Production Occupations in New Mexico

About 3.8 percent of all jobs in New Mexico are classified as production occupations by the Standard Occupational Classification (SOC) system (as of 2012). Workers in this occupation group participate in the production of goods within eight sub-groups: supervisors of production workers; food processing workers; metal and plastic workers; printing workers; textile, apparel, and furnishing workers; woodworkers; plant and system operators; and other production occupations. Production occupations are found in several important industries, including manufacturing, utilities, and mining, and often provide good employment opportunities for workers with less educational attainment.

Employment in this occupational group in New Mexico is smaller than that of many others. While there are over 100 production occupations nationwide, only 66 exist within New Mexico. Only nine of those occupations have employment of over 1,000 persons. Only 20 of those 66 occupations are projected to have 10 or more job openings each year between 2010 and 2020 (the most recent data available). The concentration of production workers in New Mexico is also less than that of neighboring states and the nation as a whole (see Exhibit 1). About 6.6 percent of all workers in the U.S. are employed in a production occupation. Oklahoma and Utah lead the Southwestern states in concentration of production workers, with 7.2 percent and 6.8 percent of all workers employed in a production occupation, respectively. Indiana, Wisconsin, Alabama, Iowa, and Michigan have the largest concentration of production workers of all U.S. states, with 10 to 12 percent of their workforce employed in production occupations.

While New Mexico's production employment comprises less than 4 percent of total employment, average wages for production occupations places the state in the top 15 highest paying in this occupational group. The Farmington Metropolitan Statistical Area (MSA) is in the top 10 highest paying MSAs in the country, with an average annual wage of $47,040; this ranking is likely driven by natural gas extraction in San Juan County.
Where Workers Are Employed and More Information on Detailed Occupations

Based on 2012 data, nearly 50 percent of all production workers were located in the Central Region of New Mexico. This is driven by the large percentage of the population that resides and works in this region. The Farmington MSA and Southwestern Region (without the Las Cruces MSA), however, have the largest concentrations of production workers of all MSAs and non-MSA areas in the state; production workers comprise 6.5 and 6.3 percent of total employment in these areas, respectively (see Exhibit 2). The Santa Fe MSA and Northern Region (without the Santa Fe and Farmington MSAs) have the lowest concentration of production workers. Natural gas extraction and supporting operations likely drive production employment in Farmington, while manufacturing, especially in food processing related to agricultural operations, is a driver of production employment in the Southwest.

As Exhibits 3 and 4 show, supervisors and managers of production and operating workers leads all other production occupations in employment, with about 8.3 percent of all production workers employed in this subgroup. Nearly 8 percent of all production workers are employed as welders, cutters, solderers, and brazers, while around 7 percent are employed as team assemblers. Most production workers (46 percent) are employed in occupations with 1,000 or fewer workers statewide, and each comprise less than 4 percent of total production employment. Of the production occupations with the most employment throughout New Mexico, half pay higher than the all-occupation average wage of $41,900 annually.

Production Occupations in New Mexico’s Industries

Production occupations can be found in any industry, as industries are defined by their business activities, while occupations are based on work tasks. In 2012, the manufacturing industry employed the largest number of production workers, with about 47 percent of total production employment. The computer and electronic manufacturing subsector lead all subsectors, not just those in manufacturing, with around 10 percent of total production employment, followed by food manufacturing (9 percent), and professional and business services (5 percent).

The manufacturing industry not only employs the largest number of production workers in New Mexico, but it also has the highest concentration of workers. As shown in Exhibit 5, 47.1 percent of all manufacturing workers are employed in a production occupation. Utilities follows manufacturing, with about 22 percent of all workers employed in production. In each of the largest employing production occupations, at least 25 percent of all workers in those occupations are employed in the manufacturing industry. As shown in Exhibit 6, supervisors/managers of production workers, team assemblers,
and machinists are most often employed in manufacturing. Welders, cutters, solderers, and brazers, along with production worker helpers, are most often employed in the mining industry.

**Future Production Jobs**

The 2010-2020 employment projections indicate that production occupations are projected to grow by about 0.5 percent annually between 2010 and 2020. This annual growth is slower than the all-occupation average of 1.5 percent. The production occupation group's share of total employment is also projected to decrease slightly, from 3.3 percent in 2010 to 3.1 percent in 2020. This reflects the slower growth of production occupations and the faster growth of other occupational groups.

Exhibit 7 provides the production occupations that are projected to see the most annual job openings between 2010 and 2020. The exhibit also shows the number of openings that are projected to result from job growth versus openings from replacement needs (turnover and retirements). Welders, cutters, solderers, and brazers, followed by machinists, are projected to see the largest number of annual openings (100 and 60 openings, respectively). All seven occupations shown are expected to either see the same number of openings due to job growth as replacements or a greater number of replacement openings. Other occupations that are projected to see employment growth, but don't necessarily have large numbers of projected openings, include production worker helpers; bakers; butchers and meat cutters; and separating, filter, clarifying, and still machine operators.

**Enter into a Production Job**

**Education and Job Experience Requirements**

Production jobs differ from many other jobs in that they typically require less education but more training in order to enter into the occupation. In 2010, close to three quarters of all production occupations required a high school diploma/GED or associate's degree to enter into the occupation (see Exhibit 8). Typically very few, if any, of the production occupations require more than an associate's degree, whereas over 15 percent of all other occupations require a bachelor's degree or more to enter into the field (as of 2010). There are more production occupations that require a postsecondary non-degree award for entry into the occupation than non-production occupations, reflecting requirements for special certifications, particularly in manufacturing.
Production jobs also typically require a longer amount of on-the-job training than all other occupations. As shown in Exhibit 9, over 60 percent of production jobs required moderate- to long-term on-the-job training for work entry in 2010, as opposed to only 16 percent for other occupations. On the other hand, close to one-third of production occupations required either no training or short-term on-the-job training to enter into a job, compared to nearly three-quarters for all other occupations.

While production occupations do not often require a significant level of higher education, the average annual wage for production occupations of $36,900 is still fairly close to the all-occupation average of $41,900. The highest paying production occupations include gas and plant operators; plant and systems operators, all other; power distributors and dispatchers; supervisors/managers of production and operation workers; and petroleum pump systems and refinery operators, and gaugers. While high-paying, all but two of these occupations have fewer than 250 workers statewide. Positively, over 2,000 workers are employed as supervisors/managers of production and operation workers, which has an average annual wage of $61,140; this occupation has been projected to see around 40 job openings per year between 2010 and 2020.

Future Education Requirements in Production Jobs

Based on projected changes to the employment composition of production occupations and related industries, demand for production workers, and corresponding educational requirements, will change slightly in coming years. Jobs that require a high school diploma/GED or less are projected to grow by about 6 percent (2010-2020). The number of jobs requiring an associate’s degree or more is projected to stay about the same. As production occupations see little change in the concentration of jobs requiring more education, other occupations are projected to see faster growth in jobs that require a bachelor’s degree or more; these jobs are projected to grow by about 19 percent over the 10-year period, as compared to 15 percent for middle-education jobs (those requiring between a high school and an associate’s degree), and 16 percent for lower-education jobs (a high school diploma or less).