nova WORKS

August 2023

WORKFORCE REVIEW

A monthly review of labor market information for Silicon Valley

# Generative AI and the future of work in America.

The US labor market is going through a rapid evolution in the way people work and the work people do. Months after MGI released its last report on the future of work in America, the world found itself battling a global pandemic. Since then, the US job market has come roaring back from its sudden drop. The nature of work has changed as many workers have stuck with remote or hybrid models and employers have sped up their adoption of automation technologies. More recently, the accelerated development of generative AI, with its advanced natural language capabilities, has extended the possibilities for automation to a much wider set of occupations.

Amid this disruption, workers changed jobs at a remarkable pace—and a subset made bigger leaps and moved into entirely different occupations. Some 8.6 million occupational shifts took place from 2019 through 2022. Now even more change is in store. We expect an additional 12 million occupational shifts by 2030. The total number of transitions through 2030 could be 25 percent higher than we projected a little over two years ago.

Multiple forces are set to fuel growth in certain occupations and erode jobs in others. They generally fall into three categories: automation, including generative AI; an injection of federal investment into infrastructure and the net-zero transition; and long-term structural trends such as aging, continuing investment in technology, and the growth of e-commerce and remote work. We do not forecast how aggregated employment may be affected by the business cycle in the short term; instead, we focus on how these forces may reshape the composition of labor demand over the long term.

Across a majority of occupations (employing 75 percent of the workforce), the pandemic accelerated trends that could persist through the end of the decade. Occupations that took a hit during the downturn are likely to continue shrinking over time. These include customer-facing roles affected by the shift to e-commerce and office support roles that could be eliminated either by automation or by fewer people coming into physical offices. Declines in food services, customer service and sales, office support, and production work could account for almost ten million (more than 84 percent) of the 12 million occupational shifts expected by 2030.

By contrast, occupations in business and legal professions, management, healthcare, transportation, and STEM were resilient during the pandemic and are poised for continued growth. These categories are expected to see fewer than one million occupational shifts by 2030.

**Workers have shown a willingness to change career paths, while a tighter labor market has encouraged companies to hire from broader applicant pools.**

For the other categories that account for the remaining one million occupational shifts still to come, the pandemic was a temporary headwind. Employment in fields like education and training should rise in the years ahead amid a continuous need for early education and lifelong learning. Demand for construction workers also stalled during the height of the pandemic but is expected to rebound strongly.

The changes estimated in our earlier research are happening even faster and on an even bigger scale than expected. It is becoming even more urgent to solve occupational and geographic mismatches and connect workers with the training they need to land jobs with better prospects. The fact that workers have been willing to pivot and change career paths, while a tighter labor market encouraged companies to hire from broader applicant pools, gives cause for optimism—but not complacency. The future of work is already here, and it's moving fast.

**In a tighter labor market, workers have been moving into new roles, accelerating occupational shifts.**

By the end of 2022, employment had bounced back to its 2019 level. But a great deal was in flux.

**Are pandemic-era labor shortages here to stay?**

The quits rate soared to new heights during the pandemic, with roughly 48 million Americans leaving their jobs in 2021 and 51 million in 2022. What people did next is not fully evident from the data. Some moved into better jobs with higher pay. Others left the labor force, whether out of discouragement or for personal or health reasons, and it is unclear if or when they will return.

Total employment hit an all-time high after the pandemic, with many employers encountering hiring difficulties. As of April 2023, some ten million positions remained vacant; labor force participation had ticked up but was 0.7 percentage point below its prepandemic level. That translates into roughly 1.9 million workers who are neither employed nor actively looking for jobs. This erosion comes after an extended 20-year trend of steadily falling participation.

Labor supply may continue to be constrained, given that one in four Americans will be of retirement age or older by 2030. Without higher participation rates, increased immigration, or meaningful productivity growth, labor shortages could be a lasting issue as the economy and the population grow. This remains an open question confronting markets, economists, and employers.

**The Great Attrition obscured deeper shifts**

While most attention was focused on soaring quits rates during the pandemic, something more structural was also occurring. A subset of people did more than change employers; they moved into different occupations altogether. Based on net increases and decreases in employment, some 8.6 million occupational shifts took place from 2019 through 2022—50 percent more than in the previous three-year period. While it is impossible to trace individual moves, many people left their previous roles and landed better-paying jobs in other occupations.

The majority of these shifts came from people leaving jobs in food services, customer service and sales, office support, and production work (such as manufacturing). At the same time, managerial and professional roles plus transportation services collectively added close to four million jobs from 2019 to 2022. Our previous research had anticipated these types of changes over a longer time frame, but the pandemic suddenly accelerated matters. The past few years have been a preview of trends we expect to continue through the end of the decade.

**More high-wage jobs—and fewer workers taking lower-wage service jobs**

Overall employment in low- and middle-wage occupations has fallen from prepandemic levels, while occupations that pay more than $57,000 annually added about 3.5 million jobs. However, it is unclear how many higher-paying roles were filled by people who moved up and how many were filled by new entrants to the labor force. Meanwhile, the number of lower-wage job openings has not declined. Demand for lower-wage service work remains, but fewer workers are accepting these roles.

What is clear from the job switching and occupational shifts of the past three years is that the US labor market accommodated a higher level of dynamic movement. Spiking demand and labor scarcity forced many employers to consider nontraditional candidates with potential and train them if they lacked direct experience. While this may not hold in the future, employers and workers alike can draw on what they have learned about the potential for people to make quick pivots and add new skills.

*Article continues at link below*

**Source: *McKinsey.com*** (07/26/2023)
https://bit.ly/nova-wr-20230823

## UNEMPLOYMENT

| Region | July 2022 | June 2023 | July 2023 | Percentage Point Change 1 month | Percentage Point Change 12 months |
|---|---|---|---|---|---|
| San José–Sunnyvale MSA | 2.7% | 3.7% | 3.6% | – 0.1 | + 0.9 |
| San Francisco MD | 2.4% | 3.2% | 3.1% | – 0.1 | + 0.7 |
| California | 4.1% | 4.9% | 4.8% | – 0.1 | + 0.7 |
| United States | 3.8% | 3.8% | 3.8% | 0.0 | 0.0 |

## INDUSTRY EMPLOYMENT

| Sector — July 2023 | San Jose MSA | San Francisco MD | Combined Region | Percentage Change (Combined Region) 1 month | Percentage Change (Combined Region) 12 months |
|---|---|---|---|---|---|
| **Total Nonfarm** | **1,186,100** | **1,221,400** | **2,407,500** | **– 0.3%** | **+ 2.6%** |
| Construction | 57,200 | 41,000 | 98,200 | + 1.4% | + 2.8% |
| Manufacturing | 181,400 | 39,400 | 220,800 | + 0.2% | – 0.1% |
| Retail Trade | 72,900 | 65,500 | 138,400 | – 0.5% | – 2.0% |
| Information | 107,200 | 128,800 | 236,000 | + 1.1% | + 0.6% |
| Professional & Business Services | 257,700 | 317,100 | 574,800 | – 0.1% | + 0.5% |
| Educational Services | 85,900 | 79,800 | 165,700 | – 7.2% | + 4.7% |
| Health Care & Social Assistance | 147,700 | 130,500 | 278,200 | – 0.1% | + 6.4% |
| Leisure & Hospitality | 108,000 | 132,400 | 240,400 | + 0.6% | + 10.4% |
| Government | 92,100 | 135,300 | 227,400 | – 4.3% | + 1.2% |

**Note:** San José MSA (San José-Sunnyvale-Santa Clara Metropolitan Statistical Area) = Santa Clara and San Benito Counties
San Francisco MD (San Francisco-Redwood City-South San Francisco Metropolitan Division) = San Mateo and San Francisco Counties

**Source:** California Employment Development Department, LMID

## LABOR FORCE & ANNUAL CHANGE

### 9-County San Francisco Bay Area

| | Labor Force July 2022 | Labor Force July 2023 | Labor Force Change | Employed July 2022 | Employed July 2023 | Employed Change | Unemployment July 2022 | Unemployment July 2023 | Unemployment Change |
|---|---|---|---|---|---|---|---|---|---|
| **California** | **19,234,000** | **19,362,400** | **+ 0.7%** | **18,444,800** | **18,431,200** | **– 0.1%** | **4.1%** | **4.8%** | **+ 0.7** |
| Alameda County | 826,500 | 832,700 | + 0.8% | 799,900 | 798,300 | – 0.2% | 3.2% | 4.1% | + 0.9 |
| Contra Costa County | 552,000 | 554,600 | + 0.5% | 533,000 | 531,600 | – 0.3% | 3.4% | 4.1% | + 0.7 |
| Marin County | 132,700 | 133,200 | + 0.4% | 129,200 | 128,800 | – 0.3% | 2.6% | 3.3% | + 0.7 |
| Napa County | 72,400 | 72,700 | + 0.4% | 70,400 | 70,200 | – 0.3% | 2.9% | 3.3% | + 0.4 |
| San Francisco County | 577,000 | 583,100 | + 1.1% | 562,900 | 564,200 | + 0.2% | 2.4% | 3.2% | + 0.8 |
| San Mateo County | 456,900 | 460,900 | + 0.9% | 446,300 | 447,100 | + 0.2% | 2.3% | 3.0% | + 0.7 |
| Santa Clara County | 1,046,200 | 1,054,300 | + 0.8% | 1,018,900 | 1,016,900 | – 0.2% | 2.6% | 3.5% | + 0.9 |
| Solano County | 202,800 | 201,900 | – 0.4% | 194,700 | 192,600 | – 1.1% | 4.0% | 4.6% | + 0.6 |
| Sonoma County | 248,800 | 250,000 | + 0.5% | 241,300 | 240,800 | – 0.2% | 3.1% | 3.7% | + 0.6 |
| **SF Bay Area (sum)** | **4,115,300** | **4,143,400** | **+ 0.7%** | **3,996,600** | **3,990,500** | **– 0.2%** | **2.9%** | **3.7%** | **+ 0.8** |

**Note:** Totals may not add correctly due to rounding

**Source:** California Employment Development Department, LMID

## REGIONAL LAYOFF ACTIVITY

### July 2023 Layoff Events

| Company | Location | # Affected |
|---|---|---|
| Medtronic | Suunyvale | 59 |
| Qualcomm | Santa Clara | 84 |
| Flex, Ltd | Milpitas | 31 |
| Illumina | Foster City | 71 |
| Meta Platforms | Multiple cities | 590 |
| Proterra Operating Company | Burlingame | 48 |
| Western Digital | Milpitas | 211 |
| Twist Bioscience Corporation | Multiple cities | 207 |
| Yellow Corporation | Multiple cities | 69 |
| Robinhood Markets | Menlo Park | 7 |
| Zeku | Palo Alto | 69 |
| Hallcon Commuter Services | Palo Alto | 63 |
| | **Total** | **1,509** |

### WARN SUMMARY

Events YTD †: **246**

Individuals Affected YTD †: **13,166**

Individuals Previous YTD ‡: **1,457**

* **WARN: Worker Adjustment and Retraining Notification** *(notice of mass layoff or closure)*

† **YTD: Year to Date** *(Calendar year: January 1–Present)*

‡ **Previous YTD:** *(Same date range as YTD, one year prior)*

**Note:** Layoff data are preliminary and should be considered an estimate of monthly regional activity

**Source:** California EDD, CalJOBS: WARN data