



COVID-19 and the Gig Economy:

What Have We Learned [so far], and What Can We Do to Fix It?

Ric Kolenda¹ and Colby King²

¹Department of Political Science, Pace University

²Department of Sociology, University of South Carolina Upstate

For presentation to

Uneven Outcomes in the Labor Market:
Understanding Trends and Identifying Solutions

February 1-4, 2021

Federal Reserve Bank of Atlanta, Atlanta, GA

Abstract

This paper surveys the current state of the “gig economy” through the lens of the COVID-19 pandemic, and explore its impacts on independent workers. We collect survey instruments and results for four surveys fielded between March and December of 2020, during the COVID-19 pandemic, and develop a quasi-meta-analysis of these surveys. We hope to discover lessons learned, and consider ways to reduce the worst precarity often experienced, both immediately and beyond the current crisis.

Keywords: gig economy, COVID-19, freelancers, contingent workers, alternative work arrangements, independent contractors, platform employment

COVID-19 and the Gig Economy:

What Have We Learned [so far], and What Can We Do to Fix It?

This paper surveys the current state of the “gig economy” through the lens of the COVID-19 pandemic, and explore its impacts on independent workers. We identify lessons learned, and consider ways to reduce the worst precarity often experienced, both immediately and beyond the current crisis. This is also an opportunity to revisit earlier research the lead author here did several years ago using earlier series of Current Population Survey’s (CPS) Contingent Worker Supplement (CWS), a mostly biennial survey conducted five times between 1995 and 2005 (Liu & Kolenda, 2011, 2012).

Background and Research Motivation

The “gig economy,” which comprises both traditional categories such as freelancers, contract workers, and other contingent workers, as well as those now working from app-based platforms such as Uber, Door Dash and TaskRabbit, has both suffered and benefited from the COVID-19 pandemic and its associated economic effects. But while most agree that this is a small but growing segment of the U.S. workforce, we still know little about it. In this paper we view the current state of the gig economy through the lens of the pandemic, and explore the good, the bad, and the sometimes devastating conditions with which such workers contend. We identify lessons , and consider ways to reduce the precarity often experienced, while maintaining the positive aspects of independent work, both immediately and beyond the current crisis.

Even before the COVID pandemic hit, independent workers faced unique challenges. In many ways, what we now call the gig economy is often good for both its workers and consumers. Workers enjoy flexible hours, and can often work part time to supplement other income sources. Consumers can receive services once only provided to the wealthy at much

higher costs, and without long-term employment commitments. But we have always seen two types of independent workers: those by choice, and those by necessity. While the former often enjoy relatively high wages and good working conditions, the latter are often struggling to get by.

The COVID-19 crisis has shone a light on this disparity, especially by combining the vulnerabilities of inconsistent work with the lack of benefits such as healthcare and retirement savings.

So why does this matter? First, we have realized that the status quo is not working for consumers. We have seen how dependent we are on people in the “gig economy,” and we need to make sure that it will be there for the rest of us. Food delivery services have been important for anyone who eats, as well as offering a lifeline to restaurants and retailers unable to serve patrons on premises, while ride sharing services have offered a relatively safe alternative to mass transit for necessary travel.

Second, it is not working for its workers. With no healthcare benefits, no paid vacations, sick leave, family leave, or health & safety protections, and constant wage insecurity, gig workers are among our most vulnerable members of the labor force. And finally, contract work is often used to avoid paying workers full-time benefits. Meanwhile, the “employers” are being subsidized by taxpayers while not compensating their “employees,” who then must rely on social safety net payments and services.

Specific effects of the COVID-19 pandemic

Besides the usual challenges faced by gig workers, the pandemic has had many unique effects on various industries and occupations. Some jobs, such as food delivery services, have been elevated as “essential work,” which has often meant a big increase in work, as well as

possible exposure to the virus and other health risks, if not always an increase in pay. Others, like rideshare drivers and home repair workers, saw a dramatic reduction in work, yet were forced to make sometimes costly accommodations to vehicles and work processes, in order to continue working at all (AP-NORC Center for Public Affairs Research, 2020). Most jobs that require working in clients' homes were greatly reduced, as consumers shunned prolonged contact with strangers.

Expected Findings

We expect to see a clear divergence of experience among various occupational and industry categories, as well as among demographic groups (race, class, age, etc.). We also hope to see some convergence of the most significant problems facing gig workers, before, during and after the pandemic, and some ideas about how to address them. We expect the result will lead to the formation of a clear policy agenda which could be implemented as part of the response to COVID-19, but to continue beyond where appropriate.

Methodology and Data Sources

This is an interim project, both intended to more clearly understand the population of gig economy workers, and to inform a survey of these workers that combines the best elements of previous recent work in this population.

To this end, we will collect the survey instruments and results for four surveys fielded between March and December of 2020, during the COVID-19 pandemic. This will be a quasi-meta-analysis of these surveys. In a standard meta-analysis, we would carefully choose research with similar methods as a way to broaden the findings and increasing their individual external validity. In social science survey research, this is more difficult to do. What we would like to do here is to approximate this approach by carefully aligning similar questions and responses across

the surveys, and where they differ slightly, creating probability ranges that will give us a better, if still imperfect, understanding of the condition and views of gig economy workers during this critical time period. For these comparisons we will use a combination of comparative statistics as needed.

Data Sources

We will be using all or parts of five surveys that highlight various aspects of the gig economy and the impacts of the COVID pandemic on gig work and workers. Four of the surveys were conducted between March and July of 2020, while one was conducted in May 2017, and will be used as a baseline and the most detailed analysis that we have on some combinations of attributes. Following is a brief description these surveys, and the positive and negative aspects of each.

The Current Population Survey and Contingent Worker Supplement, May 2017 (CPS-CWS). The CPS-CWS (U.S. Bureau of Labor Statistics, 2018) is part of the monthly series by the U.S. Bureau of Labor Statistics (BLS). The CWS is a continuation and extension of five previous supplements.

This information was obtained from the Current Population Survey (CPS), a monthly sample survey of about 60,000 households that provides data on employment and unemployment in the United States. Data on contingent and alternative employment arrangements were collected periodically in supplements to the CPS from February 1995 to February 2005 (U.S. Bureau of Labor Statistics, 2018).

This sample includes 148,623 adults, representing some 153 million eligible workers, of which 1.6 million are what the survey describes as “electronically mediated workers,” as reported in four new questions not asked on the previous CWS surveys.

These questions turned out to be somewhat problematic, and ultimately several recodes were used to increase the accuracy of the reporting on these issues (U.S. Bureau of Labor Statistics, 2018). The results discussed below will be based on those recodes. This survey will be used primarily to assess the data using a large and established data instrument, giving us a detailed baseline for the comparison to the more recent, but less comprehensive, survey instruments.

Freelance Forward 2020 (Upwork). This survey of 6,001 adults (2,132 freelance; 3,869 non-freelance) was conducted in June and July of 2020 by Edelman Intelligence, and commissioned by Freelance aggregator Upwork (Edelman Intelligence & Upwork Inc., 2020). While the data was collected and analyzed by a reputable research firm (Edelman), Upwork is itself an app-based platform for connecting freelancers with clients. Consequently, much of the reporting based on this survey seems a bit more like advocacy than it might from an academic researcher. But while we have been unsuccessful in our attempts to get the raw data from this survey, we were able to find several useful data to help illuminate this very current subject.

Appjobs/Future of Work Institute (Appjobs). Similar to Upwork, Appjobs is a platform for app-based freelancers, though they used the company's independent research institute to conduct this survey. Based in the European Union, the company serves dozens of companies, but is most well-represented by the U.S., Canada and the E.U. Of the 1,400 respondents in the survey, the plurality were from the U.S. (29%), with Canada and the pre-Brexit U.K. representing another 25% (13% and 12% respectively) .(Prevallet-Kinstle, 2020a, 2020b)

UCLA Labor Center (UCLA-LC). This survey is the smallest and most geographically limited of the four, but still worth noting. Based on a survey of 302 gig workers in June and July, 2020, with follow-up interviews with 15 of those respondents, both the questions asked and the responses may give us the fullest picture of the impact of the pandemic on gig workers (Herrera et al., 2020).

Characteristics of the Gig Workforce and its Workers

There were few demographic questions, and not all surveys asked them in quite the same ways, but between them, we can get some idea of what gig workers look like.

Size and Growth of the Gig Economy

Anecdotally, and intuitively, we expected to see growth in the relative size of the gig economy workforce. But while there seem to have been modest gains over time, both the growth and relative share of the labor force appear to be fairly stable over time. Since two of the four datasets only surveyed self-identified gig workers, only the CPS-CWS and Upwork surveys could shed any light on these questions.

Another concern about considering questions of size and growth is that 2020 was far from a typical year, and all but one of these surveys (Upwork) have no precedent in previous years. For this reason, it we considered three of numbers from the May 2017 CPS-CWS to measure the pre-COVID size of the gig workforce. First, the number of independent contractors¹ is 10.6 million, or as a percentage of the total labor force, a bit less than seven percent (6.9%). Second, we looked at the new category of *electronically mediated workers (EMWs)*, as defined

¹ The BLS defines *independent contractors* as “Workers who are identified as independent contractors, independent consultants, or freelance workers, regardless of whether they are self-employed or wage and salary workers.” The other categories making up “alternative work arrangements”—on-call workers, temporary workers and workers provide by contract firms—, and the broader group defined as “contingent workers,” are less relevant to what we consider the gig economy.

by the four new questions to the CPS-CWS since it was last administered in 2005. These are workers who answered one or both of the following questions affirmatively:

1. Some people find short, IN-PERSON tasks or jobs through companies that connect them directly with customers using a website or mobile app. These companies also coordinate payment for the service through the app or website.

For example, using your own car to drive people from one place to another, delivering something, or doing someone's household tasks or errands.

Does this describe ANY work (you/NAME) did LAST WEEK?

2. Some people select short, ONLINE tasks or projects through companies that maintain lists that are accessed through an app or a website. These tasks are done entirely online, and the companies coordinate payment for the work.

For example, data entry, translating text, web or software development, or graphic design.

Does this describe ANY work (you/NAME) did LAST WEEK? (U.S. Bureau of Labor Statistics, 2018, p. 10)

After a rather challenging process of recoding the results for these questions², this group of workers made up about 1 percent of the total work force, split more or less evenly between in-person (0.6%) and online (0.5%) activities. It is important to also point out that the, since workers could choose one or both of these options, the total of the two categories adds up to a larger percentage than the total percentage of EMWs. In addition, BLS researchers seemed concerned that respondents were still confused about their choices on these questions, and that

² See U.S. Bureau of Labor Statistics. (2018). *Electronically mediated work: New questions in the Contingent Worker Supplement* (Monthly Labor Review, Issue. <https://search.proquest.com/docview/2130712030/5A017C8AB66840CAPQ/1?accountid=14667> for more information on the reasoning, process and effects of these recodes. We used only the published tables of recoded data here, though we are hoping for access to the recoded microdata soon.

there may still be issues with false positives, and they do not recommend using the “which job” questions at all, they feel confident that the recoded results are a good estimate of the population characteristics. They also cautioned about especially large variances resulting from low case counts (U.S. Bureau of Labor Statistics, 2018, p. 19).

Based on the Upwork, the number of U.S. workers doing freelance work in any capacity as a percentage of the total labor force is fairly large, and has grown modestly from 34% in 2014 to 36% in 2020, though the basis for the 2020 data is only the month of January³ (Edelman Intelligence & Upwork Inc., 2020). It is also worth noting that there were slight dips in the growth trend in 2018 and 2019, likely a result of the low unemployment rate during that period.

Age of Gig Workers

Three of the four data sets either had similar categories, or the categories could be recoded to be similar. The UCLA-LC data used even decades (21-30, etc.), where the others used mid-decade cut-offs. The Upwork data labeled these four categories “Gen Z (18-22), Millennials (23-38), Gen X (39-54), and Boomers (55+), respectively.

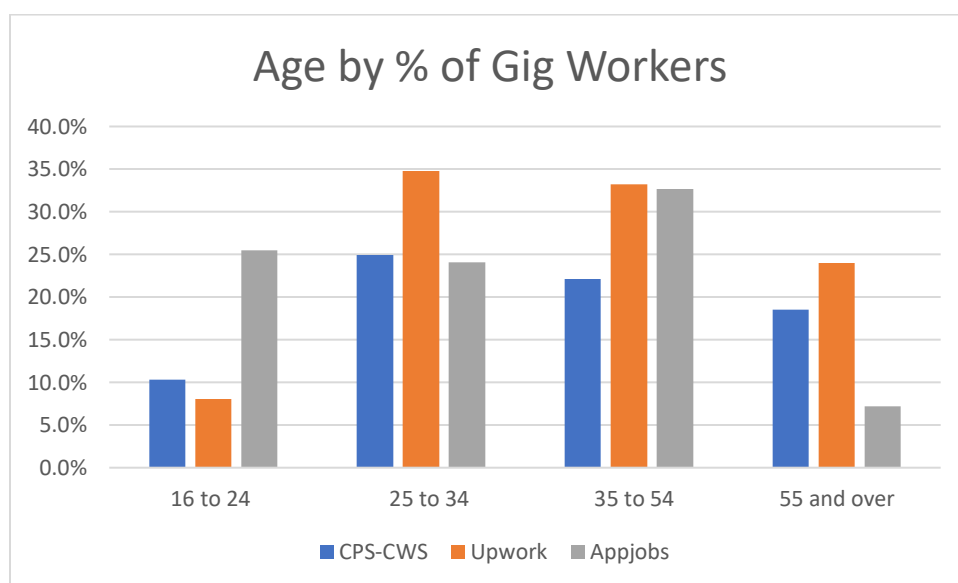
Upwork shows that new freelancers during the pandemic tend to be more likely to be millennials (23-38), representing 57% of that group, compared to making up only 37% of those who have been consistently freelancing previously (Edelman Intelligence & Upwork Inc., 2020, p. 37).

³ The survey authors chose this method to discount the effects of the pandemic on the economy generally, though we are not certain how meaningful that number is.

Table 1*Age by count, percent of total freelancers & percent of freelancers in age group*

Data Set	16 to 24	25 to 34	35 to 54	55 +	Totals
% of Total					
CPS-CWS	10.3%	24.9%	22.1%	18.5%	nd
Upwork	8.0%	34.8%	33.2%	24.0%	nd
Appjobs	25.5%	24.1%	32.7%	7.2%	nd
% of Age					
CPS-CWS	10.3%	24.9%	22.1%	18.5%	nd
Upwork	50%	44%	30%	26%	nd
Appjobs	nd	nd	nd	nd	nd

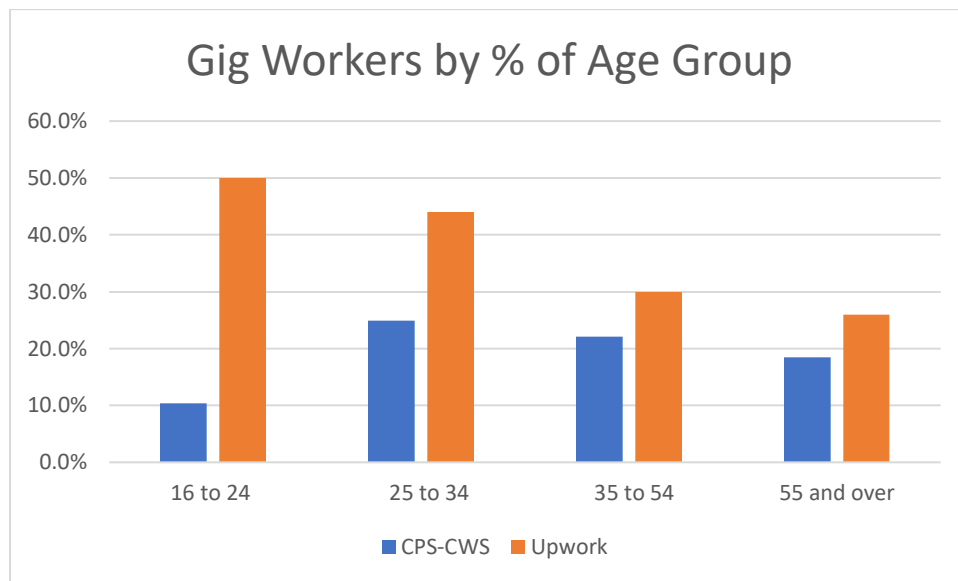
Note: This is based on the authors' compilation of data from the three data sets used. In many cases these were imputed based on recodes. The age ranges for Upwork were slightly different from the other two, as noted in the text.

Figure 1*Age by percent of total freelancers*

Source: Data compiled by the authors

Figure 2

Age by percent of freelancers in age group



Source: Data compiled by the authors

Gender of Gig Workers

Gig economy workers skew male, maybe a bit more than the overall labor force. The data from the for surveys shows significant variability.

Upwork did not provide data on the gender breakdown for all freelancers surveyed, but it does show that new freelancers during the pandemic tend to be more male than those who have been consistently freelancing previously (Edelman Intelligence & Upwork Inc., 2020, p. 37).

Table 2*Gender as a percentage of total freelancers*

Data Set	Male	Female	Other
CPS-CWS (000)	54%	47%	nd
UCLA-LC	77%	22%	1%
Appjobs	51%	48%	nd

Note: This is based on the authors' compilation of data from the three data sets used.

Race and Ethnicity of Gig Workers

We were able to get race and ethnicity data from two of the datasets (CPS-CWS and UCLA-LC), and there were several important differences between them, likely because of the size of the samples and the geography (US vs. California, and mostly Southern California).

Table 3*Race & ethnicity as a percentage of total freelancers*

Race/Ethnicity	CPS-CWS May 2017					UCLA-LC
	ICs	EMWs	In-Person	Online	Lab Force	
White	84.6%	74.6%	69.9%	84.0%	78.7%	38.0%
Black or African American	8.3%	17.2%	23.0%	6.8%	12.1%	10.0%
Asian	4.3%	5.8%	4.5%	7.0%	5.9%	11.0%
Hispanic or Latino ethnicity	14.8%	16.5%	18.5%	13.4%	16.6%	28.0%
SWANA (Middle Eastern/Southwest Asian/North African)	n/a	n/a	n/a	n/a	n/a	2.0%
Multiracial	n/a	n/a	n/a	n/a	n/a	7.0%
Other	n/a	n/a	n/a	n/a	n/a	4.0%

Note: This is based on the authors' compilation of data from the two data sets used.

As you can see in Table 3, while whites dominate in all categories in both surveys, the UCLA-LC survey shows a much more diverse racial composition, with nearly as many Latinx

workers as whites, and many more Asians than in the national surveys. Also notable is the lower white and higher Black and Latinx representation among in-person gig workers.

Other Questions

We were not able to look at other interesting demographic questions at this time, but in the future, we would like to explore questions about geography (region; urbanization), skills, education, and more.

Gig Work

We looked at gig work by industry, tenure, and to the extent that we could, the platform apps used.

Gig Economy Industries

Variations in industry classification made comparisons challenging. We chose to focus on two aspects; the pre-pandemic industrial composition of electronically mediated workers and independent contractors (see Table 4 below), and the top industries during the pandemic, though the latter used slightly different list of industry types (see Table 5 below).

Table 4*Top industries for gig workers, CPS-CWS, May 2017*

Industry	% of total employed	% of total emw	% of In person	% of online	% of Independent contractors
Agriculture and related industries	1.6%	0.1%	0.1%	0.0%	2.0%
Mining, quarrying, and oil and gas extraction	0.5%	0.0%	0.0%	0.0%	0.1%
Construction	6.8%	1.2%	1.3%	0.9%	19.3%
Manufacturing	10.4%	1.1%	0.5%	1.9%	2.2%
Wholesale trade	2.2%	0.9%	0.9%	0.9%	1.5%
Retail trade	10.5%	6.0%	5.7%	7.1%	6.4%
Transportation and utilities	5.1%	21.8%	34.9%	1.9%	5.7%
Information	1.9%	4.1%	1.4%	7.6%	2.2%
Financial activities	6.9%	3.2%	2.5%	4.0%	9.6%
Professional and business services	12.1%	31.0%	16.4%	51.2%	25.1%
Education and health services	23.1%	16.3%	19.2%	12.8%	9.6%
Leisure and hospitality	9.3%	6.5%	6.5%	7.1%	6.2%
Other services	4.9%	7.1%	10.0%	4.3%	9.7%
Public administration	4.6%	0.6%	0.6%	0.6%	0.4%

Note: This is based on the authors' compilation of data from the two data sets used. Shaded cells

represent the top five industries for that category of gig worker.

Most notable among the pre-pandemic industrial composition is the ranking of professional and business services. Though only 12 percent of all employment, it is ranked second overall, but for independent contractors and online platform workers, it is in the number one spot, constituting two to four times that amount respectively (25 and 51 percent), and the third ranking for in-person and first for overall EMWs (16 and 31 percent respectively). The largest group of in-person gig workers, and second for all EMWs, was transportation, likely representing the ubiquity of the top ride-hailing services. Another notable finding here was in construction, which was the second largest group of independent contractors, but ranked toward the bottom for EMWs.

Table 5*Top industries for gig workers, Appjobs, March, 2020*

Job Category	
Cleaning	15.73%
Hospitality and Tourism	15.51%
Customer Service	14.22%
Delivery	13.01%
Warehouse	8.15%
Sales and Marketing	6.79%
Retail	5.86%
Education/Teaching	5.58%
Business/Management	5.00%
Healthcare/Medical	4.93%

Source: Appjobs/Future of Work Institute (Prevallet-Kinstle, 2020a)

Table 5 shows that in, in this multi-national survey of gig workers, in-person jobs tended to dominate, with cleaning, hospitality, customer service and delivery making up the top four spots, and the only four with double-digit percentages.

Tenure of Gig Workers

Only the UCLA-LC study looked at gig company tenure, but it showed that a large majority of workers surveyed had worked with their main platform for gig work for over two years.

Table 5*Years working for main platform*

Tenure of Work	% of Gig Workers
Less than 6 months	12%
6 months–1 year	10%
1–2 years	17%
More than 2 years	61%

Source: UCLA Labor Center (Herrera et al., 2020)

Platform Apps Used

While there is a proliferation of app-based platforms for gig work these days, only one of the surveys looked at the question of which are being most used by workers. The UCLA-LC survey did ask this question, so we can look at the situation in California, or more likely, Southern California, where a large plurality of respondents resided.

Table 6*Main platform for gig work*

Main platform	% of Gig Workers
Uber	44%
Lyft	28%
Door Dash	5%
Uber Eats	5%
Instacart	4%
Grubhub	2%
Amazon Flex	2%
Postmates	1%
Caviar	1%
Shipt	1%
Other	5%

Source: UCLA Labor Center (Herrera et al., 2020)

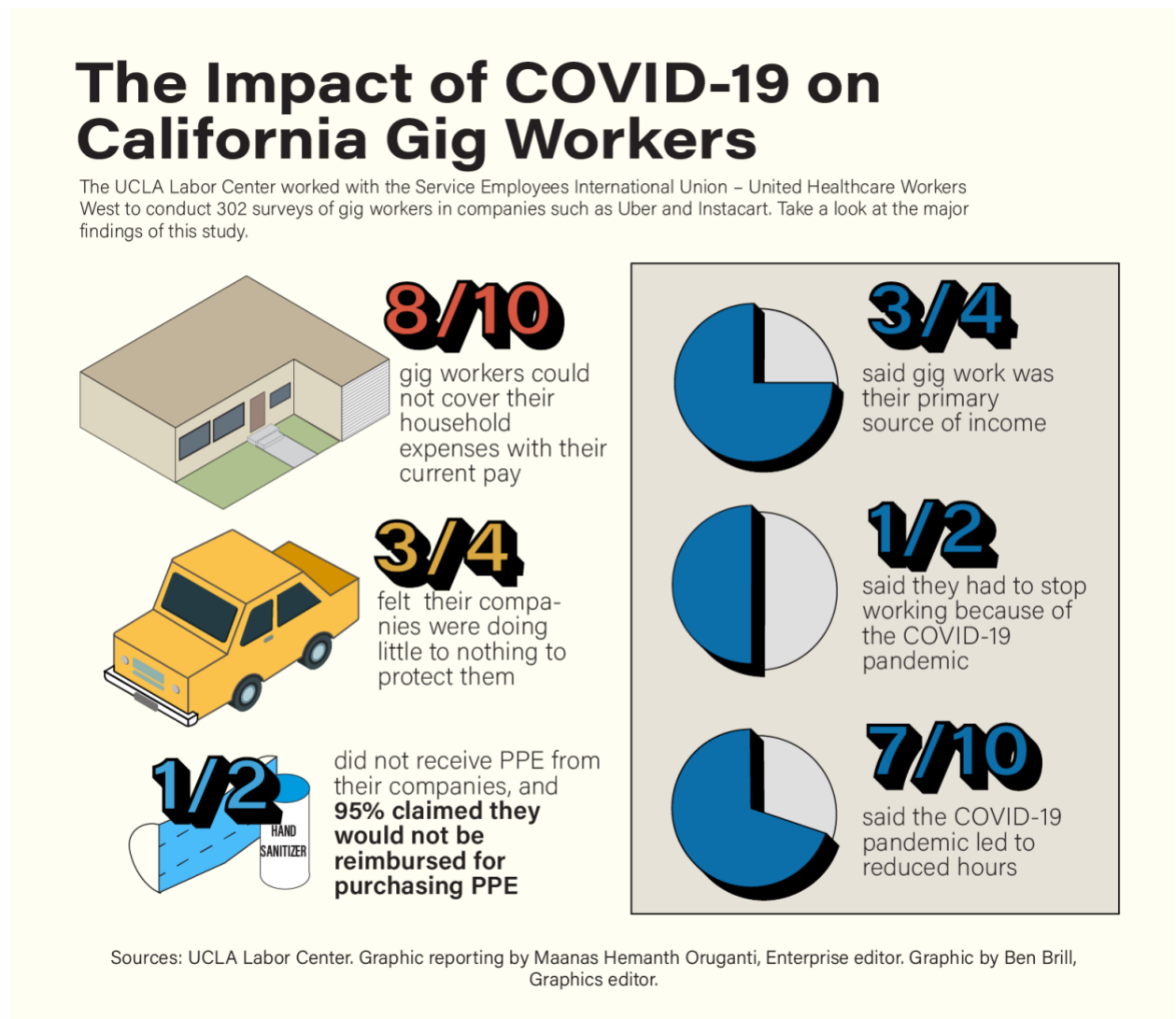
The top two ride-hailing services, Uber and Lyft, were the only two in double-digits percentages, and together account for nearly three-quarters of users most-used apps. Among the other eight polled, most all were food (prepared or groceries) or other delivery services, with Door Dash, Uber Eats and Instacart rounding out the top five.

Effects of the COVID-19 Pandemic

Most questions on the effects of the COVID-19 pandemic are unique to each survey, but we will highlight some of the most relevant findings. Figure 3 below summarizes several key findings from the UCLA-LC survey.

Figure 3

The impact of COVID-19 on California gig workers



Source: UCLA Labor Center (Herrera et al., 2020)

Income Effects of the Pandemic on Gig Workers

As was noted earlier, the pandemic and associated economic shutdowns dramatically reduced demand for many in-person services, while increasing others and those that could be provided online (AP-NORC Center for Public Affairs Research, 2020). We looked at several economic effects on gig workers, most notably, income insecurity and sources of assistance available.

There was much variability among the three surveys on the issue of income. While Upwork noted that only 28% were furloughed or unemployed and 51% had other sources of work, UCLA-LC found 70% had reduced gig hours and only 16% with non-gig income, and Appjobs showed that only 12% had stable or higher income during the pandemic.

Table 7

Other jobs aside from gig work

Second job status	% stopped working for gig company	% still working for gig company	% all workers
None	67	61	64
Laid off	17	13	15
Employed	16	26	21

Source: UCLA-LC (Herrera et al., 2020)

UCLA-LC asked why people stopped working, and 83% cited COVID-19 exposure. Other factors, in order of ranking, were not enough business (55%), to care for family member or school-age children (16% and 8% respectively), or got another job (3%). Appjobs found 90% were seeking new sources of income because of the pandemic. Upworks found that 60% of independent contractors who stopped work did so because they could not be done remotely (see Figure 4). Upwork also presented several data points suggesting that most paused workers were

on the margins of the gig economy—mostly moonlighters or temporary contractors (Edelman Intelligence & Upwork Inc., 2020, pp. 26-35).

Figure 4

Some reasons why freelancers paused their work



TOP REASONS WHY SOME PAUSED FREELANCING - BY FREELANCER CLASSIFICATION

Some industries were temporarily hit harder by COVID-19 than others

PAUSED INDEPENDENT CONTRACTORS	PAUSED Moonlighter	PAUSED Diversified Workers	PAUSED Temporary Workers	PAUSED Business Owners
<p>60% are in jobs that can't be made remote</p> <p>Occupations like transportation, maintenance, arts & design, entertainment, and personal care (e.g. hairdressing) were most impacted</p> <p>88% expect to do freelancing work in the future</p>	<p>80% still have their main employer to lean on</p> <p>They have put a pause on their freelance work while waiting for the pandemic to subside with 90% expecting to do freelance work in the future</p>	<p>"Diversified workers" are the least impacted by COVID-19 because they have multiple employers, leading to flexibility</p> <p>89% expect to do freelance work in the future</p>	<p>Those whose short-term freelance contract has ended</p> <p>Fluctuations in freelance work is a regular part of life for these "temporary workers"</p>	<p>Those impacted were small business owners (1-5 employees) in industries like art or construction</p>

EDELMAN INTELLIGENCE/ UPWORK INC. © 2020 S105: PRE/POST COVID FREELANCER CODING; S102: BEHIND THE SCENES – FREELANCER SPECIFIC CLASSIFICATION – TRACKING
Base: Total Freelancers n=2132, Paused FLs n=591

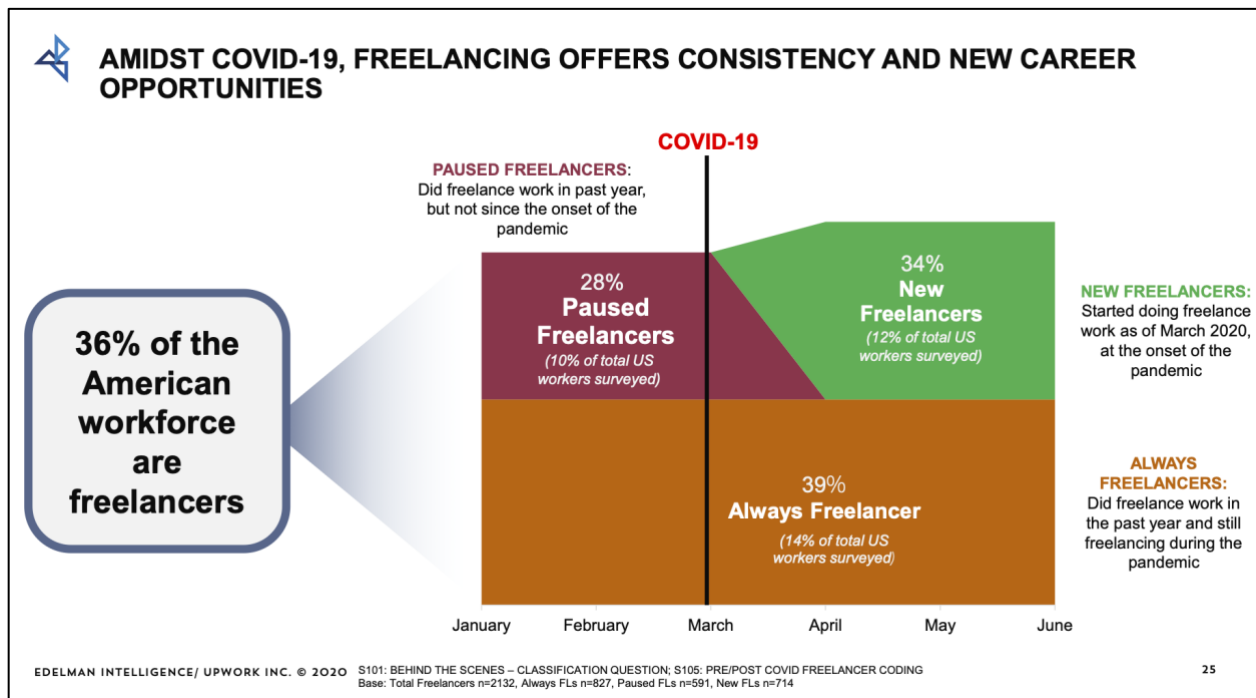
32

Source: Freelance Forward 2020 (Edelman Intelligence & Upwork Inc., 2020, p. 32)

Pauses and Growth. According to Upwork, while many freelancers paused their work during the pandemic, even more began freelancing for the first time. According to Upwork, while ten percent of the U.S. workforce paused their freelance work during the pandemic, 12 percent began freelancing for the first time (Edelman Intelligence & Upwork Inc., 2020).

Figure 5

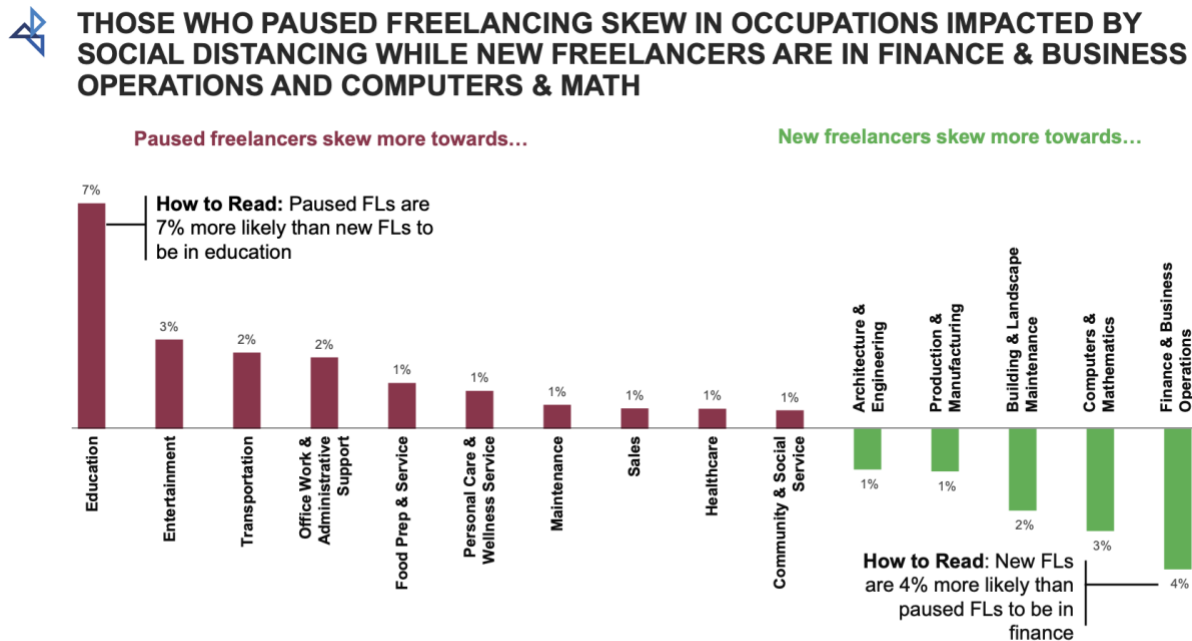
Amidst COVID-19, more new freelancers than those who paused work



Source: Freelance Forward 2020 (Edelman Intelligence & Upwork Inc., 2020, p. 25)

Figure 6

Freelance occupations were more likely to pause or grow during COVID-19



EDELMAN INTELLIGENCE/ UPWORK INC. © 2020 Q6_19: Please select the type of work you typically perform. Please think about your work at the beginning of 2020 if your current employment status has changed due to COVID-19. Base: Paused FLs n=591, New FLs n=714 27

Source: Freelance Forward 2020 (Edelman Intelligence & Upwork Inc., 2020, p. 27)

Insecurity among Gig Workers. UCLA-LC asked three questions about economic insecurity, regarding food, rent or mortgage, or housing. All areas showed distressing levels of precarity for these workers, but food insecurity was especially notable. Only 28% of respondents reported adequate resources for food, but over two-thirds were either borderline or lacked adequate funds (39% and 33% respectively, see Table 8).

Table 8*Funds available for basic needs*

Groceries	%
Yes	28
No	33
Borderline	39
Rent or mortgage	
Yes	45
No	21
Unsure	34
Housing	
Housed	85
Lost housing	8
Other	7

Source: UCLA-LC (Herrera et al., 2020)

Assistance for Gig Workers. One encouraging thing from these surveys was the response from government was helpful. Some of that aid was unique to California, however, because the state ruled that gig workers should be eligible for unemployment insurance (UI), over the objections of their platform employers (Herrera et al., 2020, p. 13). In addition, the federal The Coronavirus Aid, Relief, and Economic Security (CARES) Act provided additional benefits for contract and gig workers not normally covered by UI as part of the Pandemic Unemployment Assistance (PUA) program (see Table 9).

Table 9*Unemployment Benefits*

Benefit application and status	%
UI	51
Approved	60
Pending	15
Denied	16
Other	9
PUA	51
Approved	78
Pending	11
Disqualified due to W2 from another job	4
Denied	3
Other	4

Source: UCLA-LC (Herrera et al., 2020)

Health Effects on Gig Workers and Their Customers

In addition to the direct economic effects, many gig workers faced health issues due the pandemic, including the indirect expenses of lost work due to illness, medical expenses, and the cost of prevention for themselves and their customers.

Support for PPE. The need for personal protective equipment (PPE) in the workplace became apparent early on in the pandemic, and the surveys showed that gig workers had many concerns. Appjobs reported that about 70 percent of workers were unsatisfied with their employers' support in general, while the UCLA-LC found that nearly 80 percent said they did nothing or not enough to protect workers, and that large majorities of workers were forced to purchase at least some of their PPE (see Table 10).

Table 10*Lack of support for exposure to COVID-19*

PPE	% provided by platform	% purchased by worker
Face masks	38	79
Gloves	12	57
Cleaning wipes for car	13	68
Hand sanitizer	24	78
None	48	13

Source: UCLA-LC (Herrera et al., 2020)

Healthcare Costs & Coverage. The UCLA-LC survey also showed that gig platforms provided no information or support for workers exhibiting COVID symptoms (48%) or financial assistance for testing or treatment (61%)(Herrera et al., 2020). Another issue was health insurance, but again, because this survey only covered California, the majority of gig workers are covered under either Covered California (ACA marketplace), Medi-Cal (Medicare) or some other state or federal program. Nevertheless, nearly one-third of gig workers were not covered by any health insurance program.

Conclusions and Policy Implications

Conclusions

The gig economy impacts millions, both workers and those they serve.

Demographics. The demographic data was useful, but not definitive or terribly surprising. We were unable to parse out changes pre- and post-pandemic, and there was a fair amount of variability in the various data sets. In short, we know that gig workers generally skew to middle age groups (though Gen Z and Millennials are more likely to do gig work), male, and white (with the possible exception of in-person electronically mediated workers).

Gig Work. While there are some distinctions between EMWs and independent contractors, and a bit less between in-person and online-only EMWs, they are mostly as we expected. More independent contractors do construction than EMWs do, while the latter is more likely to do transportation and education-related work. All do more professional services work than the labor force overall. We were a bit surprised that tenure with a favorite app, at least in California, was over two years; less so that the top apps used were ride-hailing and delivery services.

COVID-19 Impacts. The findings here were interesting, but we do not have a lot of confidence in their external validity, given that most were from the smallest and most localized dataset. Nevertheless, the data does suggest disturbing levels of financial insecurity as a result of the pandemic, exacerbating already precarious financial situations for those depending on gig work for their sole or primary source of income. Health concerns and lack of demand halted or slowed work for many, while in the online-only space, where remote work is possible, workers found more work, and many even gravitated to this work from full-time positions (though it is not clear if this was by choice or design). We did see evidence of a lack of support from gig platforms and contractor clients, both in preventative measures and health consequences. And finally, we saw that government support mechanisms seemed to be helping, but they themselves have proven a bit insecure.

Policy Implications

All the above is evidence that this important classification of workers is especially susceptible to economic shocks, especially those resulting from a public health crisis. We should consider policies that address this insecurity in the long run. It is interesting to see how other countries are dealing with this situation. Not only do most industrialized nations have more universal income

supports and health benefits for their citizens, they were more likely than the U.S. to offer additional support during the COVID-19 pandemic, using monthly stipends and other mechanisms to both maintain economic health but also to prevent citizens from being forced into work that may help to spread the virus. Housing insecurity was one issue the U.S. has handled especially poorly, relying primarily on the use of eviction moratoria which, while helpful in the short-run, cause many longer-term issues for tenant and property owners alike. This is another example of why direct cash payments can be an optimal policy intervention in any crisis, even beyond the current pandemic.

Future Research

The main takeaway from this research is the need for a large, high-quality, independent and nationwide survey to learn more. The limited nature of these existing data sets, combined with our limited access to the microdata behind them, made it difficult to answer many of the key questions we sought to understand. More specifically:

- CPS-CWS is too old, with problematic new questions and limited longitudinal potential.
- Upwork is large and national in scope, but suspect due to ties to commercial entities and lack of transparency.
- Appjobs is fairly large, but maybe too broad geographically to aid in understanding the U.S. context, as only 28% of respondents were from the U.S. It also lacks a representative control set of non-gig workers in its sample.
- UCLA Labor Center asked great questions, especially regarding the COVID-19 impacts, but it is small and geographically narrow. And like Appjobs, it lacks a control group.

We will create and conduct a survey of freelance, crowd work and platform-based workers in various industries and industries and job categories, asking about how the COVID-19

pandemic affected their work and lives. This will be an online survey distributed using social media communities on Facebook, Twitter, as well as known organizations such as the Freelancers Union. The sampling method will be non-probability clustered sample with snowball sampling. The survey will consist of both closed- and open-ended questions and will be analyzed using descriptive crosstabulations and qualitative methods. We expect to distribute this survey beginning in February 2021 and will close the survey in March 2021.

Appendix A: Detailed Survey Methodologies

Edelman Intelligence/Upwork Inc.

- An online survey of 6,001 U.S. adults who have done paid work in the past 12 months
- Data collected June 15, 2020 – July 7, 2020 by independent research firm Edelman Intelligence
 - This is the seventh year the survey has been conducted, allowing for trend data.
Data collected in the summers of 2014- 2019 is referenced throughout the analysis and indicates the percentage point change compared to previous years.
 - Percentage point differences between waves are noted where applicable and noteworthy in the report.
- Results were weighted to ensure demographic representation in line with the United States Bureau of Labor Statistics' 2019 Labor Force Statistics from the Current Population Survey and the American Community Survey.
- Margin of error: Overall: $\pm 1.2\%$ at the 95% level of confidence. Freelancers: $\pm 2.1\%$, Non-freelancers: $\pm 1.6\%$, Full- time freelancers: $\pm 4.1\%$, Skilled freelancers: $\pm 3.0\%$.
- Audiences surveyed:
 - *U.S. Workers Overall*
 - U.S. adults 18+ who have earned income from work within the past 12 months, including both freelancers and non-freelancers
 - N = 6,001
 - Freelancers
 - Individuals who have engaged in supplemental, temporary, project- or contract-based work, within the past 12 months

- N = 2,132
- Non-freelancers
 - Individuals who earned income through work but have not engaged in supplemental, temporary, project- or contract-based work, within the past 12 months.
- N = 3,869

(Edelman Intelligence & Upwork Inc., 2020, p. 3)

UCLA Labor Center

(From their report)

“This study employed a mixed-methods research design including quantitative survey data, qualitative interviews, and an extensive literature review. In addition to surveying and interviewing workers, we conducted in-depth interviews with nine experts on labor and worker cooperatives.

“From June to July 2020, the UCLA Labor Center conducted online surveys of 302 gig workers in California. For the purposes of this survey, we defined the gig economy to include the following: driving for ride-hailing platforms such as Uber and Lyft; restaurant delivery through apps like Postmates, Uber Eats, Caviar, Grubhub, and DoorDash; grocery shopping and delivery through platforms like Instacart, Mercato, and Shipt; Amazon Flex package delivery; performing household chores on demand through TaskRabbit; and alcoholic beverage delivery through apps like Saucey and Drizly.

“Surveys were conducted online and took approximately 22 minutes to complete. Participants were recruited through community organizations, unions, and nonprofits that had lists of gig workers. Recruitment partners shared the link with potential participants via email

and social media. A \$20 incentive was provided to workers who completed the survey. The survey questionnaire was divided into two parts: 1) questions focused on COVID-19 impacts and demographics, and 2) questions soliciting feedback on the CEA, following a four-minute informational video produced for this study. Because our sampling relied on community partners, the majority of our participants were affiliated with community organizations such as Rideshare Drivers United (71%) and Gig Workers Rising (15%), both of which helped us recruit survey participants, as well as Tech Workers Coalition (2%), or a labor union (4%). About 17% were not affiliated with any organization.

“From our survey pool, we selected 15 gig workers from diverse sectors and regions across California for follow-up interviews, and each received an additional \$25 incentive. These interviews were 30 minutes long and conducted via telephone or video conferencing software.

“This study has some limitations, including the overrepresentation of rideshare drivers and a corresponding underrepresentation of care work. Most of our respondents were based in Southern California. Given the limited time and scope of the surveys, thoroughly conveying the details of the CEA was challenging, potentially affecting the quality of survey responses. We mitigated this by conducting in-depth follow-up interviews with a representative sample of survey respondents. Finally, COVID-19 restrictions limited our ability to go into the field to conduct the survey with a broader sample. Future scholarship should examine the experiences and opinions of a larger sample of gig workers from a greater diversity of sectors.” (Herrera et al., 2020, pp. 31-32)

Appendix B: Draft Survey Questions**Gig Economy Workers (Draft)**

Start of Block: Introduction & Consent

Q105

Thank you for participating in this research study on the gig economy!

We are interested in understanding the economic and social conditions of gig economy workers, especially during the current COVID-19 pandemic. Please be assured that your responses will be kept completely confidential, even if you volunteer to participate in a follow-up interview.

The study should take you around 10-20 minutes to complete. Your participation in this research is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any prejudice. If you would like to contact the Principal Investigator in the study to discuss this research, please e-mail Ric Kolenda, Ph.D. at rkolenda@pace.edu.

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device, though you should be able to

complete the survey on a mobile device if necessary.

- ☐ I consent, begin the study (1)
- ☐ I do not consent, I do not wish to participate (2)

End of Block: Introduction & Consent

Start of Block: Employment Questions

Q28 What type of work do you do

- ☐ App-based platform work (e.g., Uber, Door Dash, Task Rabbit, etc.) (1)
 - ☐ Crowd-sourced work (e.g., (2)
 - ☐ On-demand place-based work ((3)
 - ☐ c. Freelance/contract work (non-app-based) (4)
 - ☐ Other (5) _____
-

Q29 In what industry do you work?

- ☐ Ride share (Uber, Lyft, etc.) (1)
 - ☐ Food delivery (Door Dash, Grub Hub, Instacart, etc.) (2)
 - ☐ Personal services (Postmates, TaskRabbit, etc.) (3)
 - ☐ Creative services (graphic arts, computer programming, etc.) (4)
 - ☐ Professional services (publishing, law, business consulting, etc.) (5)
 - ☐ Other (6) _____
-

Q30 Is your gig work...

- ☐ Full-time primary employment? (1)
 - ☐ Part-time secondary employment (not your primary source of income)? (2)
-

Q31 For how long have you done gig work (number of months, rounded to the nearest whole number of months?)

Q32 Do you belong to an association or union for one or more of your gig jobs?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)
-

Q33 Have you engaged in labor actions related to your gig work?

- ☐ Protests (1)
- ☐ Strikes (2)
- ☐ Lawsuits (3)
- ☐ Other (4) _____
-

Q34 Have you left a gig job?

- ☐ Yes (1)
- ☐ No (2)
-

Display This Question:

If Have you left a gig job? = Yes

Q35 Why did you leave your gig job? (Choose all that apply)

☐ Pay too low (Please say more in the text box) (1)

☐ Poor working conditions (Please say more in the text box) (2)

☐ Policies you consider unfair or impractical (Please say more in the text box) (3)

☐ Other (4) _____

Q39 Have you had issues with getting paid for work you have done for gig employers?

☐ Yes (1)

☐ No (2)

☐ Not sure (3)

Q40 Describe the issue(s) you have had with getting paid for work you have done for gig employers?

- ☐ Non-payment (1)
 - ☐ Too much time between work & payment (2)
 - ☐ Paid less than expected (3)
 - ☐ Low percent of gratuities-based income (4)
 - ☐ Too many or unexpected fees reducing net pay (5)
 - ☐ Other (6) _____
-

Q41 Is gig work necessary to pay basic expenses (housing, food, utilities)?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Not sure (3)
-

Q42 Do you have health insurance?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)

Display This Question:

If Do you have health insurance? = Yes

Q43 Describe your health insurance

- ☐ Through non-gig employer (1)
- ☐ ACA (Obamacare) marketplace (2)
- ☐ Through spouse, domestic partner or parent (3)
- ☐ Medicaid (4)
- ☐ Medicare (5)
- ☐ Private non-marketplace (not ACA) (6)
- ☐ Other (7) _____

Display This Question:

If Do you have health insurance? = Yes



Q44 What is the monthly out-of-pocket cost of your health insurance?

Q49 Which of the following skills do you believe you possess?

- ☐ Technical skills (1)
 - ☐ Social skills (2)
 - ☐ Critical (3)
 - ☐ Creativity (4)
 - ☐ Empathy (5)
 - ☐ Communication (6)
 - ☐ Imagination (7)
 - ☐ Problem-solving (8)
 - ☐ Strategic thinking (9)
 - ☐ Other (10) _____
-

Q46 Are you a student or otherwise doing skills training?

- ☐ Yes (1)
 - ☐ No (2)
 - ☐ Not sure (3)
-

Display This Question:

If Are you a student or otherwise doing skills training? = No

Q48 Would you like to improve your education level or skills if you had time?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)

End of Block: Employment Questions

Start of Block: COVID-19 Questions

Q36 How did the COVID-19 pandemic affect your work?

- ☐ Led to gig work/lost f/t employment (1)
- ☐ Ended gig work (2)
- ☐ Reduced gig work (3)
- ☐ Expanded gig work (4)
- ☐ No change (5)
- ☐ Other (6) _____

Display This Question:

If How did the COVID-19 pandemic affect your work? = Ended gig work

Or How did the COVID-19 pandemic affect your work? = Reduced gig work

Or How did the COVID-19 pandemic affect your work? = Other

Q38 Did you receive special unemployment benefits under the CARES Act for gig workers?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Not sure (3)
-

Q37 How did the COVID-19 pandemic affect your employment-based fringe benefits?

- ☐ Lost them (1)
- ☐ Improved (2)
- ☐ Got worse (3)
- ☐ No change (4)
- ☐ Other (5) _____

End of Block: COVID-19 Questions

Start of Block: Demographics (Base/Universal)



Q1 What is your year of birth?

Q2 What is the highest level of school you have completed or the highest degree you have received?

- ☐ Less than high school degree (1)
 - ☐ High school graduate (high school diploma or equivalent including GED) (2)
 - ☐ Some college but no degree (3)
 - ☐ Associate degree in college (2-year) (4)
 - ☐ Bachelor's degree in college (4-year) (5)
 - ☐ Master's degree (6)
 - ☐ Doctoral degree (7)
 - ☐ Professional degree (JD, MD) (8)
-

Q3 Are you Spanish, Hispanic, or Latino or none of these?

- ☐ Yes (1)
 - ☐ None of these (2)
-

Display This Question:

If Are you Spanish, Hispanic, or Latino or none of these? = Yes

Q4 Are you Spanish, Hispanic, or Latino?

- ☐ Spanish (1)
 - ☐ Hispanic (2)
 - ☐ Latino (3)
-

Q5 Choose one or more races that you consider yourself to be: (Choose all that apply)

- ☐ White (1)
 - ☐ Black or African American (2)
 - ☐ American Indian or Alaska Native (3)
 - ☐ Asian (4)
 - ☐ Native Hawaiian or Pacific Islander (5)
 - ☐ Other (6) _____
-

Q6 What is your sex?

☐ Male (1)

☐ Female (2)

☐ Non-binary (3)

☐ Other (4) _____

☐ Prefer not to say (5)

Q7 Information about income is very important to understand. Would you please give your best guess? Please indicate the answer that includes your entire household income in (previous year) before taxes.

- ☐ Less than \$10,000 (1)
- ☐ \$10,000 to \$19,999 (2)
- ☐ \$20,000 to \$29,999 (3)
- ☐ \$30,000 to \$39,999 (4)
- ☐ \$40,000 to \$49,999 (5)
- ☐ \$50,000 to \$59,999 (6)
- ☐ \$60,000 to \$69,999 (7)
- ☐ \$70,000 to \$79,999 (8)
- ☐ \$80,000 to \$89,999 (9)
- ☐ \$90,000 to \$99,999 (10)
- ☐ \$100,000 to \$149,999 (11)
- ☐ \$150,000 or more (12)



Q8 What is your 5-digit ZIP code?

End of Block: Demographics (Base/Universal)

Start of Block: Demographics (Extended)



Q9 Which of the following best describes your sexual orientation?

- ☐ Heterosexual (straight) (1)
- ☐ Homosexual (gay) (2)
- ☐ Bisexual (3)
- ☐ Other (4)
- ☐ Prefer not to say (5)



Q11 Are you now married, widowed, divorced, separated or never married?

- ☐ Married (1)
 - ☐ Widowed (2)
 - ☐ Divorced (3)
 - ☐ Separated (4)
 - ☐ Never Married (5)
-

Q10 How many people are living or staying at this address? INCLUDE everyone who is living or staying here for more than 2 months. INCLUDE yourself if you are living here for more than 2 months. INCLUDE anyone else staying here who does not have another place to stay, even if they are here for 2 months or less. DO NOT INCLUDE anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment.

- ☐ 1 (1)
 - ☐ 2 (2)
 - ☐ 3 (3)
 - ☐ 4 (4)
 - ☐ 5 (5)
 - ☐ 6 (6)
 - ☐ More than 6 (7)
-

Q12 Have you ever served on active duty in the US Armed Forces?

- ☐ Yes (1)
 - ☐ No (2)
-

Display This Question:

If Have you ever served on active duty in the US Armed Forces? = Yes

Q14 Are you now serving in the Armed Forces?

- ☐ Yes (1)
- ☐ No (2)

Display This Question:

If Have you ever served on active duty in the US Armed Forces? = Yes

And Are you now serving in the Armed Forces? = No

Q13 When did you serve in the armed forces?

- ☐ September 2001 or later (1)
- ☐ August 1990 to August 2001 (2)
- ☐ May 1975 to July 1990 (3)
- ☐ Vietnam Era (August 1964-April 1975) (4)
- ☐ February 1955 to July 1964 (5)
- ☐ Korean War (July 1950 to January 1955) (6)
- ☐ January 1974 to June 1950 (7)
- ☐ World War II (December 1941 to December 1946) (8)
- ☐ November 1941 or earlier (9)

End of Block: Demographics (Extended)

Start of Block: Demographics (Employment)



Q15 Which statement best describes your current employment status?

- ☐ Working (paid employee) (1)
- ☐ Working (self-employed) (2)
- ☐ Not working (temporary layoff from a job) (3)
- ☐ Not working (looking for work) (4)
- ☐ Not working (retired) (5)
- ☐ Not working (disabled) (6)
- ☐ Not working (other) (7) _____
- ☐ Prefer not to answer (8)

Display This Question:

If Which statement best describes your current employment status? = Working (paid employee)

Or Which statement best describes your current employment status? = Working (self-employed)

Q16 How many employees work in your establishment?

- ☐ 1-4 (1)
- ☐ 5-9 (2)
- ☐ 10-19 (3)
- ☐ 20-49 (4)
- ☐ 50-99 (5)
- ☐ 100-249 (6)
- ☐ 250-499 (7)
- ☐ 500-999 (8)
- ☐ 1000 or more (9)

Display This Question:

If Which statement best describes your current employment status? = Working (paid employee)

Or Which statement best describes your current employment status? = Working (self-employed)



Q17 Where are you employed?

- ☐ PRIVATE-FOR-PROFIT company, business or individual, for wages, salary or commissions (1)
- ☐ PRIVATE-NOT-FOR-PROFIT, tax-exempt, or charitable organization (2)
- ☐ Local GOVERNMENT employee (city, county, etc.) (3)
- ☐ State GOVERNMENT employee; 5-Federal GOVERNMENT employee (4)
- ☐ Federal GOVERNMENT employee (5)
- ☐ SELF-EMPLOYED in own NOT INCORPORATED business, professional practice, or farm (6)
- ☐ SELF-EMPLOYED in own INCORPORATED business, professional practice, or farm (7)
- ☐ Working WITHOUT PAY in family business or farm (8)

Display This Question:

If Which statement best describes your current employment status? = Working (paid employee)

Or Which statement best describes your current employment status? = Working (self-employed)



Q18 Which of the following industries most closely matches the one in which you are employed?

- ☐ Forestry, fishing, hunting or agriculture support (1)
- ☐ Real estate or rental and leasing (2)
- ☐ Mining (3)
- ☐ Professional, scientific or technical services (4)
- ☐ Utilities (5)
- ☐ Management of companies or enterprises (6)
- ☐ Construction (7)
- ☐ Admin, support, waste management or remediation services (8)
- ☐ Manufacturing (9)
- ☐ Educational services (10)
- ☐ Wholesale trade (11)
- ☐ Health care or social assistance (12)
- ☐ Retail trade (13)
- ☐ Arts, entertainment or recreation (14)
- ☐ Transportation or warehousing (15)
- ☐ Accommodation or food services (16)
- ☐ Information (17)
- ☐ Other services (except public administration) (18)
- ☐ Finance or insurance (19)

☐ Unclassified establishments (20)

Display This Question:

If Which statement best describes your current employment status? = Working (paid employee)

Or Which statement best describes your current employment status? = Working (self-employed)

Or Which statement best describes your current employment status? = Not working (temporary layoff from a job)

Or Which statement best describes your current employment status? = Not working (looking for work)



Q19 Please indicate your occupation:

☐ Management, professional, and related (1)

☐ Service (2)

☐ Sales and office (3)

☐ Farming, fishing, and forestry (4)

☐ Construction, extraction, and maintenance (5)

☐ Production, transportation, and material moving (6)

☐ Government (7)

☐ Retired (8)

☐ Unemployed (9)

End of Block: Demographics (Employment)

Start of Block: Demographics (Political)

Q26 Did you vote in the last election?

☐ Yes (1)

☐ No (2)



Q20 Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or something else?

☐ Republican (1)

☐ Democrat (2)

☐ Independent (3)

☐ Other (4) _____

☐ No preference (5)

Display This Question:

If Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent,... = Republican

Q21 Would you call yourself a strong Republican or a not very strong Republican?

☐ Strong (1)

☐ Not very strong (2)

Display This Question:

If Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent,... = Democrat

Q22 Would you call yourself a strong Democrat or a not very strong Democrat?

- ☐ Strong (1)
- ☐ Not very strong (2)

Display This Question:

If Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent,... = Independent

Or Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent,... = Other

Or Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent,... = No preference

Q23 Do you think of yourself as closer to the Republican or Democratic party?

- ☐ Republican (1)
- ☐ Democratic (2)

Q24 Here is a 7-point scale on which the political views that people might hold are arranged from extremely liberal (left) to extremely conservative (right). Where would you place yourself on this scale?

0 1 2 3 4 5 6 7

Political Ideology ()



Q25 What political party are you registered with, if any?

- ☐ Republican (1)
- ☐ Democratic (2)
- ☐ Independent (3)
- ☐ Other (4) _____
- ☐ None (5)

End of Block: Demographics (Political)

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