Long Term Industry and Occupational Projections: 2020-2030

By Matthew Krzyzek and Patrick J. Flaherty, DOL

Connecticut’s employment is projected to increase by more than 201,000 jobs over the ten-year period ending in 2030. This 12% increase is 4.3 percentage points above the U.S. projection of 7.7%. Every two years, the U.S. Bureau of Labor Statistics produces 10-year projections of the U.S. labor force and employment by industry and occupation. This process is replicated at the state level to produce a detailed overview of the expected direction of the labor market in Connecticut. **Effects of COVID-19 on the 2020-30 Projections** The COVID-19 pandemic triggered a steep and short U.S. recession from February to April 2020.1 The impact of this translates to lower base-year values than earlier rounds of long-term projections. This results in higher projected employment growth, particularly in the industries and occupations that had the largest COVID-19 declines.2 These projections assume a full-employment economy, and many industries heavily impacted by COVID-19 are projected to have higher growth than would occur if the base year was not so low due to the recession.In addition, some industries and occupations have seen a change in long-term demand as a result of the pandemic. Industries that are expected to see long-term increased growth include computer-related occupations such as those that relate to telework computing infrastructure and IT security. On the other hand, Retail Trade is expected to experience an amplification of its long-term declines due to changes in consumer behavior that will outlast the pandemic.  **U.S. Labor Force Overview** From 2020 to 2030, the BLS projects that the U.S. Labor Force will increase by 8.9 million workers (a 0.5% annualized growth rate). This projected growth is slower than growth experienced in recent years. This is partially due to the aging population and slowing population growth among demographic groups that previously drove labor force growth. As the workforce ages, labor force participation declines as people are more likely to shift to retirement and leave the labor force. From 2020 to 2030, the under 25 workforce is expected to decline by 1.5 million to 18.7 million, while the age 25-54 workforce is expected to grow by 5.7million to 108.4 million, and the over 55 workforce is expected to grow by 4.7 million to 42.6 million.3
 In addition to aging, projections are that the demographic distribution of workers will get more diverse. The White share of the workforce is expected to decline from 77.4% to 75.1% and the Black/African American share of the workforce is expected to increase from 12.6% to 13.0%. The largest labor force shift among available demographic groups for 2020-30 is the 3.2 percentage point shift from 18.0% to 21.2% among Hispanic workers. By gender, men’s share is projected to decline by 0.7 percentage points to 52.3% of the workforce, and women are expected to increase from 47.0% to 47.7%. These shifts correspond to the male workforce increasing by 3.6 million and the female workforce by 5.3 million over the 2020-30 decade. By demographic group, the White workforce is projected to grow by 2.9 million, the Black workforce by 1.8 million, and Hispanic workforce by 7.0 million over the ten-year period.

**U.S. Employment Projections** U.S. total employment is projected to increase by 11.9 million to 165.4 million, an increase of 7.7%. The goods-producing sector is expected to grow by 2.8% and the service-providing sector is expected to grow by 9.2% over this period.
 The nonfarm goods-producing sector in the U.S. is projected to grow by half a million to 20.6 million by 2030. About 61 percent of 2020 goods-producing employment was in Manufacturing, which is projected to grow by 1.2% or 144,000 workers through 2030. Construction is the largest driver of U.S. goods-producing growth, increasing by 315,000 jobs. In 2020, Construction was 36% of goods-producing employment and represents 57% of goods-producing growth through 2030.
Over the 2020-30 period, total service-sector employment in the U.S. is projected to grow by 11.3 million jobs to 134.1 million. The industry with the largest expected growth is Health Care & Social Assistance, with expected growth of 3.3 million to 23.1 million. Healthcare nationwide is projected to grow at twice the rate of the overall economy, due in large part to increased demand for healthcare services as the U.S. population ages and life expectancies increase.Retail Trade is projected to decline nationwide by half a million from 2020 to 2030, driven by factors that include the shift to e-commerce and the consolidation of big-box stores.4 **Connecticut Projections** Connecticut’s total employment is projected to grow by 201,501 jobs, an increase of 12.0% from 2020 to 2030. This increase encompasses private payroll gains of 181,873 (+12.2%), slower government growth of 3,401 (+4.2%), and self-employment growth of 16,227 (15.0%).
 **CT Industry Projections** The year 2020 saw unprecedented short-term declines in almost every sector of the economy at the state and national level. The short-term drops during the 2020 base year in areas such as Accommodation & Food Services, Retail Trade, and Health Care contribute to the high projected growth in some of those industries through 2030.
 Accommodation & Food Services is projected to have the largest ten-year increase, up almost 35,000 jobs or +33.4%. This large growth rate reflects the impact of COVID-19 on that industry during the 2020 base year, from 2019 to 2020, this industry was down 24%. This long-term projection reflects an expectation that the short-term impacts of the pandemic are not influencing 2030 employment levels (See Chart 1).
 Health Care is expected to add 20,455 jobs or +9.5% over 2020 levels. This sector has consistently added jobs over the long term, though it was not immune to the 2020 employment declines experienced by most sectors of the economy. This 2020-2030 growth of around 20,000 jobs is consistent with projections during prior rounds; the 2016-2026 and 2018-2028 projection rounds both had Health Care increasing between 21,000 and 22,000 jobs, indicating that this current projection is in line with longer-term trends and growth expectations for this sector. Among the three major component industries of Heath Care, most of the 20,455 increase is in Ambulatory Health Care Services (NAICS 621), with an expected employment increase of 15,898 through 2030. This industry comprised 42% of base-year Health Care employment and 78% of its 10-year projected growth. The two other Health Care component industries, Hospitals (NAICS 622) and Nursing & Residential Care Facilities (NAICS 623) are both projected to have employment increases below 3,000. Slower Hospital growth reflects trends toward industry consolidation in recent years and the Residential Care growth reflects an expectation that demand for that industry will continue to decline in part due to the impact of COVID-19 and people’s desire to remain in their homes as they age.
 Transportation & Warehousing is projected to have the third highest employment increase through 2030. In 2010, this industry began growing in Connecticut and has seen accelerating growth in the subsequent decade. From 2019 to 2021, the industry saw annual growth of 5.7%, 6.9%, and 9.1%. Connecticut’s growth has outpaced the nation during the past four years. The 2020-30 projections anticipate that Transportation & Warehousing will increase by 20,306 jobs, or a 35% increase. This growth is driven by the increasing popularity of online shopping and the growth of warehouse distribution centers in the state. Among the component industries of Transportation & Warehousing, 49% of the projected growth is in Warehousing & Storage (NAICS 493), 31% is in Air, Water, Truck, or Ground Transportation (NAICS 481-488), and 18% is in the Courier & Messenger component industry (NAICS 492). During the ten years before the projection base year, the Transportation & Warehousing sector increased by over 16,000 jobs and was up 43%.
 Additional large-employing industries in the state not yet discussed include Educational Services, Retail Trade, and Manufacturing. These three industries are the largest employers after Health Care.
 Educational Services employs over 175,000 workers in the state and is expected to grow by 3.6% through 2030. Colleges, Universities, & Professional Schools (NAICS 6113) is projected to account for 56% of overall Educational Services growth, Other Schools & Institutions (NAICS 6116) accounts for 22.8%, with the remainder of growth distributed among the other education industries such as Elementary & Secondary Schools (NAICS 6111) and Technical & Trade Schools (NAICS 6115).
 Retail Trade is expected to increase by 8,542 workers or 5.3% through 2030, which contrasts to the U.S. projections of a 4.0% decline. Retail Trade had proportionally larger declines in Connecticut than in the U.S. (-8.6% vs. -5.4%) during 2020. Even after the projected growth, 2030 Retail Trade employment in the state is still below 2019 levels, which aligns with longer-term industry trends.
 Manufacturing represents a larger share of the overall economy in Connecticut than adjacent states or the U.S. overall. In 2020 that industry was 9.1% of overall state employment, with 30% of that falling within Transportation Equipment Manufacturing (NAICS 336). That industry is expected to account for 7,393 or 53% of the projected total Manufacturing growth of 13,981 or 9.1% through 2030. During this period, U.S. manufacturing growth is projected to be 1.2% and Transportation Equipment Manufacturing growth is projected to be up 3.3%. **CT Occupational Projections** Every occupational group is expected to add jobs through 2030 (Chart 2). The largest occupational group increases are expected in occupations that relate to the largest projected growth industries, with the three largest being Food Preparation & Serving Related, Transportation & Material Moving, and Management Occupations. Food Prep. & Serving Related growth reflects the impact of COVID-19 on 2020 base year employment. Transportation & Material Moving growth relates to the increased popularity of online shopping which grew steadily from 2010-2020 decade and is projected to continue to grow through 2030.
 Management, the third largest-growing group relates to a wide array of specific occupations projected to add jobs across many sectors of the economy. Almost every specific management occupation requires a bachelor’s degree or more. Management occupations are expected to increase by 18,034 or +14.3% through 2030. The four largest growing management occupations are General & Operation Managers (+4,300 or +14.4%), Financial Managers (+3,149 or +17.5%), Medical & Health Service Managers (+2,068 or +29.3%), and Computer & Information Systems Managers (+1,085 or +11.1%). These four occupations account for more than half the projected overall Management Occupations growth. **Education and Growth** Research by the Bureau of Labor Statistics assigns an educational category to each occupation. As Chart 3 shows, 30% of projected growth from 2020-30 period are in occupations that in general require less than a high school diploma. This is heavily impacted by the employment losses during the 2020 base year, which disproportionately impacted industries and occupations that have lower educational attainment requirements. As a result, the projections account for a cyclical employment rebound to longer-term trends for these areas of the economy. During prior rounds of long-term projections, the Less Than High School Diploma component of projected change was much lower. For example, it was 17% during the 2016-2026 projections.
 Among the four educational categories shown in the chart, the High School Diploma or GED, accounts for 28% of 2020-30 employment growth, but 36.3% of 2020 base-year employment. The Middle Skill category includes occupations that require more than a High School Diploma but less than a bachelor’s degree. The Middle Skill and Bachelor’s or More components have projected growth both within 1.6 percentage points of their Base and Projected employment share, indicating that they are expected to experience growth much more in line with overall trends. Overall employment from 2020-30 decade is projected to grow by 201,501, Bachelor’s or More occupations by 60,969, Middle Skill by 23,792, High School Diploma or GED by 55,755, and Less than High School Diploma by 60,985. Note, an occupation is a broad category. Specific jobs within an occupation may require more or less education than is typical for the occupation as a whole.

**Job Growth, Wages, and Education**

 More than 35% of the job growth is projected to be in occupations where the current median wage is $60,000 per year or more, and 78% of that growth is in occupations where the minimum education necessary to enter the occupation is a bachelor’s degree or more. At the other end of the earnings spectrum, 26% of job growth will be in occupations with median earnings less than $30,000 per year with 94% of these jobs in occupations where the minimum education requirement is a High School Diploma or less.
 **Conclusions** The 2020-2030 projections highlight the impact of COVID-19 on the 2020 base year. Industries such as Accommodation & Food Service, Retail Trade, and Health Care had unprecedented short-term employment losses in 2020, which means many heavily impacted industries and occupations are projected to show larger growth than would otherwise have occurred if the base year did not include the steep and short recession. While many areas of large growth reflect this base-year recession, 14 of 22 occupational groups are projected to grow by 10% or more, 9 are expected to grow by 15% or more, and 4 by 20% or more. High growth, high pay occupational growth in areas such as Management, Healthcare Practitioners, Business, and Computer & Mathematical occupations indicate that the state is expected to both recover the jobs lost in areas of the economy heavily impacted by COVID and build upon existing areas of strength. **Accuracy of the Projections – Data Limitations**
 The long-term projections were carefully prepared using all available information as of June 2022. When evaluating the projections, it is important to keep a few things in mind. The projections are based on the assumption of a full employment economy in 2030. Given the ups and downs of the business cycle, it is possible that the economy will not be at full employment at that time. The average annual openings are not attempting to predict how many openings there will be in a given occupation in any particular year. As the word “average” suggests, some years will be higher, others will be lower. Finally, while the projections take into account as much currently available economic and labor market data as we can evaluate, there will be changes over the next ten years which no one can anticipate. Our projections are for industries and occupations that currently exist. New industries and occupations that we cannot even imagine today may well become significant by 2030. Connecticut projection details, including details about the new methodology for calculating separations and openings, are available on the Connecticut Department of Labor’s Labor Market Information page at http://www1.ctdol.state.ct.us/ lmi/projections.asp. More detailed national projections are available at www.bls.gov/emp. n
**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1 NBER. U.S. Business Cycle Expansions and Contractions. https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions

2 Additional information on the impact of COVID-19 on the 2020-30 Projections can be found here:
https://www.bls.gov/news.release/pdf/ecopro.pdf

3 BLS. Civilian labor force, by age, sex, race, and ethnicity. https://www.bls.gov/emp/tables/civilian-labor-force-summary.htm

4 BLS. Projection overview and highlights, 2020-30. https://www.bls.gov/opub/mlr/2021/article/projections-overview-and-highlights-2020-30.htm