



Jobs Report – 2021 in Review The State of the Workforce and What You Can Do About It

January 2022



Introduction

It's over – 2021 that is! Or are the issues that affected an uneven market rebound from COVID-19 just beginning? The effects of the pandemic as well as racial and cultural watershed events and the resulting “Great Resignation” and workforce migration have created changes that will likely be with us for a long time. In many ways, the rebalancing and reset of the U.S. jobs and labor market may have simply pushed to the forefront workforce issues that had been dormant.

- Remote work
- Work-life balance
- Purpose
- Diversity
- Pay equity

In any event, what we are left with is a topsy-turvy work environment where predictability is now replaced by agility. Employers can no longer assume they have ready access to workers and must be vigilant to compete. In many cases, they are not competing against other employers but against workers taking a pause from work. How employers create incentives for workers to rejoin the workforce is part of the new normal.

The objective of this white paper is to highlight the data and key insights from 2021, which you can use to make decisions in early 2022. Market analytics plays a huge role in understanding the pulse of an ever-changing market. Market analytics also serves to level set talent acquisition and retention performance against peers. It sets the context by which the market can be properly understood and evaluated.

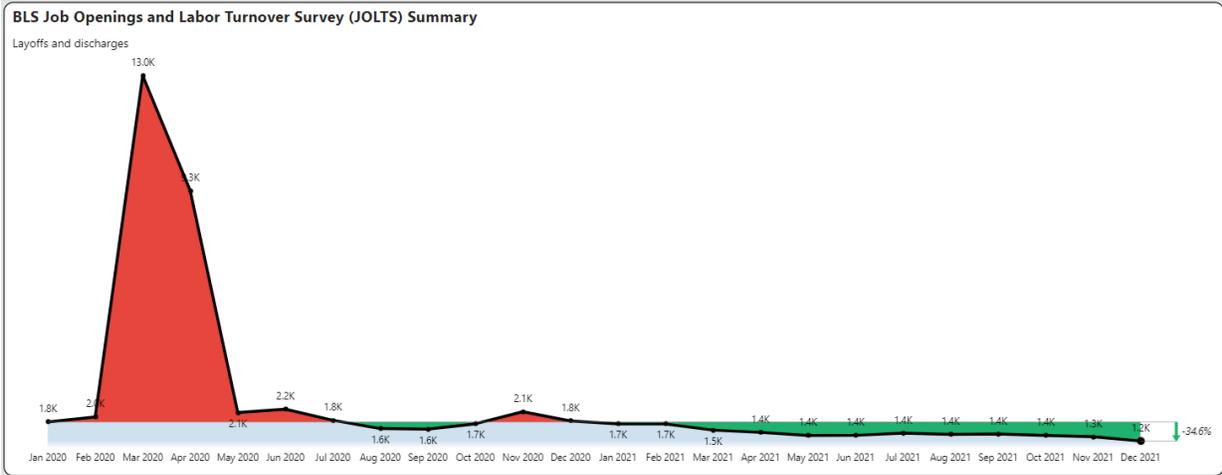
KEY TAKEAWAYS FROM 2021

- The dearth of workers is not short term nor is it temporary, but it is fixable.
- Job posting turnover keeps getting worse, but you can differentiate yourself.
- Remote work is more hype than hip, but don't ignore it.
- Some supply demand gaps are temporary, but others will require reskilling.
- Rise of compensation is necessary table stakes but be vigilant to stay competitive.
- Workplace satisfaction is the key to winning the hearts and minds of your current and future employees.

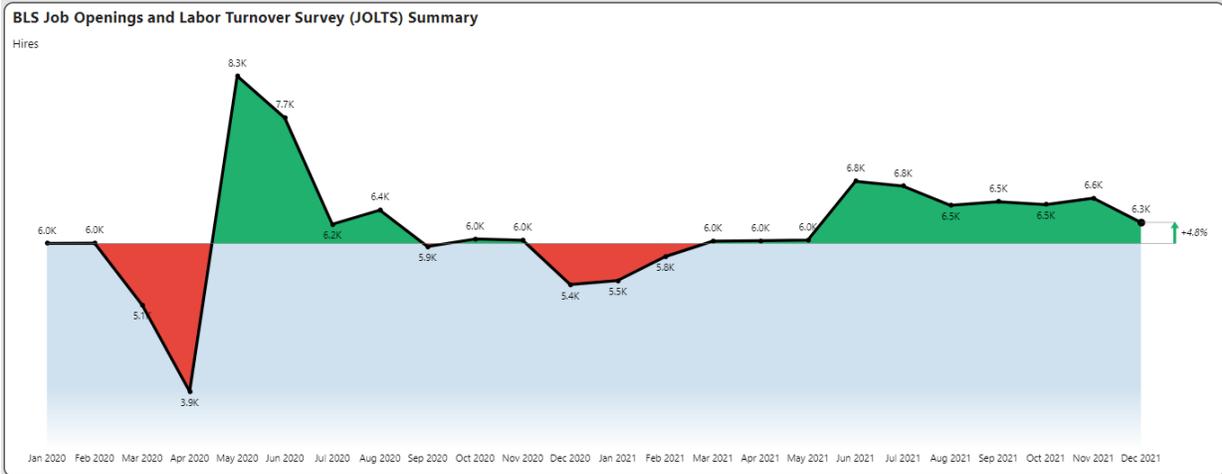
The Dearth of Workers

What Happened to 10 million displaced workers?

There are not many events that compare to the mass layoffs that occurred due to the full economic shutdown that started in March 2020. Over a two-month period an astounding 22 million workers were laid off or roughly 14% of the entire labor force. Over 50 million initial unemployment claims were filed compared to the normal 1-1.5 million claims filed pre-pandemic.



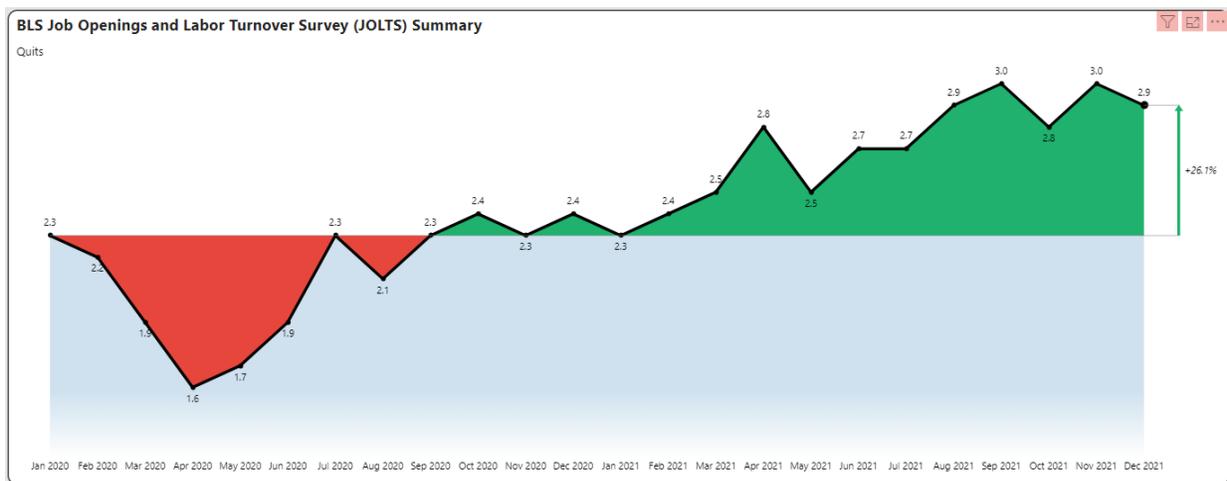
Right away, the initial signal was that this was going to be a “V” shaped recovery with a quick market rebound. New hires happened almost immediately with 8.3 million workers hired in May 2020 and 7.7 million hired in June 2020. Above average hiring has continued to this day except for a slowdown at the end of 2020 and beginning of 2021 as shown in the following graph.



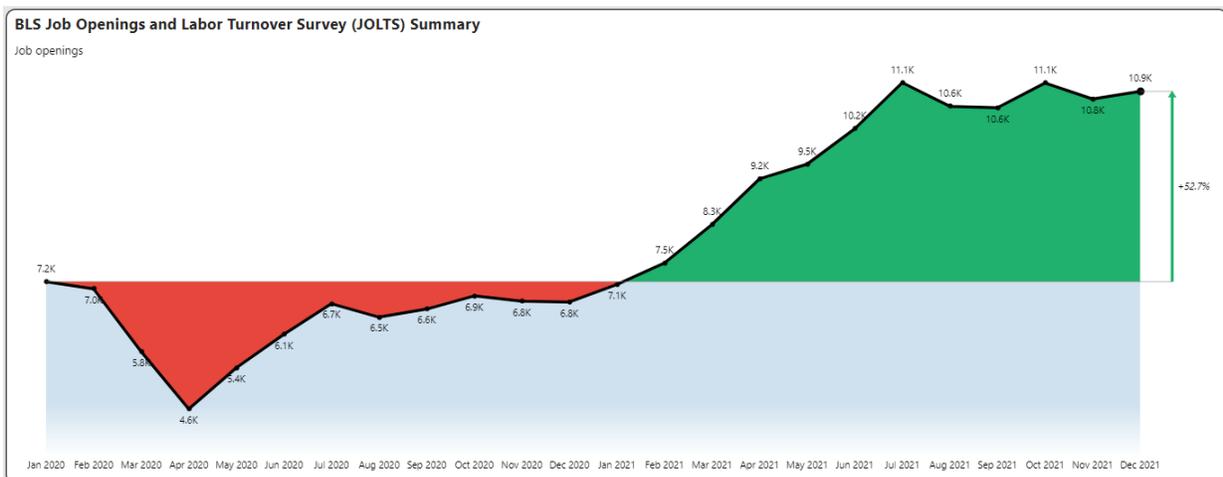
The Birth of the “Great Resignation”

This hiring rebound obviously does not account for all the 22 million displaced workers. Approximately 10 million remain somewhat unaccounted for in the labor market. Only 1 million of those have left the labor force according to BLS unemployment statistics. Unemployment claims have dipped down to below pre-pandemic levels and the unemployment rate is also now at or around pre-pandemic levels. What has happened to the remaining workers? The simple answer is they are looking for or doing something else.

It is not for lack of opportunity. In one of the oddest shifts of market control, workers have not only been laid off, but they have now left in droves and are being coaxed to come back. Quit rates are at an all-time high at 3% as shown in the following graph.



Employers simply cannot fill job openings. In the past when we referred to high job openings, it was a very positive sign. However, abnormal job openings on top of a lower labor force and low unemployment indicate a real problem. Today there are a little over 60 unemployed people for every 100 job openings. Record job openings just do not show signs of easing.



Going into 2021, there was high optimism that recovery was on the way. Job openings started out the gate strong going into 2021. But workers weren't coming back as fast as anticipated. There are numerous speculated reasons for this ranging from childcare, subsidized benefits, workplace satisfaction, burnout, and fear over possible COVID infections.

Then in the fall of 2021 the Omicron virus spread and many of these issues experienced a resurgence. For example, the most desperate sectors to hire also happened to be the most customer, patient, or consumer facing. Remote workers such as software engineers with no in-person customer facing requirements became the most popular.

The final nail in the coffin of market turbulence is the 40-year inflation high. Now, not only do employers have to coax people back to work through financial and other incentives, but they must raise pay just to keep pace with inflation.

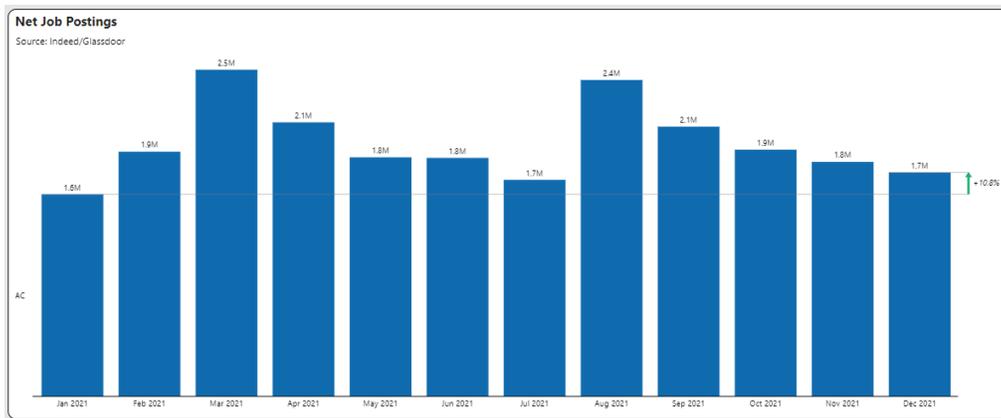
Going into 2022, it is apparent that mass shutdowns are likely past, and we are simply now going to have to learn to live with the virus. However, as we think about the workforce, it is apparent that we will have to stay informed and think critically. Understanding the market as it evolves is essential to forming good strategy.

Current State of Job Postings

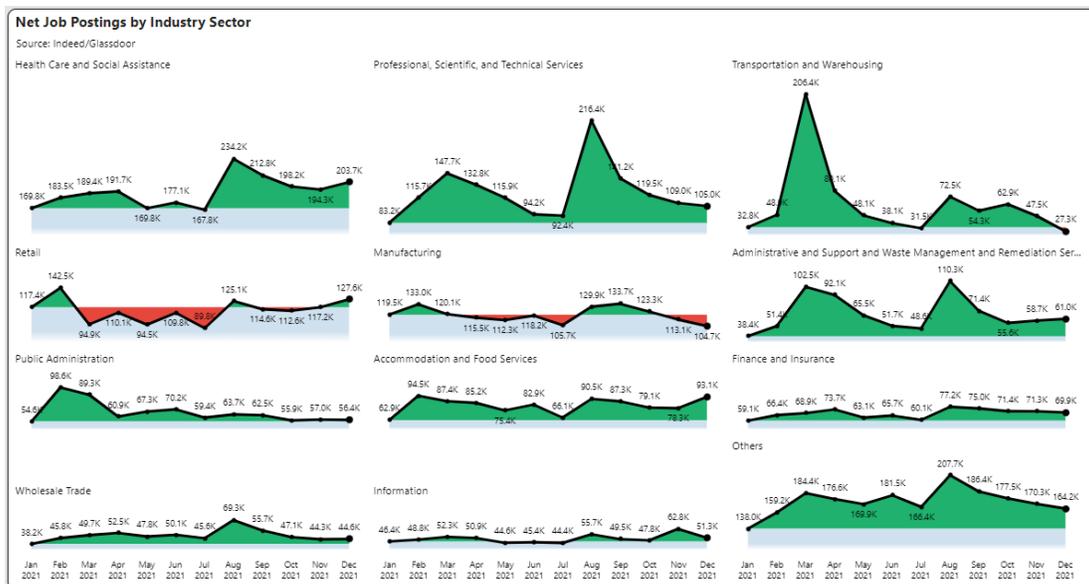
So how do we interpret where things are going into 2022? Job postings are very helpful but job posting volume alone is not a good metric. Why? Because job posting volume does not measure whether the posting ads are repeated, withdrawn (filled), or still open. We need to also understand the job postings turnover.

Slowing Posting Volume

Net postings, which are unique unrepeated ads, declined for the third straight month in December. Net postings are down about 35% from peak months in March, April, and August 2021.



The slowness of job postings varies widely by industry as shown in the following graph.



- Healthcare, Retail, Accommodation and Food Services remain at or near 2021 monthly high points.

- Transportation and Warehousing is at 2021 lows and 90% below peak, keeping in mind these jobs are highly cyclical.
- Manufacturing and Professional and Scientific also are at or new 2021 lows.

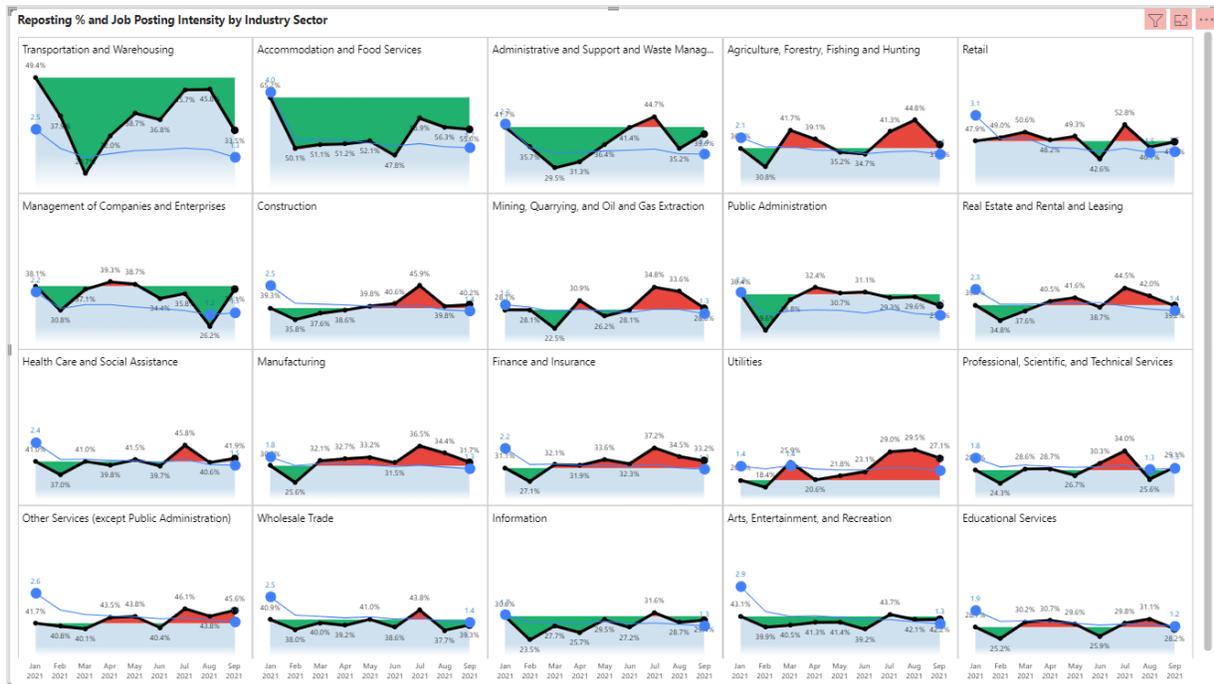
Job Posting Turnover

Job posting turnover measures how rapidly job postings are turning over. This consists of several key measures:

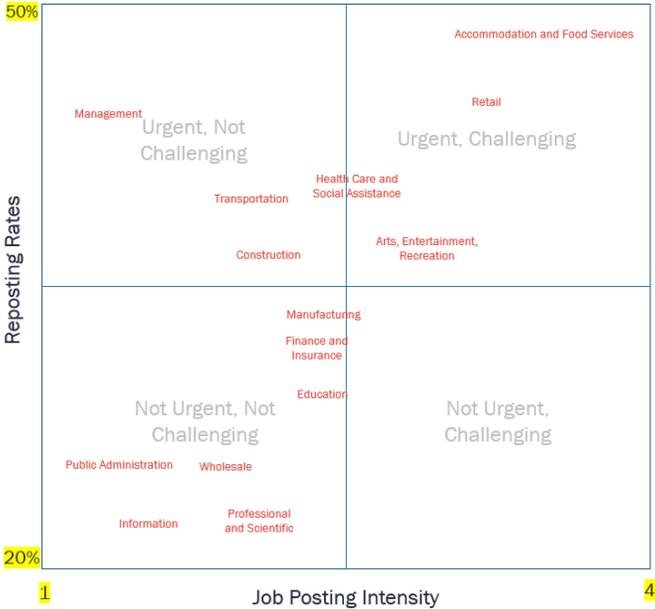
- Reposting percentage indicates the percentage of jobs which are being reposted. Job posting intensity is a measure of how frequently a job is being posted. For example, if the same job is posted twice, job posting intensity is 2. Reposting rates do not factor in the number of times a job is reposted.
- Urgency indicators show the postings which are flagged as urgent. This is also a measure of the perceived need to fill the job.
- Estimated fill days are based on the number of days from when an ad is first posted to when it expires or is withdrawn. This metric is most valid for months or quarters where most jobs are estimated to be filled.
- Open days indicates the number of days a job posting has been open

REPOSTING RATES

In the graph below, we see the reposting rate and the superimposed job posting intensity by industry for the first three quarters of 2021 (Q4 does not yet have its own history). As a benchmark, the reposting rate across all industries through the first three quarters is 35.7 and the job posting intensity is 1.59.



The following matrix compares industry sector using the measures of reposting rates and job posting intensity. Job postings with a high reposting rate typically above 50% are indicative of broader industry challenges of hiring workers. Job postings with a high job posting intensity also adds the element of the difficulty of filling jobs. A high job posting intensity may signal specific strategic difficulties in filling positions.



- Consumer facing industries continue to face the biggest challenges. These industries have very high reposting rates well above 50% and often must post an ad multiple times (job posting intensity greater than 3). This was most evident early in 2021 but then leveled off as the year progressed as these industries realized the new normal. The new normal may involve reduction in service rather than continuing to post the same jobs over and over.
- On the opposite end of the spectrum, industries such as Information, Professional and Scientific are not facing industry-wide challenges and in fact with remote work options may have additional sourcing opportunities.
- Transportation and Construction are highly cyclical industries that have had spikes in repostings. Because of the shortness of seasonal hiring, there simply isn't enough lapsed time to place the same ads multiple times.
- To some level, this is also the case with Healthcare. Healthcare had spikes in care due to COVID-19. In addition, Healthcare must often post high percentages of jobs, yet doesn't have the luxury of long-term multiple posts of the same ad.

FILL DAYS

Fill days follow an 80-20 rule. The following table measures the summary fill statistics by quarter.

	Q1	Q2	Q3	Q4
Job Postings	9,045,861	8,954,090	9,951,829	7,756,958
Reposting %	33.98%	35.20%	37.71%	29.85%
Permanently Remote %	1.52%	1.61%	1.82%	1.76%
Temporarily Remote %	2.03%	2.03%	1.22%	.74%
Urgent %	18.61%	30.23%	15.24%	12.69%
Filled % (as of Sept. 10)	95.55%	93.87%	86.69%	54.65%
Estimated Fill Days Age	50.01	45.66	35.22	20.92
Job Posting Intensity	1.79	1.51	1.43	1.22

Estimated fill days for the first and second quarter are between 45 and 50 days with about 95% of the jobs filled. At first blush, things appear to be improving. However as described in more detail in the next section (Open Jobs), the amount of time job postings remain posted for the same job continues to increase. In other words, success rate seems to be improving but the failure rate is also getting worse. Employers continue to reset expectations of how fast jobs can be filled.

Fill rates for the first and second quarter by industry sector are shown below.

Sector	Postings (Net)	Filled Postings	%	Fill Avg. Days
⊕ Accommodation and Food Services	375,908	344,801	91.72%	57.39
⊕ Administrative and Support and Waste Management and Remediation Services	192,104	185,182	96.40%	35.61
⊕ Agriculture, Forestry, Fishing and Hunting	12,675	12,322	97.21%	43.59
⊕ Arts, Entertainment, and Recreation	24,931	21,713	87.09%	66.74
⊕ Construction	51,768	49,720	96.04%	43.63
⊕ Educational Services	33,127	31,045	93.72%	53.30
⊕ Finance and Insurance	174,197	163,671	93.96%	44.91
⊕ Health Care and Social Assistance	426,948	405,418	94.96%	55.29
⊕ Information	130,793	126,635	96.82%	44.94
⊕ Management of Companies and Enterprises	33,907	32,062	94.56%	60.50
⊕ Manufacturing	193,608	184,533	95.31%	51.68
⊕ Mining, Quarrying, and Oil and Gas Extraction	10,568	10,479	99.16%	26.66
⊕ Other Services (except Public Administration)	57,555	53,562	93.06%	64.94
⊕ Professional, Scientific, and Technical Services	284,681	277,169	97.36%	40.86
⊕ Public Administration	255,227	215,367	84.38%	48.03
⊕ Real Estate and Rental and Leasing	74,377	69,313	93.19%	53.38
⊕ Retail	495,625	455,135	91.83%	59.84
⊕ Transportation and Warehousing	296,473	290,676	98.04%	35.45
⊕ Utilities	17,286	17,004	98.37%	39.66
⊕ Wholesale Trade	113,468	106,912	94.22%	60.10
Total	3,255,226	3,052,719	93.78%	50.09

- Consumer-facing industries as noted previously have experienced higher days to fill.
- Cyclical industries like transportation and construction have experienced lower than average days to fill.

- Management and technical jobs, especially those that can be done remotely, also are experiencing lower than average days to fill.
- Health Care is higher than average reflecting the broader challenges in this sector which is experiencing burnout.

OPEN DAYS

Open postings have continued to decline from month to month from the peak in September 2021. In addition the open postings average age in days has now gone up from 58 days when we measured it in July 2021 to over 109 days now with data through January 14, 2022. Even though the total number of open postings have declined, there are still a significant number of job postings that are older and remain unfilled.

	10-Jul	6-Aug	10-Sep	8-Oct	12-Nov	10-Dec	14-Jan
Jan-21	311,280	257,857	216,098	190,572	167,983	138,387	109,681
Feb-21	298,088	217,703	186,791	154,430	132,526	111,204	94,727
Mar-21	413,131	302,501	244,243	197,422	158,590	131,305	106,471
Apr-21	551,833	404,267	300,217	233,769	178,933	144,526	112,262
May-21	819,367	500,311	364,378	268,481	197,216	155,417	119,200
Jun-21	1,683,126	909,866	492,129	365,123	245,128	188,905	139,990
Jul-21		1,598,181	826,789	516,197	350,651	253,809	180,639
Aug-21			2,278,844	1,075,274	583,071	423,250	281,398
Sep-21				1,721,200	819,418	537,700	351,210
Oct-21					1,479,904	774,935	430,091
Nov-21						1,249,906	569,194
Dec-21							993,133
	4,076,825	4,190,686	4,909,489	4,722,468	4,313,420	4,109,344	3,487,996
Average Days Aging	57.97	62.92	64.86	72.80	86.50	92.66	109.14

Job posting volume will likely continue to lag until more of the backlog of open jobs is worked off.

Differentiation in Ad Copy

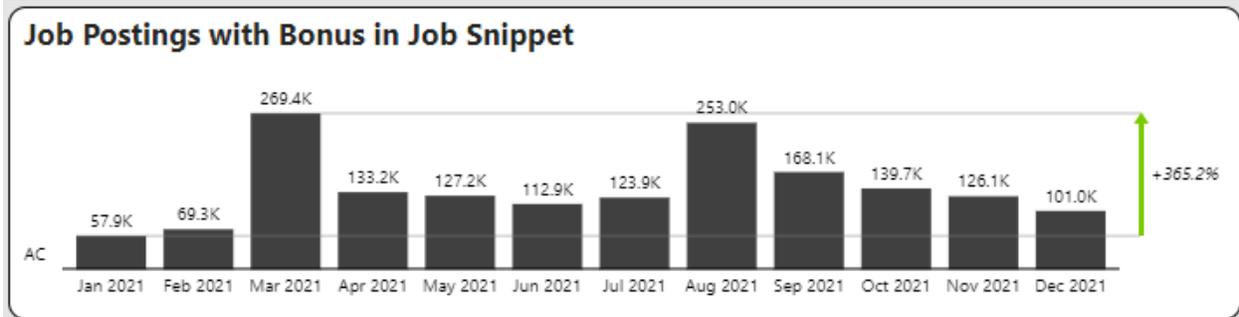
URGENCY INDICATORS MADE THE SITUATION WORSE

It is fascinating to observe the progression of behavior in job posting activity during 2021. In the first quarter, it was all about reposting rates. Then it progressed to ad urgency indicators. This is where the advertised job is marked as urgent. During the second quarter of 2021 nearly one in three jobs were marked as urgent. These urgent jobs often had the opposite effect which is to reduce the likelihood of filling the jobs. When accompanied by bonuses or compensation increases, these ads were more effective.

Urgency indicators declined to approximately 15% of all jobs in Q4. This has coincided with the realization that the problems in the marketplace are more prevalent and are not going to go away through short-term responses.

SIGN-ON BONUSES

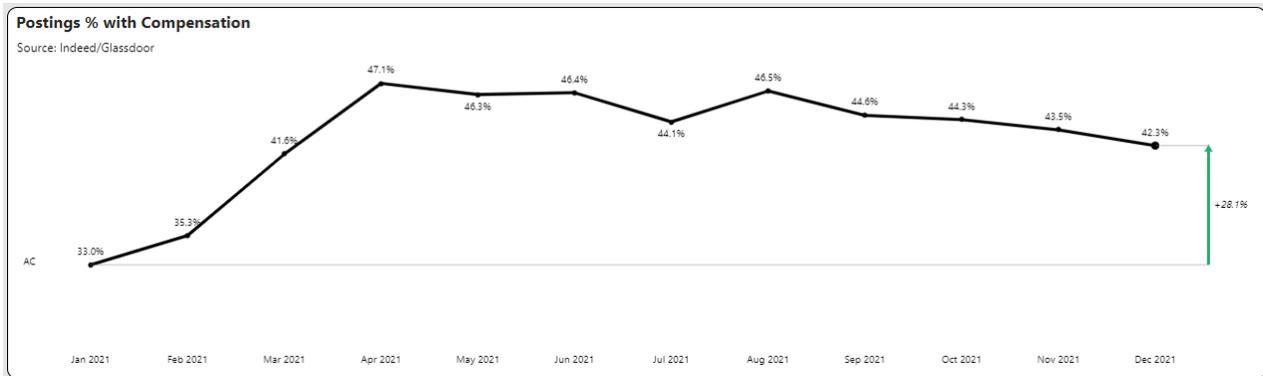
The urgency and competitive nature of the marketplace drove many companies to offer an additional incentive in the form of sign-on bonuses. Bonuses were offered in nearly 5% of the job postings during 2021. The distribution of sign-on bonuses is shown below with peaks in March and August but declining towards the latter part of the year.



Do sign-on bonuses actually help? The estimated fill days for postings with sign-on bonuses was 37 days which is four days better than postings without any bonus.

POSTINGS WITH ADVERTISED PAY RATE

Prior to the pandemic, employers posted advertised compensation in just under one third of job postings. The pandemic forced significant aggressiveness in pay advertising.



The number of job postings with advertised pay rose to as high as nearly one in two ads. However in recent months, this percentage has tailed off.

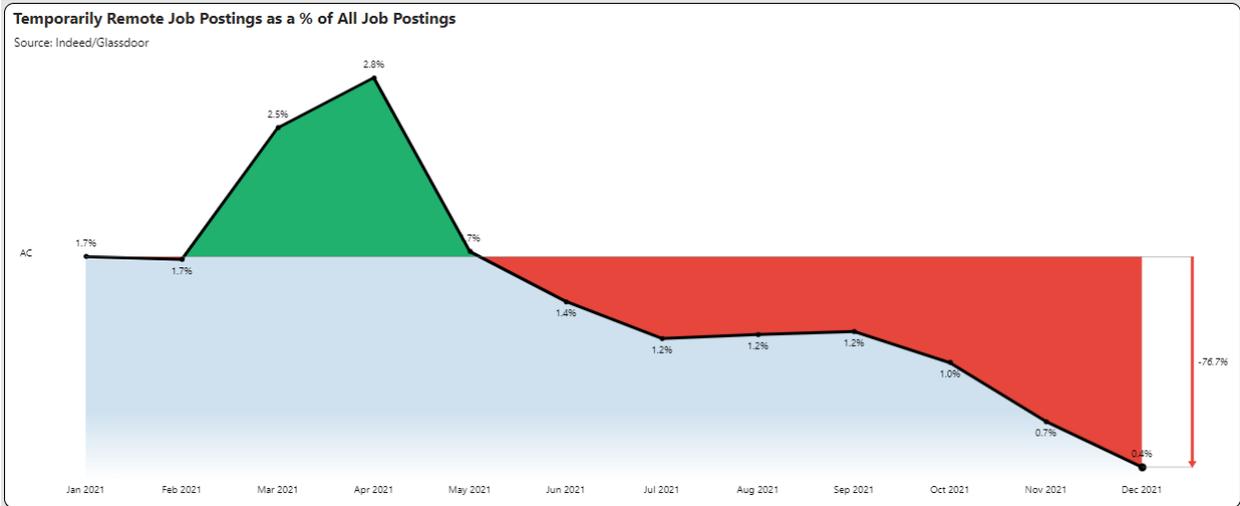
Remote Work – Hype or Hip

There is a lot of information flowing around the current state of remote work. Even more are the opinions that try to project the future of remote work. Many argue about how to even identify remote work. In this section, we attempt to identify the progression of remote work over the course of 2021 and where remote work currently stands.

How Remote Work has Changed During 2021

TEMPORARILY REMOTE

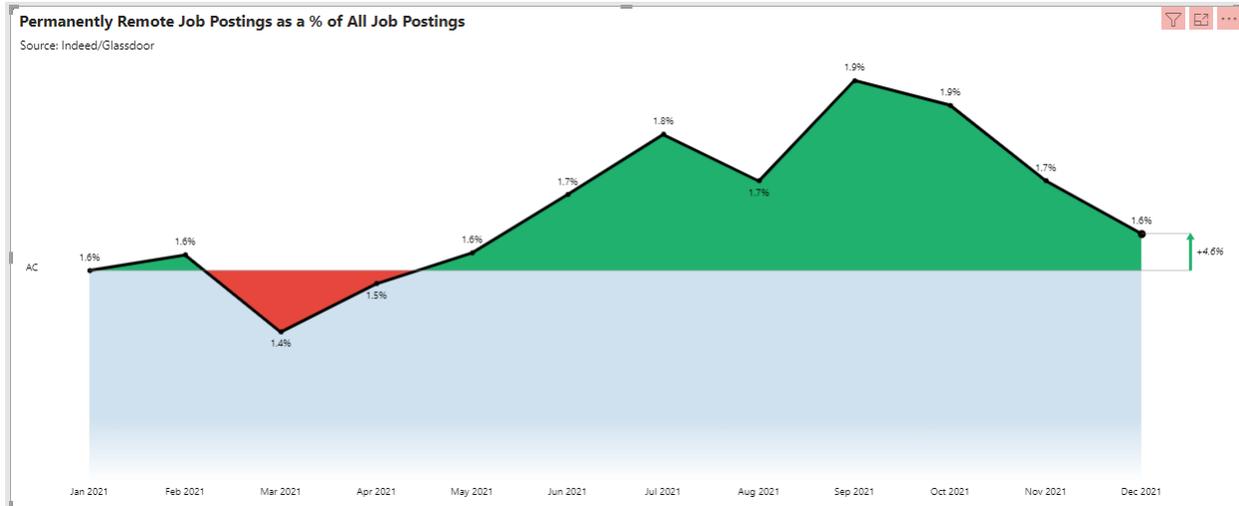
Temporarily remote work is work that is only for a period of time and will then revert to in-office at some future date. Temporarily remote job postings are expressly identified as such in Indeed® postings. Temporarily remote work declined to near zero levels by the end of the year as shown in the following graph.



It is predictable after two years of living with the pandemic that temporary arrangements ultimately will be replaced with permanent arrangements.

PERMANENTLY REMOTE

Permanently remote job postings are identified as permanent in the advertisement. Permanently remote job postings as a percentage of all job postings is still very low and in fact has been declining through December as shown below.



Employers are very reluctant to label positions as permanently remote. Remote work by and large remains relatively rare and confined to a small group of job titles.

The table to the right shows the top remote job titles (based on the top 1,000 job postings). Most are tied to software, finance, call center, marketing, and sales.

The sparkline shows the trend for these jobs by month with the highest and lowest months marked with a dot. Many of these job titles are not trending up in remote work.

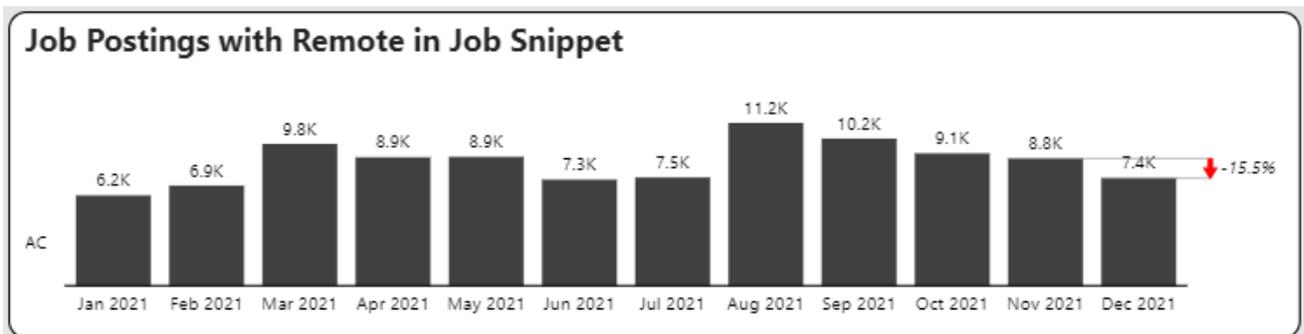
For example, software engineers and software developers experienced peak remote advertisement in the summer and have been flat or modestly declining since.

Title Cluster	Remote %	Trend by Year
Product Designer	19.73%	
Customer Success Manager	17.77%	
Accounts Executive	16.77%	
Solutions Architect	15.58%	
DevOps Engineer	15.41%	
Sales Representative	14.58%	
Mortgage Loan Processor	14.40%	
Underwriter	14.20%	
Full Stack Developer	14.11%	
Sales Engineer	13.82%	
Strategist	13.81%	
Product Marketing Manager	13.63%	
Product Owner	13.13%	
Software Engineer	12.68%	
Developer	12.64%	
User Experience Designer (UX Designer)	12.53%	
Account Director	12.40%	
Call Center Agent	12.12%	
Product Manager	12.04%	
Regional Sales Manager	12.03%	
Data Engineer	12.00%	
Instructional Designer	11.71%	
Production Director	11.65%	
Web Developer	11.55%	
Security Engineer	11.19%	
Software Developer	11.14%	
Provider	10.93%	

Where is Remote Work Today?

Estimates of remote work today range as high as one in seven jobs. However, there is nothing in the data to support anything even close to that high of an estimate. Remote positions to this point only apply to the most obvious of roles. December 2021 job postings indicates that only 1.63% of jobs are advertised as remote down from a peak of 1.93% in September.

Employers appear to be very reluctant to go out on a limb to label jobs as remote. Public Insight analyzed over 17 million elements from the text of job postings. Less than .1% of these advertisements contain any reference to remote and many of those are identifying remote in connection with the job duties and responsibilities. In addition, we analyzed job snippets (the summary job descriptions) for the last quarter of 2021. Only .2% of the job postings contain a reference to remote. Further, the trend is down from the peak in the summer.



That said, remote work in SOME form is likely here to stay. Workers have expressed a preference for some form of remote work. Employers have shown some willingness for hybrid work arrangements. The key seems to be flexibility. As we will see in exploring workplace sentiment, employers that tout work-life balance will likely be the big winners when it comes to hiring and retaining employees.

Short and Long-Term Supply Gaps

We have already highlighted the challenges in filling jobs and the significant decline in participating workers. But who is in the labor force and what are they looking for and how does that compare to demand? To answer that, we need to first define who is looking.

In our TalentView application, we define a job seeker as one who has updated their resumé on Indeed. This is a rough approximation of who is in market signaling they are looking for a job. We curate the job title just as we do the job posting to create supply/demand metrics. The job title is then cross-referenced to an occupation code using the [O*NET API](#). We are also able to then look at regional gaps.

Occupational Gaps

The accompanying table shows active resúmes in the market for 2021 compared to job postings by occupational major group.

A resumé to posting ratio above 1 indicates more job seekers in market than advertised jobs. A resumé to posting ratio below 1 indicates there are more jobs in market than there are people to fill them.

Both situations may pose separate problems. We have already highlighted the challenges in getting customer-facing workers. But this is not from a lack of people in the market. There is a 2:1 ratio of job seekers to job postings. Even Healthcare Support has significantly more job seekers than postings. This is likely a timing problem as job seekers are remaining on the sidelines, at least for now.

What is perhaps even more alarming are the occupations where there simply aren't enough job seekers in market to fill the jobs. For example, Transportation and Material Moving occupations have barely enough job seekers to cover the job postings. The job title with perpetually the highest number of open postings are CDL drivers. There just may not be enough people to go around.

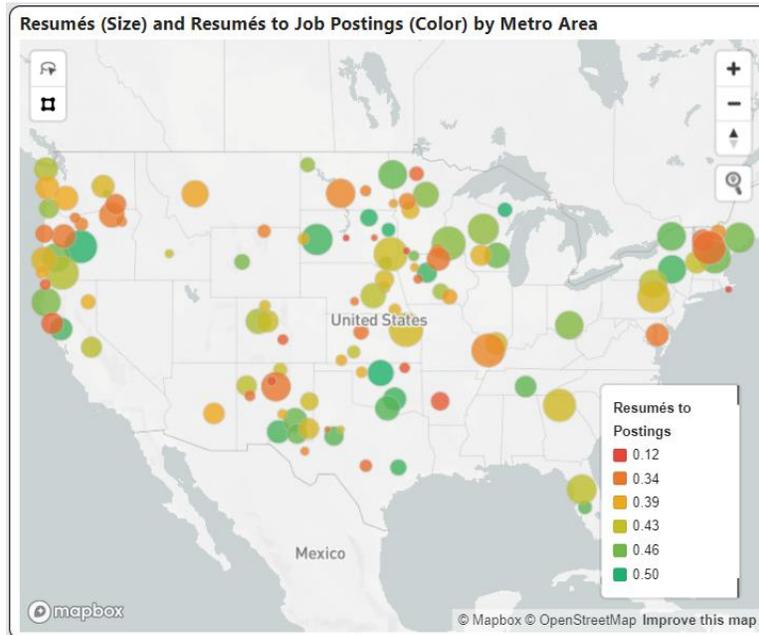
Healthcare Practitioners and Technical Occupations likewise just don't have enough people to fill the jobs. This category is at the bottom of the supply/demand ratio. This does not bode well for an aging population.

Major Group	Active Resúmes	Job Postings	Resúmes to Postings
Personal Care and Service Occupations	1,691,383	696,756	2.43
Food Preparation and Serving Related Occupations	2,404,258	1,042,613	2.31
Protective Service Occupations	825,957	361,448	2.29
Production Occupations	2,040,245	909,986	2.24
Educational Instruction and Library Occupations	1,513,740	680,123	2.23
Arts, Design, Entertainment, Sports, and Media Occupations	1,148,854	526,895	2.18
Healthcare Support Occupations	2,402,729	1,104,324	2.18
Sales and Related Occupations	2,578,529	1,294,258	1.99
Office and Administrative Support Occupations	5,033,794	2,551,909	1.97
Building and Grounds Cleaning and Maintenance Occupations	949,100	503,154	1.89
Construction and Extraction Occupations	1,534,713	877,365	1.75
Business and Financial Operations Occupations	2,272,221	1,321,693	1.72
Community and Social Service Occupations	638,064	381,880	1.67
Management Occupations	4,904,409	3,099,361	1.58
Legal Occupations	230,912	149,047	1.55
Life, Physical, and Social Science Occupations	513,952	428,075	1.20
Military Specific Occupations	71,047	61,845	1.15
Computer and Mathematical Occupations	1,093,830	968,816	1.13
Transportation and Material Moving Occupations	1,538,755	1,448,967	1.06
Architecture and Engineering Occupations	591,550	593,739	1.00
Installation, Maintenance, and Repair Occupations	811,734	862,351	0.94
Healthcare Practitioners and Technical Occupations	1,860,801	2,036,264	0.91
Total	36,650,577	21,900,869	1.67

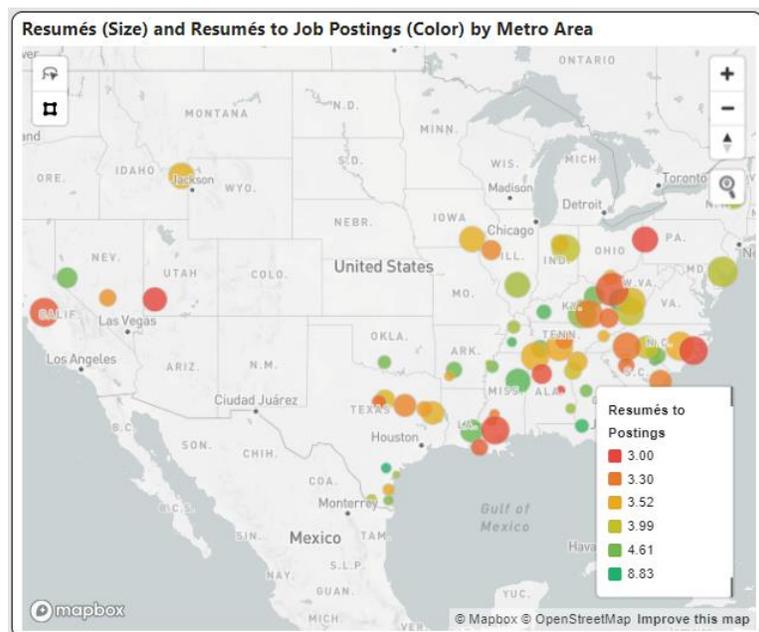
These issues are more long-term in nature and require reskilling of the labor force.

REGIONAL VARIATIONS

Healthcare is also problematic because much of the labor force must work in-person despite advances in telemedicine. Consider the map below which highlights areas of the country where the number of job seekers in healthcare support occupation is less than half of the job postings.



Regional variations also create opportunities to recruit new workers where remote work is possible. For example, Computer and Mathematical occupations show a resumés to postings ratio barely above one. However, the map shows regions of the country where these occupations have at least three times as many resumés as job postings.



HIRING FOR DIVERSITY

Many employers are seeking to increase diversity in their workplace. This is challenging as job seekers typically do not disclose their protected status. However colleges are required to report racial and gender diversity as part of Title IV reporting. In our College and Career Insights module we highlight enrollment and degrees awarded by gender and race.

For example, the following table shows colleges and universities with computer degrees awarded where the growth for the previous year exceeds 30%. This type of analysis enables employers to specifically target their recruiting efforts.

Awards by Institution, Program, Gender, and Race								
Race	Asian		Black		Hispanic		Total	
Institution	Awards	Awards by Year	Awards	Awards by Year	Awards	Awards by Year	Awards	Awards by Year
Arizona State University Campus Immersion	134		10		74		218	
Brown University	81		6		14		101	
Colorado State University-Global	31		37		48		116	
CUNY Queens College	148		15		51		214	
Florida International University	14		13		193		220	
George Mason University	93		30		22		145	
George Washington University	45		46		12		103	
Georgia Institute of Technology-Main Campus	565		65		123		753	
Harvard University	79		4		20		103	
Northeastern University	87		4		22		113	
The University of Texas at Dallas	198		12		62		272	
The University of Texas at San Antonio	19		15		129		163	
Towson University	29		90		19		138	
University of California-Berkeley	216		1		20		237	
University of California-Irvine	400		7		83		490	
University of California-Riverside	88		5		38		131	
University of Florida	59		10		85		154	
University of Houston	56		20		45		121	
University of Michigan-Ann Arbor	275		7		31		313	
Western Governors University	97		200		172		469	
Total	2,714		597		1,263		4,574	

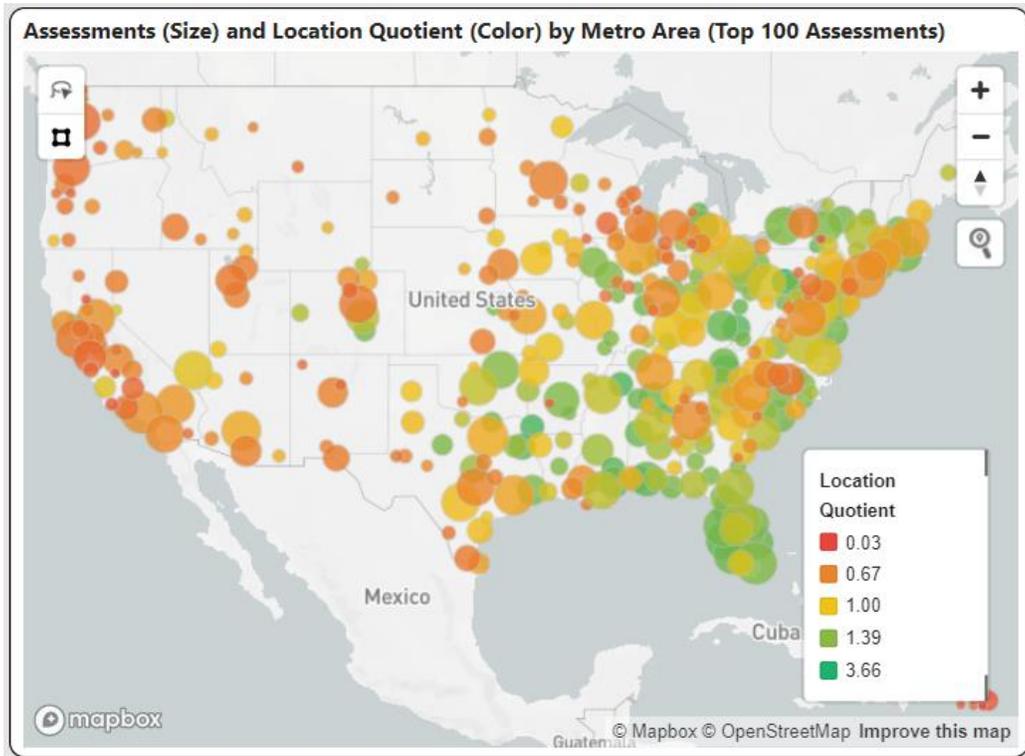
Skills Gaps

As the market continues to reset from the pandemic, reskilling or upskilling will be increasingly important. Reskilling means that an individual will be trained for a different type of work. Upskilling means that the individual will add a set of skills to better equip them for a different type of work. For example, [education teachers](#) have the core skillset to teach and are now upskilled to go into education technology or reskilled to go into sales. Unfortunately, there is not a single source of credentialing although several organizations are working the problem.

In TalentView, we analyze several sources for understanding workforce skills. One of these sources is the Indeed® assessment system. Indeed provides both standardized assessments and the ability to generate customized assessments. Scores range from completed to expert category which we quantify from one to five. By relating assessments to job titles and regions, we can identify skills gaps.

In the example below, we analyze assessments for registered nurses regionally. This is accompanied by looking at relative skills concentration using a location quotient calculation. Location quotients benchmark to a national value (which is equal to one). Skills below one therefore have a lower than

national concentration and skills above one have a higher than national concentration. As you can see, there is a wide variation in assessments taken for registered nurses. The map below indicates a higher regional concentration in the southeast of registered nurse skills than the west.

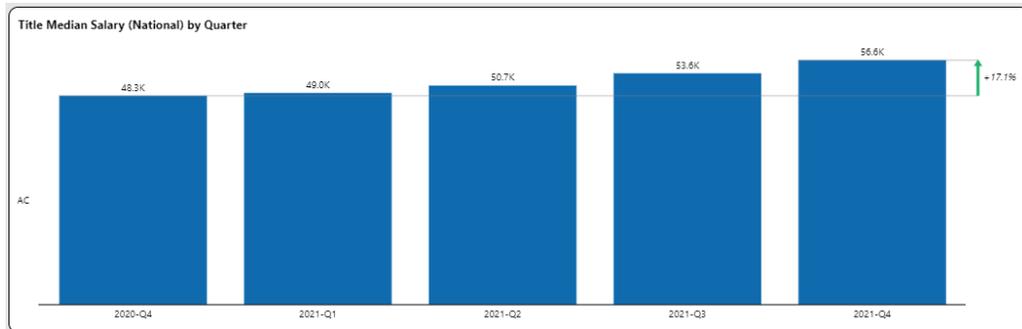


Rising Compensation in a Complex Year

Employers in 2021 not only had to deal with sourcing and recruiting challenges due to the pandemic, but also inflation. Substantial compensation increases did not make a dent in meeting sourcing challenges.

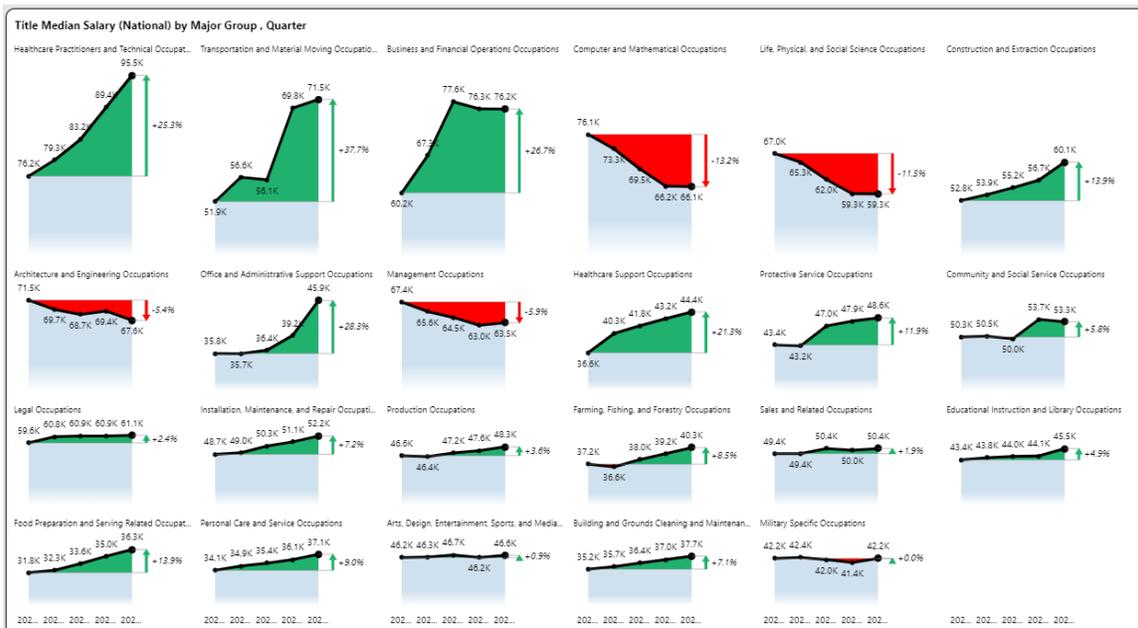
Rising Compensation

Median national compensation rose 17.1% in 2021 according to quarterly benchmarks using Indeed salary surveys. Further, the compensation increases also rose each quarter moving from 1.38% in Q1 to 5.68% in Q4.



COMPENSATION BY OCCUPATION

The changes in compensation over the course of the year varied widely. The chart below shows the changes in surveyed compensation by occupational major group. The highest salaries as a group are sorted first.



- Healthcare practitioners had the highest salary as an occupational group and increased over 25% during the year.
- Transportation occupations had the highest percentage increase at 37% and had a massive jump in Q3 as supply chain shortages became increasingly acute.
- Surprisingly some groups such as computer and mathematical occupations had composite declines but in reviewing these in more detail, the mix of job titles had much to do with the change.
- Lower paying jobs in general did not jump as much as higher paying jobs. Occupations such as food service, personal care, and maintenance ranged from 7-14%. These raises did not generally move the needle and barely kept pace with cost-of-living increases. There is nothing fundamentally attractive to drive growth in these occupations.

PAY DISPARITY IS GETTING WORSE

Getting workers back to work is also challenging because of increasing gaps in compensation. As noted previously, entry level occupations increased at a slower rate than higher paying occupations. Another way of looking at it is the gap between the highest and lowest paying jobs as a percentage of the median.

At the end of 2020, minimum salaries as a percentage of the median declined from 68% to 66%. On the other end of the spectrum, maximum salaries as a percentage of the median rose from 150% to 155%.

REGIONAL VARIATIONS

Compensation changes vary significantly on a regional basis. In the following table, we show the changes in surveyed compensation for the largest 25 metro areas based on survey count. The traffic light icon indicates whether the compensation has increased (green) or decreased (red).

Regional Compensation Survey Statistics by Quarter (Top 25 Metros)										
Quarter Metro Area (CBSA)	2020-Q4		2021-Q1		2021-Q2		2021-Q3		2021-Q4	
	Median	QoQ%	Median	QoQ%	Median	QoQ%	Median	QoQ%	Median	QoQ%
Atlanta-Sandy Springs-Roswell, GA Metro Area	\$62,293		\$61,250	-1.56%	\$59,295	-3.26%	\$58,678	-0.63%	\$61,028	3.72%
Austin-Round Rock, TX Metro Area	\$58,502		\$59,007	0.98%	\$58,354	-1.14%	\$60,150	3.12%	\$61,041	1.66%
Boston-Cambridge-Newton, MA-NH Metro Area	\$67,592		\$66,826	-1.11%	\$69,593	4.21%	\$72,139	3.72%	\$71,714	-0.62%
Charlotte-Concord-Gastonia, NC-SC Metro Area	\$55,309		\$54,518	-1.19%	\$53,964	-0.67%	\$53,899	0.27%	\$54,207	0.41%
Chicago-Naperville-Elgin, IL-IN-WI Metro Area	\$48,198		\$48,077	-0.08%	\$49,521	3.21%	\$53,234	8.10%	\$62,981	19.18%
Dallas-Fort Worth-Arlington, TX Metro Area	\$54,915		\$55,474	1.07%	\$54,479	-1.65%	\$55,407	2.10%	\$56,308	1.68%
Denver-Aurora-Lakewood, CO Metro Area	\$49,176		\$49,786	1.35%	\$51,929	4.34%	\$56,987	10.29%	\$60,158	5.70%
Houston-The Woodlands-Sugar Land, TX Metro Area	\$56,090		\$57,174	1.96%	\$56,455	-1.04%	\$56,346	0.25%	\$56,566	0.42%
Kansas City, MO-KS Metro Area	\$44,049		\$44,305	0.64%	\$45,439	2.57%	\$46,258	2.11%	\$54,021	17.63%
Las Vegas-Henderson-Paradise, NV Metro Area	\$52,447		\$52,579	0.52%	\$53,052	0.94%	\$53,013	0.26%	\$53,754	1.53%
Los Angeles-Long Beach-Anaheim, CA Metro Area	\$59,894		\$60,071	0.41%	\$59,790	-0.50%	\$62,427	4.50%	\$63,651	2.04%
Miami-Fort Lauderdale-West Palm Beach, FL Metro Area	\$51,809		\$52,369	1.43%	\$52,193	-0.54%	\$52,419	0.65%	\$52,570	0.20%
New York-Newark-Jersey City, NY-NJ-PA Metro Area	\$62,469		\$62,941	0.66%	\$61,826	-1.80%	\$64,731	4.68%	\$69,081	7.22%
Orlando-Kissimmee-Sanford, FL Metro Area	\$52,734		\$53,866	2.24%	\$53,510	-0.63%	\$53,129	-0.54%	\$52,246	-1.70%
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metro Area	\$49,890		\$50,102	0.59%	\$51,234	2.62%	\$55,254	9.11%	\$59,499	8.34%
Phoenix-Mesa-Scottsdale, AZ Metro Area	\$51,468		\$52,021	1.08%	\$52,370	0.88%	\$53,270	2.18%	\$54,138	1.65%
Portland-Vancouver-Hillsboro, OR-WA Metro Area	\$43,954		\$45,113	2.28%	\$46,452	2.98%	\$55,606	20.84%	\$57,576	3.87%
Riverside-San Bernardino-Ontario, CA Metro Area	\$49,490		\$50,656	2.51%	\$52,196	3.11%	\$55,523	6.63%	\$57,901	4.50%
San Antonio-New Braunfels, TX Metro Area	\$55,657		\$54,690	-1.62%	\$53,533	-1.71%	\$54,426	1.76%	\$55,034	1.05%
San Diego-Carlsbad, CA Metro Area	\$62,880		\$62,387	-0.59%	\$61,293	-1.87%	\$61,762	0.86%	\$61,828	0.09%
San Francisco-Oakland-Hayward, CA Metro Area	\$70,376		\$69,908	-0.61%	\$68,725	-1.75%	\$69,197	0.67%	\$73,709	6.30%
Seattle-Tacoma-Bellevue, WA Metro Area	\$60,294		\$63,193	4.90%	\$64,266	1.73%	\$64,460	0.49%	\$64,515	0.07%
Tampa-St. Petersburg-Clearwater, FL Metro Area	\$54,296		\$54,012	-0.28%	\$53,125	-1.59%	\$52,972	0.04%	\$53,700	1.23%
Ukiah, CA Metro Area	\$58,057		\$57,933	-0.11%	\$58,174	0.55%	\$61,172	5.31%	\$63,050	3.26%
Washington-Arlington-Alexandria, DC-VA-MD-WV Metro Area	\$79,462		\$79,630	0.39%	\$75,352	-5.26%	\$73,260	-2.34%	\$72,125	-1.50%
Total	\$56,915		\$57,042	0.31%	\$56,991	0.02%	\$59,181	4.12%	\$61,027	3.28%

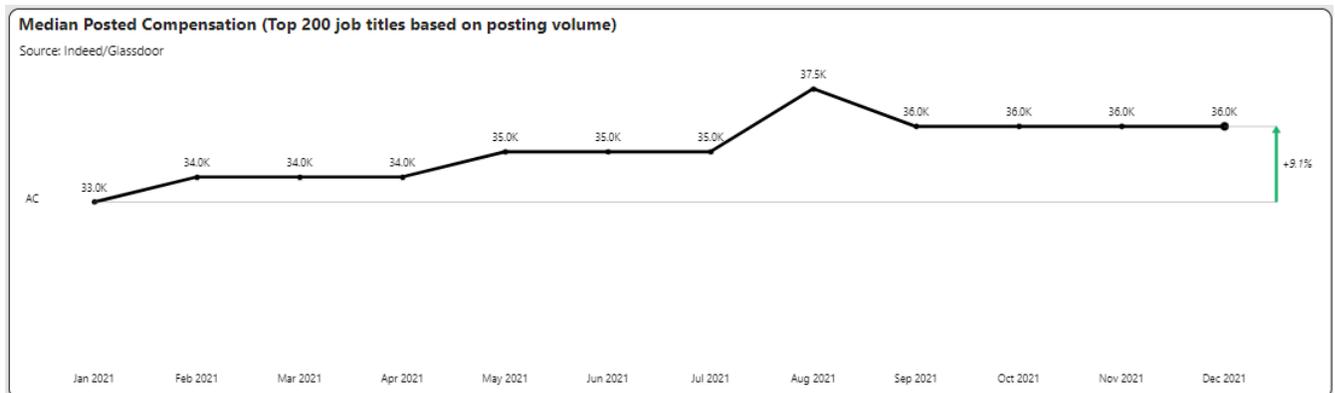
- Washington, D.C. experienced compensation declines in three of the four quarters during 2021. High cost of living cities such as D.C., Boston, and San Francisco showed lagging compensation behind medium cities.
- Several mid-size cities have experienced substantial compensation growth especially where there is acute worker shortage. Consider Louisville, KY for example which had growth rates the last three quarters ranging from 13-22%. Louisville is a shipping hub and is being very aggressive at recruiting workers. Another example is Columbus, Ohio which had a fourth quarter growth rate of nearly 20%.
- Cities such as Orlando and Las Vegas experienced flat compensation reflective of shutdowns and decline in tourism.
- Chicago and Kansas City showed significant increases in the fourth quarter. This is mostly attributable to the mix of positions. For example, Chicago registered nurses median compensation increased from \$66,378 to \$103,601.

Pay Advertising

POSTED SALARIES

The aggressiveness in advertising did not specifically translate to the actual disclosed wages. Most ads post a range of compensation, and that range can vary widely. In TalentView, we take the midpoint of the range for analysis purposes.

Median advertised posted compensation increased 9% in 2021 as shown below.



The median advertised compensation topped out in the middle of the summer and has remained relatively flat during the fourth quarter. **Average** posted compensation increased a much more modest 3.3% from January 2021 also with a high point in August.

Posted compensation is slowly giving rise to pay transparency. New York City became the first [large city](#) to mandate pay transparency in advertising with the goal of reducing pay gaps. This controversial law may also produce unintended consequences such as alienating existing workers through published salaries.

Attracting the Happy and Engaged Workforce

Employer reputation and workplace satisfaction are two sides of the same coin. Workplace satisfaction represents the worker and career perspective whereas employer reputation grades the perception of the employer.

Employers simply cannot afford to ignore their reputation. Consider the following statistics from Glassdoor® Research:

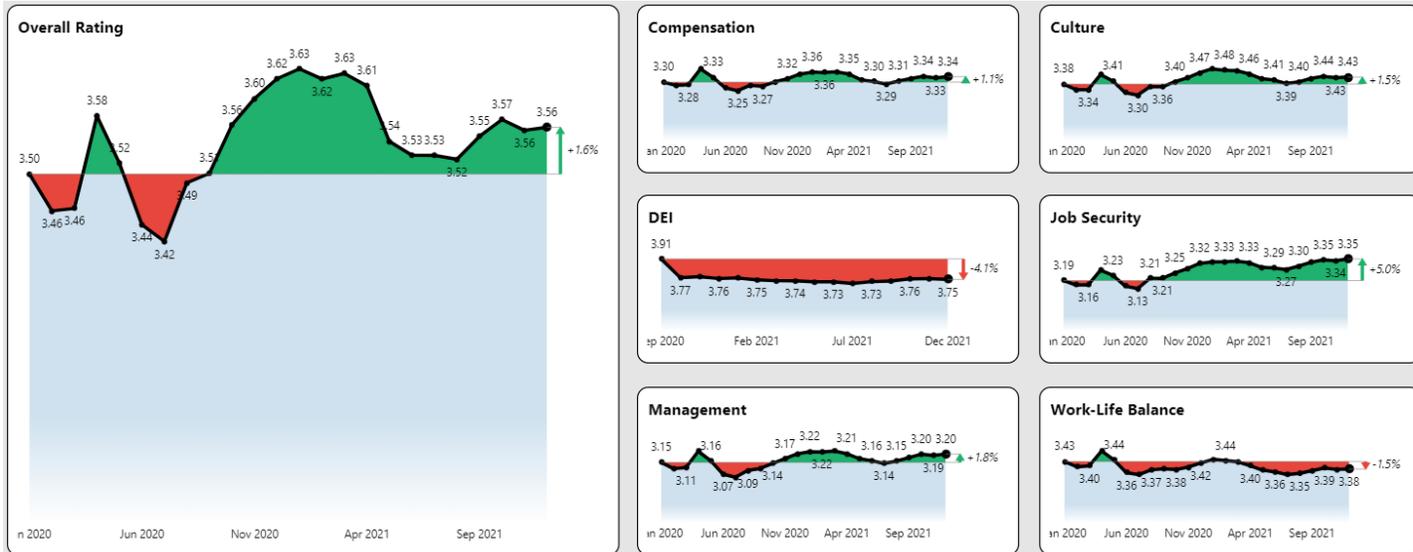
- 86% of employees and job seekers research company reviews and ratings to decide on where to apply for a job.
- 86% of women and 67% of men in the United States wouldn't join a company with a bad reputation.
- 75% of active job seekers are likely to apply to a job if the employer actively manages its employer brand.
- 50% of candidates say they wouldn't work for a company with a bad reputation, even for a pay increase.
- 92% of people would consider changing jobs if offered a role with a company with an excellent corporate reputation.
- A strong employer brand can reduce the cost per hire by as much as 50%, and a negative reputation can cost a company as much as 10% more per hire.

Worker sentiment to a large degree mirrored the attitudes of the broader public during the pandemic.

The Happy Workforce

WHERE ARE EMPLOYERS DOING WELL

Ratings over the course of 2020 to 2021 across all U.S. employers are shown below.



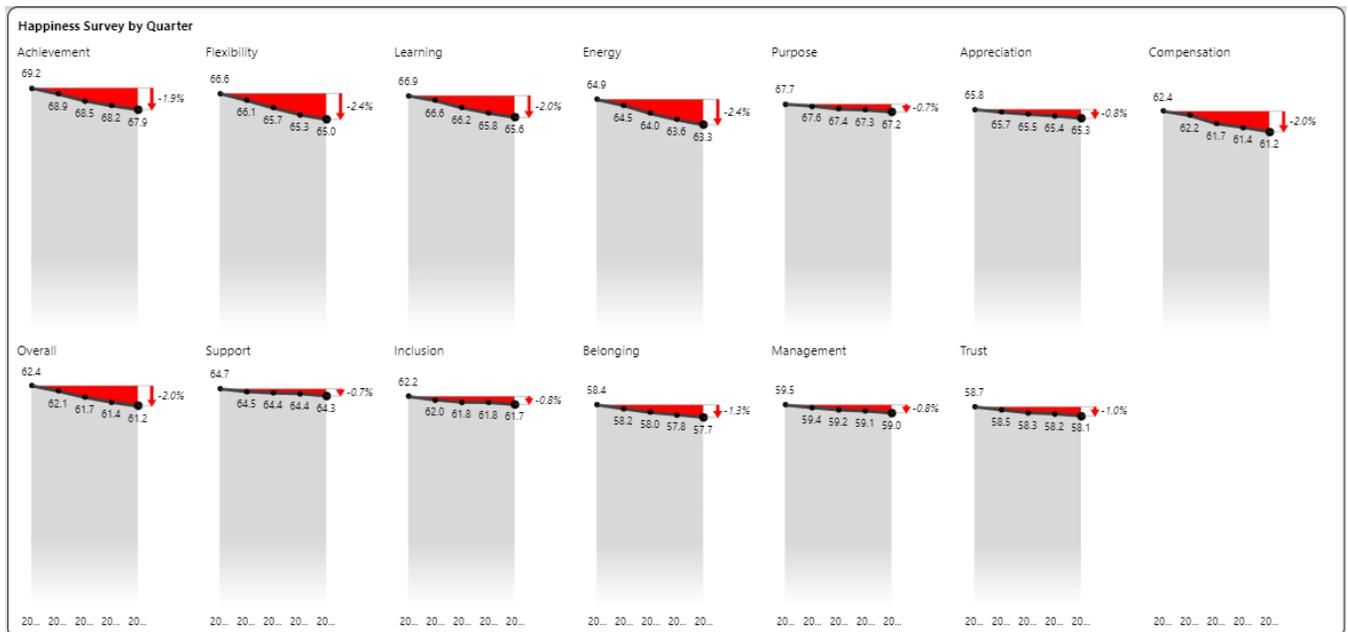
Overall ratings (5-point scale) ebbed and flowed according to the state of the pandemic. What is more interesting is the categorical breakdown over time.

- Despite increases in compensation (see previous section), compensation has remained flat at around 3.3. However, job security has jumped as the risk of layoffs has gone down significantly during the post-pandemic market recovery.
- Workers are generally not happy with management. This is the lowest rated category on a composite basis. It has gone up slightly.
- Culture and work-life balance are the second and third highest rated categories at 3.43 and 3.38 respectively. Culture improved during the pandemic whereas work-life balance declined. Navigating the process of remote work during this time was challenging. These issues are front and center to every job seeker.
- Diversity, Equity, and Inclusion (DEI) surfaced to the top of the list considering the macro social issues. Glassdoor provides a DEI rating category beginning in September 2020. Surprisingly this is the highest rated category, but expectations continue to evolve, and workers are expecting more. This category declined 4.1% reflecting those heightened expectations.

HAPPINESS SURVEY

Workplace happiness also declined modestly during the pandemic which is measured using the [Indeed Happiness Survey](#). We benchmarked the score for each quarter during the pandemic. The

overall score declined 2% but even more telling is that every single category also declined. Flexibility had the largest decline of 2.4%.



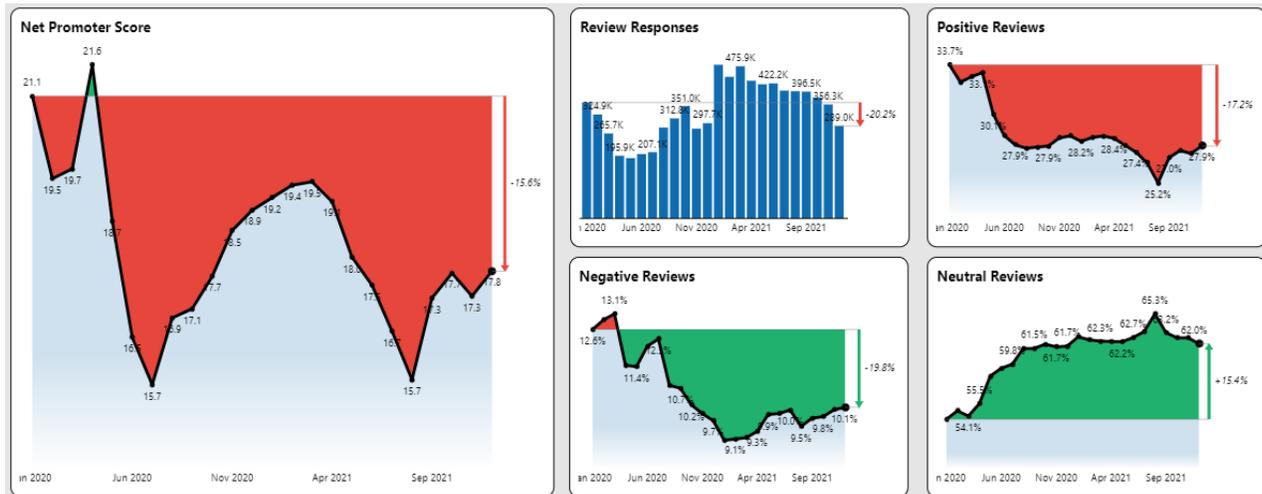
In addition, Indeed introduced two new categories during 2021 - Satisfaction and Stress Free. Stress Free is the lowest rated category in the Happiness Survey at 54.2. We have documented in a past [blog](#) that the stress-free workplace probably doesn't exist. Some stress must exist to provide the positive energy needed.

SENTIMENT SCORING

Text analytics creates the structured data from the unstructured review text. Text analytics is the automated process of examining large collections of documents to discover patterns or insights that may be interesting and useful. Text analytics synthesizes the results of data/text mining so that it can be quantified and visualized in a way that supports decision making. Text analytics uses Natural Language Processing (NLP) to understand human language to detect patterns and make sense of unstructured data. There are two technologies that we will explore that provide insights into unstructured data:

- **Sentiment Analysis or Emotion AI** – Measures feelings and emotions. It uncovers through the text whether the reviewer is positive, negative, or neutral. A sentiment score is then generated.
- **Opinion Mining** – Takes sentiment analysis to the next level by associating subjects and adjectives in pairs.

Microsoft® Cognitive Services Text Analytics AI is a service used to mine the data in the unstructured review text. Like the ratings, the results are telling.



- During the pandemic, BOTH negative reviews and positive reviews declined and were replaced by neutral reviews.
- Net promoter score calculates the difference between positive and negative promotion ranging from 100 (all positive) to -100 (all negative). The idea is that you want raving fans, or a high net promoter score. Net promoter score declined commensurate with the decline in positive and negative scores.
- Workers are taking a wait and see approach. A 20% decline in positive or negative worker sentiment is symptomatic of a passive workplace. This is consistent with the number of people looking in the workforce.

The Engaged Workforce

Employers must not only pay attention to the grades they are receiving and the overall attitudes of their workforce but who is rating them and why they are receiving these ratings. Qualitatively they must also understand what is important to their workers and structure their in-person and remote workplace to appeal to those workers.

WHO MATTERS - DIVERSITY

When Glassdoor released DEI as a rating category in late 2020, they also released various diversity categories as a reviewer category. These categories include:

- Gender
- Race and Ethnicity
- Sexual Orientation
- Disability Status
- Parent or Caregiver
- Veteran Status

In the last snapshot of 5.2 million ratings, 160 thousand responses were from one of these DEI categories or 3%. The focus on the categories will continue to grow.

Ratings for diversity categories were marginally under the overall rating as shown in the table below. The color highlights the range in values from high to low by category. The trend lines (sparklines) indicate the quarterly trends between ratings.

Employer Ratings (Top 1,000 by Rating Responses)														
Rating Category	Overall		Culture		DEI		Career Opportunities		Compensation (Pay & Benefits)		Management		Work-Life Balance	
DEI Category	Rating	QoQ	Rating	QoQ	Rating	QoQ	Rating	QoQ	Rating	QoQ	Rating	QoQ	Rating	QoQ
☐ ALL	3.77		3.70		3.95		3.57		3.52		3.34		3.49	
☐ All Classifications	3.77		3.70		3.95		3.57		3.52		3.34		3.49	
☐ Disability Status														
Not Disabled	3.60		3.55		3.88		3.49		3.46		3.21		3.34	
Disabled	3.23		3.19		3.59		3.19		3.30		2.83		2.97	
☐ Gender														
Men	3.67		3.60		3.95		3.53		3.52		3.25		3.39	
Women	3.54		3.50		3.79		3.43		3.41		3.15		3.28	
Non-Binary	3.18		3.02		3.39		3.06		3.01		2.75		2.88	
☐ Parent or Caregiver														
Not a Parent or Caregiver	3.57		3.52		3.87		3.46		3.42		3.20		3.33	
Parent or Guardian	3.57		3.53		3.84		3.49		3.55		3.15		3.25	
Caregiver	3.36		3.30		3.69		3.29		3.38		2.93		3.09	
☐ Race and Ethnicity														
White	3.51		3.46		3.86		3.40		3.43		3.13		3.23	
Black or African American	3.49		3.43		3.67		3.43		3.47		3.09		3.24	
Asian	3.82		3.76		3.96		3.66		3.51		3.42		3.57	
Hispanic or LatinX	3.61		3.54		3.92		3.47		3.49		3.18		3.31	
Indigenous American	3.41		3.29		3.61		3.35		3.40		3.02		3.12	
Middle Eastern	3.70		3.61		3.96		3.54		3.44		3.25		3.32	
Native Hawaiian	3.58		3.42		3.76		3.46		3.50		3.04		3.15	
☐ Sexual Orientation														
LGBTQ	3.31		3.28		3.67		3.24		3.24		2.92		3.05	
Non-LGBTQ	3.62		3.56		3.89		3.50		3.50		3.23		3.35	
☐ Veteran Status														
Not a Veteran	3.55		3.50		3.84		3.43		3.42		3.17		3.31	
Veteran	3.74		3.63		3.97		3.75		3.88		3.17		3.09	

- Surprisingly those in the diversity groups do not rate the DEI category as significantly lower than the broader (ALL) group.
- Management and work-life balance show the highest disparity. For example disabled workers rated these categories substantially lower than overall.
- Some diversity groups favored certain categories above the broader group. For example, veterans rated career opportunities and compensation above the broader group.
- Trends can vary widely by group. For example, Women and Black or African American groups shows positive trends whereas the Parent or Caregiver group declined across many categories.

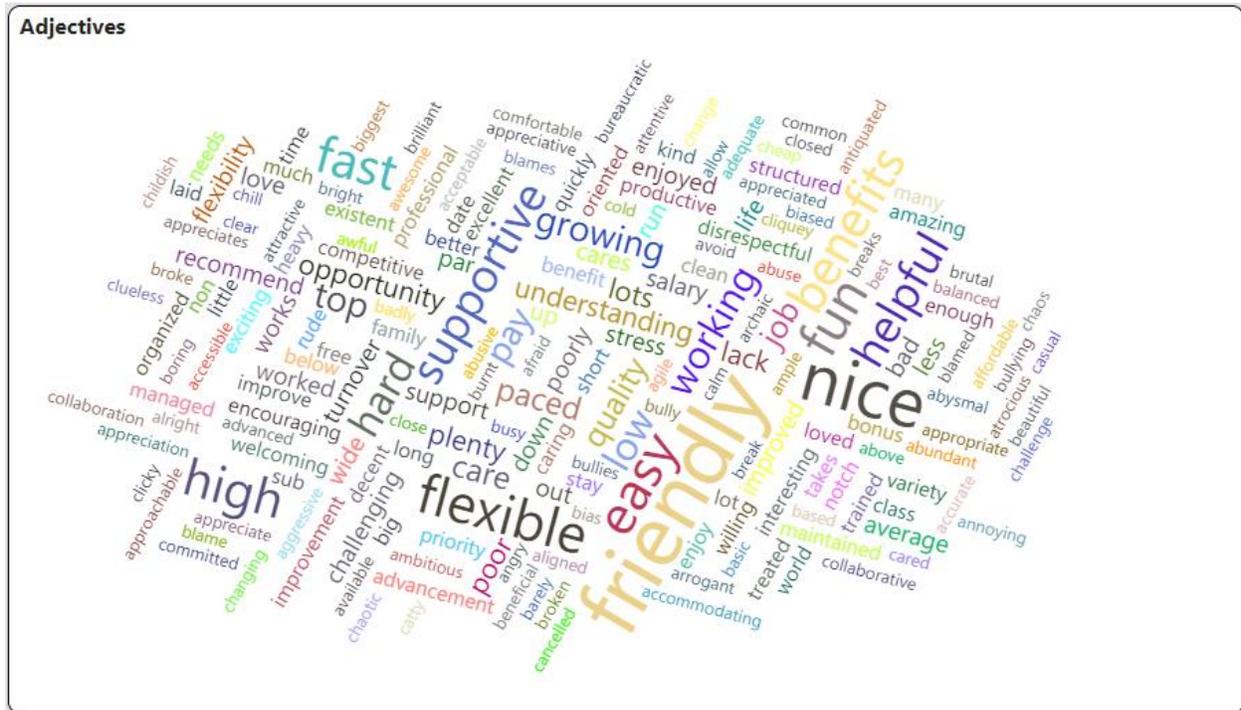
WHAT MATTERS – OPINIONS

Employers need to also pay attention to what employees are saying. This is where opinion mining is useful.

Opinion Mining is a deeper dive from Sentiment Analysis. Also known as Aspect-based Sentiment Analysis in Natural Language Processing (NLP), this feature provides more granular information about the opinions related to attributes of reviews in text. The Microsoft Cognitive Services Text

Analytics API surfaces opinions as a target noun or verb (subject) and an assessment (adjective). The text analytics provides an additional qualitative aspect to the quantitative scores rendered by sentiment analysis.

What characteristics are associated with successful companies? The following opinion word cloud provides some clues for companies that are highly rated (4.5 rating or better).



- Sometimes the main things get lost in the minutiae but what stands out is just creating a friendly and fun environment. Top 10 adjectives include friendly, nice, and fun.
- A safe work environment is also very important with clean being a top adjective.
- Flexibility is a very common theme. Flexible was a top 10 adjective as well as other adjectives that adhere to work-life balance such as supportive and cares.
- Compensation and benefits are table stakes and has little mention in the top adjectives. Offering a competitive wage however is critical.
- Creating an environment where it feels the team is rowing in the same direction is very important. Common adjectives include challenging, positive, and fast-paced.
- Culture and management is critical and appear as top subjects in reviews. A common theme is one of nurturing and caring.

Conclusion

After a rollercoaster ride through 2021, recruiters and talent strategists should no longer expect a return to normalcy. The changes that have occurred during the pandemic have longer lasting, if not permanent ramifications. Traditional work structures and definitions have been obliterated because of the repercussions of COVID-19.

Traditional government sources of job and labor market data are no longer able to keep pace with a market that changes daily. The role of market analytics has become crucial in understanding directional changes. This provides not only informational value, but actionable insights.

Employer strategies in attracting and retaining talent has dramatically changed because of the pandemic. Traditional approaches no longer work as effectively as they once did.

- Employers must alter expectations of how long it takes to fill certain positions.
- What you say and offer in a job advertisement can make a big difference.
- Dwindling candidate pools have forced employers to look at alternate and hidden sources.
- Compensation is no longer the lead driver of behavior. Compensation as a motivator falls well behind other factors such as culture, work-life balance, and DEI.
- Employers must pay attention to their brand and reputation. Job seekers are looking at this data.
- Employers must understand their relative strengths and weaknesses to best position their company.

Public Insight Can Help

We publish a monthly Jobs Report that highlights the latest changes and trends in the job and labor market including:

- What is the current state of the jobs and labor market?
- What are the trends with remote job postings, open days, quit rates and more?
- What occupations and job titles are gaining recent momentum?
- How is compensation changing?
- What geographical areas are experiencing the highest growth rates?
- Which skills and abilities will be necessary for the jobs of tomorrow?
- What are the latest employment trends?
- How you can analyze this data to improve business strategy, talent acquisition and career planning?

Sign up to receive this free report visit: <https://publicinsightdata.com/about/research/us-jobs-report/>.

About Public Insight

Public Insight® develops TalentView, a talent analytics application for rapidly evaluating, benchmarking, and monitoring market data and trends impacting talent acquisition.

TalentView generates strategic, targeted market insights that optimize talent acquisition strategies and improve employer recruiting and branding effectiveness.

TalentView transforms data from interrelated data sources such as Indeed®, Glassdoor®, InsideView®, and government publications into dynamic, actionable market insights such as:

- Job posting fill rates and open jobs aging
- Supply and demand market metrics
- Remote work trends and opportunities
- Workforce migration
- Candidate skills and assessments
- Market selection and demographics
- College programs/awards and diversity
- Alumni profiles
- Employer ratings (including diversity categories)
- Employer reviews and sentiment analysis
- Employer opinion mining
- Compensation survey and trends
- Ad-rate compensation

Public Insight solutions are built on Microsoft® Power BI and data mining technologies to enable self-service analysis, benchmarking (title, occupation, region, employer, industry), decision making and collaboration using open standards and data transparency.

Visit our website at www.publicinsightdata.com to learn more, watch a demo video, or schedule a live demo.

