Industry Special Report:
Growth of the "Gig Economy" Among Texas Metropolitan Areas as of August 2018

Workforce Solutions is an affiliate of the Gulf Coast Workforce Board, which manages a regional system that helps employers solve their workforce problems and residents build careers so both can compete in the global economy. The workforce system serves the City of Houston and the surrounding 13 Texas Gulf Coast counties including: Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, and Wharton.

Introduction

With the advent of the Internet, virtually every facet of society has been transformed, from online commerce increasingly replacing traditional retail, to social media providing a platform for sharing information ad infinitum, to the capability of work to be performed from remote locations thereby leveraging disparate time zones. Another outgrowth of these trends is peer-to-peer commerce, connecting individuals with unmet needs for transportation and lodging with individuals in possession of "excess" quantities of these resources. These types of services, typified by ride-sharing platforms like Uber and Lyft and virtual hospitality platforms like Airbnb and VRBO have disrupted traditional taxi and hotel business models and have become symbols of the emerging "gig economy." Noted for its use of short-term contingent work arrangements, the gig economy has shown its potential to provide a level of flexibility not found among traditional employer-employee relationships yet it may accelerate the "casualization of labor" resulting in ever-more precarious livelihoods for those unable to participate in the regular economy.[i]

While the merits of the gig economy are unlikely to be settled in the near future, more basic questions remain such as whether the gig economy is as large as perceived and whether it's growth is accelerating. This special report expands on a 2016 Brookings Institute study analyzing the gig economy by examining more recent data, and furthermore addresses the conclusion of a recent report from the Bureau of Labor Statistics that suggests the share of workers participating in the gig economy has actually *fallen* between 2005 and 2017.

Background

As authors Ian Hathaway and Mark Muro noted in their 2016 Brookings report "Tracking the gig economy: New numbers," determining the size and scope of the sector remains difficult given its atomized and ephemeral nature.[ii] This in turn presents challenges to government surveys' ability to comprehensively capture trends, surveys which remain the de facto standard for a wide range of social and economic data. With that said, some parts of the gig economy are easier to track than others and therefore can serve as proxies for this emerging sector. The Brookings authors highlight the Census Bureau's "non-employer" data set that provides a critical starting point for measuring the impact of two of the gig economy's most visible segments, ride-sharing such as Uber and Lyft on one hand and room-sharing platforms Airbnb and VRBO on the other. Defined as a "business…that has no paid employees, has annual business receipts of $1,000 or more ($1 or more in the construction industries) and is subject to federal income taxes…[most of which] are self-employed individuals operating very small unincorporated businesses, which may or may not be the owner's principal source of income…[and]… may operate from its owner's home address or from a separate physical location." In addition, non-employer firms, particularly those with the legal form of an "Individual proprietorship" provide a reasonable approximation of gig economy workers. Giving the non-employer firm data set additional credibility is the fact that it is primarily derived from the annual or quarterly business income tax returns filed with the Internal Revenue Service (IRS), which should in theory provide a more accurate count than a conventional sample-based survey. Unfortunately, other platforms like TaskRabbit, Amazon Mechanical Turk, and Fiverr that permit the distribution of short-term piecemeal work continue to defy easy

classification from a government survey perspective and as a result could not be analyzed for either the Brookings report or the current one.

Non-employer Firm Employment versus Total Covered Employment 2012 to 2016

The first year that we can begin to reliably measure the size and growth of one-half of the gig economy as represented by ride-sharing platforms remains 2012 based on the presence of Uber and Lyft in a majority of the largest metropolitan areas across the country. As of that year, there were 23 million non-employer firms across all industries nationwide compared to total payroll employment of 132 million as measured by the Quarterly Census of Employment and Wages (QCEW). This translated to a ratio of payroll to non-employer firm employment of 5.8. By 2016 the number of non-employer firms had increased to 25 million for a nine-percent increase. Combined with the slightly slower eight-percent increase in traditional payroll employment, the ratio of payroll employment to non-employer firms fell to 5.7. This suggests that in the aggregate, the gig economy saw modest rise in relative importance compared to the traditional economy. Closer to home, the Houston MSA saw an increase from 514,000 to 563,000 non-employer firms for an increase of 49,000 or 10 percent compared to a nine-percent increase in overall employment. The ratio of total payroll employment to non-employer firms in the Houston area saw little change, falling from 5.14 to 5.11. These measures reflected slower growth compared to other Texas cities led by Austin with 23-percent non-employer growth versus 17-percent total employment growth followed by Dallas-Fort Worth-Arlington (16 and 14 percent) and San Antonio-New Braunfels (16 and 13 percent). Of the 50 largest metropolitan areas in the country, Las Vegas saw the fastest non-employer growth up 25 percent between 2012 and 2016. While it's clear that non-employer firm growth has been on the rise and increasing in importance, these aggregate comparisons obscure faster growth in the segments of the gig economy enabled by the rise of peer-to-peer sharing platforms as will be seen shortly. (see Tables 1 and 2.)

Table 1. Ratio of QCEW Total Covered Payroll Employment to Non-employer Firms, Selected Texas MSAs and the U.S. 2012 and 2016

Industry Title	2012	2016
United States	**5.79**	**5.72**
Austin-Round Rock, TX MSA	5.32	5.07
Dallas-Fort Worth-Arlington, TX MSA	5.32	5.23
Houston-The Woodlands-Sugar Land, TX MSA	5.15	5.12
San Antonio-New Braunfels, TX MSA	5.58	5.44

Source(s): Census Bureau Non-employer Statistics and Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW)

Table 2. Non-employer Firm and QCEW Total Covered Employment Net and Percent Change 2012-2016

Industry Title	Non-employer Firm Net Change 2012-2016	Non-employer Firm Percent Change 2012-2016	QCEW Total Covered Employment Net Change 2012-2016	QCEW Total Covered Employment Percent Change 2012-2016
United States	**2,077,133**	**9%**	**10,173,688**	**8%**
Austin-Round Rock, TX MSA	35,479	23%	140,919	17%
Dallas-Fort Worth-Arlington, TX MSA	87,558	16%	410,298	14%
Houston-The Woodlands-Sugar Land, TX MSA	49,225	10%	236,375	9%
San Antonio-New Braunfels, TX MSA	25,294	16%	115,154	13%

Source(s): Census Bureau Non-employer Statistics and Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW)

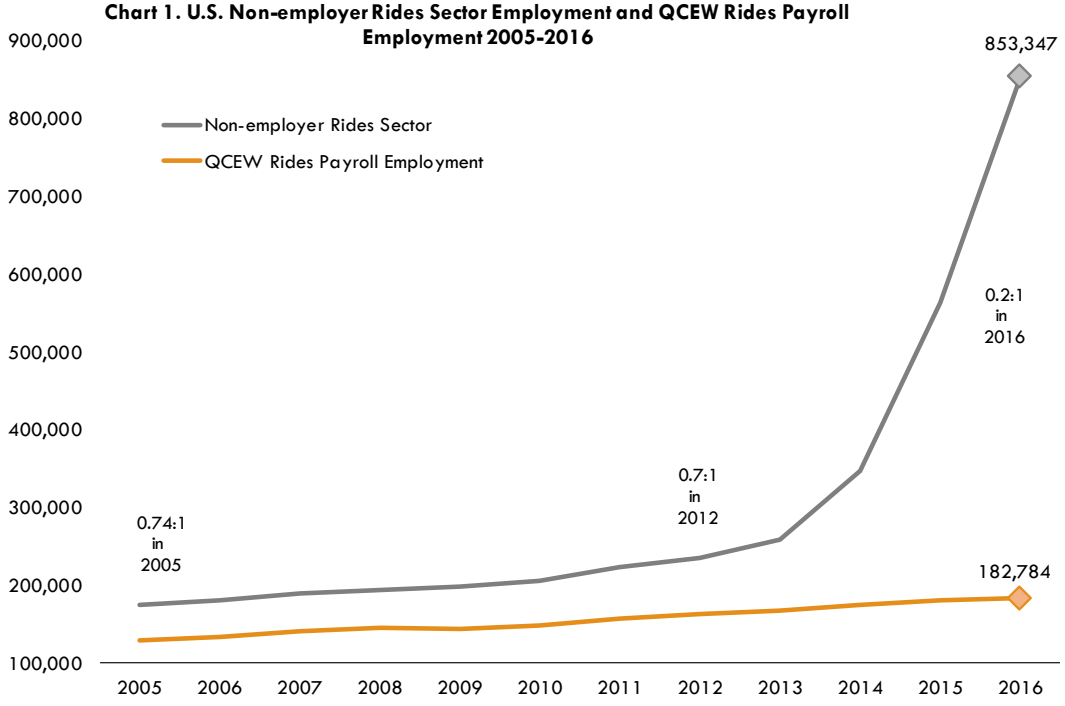
Non-employer Transportation and Lodging Trends 2012 to 2016

As noted, it remains challenging to comprehensively define and measure the gig economy using existing government survey data. Brookings report authors Hathaway and Muro sought address this issue in part by using non-employer transportation and lodging statistics produced by the Census Bureau to represent the gig economy. Specifically, the authors identified four, four-digit NAICS industries as proxies for the gig economy: *4853 Taxi and Limousine Service* and *4859 Other Transit and Ground Passenger Transportation*, which they refer to as the "rides" sector, and *7211 Traveler Accommodation* and *7213 Rooming and Boarding Houses*, which they refer to as the "rooms" sector. In keeping with the Brookings report, analysis from this point onward will utilize the same definitions.

U.S. Non-Employer "Rides Sector" Growth

We first begin by looking at the rides sector typified by ride-sharing platforms Uber and Lyft. At the national level, the number of non-employer firm in this sector grew an astonishing 264 percent between 2012 and 2016 rising from 234,000 to 853,000 firms. The Brookings authors noted that "after 2010, independent contractor growth in the ground transportation industry suddenly takes off—and then explodes in 2014 (a trend that is likely to have continued in 2015 and 2016)." At the time of writing, the authors only possessed non-employer firm data through 2014 however their supposition regarding 2015 and 2016 has now been proven correct given the availability of figures for these two additional years. Recent data shows that of the 619,000 new non-employer firms created between 2012 and 2016, 82 percent came into existence in just 2015 and 2016. In contrast, an examination of QCEW employment growth in the rides sector revealed a mere 12-percent increase over the four-year period in question, increasing from 163,000 jobs to 183,000 jobs. Additionally, less than half (40 percent) of the 20,000 rides sector payroll jobs were added in the final two years. Lastly, as further evidence of the growing importance of non-employer rides sector firms to payroll employment, this ratio fell from 0.74 in 2005 to 0.7 in 2012 followed by a sharp drop to 0.21 in 2016. (see Chart 1.)

Chart 1. U.S. Non-employer Rides Sector Employment and QCEW Rides Payroll Employment 2005-2016



Source(s): Census Bureau Non-employer Statistics and JobsEQ and BLS QCEW estimates
*Ratios represent payroll employees to non-employer firms.

Texas Metropolitan Areas Non-Employer "Rides Sector" Growth

Austin

The exponential growth in the non-employer rides sector seen across the U.S. was also observed among the four major metropolitan areas in Texas. Between 2012 and 2016, the number of non-employer rides firms in Austin rose from 1,029 to 6,839 for a 565-percent increase, which dwarfed the19-percent increase in payroll employment for this sector. This former percentage was the largest increase of the Texas cities. It should be noted that there was little growth in rides sector non-employer firms in Austin between 2015 and 2016. In May 2016, Uber and Lyft suspended operations after local voters rejected a measure that would have shielded ride-sharing drivers from more stringent background checks.[iii] Smaller ride-sharing start-up companies emerged to fill some of the gap in service, which explains the marginal increase over the two-year period of only two percent compared the previous year's 175-percent increase. In May of 2017, statewide legislation regulating ride-sharing companies was passed paving the way for Uber and Lyft to resume operations.[iv] Based on the growth trajectory up to 2015, there is a strong likelihood that the number of non-employer ride-sharing firms in Austin would have continued to increase unabated in the absence of regulatory restrictions. Even though the two largest players in the ride-sharing space temporarily exited the Austin market, the ratio of rides sector payroll employment to non-employer firms saw the steepest drop of the major metro areas in Texas, from 0.78 in 2005 to 0.52 in 2012 to just 0.09 in 2016.

Dallas-Fort Worth-Arlington

The Dallas-Fort Worth-Arlington area has had ride-sharing services since 2012 with no meaningful interruptions found to date. This coupled with the fact that Dallas is the fourth-largest metropolitan area in the country is likely the reason that DFW has consistently had the largest absolute number of non-employer rides firms of the four major cities in Texas with 3,671 in 2012 rising to 20,077 in 2016. The growth rate over this timeframe came in at 447 percent, the second-fastest in the state after Austin, which like other areas in Texas and around the country was orders of magnitude larger than the growth in payroll employment which for Dallas was 20 percent. The net effect of these trends was a sharp drop in the number of payroll jobs relative to non-employer firms of 0.41 to 0.09 over the four-year period, again a reflection of the growing importance of unincorporated individual proprietorships offering ride-sharing services. [v] [vi]

Houston-The Woodlands-Sugar Land

Ride-sharing services entered the Houston market in early 2014, which explains the limited growth in non-employer rides firms in 2012 and 2013.[vii] Nonetheless in keeping with analysis of the 2012 to 2016 timeframe, the number of firms over this period increased from 3,559 to 14,058 for a gain of 295-percent, the lowest growth rate of the major cities in Texas, yet this was well in excess of the 20 percent increase in payroll rides sector employment. In this case, the ratio of payroll jobs to non-employer firms fell from 0.6 to 0.15.

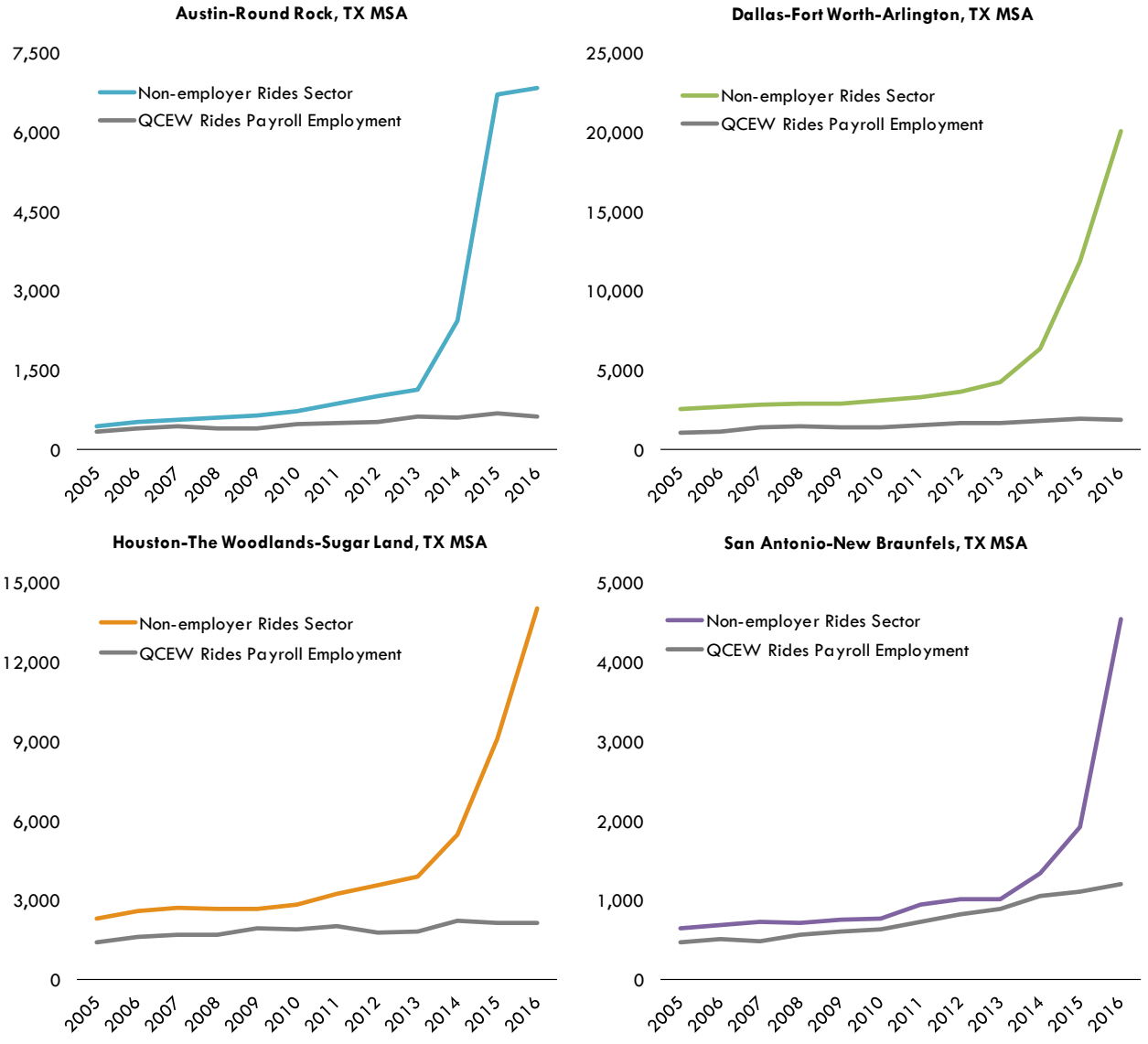
It should be noted that the Houston area experienced an economic downturn between 2014 and 2016 related to the fall in oil prices and incidentally coinciding with the arrival of ride-sharing services. This period was marked by layoffs in the oil and gas industry of approximately 75,000 to 85,000 jobs. A question worth investigating is whether ride-sharing platforms like Uber and Lyft provide highly flexible stop-gap employment opportunities to laid-off workers in general, but in the case of Houston, to those previously employed in oil and gas and related industries. Evidence of this phenomenon, if significant, would manifest itself at a bare minimum in the form of increasing year-over-year growth in non-employer rides firms and ideally faster than some benchmark such as the U.S. or other Texas cities. A look at growth rates between 2014-2015 and 2015-2016 revealed increases of 66 percent and 54 percent, respectively, indicating a mild slowing of the creation of non-employer rides firms. In fact, a look at the top-50 largest metropolitan areas in the country revealed that the slowing growth observed in Houston was typical of 40 other metropolitan areas as well as the U.S. As a result, it does not appear that the number of ride-sharing service providers increased beyond what might have been expected. If laid-off oil and gas workers did in fact turn to platforms like Uber and Lyft in significant numbers to secure temporary employment, this phenomenon was obscured by the broader trend of slowing year-over-year growth for the non-employer rides sector as a whole.

San Antonio-New Braunfels

For the remaining major metropolitan area in Texas, San Antonio, the 2014 to 2015 timeframe was marked by periodic provision and suspension of ride-sharing services that naturally altered the growth

trajectory of non-employer rides firms between 2012 to 2016.[viii] [ix] [x] While the increase over the four-year period was 348 percent, the third-fastest of the major metro areas in Texas, the overwhelming majority of that growth occurred between 2015 and 2016 once local regulatory disputes were finally resolved. Unlike the other three major cities in Texas, San Antonio continued to see faster year-over-year growth in non-employer rides firms through 2016 owing to the delayed adoption of ride-sharing services. One possible side-effect, and potential benefit, was payroll growth in the rides sector saw significant growth between 2012 and 2016 as evidenced by a 47-percent increase, much faster than the other major Texas metropolitan areas. Assuming a cause-and-effect relationship where gains in non-employer rides employment comes as the expense of payroll employment, one would expect a moderation of the payroll growth seen in recent years as non-employer firm growth accelerates and matures. (see Charts 2-4. and Table 3.)

Chart 2. Selected Texas Metropolitan Areas - Non-employer Rides Sector Employment and QCEW Rides Payroll Employment 2005-2016



Source(s): Census Bureau Non-employer Statistics and JobsEQ QCEW estimates

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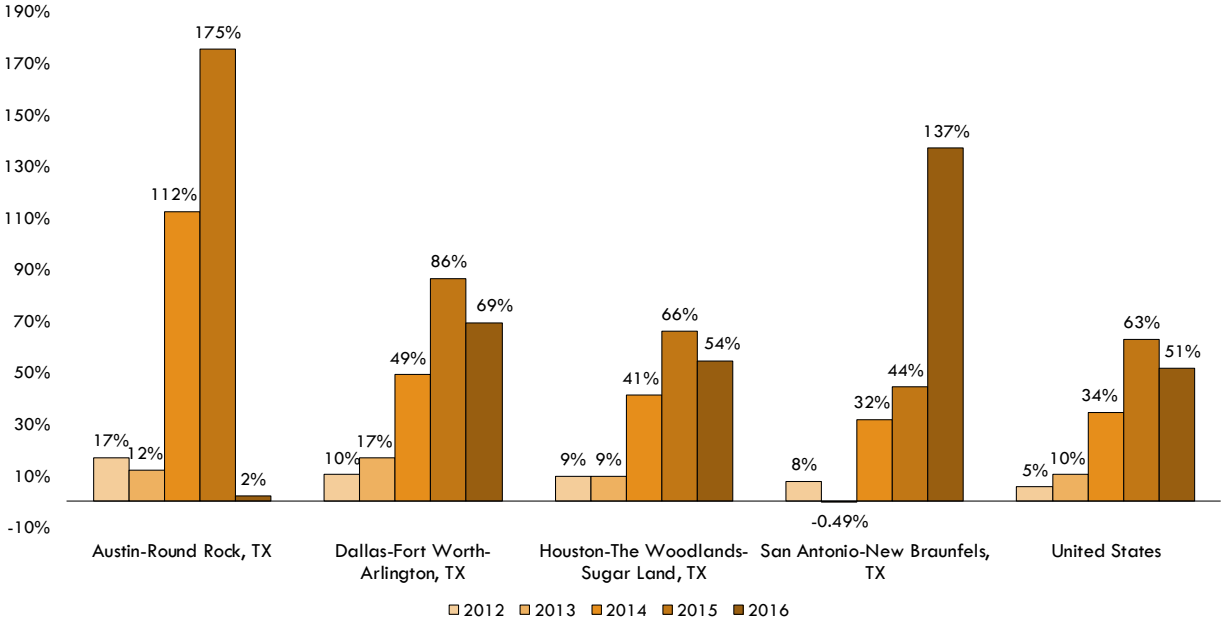
Table 3. Ratio of Rides Sector Payroll Employment to Rides Sector Non-employer Firms, Selected Texas MSAs and the U.S. 2005, 2012 and 2016

Industry Title	2005	2012	2016
United States	**0.74**	**0.70**	**0.21**
Austin-Round Rock, TX MSA	0.78	0.52	0.09
Dallas-Fort Worth-Arlington, TX MSA	0.41	0.46	0.09
Houston-The Woodlands-Sugar Land, TX MSA	0.60	0.50	0.15
San Antonio-New Braunfels, TX MSA	0.72	0.81	0.27

Source(s): Census Bureau Non-employer Statistics and Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) and JobsEQ

Chart 3. Non-employer Rides Sector Year-over-Year Percent Change 2012 to 2016



Source: Census Bureau Non-employer Statistics

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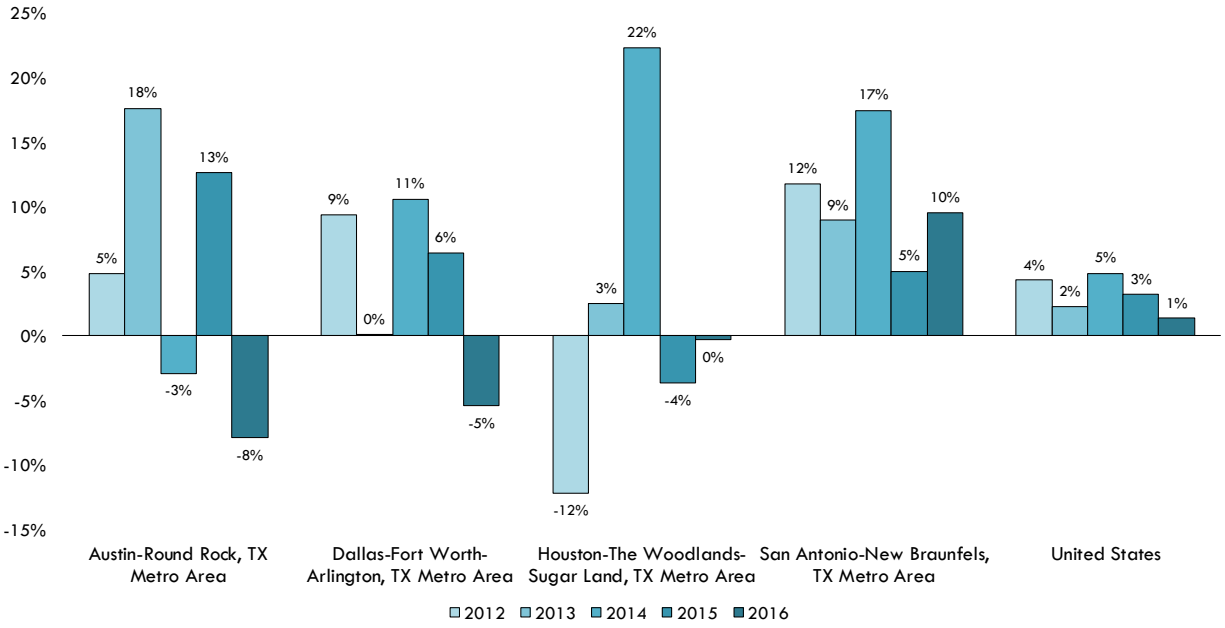
Chart 4. QCEW Payroll Rides Sector Year-over-Year Percent Change 2012 to 2016



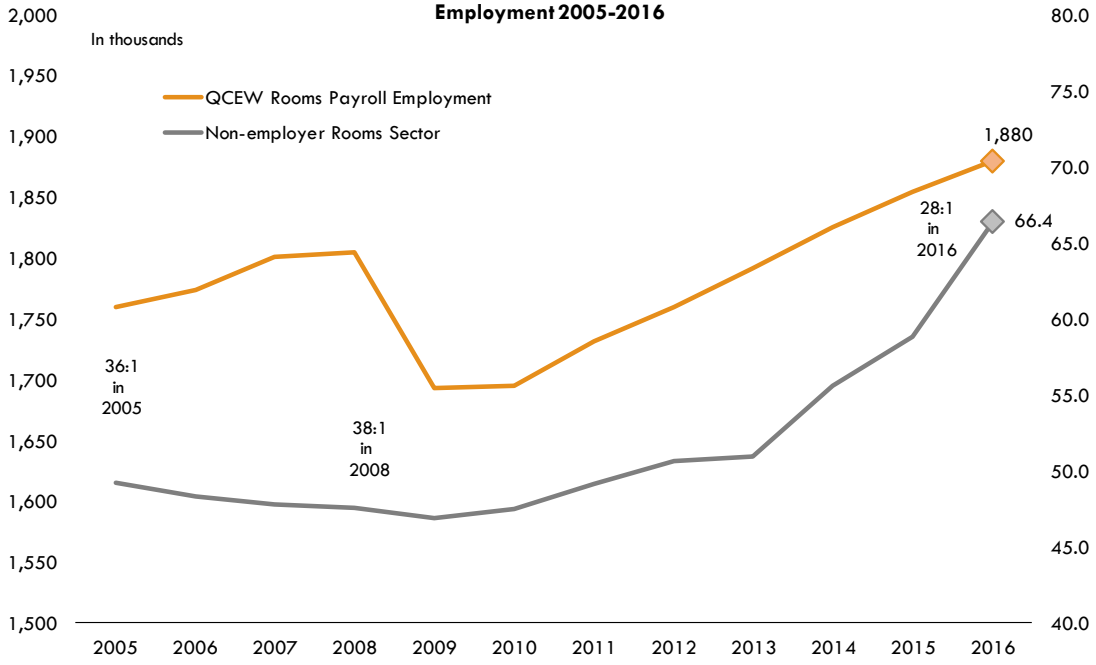
Source: JobsEQ QCEW estimates

U.S. Non-Employer "Rooms Sector" Growth

The rooms sector demonstrated similar trends to the ride-sharing portion of the gig economy previously described however the scale in terms of non-employer firms compared to payroll employment proved drastically different. As of 2016, there were nearly a combined 1.9 million payroll jobs in *7211 Traveler Accommodation* and *7213 Rooming and Boarding Houses* compared to 66,000 non-employer firms in these same industries. As Hathaway and Muro point out, non-employer rooms firms are more likely to "contract out support functions like cleaning services, meals, and entertainment," which would reduce the apparent size of such firms. They are also likely to be "undercounted in the data, because of tax reporting requirements—which…are not mandatory until a room-sharing host exceeds $20,000 in receipts or 200 transactions each year." Nonetheless, the firms that were captured in the non-employer rooms sector demonstrate a clear trend of rapid growth from 2008 onward, prior to which the sector was on a modest decline. Not coincidentally, 2008 remains a pivotal year for the non-employer rooms sector given the launch of the best-known platform for providing such services, Airbnb.[xi]

Using 2008 as our starting year for analysis of the non-employer rooms sector, we find that nationally by 2016 the number of firms had risen from 48,000 to 66,000 for a 40-percent increase. Roughly 57 percent of the eight-year increase occurred in just 2015 and 2016, illustrating that much of the acceleration in room-sharing offerings across the country occurred relatively recently despite pre-dating the ride-sharing sector by two to four years depending on the timing of entry into some markets. In contrast, payroll employment in the rooms sector rose a mere 4 percent driven an increase from 1.8 million to 1.9 million jobs over the eight-year period. In this case, the ratio of payroll jobs to non-employer firms saw a brief increase from 2005 to 2008 (36 to 38) but then fell by 2016 to just 28. (see Chart 5.)

Chart 5. U.S. Non-employer Rooms Sector Employment and QCEW Rooms Payroll Employment 2005-2016



Source(s): Census Bureau Non-employer Statistics and JobsEQ and BLS QCEW estimates
*Ratios represent payroll employees to non-employer firms.

Texas Metropolitan Areas Non-Employer "Rooms Sector" Growth

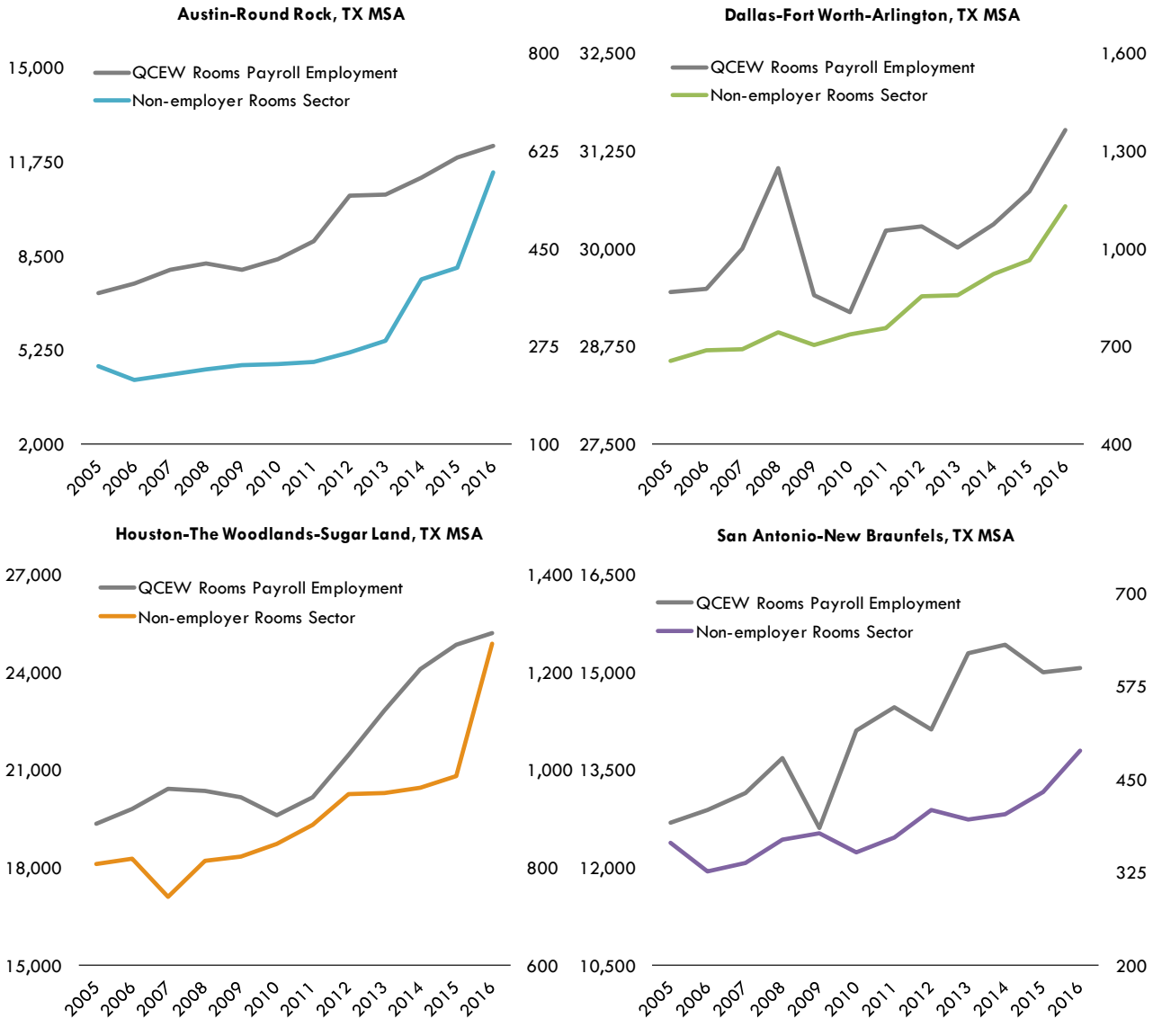
When it came to room-sharing trends among the major metropolitan areas of Texas, Austin once again saw the fastest growth between 2008 and 2016, rising from 234 non-employer rooms sector firms to 587 for a 151-percent increase although payroll employment growth posted a respectable 49-percent increase over the period. The net effect of these changes was a moderate shrinking of the ratio of payroll employees to non-employer firms from 30 to 21 over the eight-year period punctuated by a sharp but temporary rise to 40 in 2012. Dallas saw the third-fastest growth of non-employer firms, up 52 percent whereas payroll employment only rose 2 percent. While not apparent from the chart below due to the different scales, the ratio of payroll employment to non-employer firms across the Dallas-Fort Worth area saw a significant drop over the eight-year period, falling from 42 to 28, and likely a result of the low rate of rooms payroll growth noted previously. Houston added 445 new non-employer room sector firms for a growth rate of 55 percent, about twice as fast payroll employment growth of 24 percent. As result, the ratio of non-employer firms to payroll employment experienced a modest decline, falling from 25 to 20. Lastly, San Antonio registered a 32-percent increase in room-sharing non-employer firms compared to a 10-percent increase in payroll employment resulting in a falling payroll to non-employer ratio of 35 to 31. Again, due to vastly different absolute levels of non-employer and payroll employment found within the rooms sector, there is little chance that the former will surpass the latter in the near future. Nevertheless, the declines in non-employer to payroll ratios nationally and across the four Texas metro areas suggest that while demonstrating smaller increases relative to the ride sector, non-employer rooms firms continue to gain in relative importance. (See Chart 6. and Table 4.)

Table 4. Ratio of Rooms Sector Payroll Employment to Room Sector Non-employer Firms, Selected Texas MSAs and the U.S. 2005, 2008 and 2016

Industry Title	2005	2008	2016
United States	**36**	**38**	**28**
Austin-Round Rock, TX MSA	30	35	21
Dallas-Fort Worth-Arlington, TX MSA	45	42	28
Houston-The Woodlands-Sugar Land, TX MSA	24	25	20
San Antonio-New Braunfels, TX MSA	35	37	31

Source(s): Census Bureau Non-employer Statistics and Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) and JobsEQ

Chart 6. Selected Texas Metropolitan Areas - Non-employer Rooms Sector Employment and QCEW Rooms Payroll Employment 2005-2016



Source(s): Census Bureau Non-employer Statistics and JobsEQ QCEW estimates

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Bureau of Labor Statistics Recent Reports of a Shrinking Gig Economy

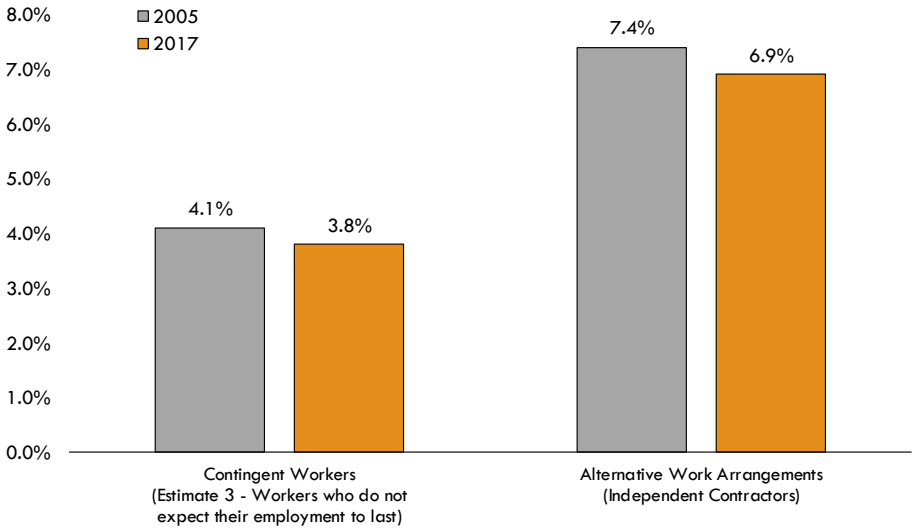
In June 2018, the Bureau of Labor Statistics released special report titled "Contingent and Alternative Employment Arrangements – May 2017" based on data collected through a supplement to the May 2017 Current Population Survey (CPS). This survey, conducted on behalf of BLS by the Census Bureau, includes roughly 60,000 households, and is the same survey used to generate monthly unemployment statistics, estimates of earnings, and various demographic measures of the labor force, primarily at the national level. The supplement, last conducted in 2005, seeks to make two major determinations about the work status of an individual. First, whether an individual qualifies as a contingent worker, which is someone who does not have an explicit or implicit contract for continuing employment but if self-employed and/or an independent contractor and expects to perform the same duties for more than one year does not meet this standard. The second determination is whether an individual had an alternative employment arrangement, such as working as an independent contractor who must obtain customers on their own to provide a product or service, an on-call worker, or someone employed through a temporary help agencies or contract firm. [xii] [xiii] Note that there may be overlap between individuals in alternative employment arrangements and contingent workers however the categories are reported separately and are conceptually distinct. BLS does not use the term "gig economy" at any point in the publication, yet the two work status determinations that the supplement seeks to measure are commonly understood facets of emerging non-traditional work arrangements. Therefore, it is not unreasonable to interpret the report's findings as a measure of the gig economy as exemplified by articles written from The Washington Post, Bloomberg, and Quartz.[xiv] [xv] [xvi]

Given that the BLS report should capture at least some aspects of the gig economy, one would expect the data, although sporadically produced, to reflect at least a flat if not a small increase in the share of non-traditional employment. Surprisingly, the report indicates that the share of contingent workers, using the broadest definition, *fell* from 4.1 percent to 3.8 percent between 2005 and 2017. Individuals working in alternative arrangements as independent contractors also declined from 7.4 percent to 6.9 percent over this same period. There is little reason to doubt that the data may be accurate based on the questions and *how* they were asked. Furthermore, there is no reason to question BLS's rigorous standards of ensuring statistical validity of the data that *was* collected. At the same token, the supplement as currently designed may simply not be sufficiently nuanced to detect relatively small but rapidly growing segments of the labor market. For instance, the Current Population Survey mainly focuses on an individual's primary job meaning that occasional work, like driving for Uber or Lyft, might not be captured. Furthermore, the limited size of the survey, again only 60,000 households, prevents the examination of regional trends could reflect the trends described throughout this report that otherwise are obscured by aggregate figures. [xvii] (see Chart 7.)

In all fairness, the technical documentation included with the BLS special report clearly states that "four new questions were added to the May 2017 supplement. These questions were designed to identify individuals who found short tasks or jobs through a mobile app or website and were paid through the same app or website. Data from these new questions are not included in this news release." The results of the new questions will be released in a BLS Monthly Labor Review article later this fall and it is encouraging that BLS recognizes the shortcomings of the supplement and has taken measures to compensate for them. The issue going forward is that since these will be new questions, there will be no

past data with which to compare them directly. As a result, there are questions surrounding the usefulness of the findings although BLS could choose to repeat the supplement more frequently to overcome this limitation sooner rather than later.

Chart 7. BLS Contingent and Alternative Employment Arrangements Share of Total U.S. Employment 2005 and 2007



Conclusion

This report examines two of the most prominent segments of the gig economy, ride-sharing and room-sharing, concepts that were first elucidated through rich research conducted at the Brookings Institute. A look at more recent data reveals that trends that previously could only be measured through 2014 have continued and in fact have accelerated, signaling that the gig economy continues to grow in importance. Thus far, there is little evidence to suggest that peer-to-peer service-sharing platforms are causing steep drops in analogous traditional payroll employment yet policymakers should remain vigilant to these disruptive forces as we remain in the early stages of adoption of these technologies. Given that most municipalities, states, etc. do not appear willing to engage in outright bans on ride-sharing and room-sharing services, it may be necessary to expand training and re-training opportunities for individuals that find themselves displaced by the changes detailed throughout this report.

Appendix: Ride-sharing and Room-Sharing Non-employer Firms and Payroll Employment by Metropolitan Area (2012-2016) and (2008-2016)

MSA ID	MSA	Rides Sector						Rooms Sector					
		Non-employer Firms			Payroll Employment			Non-employer Firms			Payroll Employment		
		2012	2016	2012-2016 Pct	2012	2016	2012-2016 Pct	2008	2016	2008-2016 Pct	2008	2016	2008-2016 Pct
-	United States	234,195	853,347	264%	162,830	182,784	12%	47,548	66,370	40%	1,804,871	1,879,803	4%
12060	Atlanta-Sandy Springs-Roswell, GA	4,564	21,845	379%	1,773	2,019	14%	665	1,069	61%	23,760	23,742	0%
12420	**Austin-Round Rock, TX**	**1,029**	**6,839**	**565%**	**540**	**640**	**19%**	**234**	**587**	**151%**	**8,246**	**12,314**	**49%**
12580	Baltimore-Columbia-Towson, MD	2,307	10,075	337%	2,910	2,254	-23%	304	391	29%	9,564	8,947	-6%
14460	Boston-Cambridge-Newton, MA-NH	6,646	28,249	325%	5,571	6,762	21%	692	1,122	62%	24,345	24,676	1%
15380	Buffalo-Cheektowaga-Niagara Falls, NY	450	869	93%	1,582	1,337	-15%	122	130	7%	3,909	4,651	19%
16740	Charlotte-Concord-Gastonia, NC-SC	1,149	5,443	374%	370	685	85%	148	324	119%	8,273	10,086	22%
16980	Chicago-Naperville-Elgin, IL-IN-WI	17,601	59,257	237%	6,727	7,100	6%	875	1,341	53%	39,216	40,001	2%
17140	Cincinnati, OH-KY-IN	702	3,447	391%	1,113	1,296	16%	166	250	51%	6,438	6,229	-3%
17460	Cleveland-Elyria, OH	695	4,038	481%	1,324	1,579	19%	173	288	66%	6,545	7,140	9%
18140	Columbus, OH	1,029	5,040	390%	542	553	2%	156	292	87%	7,563	7,498	-1%
19100	**Dallas-Fort Worth-Arlington, TX**	**3,671**	**20,077**	**447%**	**1,676**	**1,868**	**11%**	**744**	**1,132**	**52%**	**31,034**	**31,518**	**2%**
19740	Denver-Aurora-Lakewood, CO	2,492	13,545	444%	1,172	1,592	36%	327	623	91%	15,156	16,769	11%
19820	Detroit-Warren-Dearborn, MI	2,288	7,570	231%	1,687	2,259	34%	428	493	15%	9,835	17,722	80%
25540	Hartford-West Hartford-East Hartford, CT	382	1,904	398%	1,015	988	-3%	111	158	42%	4,089	3,755	-8%
26420	**Houston-The Woodlands-Sugar Land, TX**	**3,559**	**14,058**	**295%**	**1,781**	**2,145**	**20%**	**813**	**1,258**	**55%**	**20,346**	**25,198**	**24%**
26900	Indianapolis-Carmel-Anderson, IN	888	4,042	355%	675	712	6%	142	235	65%	8,175	8,504	4%
27260	Jacksonville, FL	515	2,538	393%	329	799	143%	178	262	47%	9,525	10,136	6%
28140	Kansas City, MO-KS	967	3,381	250%	1,028	1,179	15%	189	235	24%	9,787	9,220	-6%
29820	Las Vegas-Henderson-Paradise, NV	834	11,375	1264%	11,221	10,765	-4%	255	420	65%	174,854	166,858	-5%
31080	Los Angeles-Long Beach-Anaheim, CA	9,960	71,212	615%	8,334	8,047	-3%	1,822	3,251	78%	63,945	71,634	12%
31140	Louisville/Jefferson County, KY-IN	498	1,894	280%	509	396	-22%	97	157	62%	5,153	5,002	-3%
32820	Memphis, TN-MS-AR	305	1,465	380%	892	1,048	18%	148	215	45%	17,018	10,940	-36%
33100	Miami-Fort Lauderdale-West Palm Beach, FL	6,661	33,368	401%	3,198	3,321	4%	1,221	1,904	56%	48,685	58,854	21%
33340	Milwaukee-Waukesha-West Allis, WI	630	2,942	367%	622	1,004	61%	125	180	44%	5,801	6,045	4%
33460	Minneapolis-St. Paul-Bloomington, MN-WI	3,091	9,601	211%	1,695	1,890	12%	361	500	39%	13,953	12,816	-8%
34980	Nashville-Davidson--Murfreesboro--Franklin, TN	1,032	7,010	579%	503	608	21%	180	465	158%	12,140	12,430	2%
35380	New Orleans-Metairie, LA	1,990	6,642	234%	663	709	7%	196	356	82%	10,828	14,587	35%
35620	New York-Newark-Jersey City, NY-NJ-PA	73,874	142,953	94%	22,853	22,894	0%	2,107	3,612	71%	70,588	81,047	15%
36420	Oklahoma City, OK	332	1,700	412%	178	229	29%	107	168	57%	4,670	5,343	14%
36740	Orlando-Kissimmee-Sanford, FL	2,995	11,141	272%	1,494	1,781	19%	368	549	49%	49,369	58,042	18%
37980	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	4,658	20,826	347%	4,531	4,465	-1%	523	853	63%	17,040	18,147	7%
38060	Phoenix-Mesa-Scottsdale, AZ	2,581	14,362	456%	2,064	3,160	53%	395	690	75%	28,844	26,219	-9%
38300	Pittsburgh, PA	658	4,684	612%	1,322	1,254	-5%	193	280	45%	7,964	8,983	13%
38900	Portland-Vancouver-Hillsboro, OR-WA	1,239	7,481	504%	868	1,203	39%	350	903	158%	9,085	9,848	8%
39300	Providence-Warwick, RI-MA	599	3,457	477%	817	855	5%	206	295	43%	4,997	5,826	17%
39580	Raleigh, NC	807	3,573	343%	269	468	74%	115	174	51%	3,560	4,559	28%
40060	Richmond, VA	553	2,604	371%	648	706	9%	143	184	29%	5,390	5,770	7%
40140	Riverside-San Bernardino-Ontario, CA	1,149	8,706	658%	1,191	1,237	4%	509	828	63%	19,163	23,269	21%
40380	Rochester, NY	305	400	31%	795	1,027	29%	156	226	45%	3,193	3,038	-5%
40900	Sacramento--Roseville--Arden-Arcade, CA	782	7,793	897%	1,249	1,336	7%	320	435	36%	9,886	10,355	5%
41180	St. Louis, MO-IL	1,175	3,526	200%	1,216	1,169	-4%	278	330	19%	10,032	12,121	21%
41620	Salt Lake City, UT	384	2,441	536%	271	286	6%	148	195	32%	7,350	7,710	5%
41700	**San Antonio-New Braunfels, TX**	**1,016**	**4,550**	**348%**	**819**	**1,206**	**47%**	**369**	**488**	**32%**	**13,679**	**15,067**	**10%**
41740	San Diego-Carlsbad, CA	2,617	16,758	540%	1,304	1,319	1%	512	951	86%	31,515	36,067	14%
41860	San Francisco-Oakland-Hayward, CA	6,973	37,486	438%	3,602	6,466	80%	774	1,660	114%	32,908	31,506	-4%
41940	San Jose-Sunnyvale-Santa Clara, CA	1,232	9,348	659%	889	976	10%	209	460	120%	8,300	8,993	8%
42660	Seattle-Tacoma-Bellevue, WA	3,193	14,108	342%	2,326	2,392	3%	555	1,172	111%	16,064	16,381	2%
45300	Tampa-St. Petersburg-Clearwater, FL	1,443	8,155	465%	706	942	33%	477	524	10%	14,550	18,650	28%
47260	Virginia Beach-Norfolk-Newport News, VA-NC	639	3,339	423%	673	697	4%	165	201	22%	13,394	11,150	-17%
47900	Washington-Arlington-Alexandria, DC-VA-MD-WV	13,154	45,546	246%	4,670	5,673	21%	741	1,160	57%	40,451	41,349	2%

Source(s): Census Bureau Non-employer Statistics, Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW), and JobsEQ

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[xiii] Bureau of Labor Statistics – Current Population Survey FAQ https://www.bls.gov/cps/#faq

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