractors, and gig workers. Pub. L. No. 117-2, § 9011(a), (b), 135 Stat. 4, 118; Pub. L. No. 116-260, div. N, tit. II, § 201(a), (b), 134 Stat. 1182, 1950-51 (2020); Pub. L. No. 116-136, § 2102, 134 Stat. 281, 313 (2020). This temporary benefit expired in 2021.

⁵⁰GAO-15-168R.

⁵¹See 42 U.S.C. §§ 2000e-2000e-17.

Health and safety. Federal data and agency officials have raised concerns that nonstandard and contract work arrangements may increase workplace health and safety risks, as well as negatively affect some health outcomes.⁵² For example, data from the 2021 BLS Census of Fatal Occupational Injuries show that self-employed workers were fatally injured on the job at a rate of 11.1 fatalities per 100,000 full-time equivalents, as opposed to wage and salary workers at rate of 3.1 fatalities per 100,000 full-time equivalents.⁵³ NIOSH identified that 46 percent of all fatalities in the construction and extraction industries in 2018 were among workers with contract work arrangements.⁵⁴ In recognition of increased risks, NIOSH issued guidance in 2022 for employers to protect temporary workers on their job sites.⁵⁵

Job flexibility. Nonstandard workers, by definition, often have different work schedules and hours than standard, full-time workers. Nationally representative survey data are available on total work hours, but data and research on the effects of nonstandard work schedules are limited. To increase accuracy of available data on worker's schedules, the National Academies recommended in 2020 that the Contingent Worker Supplement collect detailed information on workers' schedules, including measures of autonomy, predictability, and variability. ⁵⁶ Partially in response to these recommendations, BLS officials told us they added some questions on these topics to the 2023 Supplement.

⁵²National Institute for Occupational Safety and Health, "National Occupational Research Agenda for Healthy Work Design and Well-Being" (January 2020); and John Howard, "Nonstandard Work Arrangements and Worker Safety and Health," *American Journal of Industrial Medicine*, 60, no. 1 (January 2017): 1-10.

⁵³Bureau of Labor Statistics, Census of Fatal Occupational Injuries. The number of fatalities among contracted workers in construction and extraction occupations is from the table entitled "Fatal occupational injuries incurred by contracted workers, 2011-2018" located under "Miscellaneous Tables" on the Census of Fatal Occupational Injuries-Archived Data" webpage. The total number of occupational fatalities in construction and extraction occupations is from "TABLE A-5. Fatal occupational injuries by occupation and event or exposure, all United States, 2018," located under "Annual Data, Census of Fatal Occupational Injuries, 2018."

⁵⁴Contract work arrangements are defined to include self-employed workers, owners of unincorporated businesses and farms, and paid and unpaid family workers, and may include some owners of incorporated businesses or members of partnerships.

⁵⁵National Institute for Occupational Safety and Health, "Protecting Temporary Workers: Best Practices for Host Employers," 2022-126 (Washington, D.C.: July 2022).

⁵⁶"Measuring Alternative Work Arrangements for Research and Policy" (2020).

Fragmented Efforts to Define and Measure Work Arrangements Contribute to Variation in Estimates

Agencies' Data Collection Efforts Are Fragmented and Use Different Methodologies

Federal data collection on nonstandard and contract work arrangements is fragmented and agencies use definitions and methodologies that meet specific purposes for their programs and activities. Fragmentation refers to circumstances in which more than one federal agency (or more than one organization within an agency) is involved in the same broad area of national need and opportunities exist to improve service delivery.⁵⁷ While fragmentation can complement an existing program, fill a gap, or result in new methods being used, it also can result in a patchwork of programs that can waste scarce funds, confuse and frustrate program customers, and limit the overall effectiveness of the federal effort.

At least eight federal entities—in seven agencies—collect data on work arrangements, including one or more aspects of nonstandard or contract work arrangements. These data are not directly comparable and, according to some agency officials, were not intended to be. Data collection efforts measure overlapping populations and use different definitions and terminology, data sources, and methodological approaches. Federal officials from selected agencies generally report these differences help meet specific purposes of their programs; however, they also contribute to variation in the estimates of these work arrangements. As a consequence of measuring different aspects of nonstandard and contract work arrangements and fragmented data collection efforts, these data cannot be used to form a coherent national view of such arrangements. For example, pairs of estimates may overlap (such as estimates of independent contractors and contingent workers), but the extent of this overlap is not always known.

Definitions and terminology. Various federal surveys and administrative data sources use a combination of at least 25 different terms to describe nonstandard and contract work arrangements (see fig. 7).

⁵⁷GAO, Fragmentation, Overlap, and Duplication: An Evaluation and Management Guide, GAO-15-49SP (Washington, D.C.: Apr. 14, 2015).

Figure 7: Terms Used in Selected Data Sources to Describe Nonstandard and Contract Work Arrangements

Data source

	Departme	nt of Labor	Departr Commerce/Ce	ment of ensus Bureau		vernors of the serve System	Department of the Treasury
Terminology	Current Population Survey	Contingent Worker Supplement	Survey of Income and Program Participation	Annual Business Survey	Survey of Household Economics and Decision- making	Survey of Consumer Experiences Survey of Informal Work Participation	Tax data (from Forms W-2, 1099-MISC/ NEC/K, Schedule SE/C)
Self-employ(ed)				//////,			
Part-time work(er)		1/////					1/////
Freelance work(er)	//////		/////.	(/////			1/////
Independent contractor	//////		//////.		//////	1/////	
On-call work(er)	//////		/////.	(/////		(/////	1/////
Consultant	//////	1/////	/////.		//////	(/////	1/////
Contingent worker	//////		/////.	//////	//////	1/////	7/////
Contract labor	//////	1/////	/////.	1//////	//////	1/////	
Contractor	//////	1/////	/////.		//////	(/////	//////
Day labor(er)	//////		//////.	(//////	//////	1/////	7/////
Gig work(er)	//////	1/////	//////.	//////		1/////	7/////
Independent consultant	//////		//////.	1//////	//////	//////	7/////
Informal paid activity	//////	1/////	//////.	1//////	//////		1//////
Informal paid work	//////	1/////	//////.	(/////	//////		1/////
Informal work	//////	1/////	//////.	1//////	//////		1//////
Leased employee from a leasing service	//////	1/////	/////.		//////	//////	1//////
Leased employee from a professional employer organization	//////	1/////	//////.		//////	1/////	7/////
Nonemployee	//////	7/////	//////.	1//////	//////	1/////	
Outside consultant		1/////	//////.		//////	1/////	7/////
Paid day labor(er)	//////	1/////	//////.		//////	//////	7/////
Side-job	//////	1/////	//////.	1//////	//////		//////
Sole proprietor	///////	7/////	//////.	1//////	//////	1//////	
Subcontractor	///////	1/////	//////.		7/////	1/////	1/////
Temporary help agency work(er)	//////		/////.	1/////	//////	1/////	7/////
Temporary staffing obtained from a temporary help service	//////	1/////	//////.		//////	1/////	7/////

Term was used on the data source's survey questionnaire or administrative form

Source: GAO analysis of agency documentation. | GAO-24-105651

At times, the same term is used in different ways. For example, "employee" is defined differently across the Current Population Survey and National Longitudinal Survey of Youth, in the Fair Labor Standards Act, and by OSHA.

In addition, work arrangements have become more varied and complex and federal entities use numerous, varied terms to describe them. Figure 8 illustrates the multiple terms that may be used to describe a single job—such as a dog walker—depending on specific circumstances. While some of these terms or categories are used across multiple agencies' data collection efforts, others are less common.

Terms that might be used to apply to a dog walker:	Census Bureau	Department of Labor	Internal Revenue Service
Contingent worker			
Contractor			
Freelance work(er)			
Independent contractor			
Leased employee from a leasing service			
Nonemployee			
Part-time work(er)			
Self-employ(ed)			
Sole proprietor			
Subcontractor			
Term was used on the data source's survey qu	estionnaire or administrative for		

Sources: GAO analysis of agency documentation; Adrian Hillman/stock.adobe.com (image). | GAO-24-105651

Specific vocabulary may add to challenges for surveys when their terms are not commonly understood or when terms have plain language meanings that conflict with the terms' specialized use in a survey. Federal officials we contacted from the selected agencies reported they generally collect data using specific terms and definitions to meet their program's purpose. These terms do not always correspond with those used across various household and employer surveys or other plain language descriptors, making it difficult to aggregate or compare data across sources.

In other cases, terms carry unintended and confusing connotations from use in other contexts. For example, the Current Population Survey asks respondents if they are self-employed.⁵⁸ Experts told us that some workers—like independent contractors, who could be considered self-employed under IRS's definition—may not identify as self-employed, do

⁵⁸The Current Population Survey identifies the self-employed by asking people if they are employed by government, by a private company, a nonprofit organization, or are self-employed (or working in a family business).

not see themselves as entrepreneurs, or think they work directly for a company when they are a contractor.

Data source. Data on nonstandard and contract work arrangements come from several sources: federal administrative data (tax filings), private commercial data, and government and private surveys.⁵⁹ Differences in the source of data used can result in variations in estimates of nonstandard and contract work arrangements. For example, as shown in figure 5, one study showed significant disagreement between administrative data and household survey data on the prevalence of self-employment.⁶⁰ In addition, different surveys may sample distinct populations such as individuals, households, or businesses, which also may affect estimates of these work arrangements.

Methodology. Differing methodological approaches may contribute to variations in estimates. Surveys collect information on work conducted over different time intervals (known as reference periods), which can make data less directly comparable. Surveys also may differ in how they select and contact respondents. For example, some surveys allow household members (proxy reporters) to respond about another's work activities. One study found that proxies reported informal employment at a rate almost 25 percentage points lower than among self-reporters. 61 The method by which respondents are contacted—in-person, online, or by telephone—also may affect estimates. Populations may differ in their use of telephones or the internet or their comfort speaking English or interacting with federal officials. In addition, the types and wording of questions can affect the results. For example, one study found that additional probing identified a substantial amount of informal work activity not otherwise captured by the Current Population Survey. 62 See figure 9 for additional methodological factors that may differ across selected surveys.

⁵⁹Administrative data come from tax filings and include information on noncontract and contract work relevant to individual and business filings. IRS research on independent contractors and misclassification of workers may be limited.

⁶⁰Katharine G. Abraham, et al., "Reconciling Survey and Administrative Measures of Self-Employment," *Journal of Labor Economics*, 39, no. 4 (Chicago, Ill.: Oct. 12, 2021).

⁶¹Katharine G. Abraham and Ashley Amaya, "Probing for Informal Work Activity," National Bureau of Economic Research, Working Paper 24880 (Cambridge, Mass.: 2019).

⁶²Katharine G. Abraham and Ashley Amaya, "Probing for Informal Work Activity."

Figure 9: Information on Selected Data Sources Measuring Nonstandard and Contract Work Arrangements, and Selected Methodological Factors

			Nationally	Measure(s) of nonstandard		bs ided ^a
Data	Entity collecting data	Response rate	representative	and contract work	Main	All
Household survey: Current Population Survey ^b	Census Bureau administers survey for the Bureau of Labor Statistics	70% or higher	>	Unincorporated self-employment		
Household survey: American Community Survey	Census Bureau	86% or higher	>	Unincorporated self-employment		
Household survey: Current Population Survey Annual Social and Economic Supplement	Census Bureau, which administers survey for Bureau of Labor Statistics	70% or higher	>	Unincorporated self-employment		
Household survey: Current Population Survey Contingent Worker Supplement	Census Bureau administers survey for the Bureau of Labor Statistics	77% or higher	>	Selected temporary and contract work arrangements, online platforms		
Household survey: National Longitudinal Survey of Youth 1979 and 1997 cohorts	Bureau of Labor Statistics	74% or higher ('79) 77% or higher ('97)	(selected age groups in initial year of survey)	Selected temporary and contract work arrangements, work schedule (1997 cohort only)		
Household survey: American Time Use Survey 2017–2018 Leave and Job Flexibilities Module	Sponsored by Bureau of Labor Statistics (survey) and Women's Bureau (module), and administered by Census Bureau	40% or higher	(wage and salary workers whose employers control their schedule)	Work schedule		
Household survey: General Social Survey Quality of Worklife Module	Sponsored by the National Institute for Occupational Safety and Health and National Science Foundation, conducted by NORC at the University of Chicago	60% or higher	✓	Selected temporary and contract work arrangements, work schedule		
Household survey: Gallup Edu- cation Consumer Pulse Survey 2018–2019, module on contract and other nonemployee work	Gallup, Inc.	8% to	✓	Selected temporary and contract work arrangements, informal work activity, online platforms		
Household survey: Survey of Informal Work Participation	Federal Reserve Bank of Boston	Unknown	(those with Internet access)	Informal work activity		
Household survey: Enterprising and Informal Work Activities Survey	Board of Governors of the Federal Reserve System	4% to 5%°	✓	Informal work activity		
Household survey: Survey of Household Economics and Decisionmaking ^d	Board of Governors of the Federal Reserve System	4% to 5% ^c	✓	Informal work activity, work schedule		
Employer survey: Economic Census	Census Bureau	62%	(operating establishments in in-scope industries)	Business services associated with contracting		
Employer survey: Current Employment Statistics	Bureau of Labor Statistics	41% or higher	(nonfarm industries)	Business services associated with contracting		
Employer survey: Annual Business Survey	Census Bureau and National Science Foundation	68%	(businesses operating in in-scope industries)	Selected temporary and contract work arrangements		

Source: GAO analysis of academic research and agency documentation. | GAO-24-105651

Notes: Based on GAO analysis of the study by Katharine G. Abraham and Susan N. Houseman, "What Do We Know about Alternative Work Arrangements in the United States? A Synthesis of Research Evidence from Household Surveys, Employer Surveys, and Administrative Data," prepared for the Department of Labor (Washington, D.C.: Sept. 5, 2021). We provided this information to the Census Bureau, Bureau of Labor Statistics, Board of Governors of the Federal Reserve System, and Internal Revenue Service for review. We did not independently verify the information and it may pertain only to certain periods. The types of temporary and contract work arrangements vary across surveys but generally include independent contractors and temporary agency workers.

Unincorporated self-employed persons work for themselves and are not employed by or do not own a business that has been incorporated or otherwise legally designated as a corporation or other entity.

^aDenotes whether data were collected only on a worker's main job or on multiple ("all") jobs held by the worker.

^bHouseholds in the Current Population Survey are interviewed eight times over a 16-month period. Data on unincorporated self-employment on workers' second job is collected only in the fourth and eighth rounds of the survey.

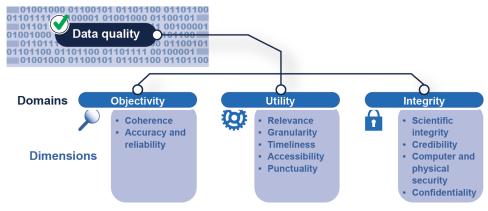
^eResponse rates are cumulative, which incorporates the process of recruiting internet panel members as well as the panel survey response rate.

^dDefinitions and measures of nonstandard and contract work in the Survey of Household Economics and Decisionmaking have varied over the past decade.

Data Limitations Are Worsened by Fragmentation and Hinder Understanding of Work Arrangements

We and others have identified strengths and limitations in the quality of data available to measure work arrangements and the ability to analyze data collected across federal agencies. According to the Federal Committee on Statistical Methodology, data quality consists of several components (see fig. 10). For data on work arrangements, we identified limitations with regard to the dimensions of coherence (comparability), accuracy and reliability, relevance, granularity (detail), timeliness, and accessibility.⁶³

Figure 10: Components of Data Quality According to the Federal Committee on Statistical Methodology



Source: GAO adaptation of graphic from the Federal Committee on Statistical Methodology; GAO (icons). | GAO-24-105651

⁶³We did not assess limitations in relation to the domain of integrity (security) because it deals in part with technical issues, such as computer and physical security and systems to secure confidentiality and did not directly pertain to our objectives. The dimension of coherence refers to the ability of the data product to maintain common definitions, classification, and methodological processes, align with external statistical standards, and maintain consistency and comparability with other relevant data, according to the Federal Committee on Statistical Methodology.

- Coherence Are the data consistent and comparable with other relevant data (internal and external) over time? There are limited data on the prevalence of nonstandard and contract workers that can be compared over time. 64 In combination with other factors, this makes it difficult to assess trends and understand the prevalence of these work arrangements. Further, there is no consensus among federal agencies on a common terminology or classification of terms to help data users distinguish different work arrangements across the various data sources. The lack of a common system of classification can make it difficult to describe and compare different types of nonstandard and contract work arrangements. It also makes it difficult to synthesize and build upon existing research by comparing data from different sources.
- Accuracy and reliability How close is an estimate to its true value?
 Household surveys such as the Contingent Worker Supplement to the
 Current Population Survey, Survey of Household Economics and
 Decisionmaking, Quality of Working Life Module of the General Social
 Survey, and Survey of Informal Work Participation have widely
 varying estimates on nonstandard and contract workers. This has
 raised questions among policymakers and researchers about the
 accuracy and reliability of related individual estimates.

At the same time, these household surveys have strengths. They may include large nationally representative samples and can provide consistent data over an extended period, which contributes to accuracy and reliability. Administrative data also have strengths in terms of reliability. Because they measure workforce participation through earnings and employer reporting, they are not influenced by survey respondents' interpretations of questions or terminology. 65

⁶⁴For example, the Contingent Worker Supplement to the Current Population Survey has gathered consistent data on nonstandard work arrangements but has been conducted at irregular intervals. The Annual Social and Economic Supplement to the Current Population Survey has been administered every year but gathers limited information on work arrangements. The Quality of Working Life Module (of the General Social Survey) has been administered every 4 years since 2002 and has gathered some basic information on nonstandard work arrangements.

⁶⁵According to IRS officials, payments made to self-employed individuals generally are reported to IRS on forms such as the 1099-MISC (prior to 2020 tax year), 1099-NEC (beginning with 2020 tax year), or 1099-K. IRS has been sharing 1099 data with state unemployment agencies since 1990, and state agencies can obtain these data through the Governmental Liaison Data Exchange Program. The participating state agencies can request data elements annually but also must justify their need for the data.

Relevance – Are data useful for intended users and meet their needs? Officials from federal agencies, including BLS, told us the data they collect on nonstandard and contract work arrangements are generally useful for the specific purposes for which they are collected, given existing tools and resources. These purposes include administration of agency programs and meeting specific agency goals.

However, the data may not be useful for broader research or policymaking purposes across government. Specifically, widely varying estimates of the prevalence of nonstandard and contract work arrangements may limit users' ability to fully understand the size and effects on outcomes for workers, which is relevant for designing and improving policies. The Director of the Census Bureau has noted limitations in the ability of the American Community Survey and Current Population Survey to fully capture nonstandard and contract work arrangements, particularly for those who supplement main employment with gig work. 66 Further, one expert described to us the burden of "cobbling together" various sources of data to obtain a clearer understanding of nonstandard and contract work arrangements.

• **Granularity** – How much detail is available and can the data be separated into discrete units? The federal household surveys on nonstandard and contract work can provide detailed demographic information about their respondents, such as on age, gender, education, race, marital status, and family income. In addition, the federal employer surveys can provide information about the industries employing temporary help and other contract workers. Employer surveys are especially useful for gathering information about subcontracting relationships.

However, several key surveys do not measure details on important job features, such as the protections available to a worker on a job site, their access to benefits like paid time off, degree of control over scheduling, or wages. In addition, there is limited information about work arrangements among firms that contract out certain services to other companies.

Timeliness – How long does it take for data to become available?
 The monthly Current Population Survey can provide consistent data

⁶⁶Robert L. Santos, "The Role of Data Quality in a Twenty-First Century Federal Statistical System," keynote address at meeting of Federal Committee on Statistical Methodology (Oct. 25, 2022).

on a regular basis over an extended period about a person's job.⁶⁷ Other sources of data provide data on a less frequent basis. For example, data from the Contingent Worker Supplement—designed in part to measure contingent work arrangements—may take up to a year to analyze and publish after survey administration.

Also, federal entities have collected data on nonstandard and contract work arrangements at different frequencies. For instance, the Contingent Worker Supplement has been conducted at irregular intervals—in 2005, 2017, and 2023. Several studies and experts have indicated that more frequent, regular data collection could increase the accuracy of measurements of these work arrangements. 68 Accordingly, BLS officials told us that as of 2023 they will be fielding the Contingent Worker Supplement every 2 years. According to the Federal Committee on Statistical Methodology's Framework for Data Quality, threats to timeliness are greater for events and issues that change more rapidly over time—which may include fluctuations in work arrangements—as opposed to those that experience little change.

Accessibility – Are data easy to find, obtain, and understand?
 According to federal officials, household survey data are generally more accessible to the public than administrative data on nonstandard and contract work arrangements. They provide data and extensive documentation on survey contents, methodology, and questionnaires that is easy to find and free of charge. In contrast, certain administrative data are generally inaccessible on an individual level due to privacy protections.

For example, IRS is limited in the individual-level taxpayer data it can provide. Federal entities generally disclose data on a case-by-case basis or in aggregate form. IRS is specifically permitted on written request by certain entities to conduct special statistical studies involving tax return information and furnish results that cannot be associated with or indirectly identify a particular taxpayer. Treasury officials described a separate, multiyear process for outside parties to request analyses of tax data on a cost-recovery basis, which requires IRS to follow stringent legal requirements for data protection. Officials

⁶⁷Information about second jobs in the Current Population Survey is limited to about onequarter of the survey sample.

⁶⁸For example, see Rory O'Farrell and Pierre Montagnier, "Measuring Platform Mediated Workers," OECD Digital Economy Papers, 282 (April 2019); and Katharine G. Abraham, et al., "Measuring the Gig Economy: Current Knowledge and Open Issues," National Bureau of Economic Research, Working Paper 24950 (Cambridge, Mass.: August 2018).

said that any request to analyze tax data must be negotiated and formalized in a memorandum of understanding between IRS and the requester, regardless of whether the requester is inside or outside of government.

There are several potential reasons for these limitations in data on nonstandard and contract work arrangements. First, entities generally collect data and use definitions that best suit their individual programmatic needs. Therefore, data collection efforts may lack shared or cross-cutting government priorities and goals. Second, experts and studies indicated that key labor-related surveys originally were not designed to measure nonstandard and contract work arrangements. ⁶⁹ As a result, such surveys may not be well-suited to accurately capture these types of work arrangements.

Finally, agencies must balance the need to update data collection instruments against efforts to maintain survey comparability and consistency over time, according to some agency officials. Therefore, surveys may not always be optimized to collect information on current nonstandard and contract work arrangements, which have evolved over the years.

As a result, federal data measuring the prevalence of nonstandard and contract work arrangements likely are not fully reliable for certain purposes, according to studies and experts. While the monthly Current Population Survey may consistently capture standard employment and unemployment, these studies indicate that a significant number of nonstandard or contract workers are missed or are miscoded as employees. This may affect the accuracy of BLS statistics on the employment rate and the multiple-job-holding rate. Others assert that some nonstandard or contract workers are counted as not in the labor

⁶⁹For example, see Katharine G. Abraham, et al., "Measuring the Gig Economy: Current Knowledge and Open Issues" (2018); and Katharine G. Abraham, Brad Hershbein, and Susan Houseman, "Independent Contract, Informal, and Online Intermediary Work: Preliminary Evidence on Developing Better Measures in Household Surveys," working paper (June 2019). The monthly Current Population Survey also collects information on labor utilization, part-time employment, and those not in the labor force.

⁷⁰For example, see Katharine G. Abraham and Ashley Amaya, "Probing for Informal Work Activity" (2019); Katharine G. Abraham, Brad Hershbein, and Susan Houseman, "Independent Contract, Informal, and Online Intermediary Work: Preliminary Evidence on Developing Better Measures in Household Surveys" (2019); Anat Bracha and Mary A. Burke, "How Big is the Gig? The Extensive Margin, the Intensive Margin, and the Hidden Margin," *Labour Economics*, 69 (April 2021); and Katharine G. Abraham, et al., "Measuring the Gig Economy: Current Knowledge and Open Issues" (2018).

force and that counting them would improve the accuracy of the labor force participation rate.⁷¹

Furthermore, depending on the magnitude of the limitations, not having regular, accurate, and coherent data on work arrangements can affect labor and economic policymaking decisions. To For example, initial estimates of the costs of Pandemic Unemployment Assistance, which covered the self-employed and certain gig economy workers among others, relied on experience with disaster unemployment aid instead of using data on the prevalence of these work arrangements. To this and other reasons, the program's initial cost estimate was billions lower than the costs eventually incurred.

Without improved data on nonstandard and contract work arrangements across agencies, researchers, officials, and policy makers have inconsistent information to accurately estimate the number of workers not covered by certain benefit programs, like unemployment insurance, and appropriately evaluate labor policies. Consistent and accurate information on these work arrangements across agency boundaries would allow for more informed, evidenced-based decisions on assisting these workers and addressing risks they face.

⁷¹See Anat Bracha and Mary A. Burke, "Who counts as employed? Informal work, employment status, and labor market slack," Federal Reserve Bank of Boston Working Papers (December 2016).

⁷²Disagreements exist among researchers about the magnitude of errors in household survey data, including the measurement of employment rate for nonstandard and contract workers. Analysis from one study found that the effect of misclassification of workers in surveys has a small effect on employment statistics; however, it may have a greater impact on the estimate for multiple job holding. For example, see Mary Dorinda Allard and Anne E. Polivka, "Measuring labor market activity today: are the words work and job too limiting for surveys?" *Monthly Labor Review* (November 2018).

⁷³See GAO-23-106696.

⁷⁴According to DOL data, approximately \$900 billion in benefits were paid across all unemployment insurance programs from April 2020—the first full month of all pandemic unemployment insurance program payments—through May 2023—the end of the public health emergency. We also estimated that fraud in unemployment insurance programs during the COVID-19 pandemic was likely between \$100 billion and \$135 billion, representing 11–15 percent of the total amount of unemployment benefits paid during the pandemic. GAO-23-106696.

Agencies Have Taken Some Steps to Address Data Limitations, but Interagency Efforts Have Not Been Sustained or Effective

Federal agencies have taken some steps to address limitations relating to the quality of data on nonstandard and contract work arrangements, but issues persist. The collaborative efforts among federal agencies to address these data limitations have not incorporated leading practices, and they have not been sustained or effective.

Agencies Have Taken Some Steps to Address Data Limitations

Federal agencies have taken some steps to improve the quality of data on nonstandard and contract work arrangements in the following areas:

Accessibility. To coordinate activities of the federal statistical system, OMB established a standard application process for external users of federal data in 2022.⁷⁵ The standardized process may reduce the time and cost burden for researchers and external agencies seeking access to confidential data (which may include data on nonstandard and contract work arrangements).

Further, a number of bilateral memorandums of understanding exist between federal agencies pursuing shared goals related to these work arrangements, such as addressing misclassification. For example, IRS has a memorandum of understanding with DOL's Wage and Hour Division to better identify where to prioritize outreach, education, compliance, and enforcement resources related to worker misclassification. The memorandum specifies that DOL will transmit information to IRS that may raise tax compliance issues related to misclassification. In response, IRS will evaluate these referrals and provide annual reports to DOL summarizing the results achieved.

Timeliness. As noted earlier, BLS officials told us that starting with 2023 they will field the Contingent Worker Supplement biennially instead of at

⁷⁵The Foundations for Evidence-Based Policymaking Act of 2018 generally requires OMB to establish a process (including a common application form) through which agencies and others may apply to access the data assets accessed or acquired by a statistical agency or unit. See Pub. L. No. 115-435, § 303, 132 Stat. 5529, 5554-56 (2019) (codified at 44 U.S.C. § 3583). See also Office of Management and Budget, *Establishment of Standard Application Process Requirements on Recognized Statistical Agencies and Units*, M-23-04 (Washington, D.C.: Dec. 8, 2022).

irregular intervals, which may improve the timeliness of certain data related to nonstandard and contract workers.

Granularity. BLS changed the Contingent Worker Supplement for 2023 to capture information for both the main and any second job of jobholders. The reference period of the 2023 supplement will remain unchanged to maintain alignment with the Current Population Survey reference period (the prior week). Short reference periods may improve accuracy by asking about a period the respondent can easily remember, but they pose challenges for capturing inconsistent, seasonal, or temporary work. The 2023 supplement also includes questions on advance notice and work schedules (in response to recommendations from a 2020 National Academies of Sciences study). ⁷⁶

Accuracy and reliability. The 2023 Contingent Worker Supplement also will

- use one definition for contingent workers, roughly equivalent to the broadest of its three earlier measures; and
- introduce new questions on task-based and app-based work that replace questions on electronically mediated employment that produced errors in the previous iteration.
- These changes may improve the accuracy and reliability of data on nonstandard and contract work arrangements.

Coherence. In an attempt to reduce confusion around terms and definitions, NIOSH developed an internal system of classification and set of descriptors for work arrangements. According to researchers at NIOSH, a clearly agreed-upon set of work arrangement dimensions and definitions may support research on the relationship among work arrangements, workplace health and safety risks and worker well-being, and outcomes for workers. NIOSH researchers noted that they cannot require other stakeholders to use their classification system.

⁷⁶"Measuring Alternative Work Arrangements for Research and Policy" (2020).

Interagency Efforts to Collaborate Have Not Been Sustained or Effective in Addressing Data Quality Issues or Fragmentation

Interagency efforts lack an ongoing collaborative mechanism (such as a committee or working group) and have not effectively addressed many of the cross-agency data quality and fragmentation issues we previously discussed. For example, in 2019, BLS commissioned the National Academies of Sciences to review measures of alternative work arrangements (including the Contingent Worker Supplement), but the resulting recommendations only addressed BLS' need to improve the Contingent Worker Supplement rather than improving measurements across agencies. The Similarly, a 2022 interagency group led by the National Economic Council focused on issues like misclassification of nonstandard and contract workers but did not consider wider issues of data collection and data quality for these work arrangements, according to Treasury officials. According to officials, the efforts were not sustained because the Council's priorities changed.

In 2019, OMB issued guidance encouraging federal statistical agencies to connect data functions across agencies and regularly collaborate on and refine data collection efforts. Moreover, according to *Principles and Practices for a Federal Statistical Agency*, federal statistical agencies should collaborate with each other and other agencies and researchers. Such collaborations can serve many purposes, including standardization of concepts, measures, and classifications; augmentation of available information for cross-national and subnational comparisons; and improvements in many aspects of statistical programs. In addition, effective interagency collaboration helps to manage fragmentation.

In our prior work, we found that effective interagency collaboration benefits from certain leading practices.⁸⁰ Five of these eight practices are most relevant to the fragmented nature of data collection on nonstandard and contract work arrangements: (1) defining common outcomes, (2) bridging organizational cultures, (3) identifying and sustaining leadership,

⁷⁷In the commissioned study, alternative work arrangements included independent contractor and other nonemployee jobs, as well as work through intermediaries such as temporary help agencies and other contract companies, and work with unpredictable schedules. "Measuring Alternative Work Arrangements for Research and Policy."

⁷⁸Office of Management and Budget, *Federal Data Strategy – A Framework for Consistency*, M-19-18 (Washington, D.C.: June 4, 2019).

⁷⁹National Academies of Sciences, Engineering, and Medicine, *Principles and Practices for a Federal Statistical Agency*.

⁸⁰See GAO-23-105520.

(4) including relevant participants, and (5) leveraging resources and information.⁸¹

As seen in figure 11, federal agencies have partially followed two of the five leading practices (including relevant participants and leveraging resources and information) and generally have not followed three of the five (defining common outcomes, bridging organizational cultures, and identifying and sustaining leadership).

⁸¹We selected five of the eight leading practices based on their significance and applicability to our research objectives.

Figure 11: Extent to Which Federal Agency Efforts Followed Selected Leading Practices for Interagency Collaboration in Relation to Nonstandard and Contract Work Arrangements

Selected leading practice	Key considerations	GAO assessment
Define common outcomes	 Have the crosscutting challenges or opportunities been identified? Have short- and long-term outcomes been clearly defined? Have the outcomes been reassessed and updated, as needed? 	
Bridge organizational cultures	 Have strategies to build trust among participants been developed? Have participating agencies established compatible policies, procedures, and other means to operate across agency boundaries? Have participating agencies agreed on common terminology and definitions? 	
Identify and sustain leadership	 Has a lead agency or individual been identified? If leadership will be shared between one or more agencies, have roles and responsibilities been clearly identified and agreed upon? How will leadership be sustained over the long term? 	
Include relevant participants	 Have all relevant participants been included? Do the participants have the appropriate knowledge, skills, and abilities to contribute? Do participants represent diverse perspectives and expertise? 	
Leverage resources and information	 How will the collaboration be resourced through staffing? How will the collaboration be resourced through funding? If interagency funding is needed, is it permitted? Are methods, tools, or technologies to share relevant data and information being used? 	

○ Did not follow = None of the key considerations were followed
 ○ Partially followed = Some of the key considerations were followed

Generally followed = All of the key considerations were generally followed

Source: GAO analysis and GAO-23-105520; GAO (icons). | GAO-24-105651

Defining common outcomes. Interagency efforts have no ongoing
collaborative mechanism in place, and agencies have not defined
common goals and objectives in relation to data collection efforts for
nonstandard and contract work arrangements. Individual agency
strategic plans share general goals for producing quality data, but the
agencies producing data on work arrangements have not coordinated
their plans or defined common outcomes related to data quality. While
NIOSH developed a common classification system, officials stated
they cannot require that other agencies adopt their system. In

addition, other agencies more active in data collection efforts have not taken similar steps to address the lack of common terminology.

In contrast, the North American Industry Classification System and the Standard Occupational Classification System were developed through an interagency committee or working group with the common goals of standardizing and updating labor force and industry classification systems to reflect current conditions.⁸²

- Bridging organizational cultures. One element of bridging organizational cultures is agreeing to common terminology and definitions. Agencies lack a common classification system for nonstandard and contract work arrangements.
- Identifying and sustaining leadership. Strong and sustained leadership provides the authority, support, and decision-making capabilities that allow interagency efforts to function and to facilitate oversight and accountability. As previously mentioned, interagency efforts lack an ongoing collaborative mechanism; therefore, leadership has not been identified.
- **Including relevant participants.** A leading practice for collaboration is inclusion of all relevant participants—those with a stake in the collaborative effort. Agencies partially followed this practice by including most of the relevant participants in prior collaborative efforts. However, although one IRS component includes a federal statistical agency that collects relevant data (Statistics of Income Division), it has not been systematically involved in past interagency efforts on work arrangements. IRS is not a chartered member of the Federal Economic Statistics Advisory Committee, which advises BEA, BLS, and Census. Although IRS officials noted they do not specifically examine tax returns solely based on nonstandard and contract work arrangements, such data are important for their work on tax compliance. For instance, worker misclassification could affect tax compliance because employers may fail to pay and withhold payroll taxes they would otherwise be required to pay and withhold, and the workers may not be aware of their obligation to pay estimated taxes.83

⁸²The interagency groups for the North American Industry Classification System and for the Standard Occupational Classification System originated as a committee or working group chartered by OMB. In addition, the Chief Statistician of the United States, who is the chair of the Interagency Council on Statistical Policy, stated that as of May 2023 proposals for interagency collaboration from councilmembers are encouraged and would be considered with the purpose of advising the Chief Statistician of the United States and OMB on its statutory responsibilities.

⁸³See GAO-09-717.

• Leveraging resources and information. Agencies partially followed the leading practice of leveraging resources and information. As response rates to traditional surveys have declined and costs to administer them increased, agencies have been encouraged to leverage administrative data. For example, IRS's Counsel and Statistics of Income Division and Treasury's Counsel and Office of Tax Policy have been collaborating with Census to expand Census's staff access to tax data to help them identify the number of informal workers.⁸⁴ According to IRS officials, the request involves thousands of variables and requires a time-consuming change in regulations.

BLS officials said they do not have access to individual-level taxpayer data, which they said would require legislative changes. In May 2022, we recommended that Congress consider revising relevant laws to facilitate interagency data sharing that would allow for more accurate, consistent, and systematic analyses of the effects of tax policies. 85 Without addressing the barriers to integrating survey and administrative data, statistical agencies may continue to rely on burdensome and increasingly difficult household surveys without the benefit of administrative data available from other agencies. Moreover, they will lack potentially useful validation information available from administrative records.

Interagency efforts may not have been sustained or effective because fragmented data and collection methods have complicated collaboration. Instead, agencies have prioritized their individual programs and needs when measuring these work arrangements. Without an ongoing interagency collaboration mechanism—and agencies providing coordination and leadership for such an effort—in place, agencies can risk working at cross purposes and lack incentives to prioritize crosscutting concerns.

BLS's and OMB's roles and responsibilities lend themselves to leadership in this area. BLS collects and analyzes data on labor market activity and work arrangements. BLS also has taken some steps toward organizing

⁸⁴Officials stated that data from Form 1040 Schedule C are part of this expansion effort.

⁸⁵See GAO, *Tax Equity: Lack of Data Limits Ability to Analyze Effects of Tax Policies on Households by Demographic Characteristics*, GAO-22-104553 (Washington, D.C.: May 18, 2022). We recommended that Congress consider revising relevant laws, such as those in Titles 13 and 26, as appropriate, to facilitate interagency data sharing to allow for more accurate, consistent, and systematic analyses of any effects of existing and proposed tax policies in relation to taxpayers' demographics. As of October 2023, no action had been taken on this recommendation.

interagency collaborative efforts in this area. However, these efforts did not incorporate leading practices, such as defining common outcomes and bridging organizational cultures. Census also has taken steps organizing interagency activities like workshops, but officials stated they defer to BLS in defining and measuring nonstandard and contract work arrangements. In addition, OMB's Office of Information and Regulatory Affairs oversees the use of information resources to improve the efficiency and effectiveness of governmental operations. Furthermore, OMB's responsibilities include coordinating the activities of the federal statistical system to ensure the integrity, objectivity, and utility of information. Consistent with these roles, OMB may support executive agencies in coordination. A lead agency, such as DOL (BLS), may benefit from OMB's assistance in developing or helping adapt an existing formal coordination mechanism.

Conclusions

Accurate and complete information on nonstandard and contract work arrangements is important to understanding and addressing changes in the workforce that may affect workers' welfare, federal programs that support them, and the functioning of the economy. However, the data collected by federal agencies have limitations, such as inconsistent definitions that make it hard to compare information from different data sources. With estimates of nonstandard and contract workers ranging from below 5 percent to over 30 percent of the workforce, policymakers do not have reliable and consistent data with which to make key decisions concerning these workers.

An ongoing interagency mechanism to oversee collaborative efforts and gather relevant participants may increase the likelihood of success in addressing data limitations around work arrangements. Furthermore, clear leadership—from a key agency that collects and uses these data (for example, DOL)—to develop an ongoing interagency mechanism that employs leading practices for collaboration would help ensure opportunities for improvement are not missed. In addition, OMB's involvement could help ensure relevant agencies would be included in developing an interagency mechanism and overseeing its activities. In the absence of such efforts, policymakers may lack the clear information they need to assess the risks and protections of nonstandard and contract workers.

⁸⁶See 44 U.S.C. § 3504(a)(1).

⁸⁷⁴⁴ U.S.C. § 3504(e)(1).

Recommendations for Executive Action

We are making a total of two recommendations, one to DOL and one to OMB.

The Secretary of Labor should ensure that the Commissioner of the Bureau of Labor Statistics leads an effort, in coordination with OMB, including outreach to other relevant statistical agencies and programs, to develop or adapt an interagency collaborative mechanism for improving the measurement of work arrangements, including nonstandard and contract work. (Recommendation 1)

The Director of OMB should ensure that the Chief Statistician of the United States supports the Department of Labor in leading an effort to develop an interagency collaborative mechanism to improve the measurement of work arrangements, including nonstandard and contract work. Such support could include coordinating the involvement of relevant statistical agencies and programs in this mechanism or exploring the establishment of a technical working group or subcommittee under the auspices of the Interagency Council on Statistical Policy or the Federal Committee on Statistical Methodology. (Recommendation 2)

Agency Comments and Our Evaluation

We provided a draft of this report to DOL, the Department of Commerce's Census Bureau and Bureau of Economic Analysis, Department of the Treasury's IRS and Office of Tax Policy, SEC, Board of Governors of the Federal Reserve, Department of Health and Human Services, and OMB for review and comment.

DOL and OMB provided technical comments, which we incorporated as appropriate. In their technical comments, DOL and OMB recommended that the reference to Designated Statistical Official be removed, and we revised the recommendation to instead refer to the Commissioner of the Bureau of Labor Statistics. In its technical comments, DOL stated, consistent with our recommendation, that it would participate in and lead an effort to bring together relevant federal agencies to improve the measurement of work arrangements, including nonstandard and contract work. In connection with our reference to the Interagency Council on Statistical Policy and the Federal Committee on Statistical Methodology, DOL's technical comments noted that the authority to develop or adapt an interagency collaborative mechanism rests with OMB. We revised the language in our recommendation to clarify the roles and responsibilities for the respective agencies.

The Census Bureau, Department of Health and Human Services, and IRS also provided technical comments, which we incorporated as appropriate.

The Department of Commerce's Bureau of Economic Analysis, Department of the Treasury's Office of Tax Policy, SEC, and the Board of Governors of the Federal Reserve said they had no comments.

We are sending copies to the appropriate congressional committees, Chair of the Board of Governors of the Federal Reserve System, Secretary of Commerce, Secretary of Health and Human Services, the Acting Secretary of Labor, Director of OMB, Chair of the Securities and Exchange Commission, Secretary of the Treasury, and other interested parties. In addition, the report is available at no charge on the GAO website at https://www.gao.gov.

If you or your staff members have any questions concerning this report, please contact Thomas Costa at (202) 512-4769 or costat@gao.gov, or Michael E. Clements at (202) 512-8678 or clementsm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix III.

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Appendix I: Objectives, Scope, and Methodology

This report examines (1) what is known about the prevalence of nonstandard and contract work arrangements and their effects on workplace safety, wages, access to benefits, and other outcomes for workers; (2) what data selected federal agencies collect on these work arrangements and any limitations of these data; and (3) the extent to which selected federal agencies have taken steps to address any limitations in available data to meet or anticipate data needs related to these work arrangements.¹

For all our objectives, we identified more than 250 studies published from 2012 to 2022 by (1) using multistage, librarian-assisted searches of databases (including Policy File, ProQuest, Scopus, EBSCOhost) with keywords such as contingent work, nonstandard work, alternative work, gig work, gig economy, independent contractor, temporary work, platform work, nontraditional work, and on call; (2) having analysts conduct internet searches; (3) reviewing other literature cited in studies we identified (snowball method); and (4) reviewing studies cited during our interviews with selected experts (which we discuss in more detail later in this appendix).

We selected 27 studies among those initially identified that met the following inclusion criteria: appeared in a peer-reviewed journal or a federally sponsored or research institution publication; directly pertained to measuring the prevalence of nonstandard and contract work arrangements, reviewed the effects of these work arrangements on worker outcomes, or evaluated the strengths or limitations on data available on nonstandard and contract work arrangements; used U.S.-focused data; and had a methodology determined to be sufficiently sound and reliable for our purposes. To assess the methodological sufficiency of the selected studies, we reviewed summary-level information and evaluated the features of methods used in each study, based on generally accepted social science standards. We eliminated a study if its methods had obvious flaws or were not appropriate or rigorous.

To identify estimates of the prevalence of nonstandard and contract workers, we reviewed the 27 studies identified through our literature review, as well as other studies cited by research (snowball method). We selected six estimates from studies that met the following criteria: appeared in a peer-reviewed journal or a federally sponsored or research

¹In this report, we identify data limitations as factors or issues that may threaten or detract from the quality of data, as specified in Federal Committee on Statistical Methodology, *A Framework for Data Quality*, FCSM-20-04 (Washington, D.C.: September 2020).

institution publication, and had a methodology determined to be sufficiently sound; relevance to our subject matter; and use of definitions of nonstandard and contract work arrangements that overlapped or aligned with terms used in our November 2022 report. These estimates were derived from survey data that were nationally representative or relatively generalizable to the U.S. workforce and collected within the past two decades. We chose to review estimates from an extended time frame because of the limited frequency and consistency of available data on nonstandard and contract work arrangements. For example, the Contingent Worker Supplement to the Population Survey has not been conducted at regular intervals—it was fielded in 1995, 1997, 1999, 2001, 2005, 2017, and 2023.

To assess the reliability of the survey estimates, we reviewed the technical documentation for each survey and determined the statistical reliability of the estimate by calculating or obtaining the 95 percent confidence interval associated with it. Limitations include wide variation in the amount of technical information available about survey estimates of nonstandard and contract workers.

To identify the effects of these arrangements on worker outcomes, we selected 16 of the 27 studies that met the following additional criteria: (1) conducted original data analysis, (2) discussed job characteristics and worker outcomes (including workplace safety, wages, access to benefits), and (3) used a quantitative or statistical comparison method of one or more categories of workers. Using a data collection instrument, we conducted in-depth reviews of the selected studies to gather information on the effects nonstandard and contract work arrangements may have on wages and earnings, income security, health and safety, worker protections, and access to benefits, among other outcomes.² In addition to using a data collection instrument, we identified, reviewed, and selectively compiled passages from the studies that contained information on the prevalence of these work arrangements, and their effects on workplace safety, wages, access to benefits, and other outcomes.

²We used some of the categories cited in GAO, *Nonstandard and Contracted Work Arrangements: Data from the 2020 Annual Business Survey and Analysis of 2021 10-K Filings*, GAO-23-106212 (Washington, D.C.: Nov. 10, 2022). We selected categories for our November 2022 report based on findings from a review of studies on nonstandard or contracted work arrangements, as well as human capital disclosure topics from frameworks produced by the Sustainability Accounting Standards Board and Global Reporting Initiative.

For our first and second objectives, we also interviewed a nonprobability sample of seven subject matter experts primarily from academic institutions and public policy organizations.³ We used a semi-structured questionnaire to provide context and additional information about the prevalence of these work arrangements and their effect on workplace safety, wages, access to benefits, and other outcomes for workers. Experts also provided views on the significance of data limitations in relation to federal collection purposes, quality or reliability, and future data needs. The information collected from this sample of subject matter experts cannot be generalized to the larger population of all knowledgeable individuals.

For the second and third objectives, we interviewed agency officials who collect or use data on these work arrangements. Those officials were from the Department of Labor—Bureau of Labor Statistics, Office of the Assistant Secretary for Policy, Wage and Hour Division, and Occupational Safety and Health Administration: Department of Commerce's Bureau of Economic Analysis and Census Bureau: Department of the Treasury's Internal Revenue Service, Statistics of Income Division, Office of Tax Policy, and Office of Tax Analysis; Securities and Exchange Commission; Center for Disease Control and Prevention's National Institute for Occupational Safety and Health; Board of Governors of the Federal Reserve System; and the Office of Management and Budget.⁴ We selected agencies that we determined were most relevant to the specific objectives of our review—those that collect data on these work arrangements, use these data to accomplish their goals and objectives. conduct related research, or coordinate efforts across statistical agencies—and focused on those agencies. We discussed the data they collect on these work arrangements, the extent to which they monitored and evaluated the quality of data collected, and how they used these data.

To obtain additional information on available data sources on nonstandard and contract work arrangements, we identified an initial list of sources using our prior work and a synthesis of studies contracted by the Department of Labor and reviewed agency documents that described

³Our selection criteria included that they authored studies on related topics published in peer-reviewed journals or research institution publications, represented a variety of academic disciplines and professions, and had knowledge of different types of nonstandard and contract work arrangements.

⁴Within the Internal Revenue Service, the Statistics of Income Division is a principal statistical entity.

Appendix I: Objectives, Scope, and Methodology

individual, household, and employer surveys and reviewed administrative data (including tax filings and Form 10-Ks).⁵

For our second objective, we also obtained information on the strengths and limitations of available data in relation to nonstandard and contract work arrangements from the 27 studies we initially selected and from other studies we subsequently identified through citations in studies (snowball method) and internet searches. We compared the strengths and limitations of these data with selected aspects of data quality as described in the Federal Committee on Statistical Methodology's *Framework for Data Quality*.⁶ In this report, we identify data limitations as factors or issues that may threaten or detract from the quality of data, as specified in the framework for data quality. Further, we reviewed reports and other documents on data collection, and assessments of current and future needs for data such as agencies' strategic plans, learning agendas, evidence building plans, and internal reports when relevant. We incorporated some of our findings from our November 2022 report into this report.⁷

For our third objective, we collected information on key agencies' intraand interagency activities for collaborating in relation to data on nonstandard and contract work arrangements. We reviewed agency documentation on relevant collaborations such as strategic plans, learning agendas, evidence building plans, correspondence, and research studies. We also interviewed agency officials (as discussed previously) to obtain information on internal and external efforts to collaborate to identify users' needs for data on these work arrangements, limitations with these data, and steps taken to address any identified limitations.

⁵Katharine G. Abraham and Susan N. Houseman, "What Do We Know about Alternative Work Arrangements in the United States? A Synthesis of Research Evidence from Household Surveys, Employer Surveys, and Administrative Data," prepared for the Department of Labor (Washington, D.C.: Sept. 5, 2021).

⁶Federal Committee on Statistical Methodology, A Framework for Data Quality.

⁷GAO-23-106212.

We compared these activities against OMB guidance on evidence-based policymaking, interagency collaboration, and data quality.8 We compared agency activities with selected leading practices for interagency collaboration developed in prior work—defining common outcomes, bridging organizational cultures, identifying and sustaining leadership, including relevant participants, and leveraging resources and information.9 We focused our review on five of the eight leading practices for collaboration based on their relevance to our topic and related prerequisite actions for the remaining three practices. Each of these practices contains key considerations, and we assessed whether agencies' actions and documentation followed leading collaboration practices, including key considerations. Based on our assessment, we determined the extent to which agencies generally followed, partially followed, or did not follow each leading collaboration practice.

We also compared key agencies' intra- and interagency activities for collaboration in relation to data on nonstandard and contract work arrangements against leading practices in the Committee on National Statistics' *Principles and Practices for a Federal Statistical Agency* (2021).

We conducted this performance audit from January 2022 to December 2023 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

⁸See Office of Management and Budget, *Phase 1 Implementation of the Foundations for Evidence-Based Policymaking Act of 2018: Learning Agendas, Personnel, and Planning Guidance*, M-19-23 (Washington, D.C.: July 10, 2019); and *Improving Statistical Activities through Interagency Collaboration*, M-15-15 (Washington, D.C.: July 8, 2015). Also see Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, 67 Fed. Reg. 8,452 (Feb. 22, 2002).

⁹GAO, Government Performance Management: Leading Practices to Enhance Interagency Collaboration and Address Crosscutting Challenges, GAO-23-105520 (Washington, D.C.: May 24, 2023). The work we did for the 2023 report validates and updates our 2012 report, Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms, GAO-12-1022 (Washington, D.C.: Sept. 27, 2012). We also used practices for collaboration discussed in National Academies of Sciences, Engineering, and Medicine, Principles and Practices for a Federal Statistical Agency, seventh ed. (Washington, D.C.: 2021).

Table 3 provides general summaries of key federal laws pertaining to nondiscrimination and equal employment and their potential application to workers in certain nonstandard and contract work arrangements. Table 4 provides general summaries of key federal laws pertaining to wages, access to benefits, and workplace safety, and their potential application to these workers. The scope of coverage for each law varies, and as a result, the extent to which a particular law applies to different types of nonstandard and contract workers will vary depending on the particular facts and circumstances of their employment arrangements.

To compile the information in this appendix, we relied primarily on agency guidance documents, interviews with agency officials and knowledgeable stakeholders, and our prior work. We did not conduct an independent legal analysis. This is not a comprehensive list of all laws that may affect the protections and benefits of nonstandard and contract workers.

Table 3: General Summaries of Key Federal Laws Pertaining to Discrimination and Equal Employment for Workers and Their Potential Application to Certain Nonstandard and Contract Work Arrangements

Law General summary Title VII of the Civil Rights Act of Protects employees and job applicants from discrimination in employment based on race, 1964, codified at 42 U.S.C. §§ 2000ecolor, religion, sex, or national origin. 2000e-17 Applies to employers that have 15 or more employees for each working day in each of 20 or more calendar weeks in a year. Nonstandard and contract workers According to the Equal Employment Opportunity Commission, Title VII of the Civil Rights Act of 1964 generally does not apply to individuals who are found to be independent contractors. Equal Employment Opportunity Commission guidance states that in most circumstances, an individual is only protected if they are an "employee" at the time of the alleged discrimination, rather than an independent contractor, partner, or other nonemployee. It also states that the question of whether an employer-employee relationship exists is fact-specific and depends on whether the employer controls the means and manner of the worker's work performance, and cites various factors to consider as enumerated in Title I of the Americans with Protects qualified employees and job applicants with disabilities from discrimination based Disabilities Act of 1990, codified at on disability. 42 U.S.C. §§ 12111-12117 Applies to employers that have 15 or more employees for each working day in each of 20 or more calendar weeks in a year. Nonstandard and contract workers According to the Equal Employment Opportunity Commission, Title I of the Americans with Disabilities Act generally does not apply to individuals who are found to be independent contractors. Equal Employment Opportunity Commission guidance states that in most circumstances, an individual is only protected if they are an "employee" at the time of the

Age Discrimination in Employment Act of 1967, codified at 29 U.S.C. §§ 621-634

Protects employees and job applicants 40 years of age or older from discrimination in employment based on age.

alleged discrimination, rather than an independent contractor, partner, or other

Applies to employers that have 20 or more employees for each working day in each of 20 or more calendar weeks in a year.

nonemployee. It also states that the question of whether an employer-employee relationship exists is fact-specific and depends on whether the employer controls the means and manner of the worker's work performance, and cites various factors to consider as enumerated in

Nonstandard and contract workers

According to the Equal Employment Opportunity Commission, the Age Discrimination in Employment Act generally does not apply to individuals who are found to be independent contractors. Equal Employment Opportunity Commission guidance states that in most circumstances, an individual is only protected if they are an "employee" at the time of the alleged discrimination, rather than an independent contractor, partner, or other nonemployee. It also states that the question of whether an employer-employee relationship exists is fact-specific and depends on whether the employer controls the means and manner of the worker's work performance, and cites various factors to consider as enumerated in case law.

case law.

Law	General summary
Section 1981 of the Civil Rights Act of 1866, codified at 42 U.S.C. § 1981(a)	Prohibits discrimination on the basis of race, color, and ethnicity when making and enforcing contracts.
	Nonstandard and contract workers
	Because the right to bring an action under section 1981 is not dependent on an employment relationship, some courts have held that an independent contractor may bring a discrimination claim under section 1981 against the entity with which they have contracted.

Sources: GAO review of federal statutes, agency documentation, prior GAO work, and interviews with agency officials and knowledgeable stakeholders. Framework for Data Quality Framework for Data Quality. | GAO-24-105651

Note: The scope of coverage for each law varies, and as a result, the extent to which a particular law applies to different types of nonstandard and contract workers will vary depending on the particular facts and circumstances of their employment arrangements. To compile the information in this table, we relied primarily on agency guidance documents, interviews with agency officials and knowledgeable stakeholders, and prior GAO work. We did not conduct an independent legal analysis.

Table 4: General Summaries of Key Federal Laws Pertaining to Wages, Access to Benefits, and Workplace Safety and Their Potential Application to Certain Nonstandard and Contract Work Arrangements

Law	General summary
Fair Labor Standards Act of 1938, codified at 29 U.S.C. §§ 201-219	Establishes minimum wage, overtime, and child labor protections for most private- and public-sector employees. Administered by the Department of Labor's Wage and Hour Division.
	Nonstandard and contract workers
	According to the Wage and Hour Division, independent contractors are workers who, as a matter of economic reality, are in business for themselves; they are excluded from protections of the Fair Labor Standards Act. While the act does not define "independent contractor," the Department of Labor stated that it applies its regulations and case law to determine whether workers are employees or nonemployees—such as independent contractors—under the act.
Family and Medical Leave Act of 1993, codified at 29 U.S.C. §§ 2601-2654	Requires private-sector employers who employ at least 50 employees for 20 weeks or more in the current or preceding calendar year and public-sector employers of any size to allow employees to take up to 12 weeks of unpaid, job-protected leave during any 12-month period for medical reasons related to a family member's or the employee's own health, or for a qualifying exigency arising out of a family member's covered active duty in the Armed Forces. Administered by the Department of Labor's Wage and Hour Division. Employees are eligible if they worked for the employer for at least 12 months and for at least 1,250 hours in the 12 months prior to the start of leave.
	An eligible employee also may take up to 26 workweeks of leave during a single 12-month period to care for a covered service member with a serious injury or illness, when the employee is the spouse, son, daughter, parent, or next of kin of the service member.
	Nonstandard and contract workers
	The Family and Medical Leave Act defines an employee as being eligible for benefits under the statute if they are employed by a covered employer.

Law	General summary
National Labor Relations Act, codified at 29 U.S.C. §§ 151-169	Provides employees the right to join or form a labor union and to bargain collectively over conditions of employment such as wages and hours.
	Applies to private employers, except those in the railway and airline carrier industries. Excludes from the definition of employee supervisors, independent contractors, agricultural laborers, individuals employed by a parent or spouse, and in-home domestic workers employed by a family or person.
	Nonstandard and contract workers
	Generally, the National Labor Relations Board has found that a temporary employee is ineligible to be included in a bargaining unit. The board has found exceptions to this general rule, such as seasonal or other recurring employees who have a reasonable expectation of re-employment based on the employer's hiring practices.
Consolidated Omnibus Budget Reconciliation Act of 1985, codified at 29 U.S.C. §§ 1161-1169 and 42 U.S.C. §§ 300bb to 300bb-8	Requires that temporary continuation of group health plan coverage be offered to covered employees and their family members who would lose coverage under employer-sponsored group health plans as a result of certain events, such as employees being laid off from or changing their jobs.
	Applies to group health plans sponsored by private-sector employers or state or local governments that employed at least 20 employees in the previous calendar year.
	Nonstandard and contract workers
	Under Internal Revenue Service regulations, certain self-employed individuals and independent contractors are eligible for benefits if they participate in an employer's group health plan.
Unemployment Insurance, see generally 26 U.S.C. §§ 3301-3311 and 42 U.S.C. §§ 501-505	Provides temporary, partial wage replacement to employees who become unemployed through no fault of their own and meet eligibility rules of state programs established in accordance with requirements of federal law.
	Unemployment insurance is a joint federal-state system primarily funded through federal and state payroll taxes levied on employers. Employers in states whose unemployment insurance programs meet federal requirements receive a credit against federal tax liability, and states with such unemployment insurance programs receive grants for the costs of administering their programs.
	Nonstandard and contract workers
	According to the Department of Labor, eligibility for unemployment insurance is determined at the state level, based on state law and policy. Generally, nonstandard or contract arrangements are not covered employment that would support an unemployment claim. However, an exception to this was introduced during the COVID-19 pandemic in the temporary federal Pandemic Unemployment Assistance program, under which eligibility included nonstandard and contract arrangements. This program ended in September 2021.
Federal Employees Compensation Act, codified at 5 U.S.C. §§ 8101- 8193	Provides coverage for and provides medical benefits and disability compensation for work-related injuries and diseases to all federal civilian employees as defined in 5 U.S.C. § 8101(1).
	Nonstandard and contract workers
	According to the Department of Labor's Office of Workers' Compensation Programs, contract worker arrangements, such as independent contractors under a contract with the federal government, are generally not covered under the act. The office stated that federal contract employees are typically covered under state workers' compensation systems.

Law	General summary
The Black Lung Benefits Act, codified at 30 U.S.C. §§ 901-944	The Black Lung Benefits Act provides monthly payments and medical benefits to coal miners totally disabled from pneumoconiosis (black lung disease) arising from their employment in or around the nation's coal mines. The act also provides monthly benefits to a miner's dependent survivors.
	Nonstandard and contract workers
	According to the Department of Labor's Division of Coal Mine Workers Compensation, the act covers all coal miners, whether they are employees, nonstandard workers, or contractors.
The Longshore and Harbor Workers' Compensation Act, codified at 33 U.S.C. §§ 901-950	The Longshore and Harbor Workers' Compensation Act provides for the payment of compensation, medical care, and vocational rehabilitation services to employees disabled from on-the-job injuries that occur on the navigable waters of the United States, or in adjoining areas customarily used in the loading, unloading, repairing, or building of a vessel.
	Nonstandard and contract workers
	According to the Department of Labor, nonstandard work arrangement employees are protected by the Longshore and Harbor Workers' Compensation Act and can be defined as casual, irregular, seasonal, intermittent, or discontinuous. The agency stated that a worker must be an "employee" for the individual to be entitled to workers' compensation benefits, which it said is determined by looking at whether an employer has the "right to control" the worker, as well as looking at the "relative nature of the work" test as set out in case law.
Energy Employees Occupational Illness Compensation Program Act, codified at 42 U.S.C. § 7384d	The purpose of the compensation program is to provide for timely, uniform, and adequate compensation of covered employees and, where applicable, survivors of such employees, suffering from illnesses incurred by such employees in the performance of duty for the Department of Energy and certain of its contractors and subcontractors.
	Nonstandard and contract workers
	According to the Department of Energy's Division of Energy Employees Occupational Illness Compensation, the act does not apply the terms "independent contractor" or "self-employed" in its definition of a covered employee, contractor, or subcontractor. In addition, Department of Labor regulations do not refer to independent contractors in definitions of the various employees eligible for compensation under the program.
Employee Retirement Income Security Act of 1974 (ERISA), codified at 26 U.S.C. §§ 401-436 and 4971-4982 and 29 U.S.C. §§ 1001- 1461	Establishes minimum standards and requirements intended to protect plan participants and beneficiaries in most private-sector employer-sponsored pension and welfare benefit plans, including for those related to participation, vesting, and benefit accrual; funding; fiduciary responsibilities; and reporting and disclosure. The act does not require employers to provide employee benefit plans.
	Nonstandard and contract workers
	According to the Department of Labor's Employee Benefits Security Administration, to the extent questions or disputes arise concerning ERISA's applicability to persons claimed to be "nonemployee" workers, the agency applies the statutory definitions in ERISA section 3 and the coverage provisions in ERISA section 4, as well as case law to address such questions. ERISA includes definitions of employee benefit plan, employer, employee organization, employee, and participant, but it does not define nonemployee classifications.

Law

General summary

Occupational Safety and Health Act, codified at 29 U.S.C. §§ 651-678

Requires employers to furnish each of their employees' employment and place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm and requires employers to comply with applicable occupational health and safety standards promulgated under the act. Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct.

The Department of Labor sets and enforces standards for certain private-sector employers in about half the states; the remaining states operate their own occupational safety and health programs under Department of Labor-approved state plans. State standards and their enforcement must be at least as effective as the federal standards in protecting workers and in preventing work-related injuries, illnesses, and fatalities.

Nonstandard and contract workers

The Occupational Safety and Health Act generally covers nonstandard workers if it is determined that there is an employment relationship with an employer, according to the Occupational Safety and Health Administration (OSHA). The agency stated it determines applicability through a common law-based multifactor test, and that workers who are determined to be self-employed, such as self-employed or independent contractors are not covered by this act. For temporary workers employed by a staffing agency, the extent of responsibility under the law of staffing agencies and host employers is dependent on the specific facts of each case. However, staffing agencies and host employers are jointly responsible for maintaining a safe and healthy work environment for temporary workers, according to OSHA.

Source: GAO review of federal statutes, agency documentation, prior GAO work, and interviews with agency officials and knowledgeable stakeholders. | GAO-24-105651

Note: The scope of coverage for each law varies, and as a result, the extent to which a particular law applies to different types of nonstandard and contract workers will vary depending on the particular facts and circumstances of their employment arrangements. To compile the information in this table, we relied primarily on agency guidance documents, interviews with agency officials and knowledgeable stakeholders, and prior GAO work. We did not conduct an independent legal analysis.

Appendix III: GAO Contacts and Staff Acknowledgments

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In addition to the contacts named above, key contributors to this report were Betty Ward-Zukerman (Assistant Director), John Fisher (Assistant Director), Kimberly Reardon (Analyst in Charge), Carl Barden, Jason Bromberg, Katherine Carter, Danielle Curet, Justin Fisher, Michael Kniss, Jill Lacey, Kathryn Lenart, Benjamin Licht, Marc Molino, Carl Nadler, Michael Naretta, Jessica Nierenberg, Silda Nikaj, Jesse Mitchell, James Rebbe, Stephen Robblee, Barbara Roesmann, Lindsay Shapray, Thomas Short, Stacy Ann Spence, April Van Cleef, Sarah Veale, Adam Wendel, and Richard Zarrella.

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