

## Job Outlook to 2028 by Educational Requirement

The educational requirements of the workforce are continually evolving. Some jobs require little, and others extensive experience or education, with a whole range in between. As the occupational structure of the labor market changes, [which was highlighted in a previous blog](#), the educational requirements of the workforce also shift. The requirements to successfully perform the functions of most jobs also change over time. Technology and other factors impact how tasks are accomplished and even what tasks are necessary to complete job functions.

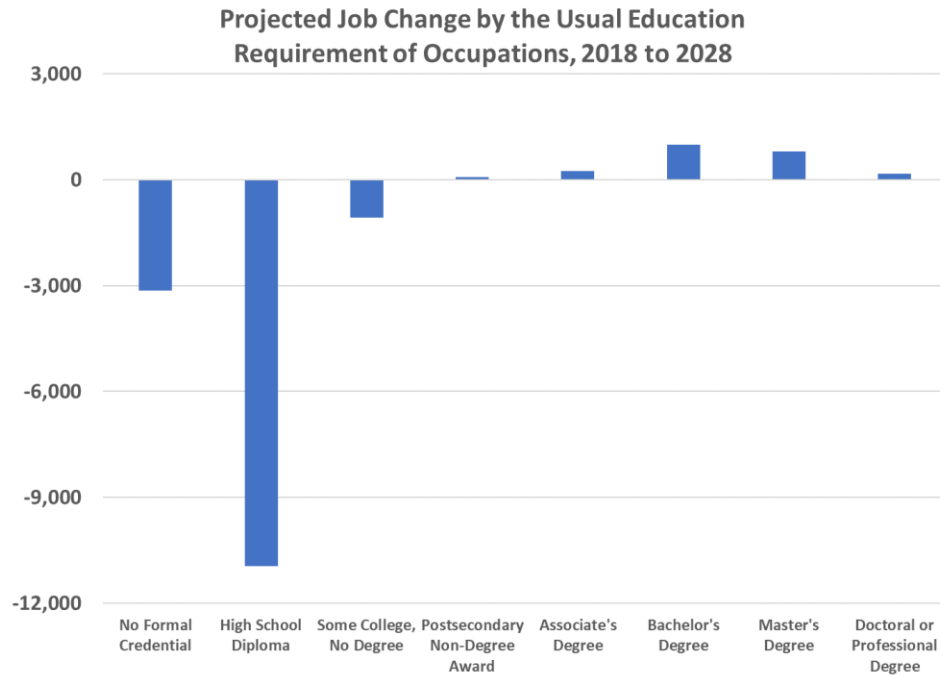
About 76 percent of jobs in Maine are in occupations that have a “usual education requirement” that falls within one of seven levels of attainment: high school or equivalency; some college, but no degree; post-secondary non-degree award; associate’s degree; bachelor’s degree; master’s degree; or doctoral or professional degree. Non-degree certifications can be achieved through apprenticeship programs, as well as through educational institutions.

Another 24 percent of jobs are in occupations that do not have a usual educational requirement. This does not mean that these are jobs for people who have not graduated from high school. Some of these jobs are available to non-graduates or teens who have not yet graduated, but many more require certain skills or expertise, but there is no “usual” educational path. This includes some occupations that pay well and in which many incumbents have postsecondary education or training, extensive experience, or specialized skills, such as many jobs in the arts, construction, farming and agriculture, entertainment and athletics, or food services.

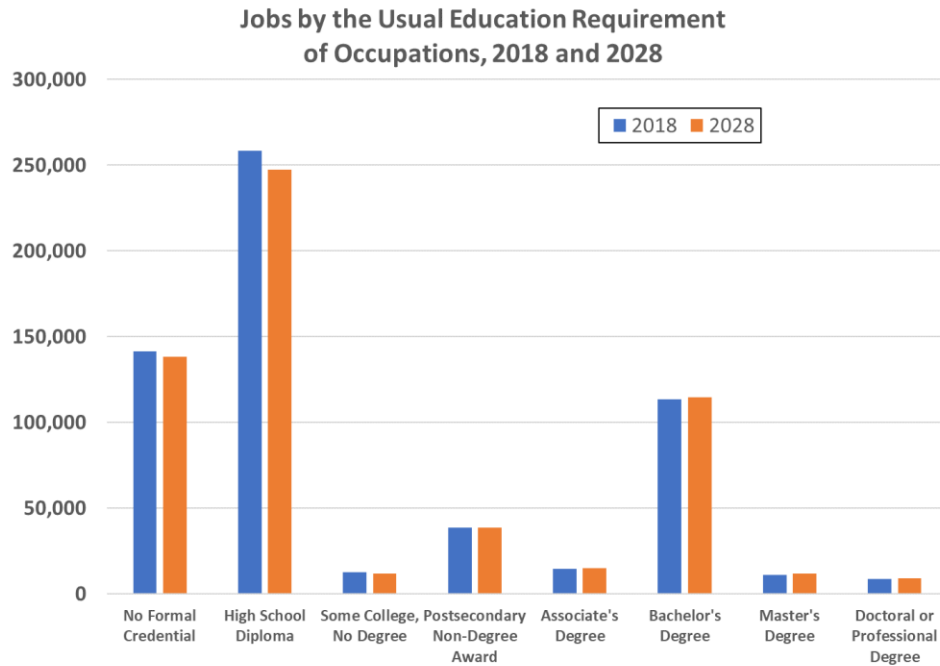
For many occupations there are exceptions to the usual requirement; for some there are strict requirements. People of all levels of educational attainment may become managers, though the usual requirement for most of these jobs is a degree of some form. Some registered nurses have an associate’s degree, though most have a bachelor’s, which is preferred by many hospitals today. For other occupations an individual must complete a specific educational program and pass qualifying exams to work in the profession, such as physicians and lawyers.

### Shifting Education Requirements of Jobs

Reflecting the changing mix of jobs outlined in the previous blog, in the decade through 2028 the number of jobs in occupations that require some level of education beyond high school (a postsecondary non-degree award as well as the various degree levels) is expected to increase by 2,300 (1.2 percent). That gain will be offset by a decrease of 14,100 (-3.5 percent) jobs in occupations that do not require a degree or postsecondary award. As the first chart indicates, the largest net job increase is expected in occupations that require a bachelor’s degree, followed by occupations that require a master’s degree, associate’s degree, and doctoral or professional degree. The largest net job decrease is expected in occupations that require a high school diploma, followed by occupations that require some college, but no degree. Jobs in occupations for which there is no usual requirement also are expected to decrease.

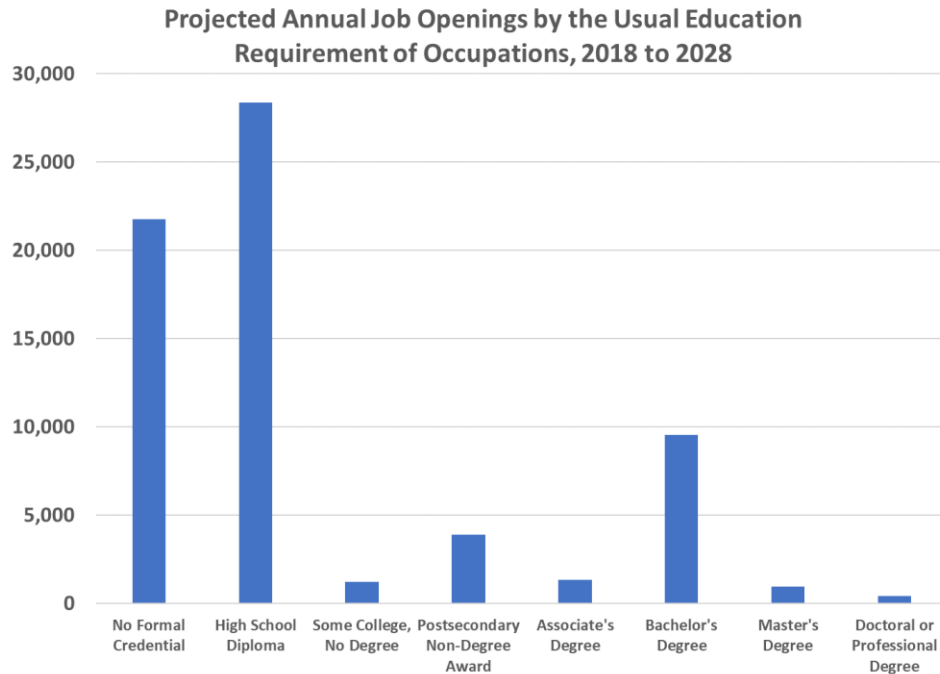


Despite differences in growth and decline, the structure of employment by education requirement is only expected to change marginally, as seen in the second chart. Even though the number of jobs in occupations that require a high school diploma or equivalent is expected to decrease, they will remain the largest in number, falling from 43 to 42 percent of all jobs. The number of jobs that typically require a bachelor's degree is expected to increase from 19 to 20 percent of all jobs, and the number requiring more than a bachelor's is expected to rise from 3.3 to just 3.5 percent of the total.



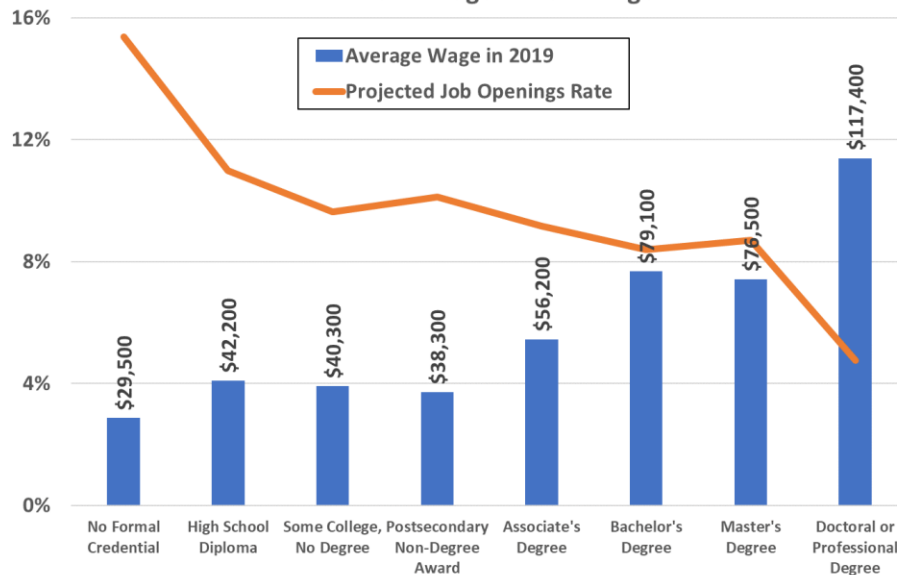
## Job Openings

The expected net decrease of 14,100 jobs in occupations that do not require postsecondary education does not mean we expect that many people who do not have a college education will lose jobs. The flow of young people into the labor force, older people into retirement, as well as individuals advancing their education or experience to move up the career ladder more than offsets that net decrease. In fact, three quarters of all job openings – 50,100 per year – are expected in occupations that do not require more than a high school diploma.



The reason there will be so many openings in occupations in which the total number of jobs is expected to decrease is that there is a strong correlation between the earnings and education requirements of jobs on-the-one-hand, and turnover rates on the other. Occupations with high education requirements that generally pay well tend to have an older, more established workforce that has low rates of turnover. Occupations with limited education requirements that generally offer relatively low pay tend to have a younger, less established workforce that has higher rates of turnover and many more job openings, which can be seen in the last chart.

**Projected Annual Job Openings Rate by Occupation by Usual Education Requirement, 2018 to 2028 with 2019 Average Annual Wage**



There have been many claims in recent years of the dramatic shifts around the education requirements of the workforce in the years ahead. It is true that technology is disrupting industries, creating new fields of work and making others obsolete, and is changing how functions are performed and who does them. It is not true that the level of educational requirements of the workforce are likely to dramatically change in just a decade. Rather, the changes in the mix of jobs and their education requirements are likely to continue to be gradual, as has been the case for many decades.

The flipside of that statement is that an increasing share of jobs are in occupations that require a specific degree or credential. Healthcare is expected to continue to be the fastest growing sector of the economy. Many healthcare-related occupations not only require a degree or credential, but a specific degree or credential. A degree in economics, history, or arts does not qualify someone to be a physician, registered nurse, or dental hygienist. The increased technical nature of many occupations means that the program of study is becoming as important as the level of credential or degree.

Finally, a rising share of middle-wage jobs are in occupations that usually require education beyond high school. Middle-wage jobs performing routine functions that have traditionally been available to people with a high school diploma will continue to be eliminated by automation and technology applications. To maintain a middle-wage standard of living, many people will need to advance their education.

This has been a very general description of one aspect of our occupational employment projections to 2028. Details on over 600 individual occupations, including expected growth or decline, openings, and wages are available at [www.maine.gov/labor/cwri/outlook.html](http://www.maine.gov/labor/cwri/outlook.html). Users can generate charts or tables for occupations by number of expected job openings, rate of change, or net change by education requirement, and can look at the outlook for individual occupations or groups.