

POLICY BRIEF

Defining and Measuring Gig Work

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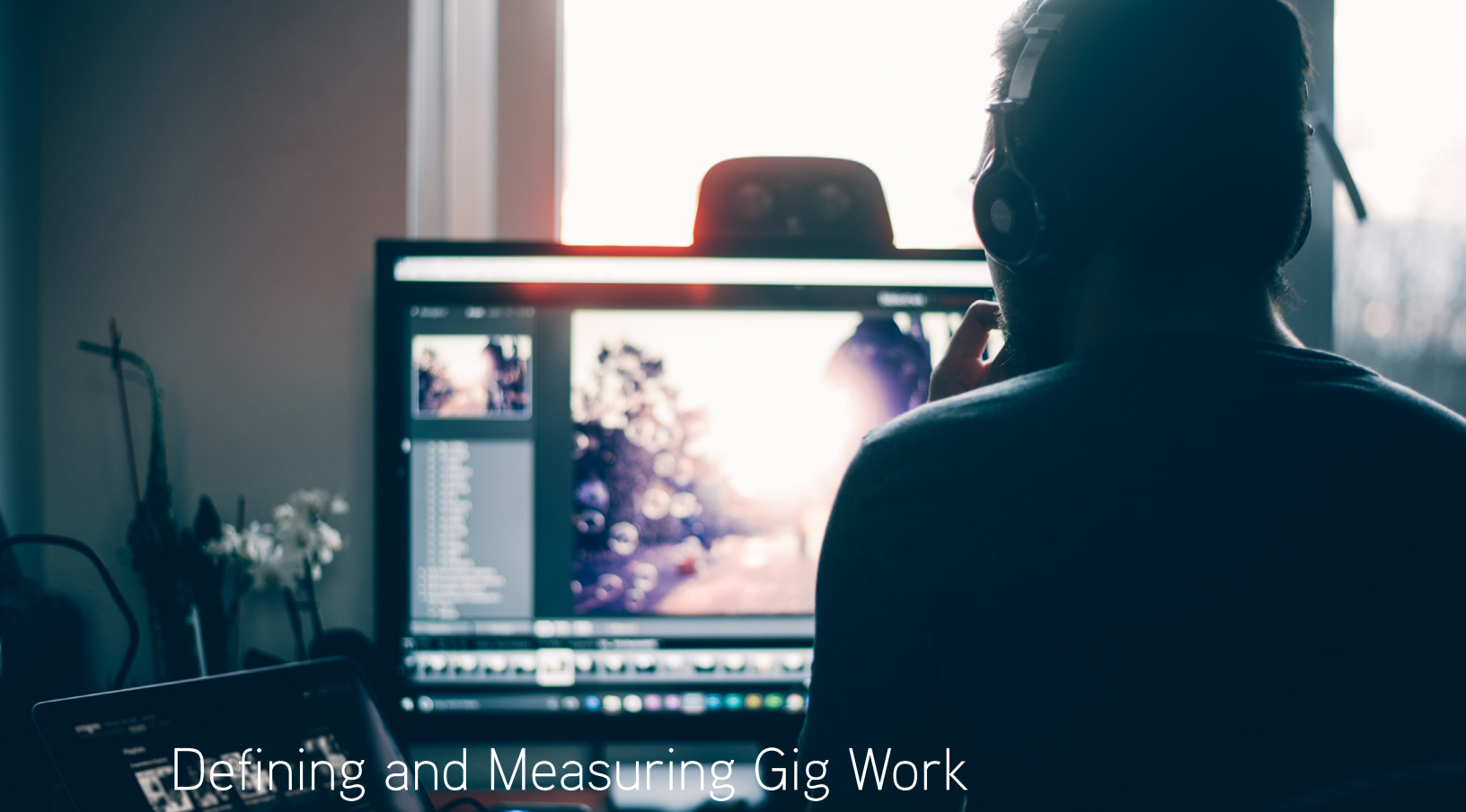
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Defining and Measuring Gig Work

Traditionally, workers have fallen into one of two categories: employees or self-employed. Employees report to work during hours designated by the employer and do work as directed by the employer. The terms of the employment include a set rate of pay, benefits, and labor protections. Self-employed workers are individuals who run their own business.

The increased demand for flexibility from both workers and firms, the shift into the service-oriented economy, and advancements in technology have expanded the range of possible employment arrangements beyond employer-employee or self-employed. Workers can now provide labor as independent contractors, freelancers, on-call workers, temporary agency or contract firm employees, and online platform workers (e.g., Uber and Grubhub drivers). Economists refer to this growing type of work as alternative work arrangements.¹ The media has dubbed these arrangements “gig work.”

While there is abundant anecdotal evidence of the changing nature of work, reliable and complete data related to these shifts are harder to find. There is a great deal of interest in understanding the scale and scope of the gig workforce as can be seen by the large number of recent studies producing estimates using household surveys or financial transaction data. However, there is no standard definition for gig work and relevant data are not collected on a regular schedule. This makes it difficult to use existing data to quantify the scale of these changes. Recent estimates of the gig workforce range from as low as 10 percent to as high as 36 percent. To illustrate the large range of findings, here is a sample of gig workforce estimates published since 2016:

- »» 10.1 percent of workers participated in alternative employment arrangements.²
- »» 11.8 percent of earners in 2016 received a 1099-MISC or 1099-K suggesting they earned income from a firm through a nonemployee relationship.³
- »» 30 million Americans (18.5 percent of workforce) get primary income from gig work and an additional 15 million (9.2 percent) supplement their full-time work with gig work.⁴
- »» 13 percent of Americans earn their primary income from the independent workforce and an additional 14 percent supplement employment income as independent workers.⁵
- »» 3 in 10 workers participated in gig work in the past month. This included providing services (babysitting, handywork, driving) or selling goods (online marketplaces, craft fairs, etc.)⁶
- »» 35 percent of American workers freelance (9.8 percent full-time, 15.4 percent part-time, and 8.8 percent to supplement employment income).⁷
- »» 36 percent of all US workers participate in the gig economy in some capacity, including part-timers and multiple jobs holders.⁸

There is a big difference between a 10th and a third of the workforce. A deeper read of the available studies finds that it is likely that 10-15 percent of the workforce relies on nontraditional employment as their primary job. When including people who earn secondary income from gig work, the share increases by another 10-15 percent. The largest segment of the gig workforce are independent contractors (4-12 percent of workers). The online platform workforce is still relatively small (1-4 percent of workers) but growing. The limited data available on New York suggests that the state's workforce is less reliant on gig work than the national average. But given the size of New York's workforce, a large share of the nation's gig workforce is located within the state.

This brief reviews these recent reports that estimate the scale and scope of the gig economy. The next sections explore methods used to collect the data and the categories of workers included when measuring the gig economy. Breaking workers and estimates into different categories, independent contractor versus contract firm employee versus online platform worker, provides greater insights into the current composition of the gig workforce. The final section presents measures related to the gig economy in New York.

Measuring the Gig Economy

The reports measuring the gig economy have generally used two approaches: household surveys and financial data from tax records or online payments.

The primary source of data for understanding labor force trends is the Bureau of Labor Statistics (BLS). To track employment and unemployment, BLS conducts the *Current Population Survey*, a monthly survey of 60,000 US households. BLS periodically includes the Contingent Worker Supplement (CWS) that asks respondents a series of questions related to contingent and alternative employment arrangements. The most recent CWS was conducted in 2017. The BLS survey is the largest survey of its kind and is considered the most reliable source of data on alternative work arrangements. One limitation of the CWS is the focus on the respondent's main job. Workers using alternative work arrangements to supplement their income are not captured in the BLS data.

In 2017, the CWS included four questions related to electronically mediated employment. Respondents were asked about any work found through websites or mobile apps. The survey asked about main jobs, second jobs, and additional work-for-pay. The results from the electronically mediated employment were released separately from its contingent and alternative employment arrangement. Two additional federally sponsored surveys, the *General Social Survey* and *Survey of Household Economics and Decision Making* have recently incorporated questions related to alternative work arrangements. Private organizations such as Gallup, McKinsey, and MetLife have commissioned household surveys to better understand the rise of gig employment including as supplemental income. These surveys have smaller sample sizes but provide more insight into part-time gig work.

A handful of organizations have access to financial transaction data that can provide direct insights into the gig economy. The Internal Revenue Service (IRS) collects annual data on workers' sources of income. Firms are required to file 1099-MISC and 1099-Ks to report payments above a threshold to individuals. The income should then be reported as income on individuals' income taxes. Recent IRS reports have used these data to track the evolution of alternative work. J.P. Morgan Chase has used account holder data to track payments into checking accounts from online platforms.

In general, studies to date have broken down the gig economy into five categories of workers: independent contractors, on-call workers, employees placed by temporary agencies, employees of contract firms, and digital platform workers. The following section reviews each of these alternative work arrangements, the definitions used, and recent estimates of their prevalence.

Alternative Work Arrangements

Independent Contractors

Independent contractors are also referred to as independent consultants or freelance workers. BLS identifies these individuals as “someone who obtains customers on their own to provide a product or service.” Studies have found that 4 to 12 percent of the workforce lists independent contracting as their primary employment. When secondary employment is included, the number of individuals identified as independent contractors expands. These could be individuals who primarily earn income through a traditional employment arrangement but supplement through freelance work, such as adjunct professors, freelance graphic artists, or part-time childcare providers.

TABLE 1. Independent Contractors

Report	Share of Workforce	Timeframe	Method
Bureau of Labor Statistics (2018) ⁹	6.9% main job	In previous week (May 2017)	Contingent Worker Supplement to Current Population Survey
Katz and Krueger (2016) ¹⁰	8.4% main job	In previous week (May 2015)	RAND Household Survey
Gallup (2018) ¹¹	10.9% primary job 14.7% all workers	In previous week (October 2017)	Gallup Household Survey
IRS (2019) ¹²	4.0% primary income 8.1% of all tax workforce	2016	IRS Administrative Data
General Social Survey ¹³	12.5% main job	2018	General Social Survey

On-Call Workers

These are people who work for an employer as needed. They can be scheduled to work for a single shift or for an extended time period. Substitute teachers are the prime examples of the category. Over a third of on-call workers are employed by the education and health sectors. The share of people with these employment arrangements range from 2 to 4 percent.

TABLE 2. On-Call Workers

Report	Share of Workforce	Timeframe	Method
Bureau of Labor Statistics (2018) ¹⁴	1.5% main job	In previous week (May 2017)	Contingent Worker Supplement to Current Population Survey
Katz and Krueger (2016) ¹⁵	2.6% main job	In previous week (May 2015)	RAND Household Survey
Gallup (2018) ¹⁶	4.4% primary job 6.4% all workers	In previous week (October 2017)	Gallup Survey
General Social Survey ¹⁷	1.5% as main job	2018	General Social Survey

Contract Firm Workers

Companies often contract with external firms to provide services instead of creating internal capabilities. This arrangement is most common in the sectors of professional business services, educational and health services, and public administration. Contract firms frequently provide on-site janitorial, landscaping, security, or IT services. While workers would report to work at the client company, they would be employees of the contract firm and would receive W-2s and benefits from the contract firm. This sector of the gig economy has the widest range of estimates, from less than 1 to over 8 percent. This variation may be dependent on the language used in the question. Respondents who work for contract firms may consider themselves in a traditional employment arrangement and not self-identify as participating in the gig economy.

TABLE 3. Contract Firm Workers

Report	Share of Workforce	Timeframe	Method
Bureau of Labor Statistics (2018) ¹⁸	0.6% main job	In previous week (May 2017)	Contingent Worker Supplement to Current Population Survey
Katz and Krueger (2016) ¹⁹	3.1% main job	In previous week (May 2015)	RAND American Life Panel Survey
Gallup (2018) ²⁰	8.5% primary job 9.1% all workers	In previous week (October 2017)	Gallup Survey
General Social Survey ²¹	3.0% as main job	2018	General Social Survey

Temporary Help Agency Workers

This category focuses on workers whose short-term services are contracted through a temporary help agency. There are minor variations in the questions asked in the surveys. BLS, Katz and Krueger, and the General Social Survey (GSS) all ask about work specifically facilitated by a temporary help agency. The Gallup survey asked about short-term work arrangements. These could include individuals engaged in seasonal work or other temporary positions they acquired independently. Approximately 1 to 2 percent of workers have been placed by a temporary agency.

TABLE 4. Temporary Help Agency Workers

Report	Share of Workforce	Timeframe	Method
Bureau of Labor Statistics (2018) ²²	0.9% main job	In previous week (May 2017)	Contingent Worker Supplement to Current Population Survey
Katz and Krueger (2016) ²³	1.6% main job	In previous week (May 2015)	RAND American Life Pane Survey
Gallup (2018) ²⁴	4.5% primary job 6.8% all workers	In previous week (October 2017)	Gallup Survey
General Social Survey ²⁵	1.5% as main job	2018	General Social Survey

Digital Marketplace/Online Platform Workers/Electronically Mediated Employment

The header shows the various terms used to refer to individuals who rely on online platforms to find short-term employment. These platforms enable workers to earn income by providing goods and services directly to individuals. There are now more than 100 platforms that fall into four general categories: transportation of individuals and products (Uber or GrubHub), other types of work (Handy, TaskRabbit), selling of goods (Etsy, eBay), or leasing of property (Airbnb).

While evidence of the growth of these platforms is everywhere, data are hard to come by. Estimates measuring this sector of the workforce vary widely as can be seen in [Table 5](#). Variation in these results are driven by the definition on online platform work used when surveying and the timeframe of the analysis. Some studies focus exclusively on labor/employment provided through online platforms while others include information from individuals who sold goods through platforms such as eBay. When the survey was conducted appeared to be a factor as well. The numbers obtained through surveys conducted in 2018 are higher than those in 2015, likely driven by the growth of the platforms. Analyses that focus on the previous week find lower participation than those focusing on the previous year. Overall, the share of the workforce participating in the digital marketplace is likely in the range of 1 to 4 percent.



TABLE 5. Online Platform Workers

Report	Share of Workforce	Timeframe	Method
Katz and Krueger (2016) ²⁶	0.5%	Previous week	RAND survey
Bureau of Labor Statistics (2018) ²⁷	1.0% primary or supplemental	Previous week (May 2017)	Supplement to Current Population Survey
IRS ²⁸	1.0%	During 2016	Administrative tax data
Farrell, Greig, and Hamoudi (2018) ²⁹	1.6% (1.1% labor)	Past month (March 2018)	Sample of customer checking account data
	4.5% (2.6% labor)	Past year (March 2018)	
MetLife ³⁰	2.5%	Currently (October 2018)	Household Survey
Gallup ³¹	7.3%	Previous week	Household survey
Federal Reserve Board (2019) ³²	3%	Last month	Survey of Household Economics and Decision Making

The Gig Economy in New York

As New York explores policies that will protect gig economy workers, there are questions about the size and scope of the gig workforce in New York. In this section we review data from these studies related to New York. A handful of studies have published state and regional results relevant to New York.

Study	Findings
Holtz-Eakin, Gitis, and Rinehart (2017) ³³	A regional analysis of 2014 GSS data found the Middle Atlantic region (NY, NJ, and PA) has fewer gig workers than the national average: <ul style="list-style-type: none"> • 11.7 percent are independent contractors, consultants, or freelancers (14.1 percent nationally). • 1.9 percent are temporary agency and on-call workers (3.7 percent nationally). • 2.6 percent are contract company workers (2.7 percent). • The region is home to 13 percent of the national workforce but only 10 percent of the gig workforce.
Farrell, Greig, and Hamoudi (2018) ³⁴	Analysis of checking accounts: <ul style="list-style-type: none"> • 1.8 percent of New Yorkers in the study generated income from online platforms in October 2017. • 1.05 percent in transportation, 0.09 percent from nontransport work, 0.47 percent from selling, 0.21 percent from leasing.
Collins et al. (2019) ³⁵	IRS Administrative Tax Data (2016): <ul style="list-style-type: none"> • 10.39 percent of the New York’s tax workforce participated in the gig economy (12.29 percent nationally). • New Yorkers made up 5.78 percent of the country’s gig workforce. • New York’s share of the workforce participating in the gig economy grew from 8.9 percent to 10.4 percent between 2000-16. • 86,949 New Yorkers received a 1099 form from an online platform (0.8 percent share). New York ranks fifth in number of platform workers but 21st in share of the workforce participating in platform work.
Moe et al. (2020) ³⁶	Census Data and Tax Data (2015-17): <ul style="list-style-type: none"> • 1.6 percent of New York’s workforce are app-based independent contractors (2018). • 917,900 (9.6 percent) New York’s workforce list self-employment as their primary job (ACS). • 1,752,200 (18.3 percent) New York’s workforce are self-employed in primary or supplemental work (Census Nonemployer Statistics (NES)).

Conclusion

As the nature of work changes, it is important to have consistent data collected on regular intervals. Surveys of workers should be updated or supplemented more frequently. Tools need to integrate measures of secondary employment to better understand how individuals make labor decisions.

State-level data is also critical as individual states are considering how to legislate the gig economy and digital workforce. Lawmakers must know who comprises the gig economy and the nature of their work in order to develop policies that will adequately protect workers.



ENDNOTES

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