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Labor Market Information Center

SD Department of Labor & Regulation

South Dakota Occupational Employment Projections to 2024

Overall, South Dakota employment is projected to increase by 6.7 percent during the 2014-2024 occupational employment projections decade, which adds just over 32,000 new jobs to the state's economy. This article will explore reasons for occupational expansion and contraction and examine the fastest growing occupations in South Dakota at both the macro and micro level.

South Dakota and U.S. Projected Employment Snapshot from 2014-2024

U.S. employment is projected to increase 6.5 percent during the 2014-2024 decade, from 150.5 million jobs in 2014 to 160.3 million jobs in 2024. The U.S. Bureau of Labor Statistics (BLS) Employment Projections program released projections for 819 detailed occupations. Employment in 602 occupations is projected to increase, while employment in 217 occupations is projected to decline.

Comparatively, South Dakota's projected occupational growth is slightly faster than the nation at 6.7 percent for the 2014-2024 decade. The Labor Market Information Center (LMIC) released projections for 561 occupations. Employment in 477 occupations is projected to increase or remain the same, while 84 detailed occupations are projected to decline.

LMIC completed the 2014-2024 statewide projections using the nationally-adopted projections methodology, which allows for comparability of this data across states, as well as to the nation. This methodology incorporates historical time-series employment data as well as state and national economic trends and utilizes various statistical models to do the projecting. It is important to note, a general assumption is made no major catastrophic events or natural disasters will significantly affect the economic activities of the occupations during the projecting period.

What Causes Occupational Expansion or Contraction?

There are two factors that affect employment change in an occupation:

1. Changes in industry employment.
2. Changes in the mix of occupations (staffing pattern) in an industry.

The first factor, changes in industry employment, inherently makes sense. If an industry's employment grows or contracts it stands to reason the occupations within that industry will follow suit.

The second factor, changes in the mix of occupations (also referred to as staffing patterns) in an industry, is a little more involved and requires more research and analysis. Research includes examining historical staffing pattern data and conducting research on factors that may affect occupations within the given industry in question.

Below is a list of some of the factors that influence the growth or decline of staffing patterns:

- **Technology.** Changes in technology, such as new machines or software, can affect the growth or decline of an occupation. Technology can increase productivity which will lead to the need for fewer workers, or in some cases eliminate the need for workers all together. On the reverse side, technology can bring with it the advent of new or emerging occupations, which creates new jobs. Very often, technology can cause both a decrease in one occupation while creating a demand for a different occupation within the same staffing pattern. An industry may expand or contract, or it may remain at the same employment level, but because of technological changes in the industry, the occupational mix within an industry will experience significant growth or decline.
- **Replacement of one product or service for another.** Changes in the needs or preferences for a product or service by consumers can also affect occupational staffing patterns.
- **Outsourcing.** Companies will sometimes contract support functions to other companies instead of hiring their own workers. The practice of outsourcing tends to drive down occupational growth in the outsourced industry, while increasing occupational growth in another industry. However, occupational growth can only occur in South Dakota, if the company providing the outsourcing is also located in the state.
- **Organizational/work restructuring.** A change in job duties that results in the same output but increases/decreases the utilization of some occupations relative to others within the same industry also impacts staffing patterns. These changes cause occupations to grow at different rates. Much of the time it is a consolidation of job duties.

A Look at the Top 10 Fastest Growing Occupations in South Dakota

The table below features the 10 fastest growing occupations in South Dakota and the following narrative explores the reason for this predicted growth. Occupations with less than 200 workers were not included in the table or corresponding analysis.

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Top 10 Occupations Projected to Grow the Fastest in South Dakota 2014-2024				
SOC* Code	Occupation	2014 Estimated Employment	2024 Projected Employment	2014- 2024 Percent Change
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	352	480	36.4%
49-9041	Industrial Machinery Mechanics	1,044	1,338	28.2%
29-1171	Nurse Practitioners	423	526	24.4%
15-1134	Web Developers	309	383	24.0%
51-4041	Machinists	905	1,114	23.1%
31-2021	Physical Therapist Assistants	233	284	21.9%
47-2021	Brickmasons and Blockmasons	361	436	20.8%
35-2014	Cooks, Restaurant	1,864	2,240	20.2%
13-1161	Market Research Analysts and Marketing Specialists	576	692	20.1%
49-3041	Farm Equipment Mechanics and Service Technicians	1,119	1,339	19.7%

Notes:
 *SOC - Standard Occupational Classification, 2010
 Percentages have been rounded to the nearest tenth.
 Data is preliminary and subject to revision.
 Data for occupation with less than 200 workers in 2014 was not included.
 Demand data is the summation of job openings estimated due to projected employment growth and job openings projected to be created due to replacement need of current workers. Replacement need is estimated by multiplying occupational employment estimates by national replacement rates supplied by the U.S. Bureau of Labor Statistics (BLS). These rates estimate the number of job openings, by occupation, which will be attributed to a worker permanently leaving an occupation (e.g. retirement, death, exits the workforce, etc.).

Source: Employment Projections, Labor Market Information Center, South Dakota Department of Labor and Regulations, August 2016.

Computer-Controlled Machine Tool Operators, Metal and Plastic

The computer-controlled machine tool operators, metal and plastic occupation is projected to be the fastest growing occupation (36 percent) in South Dakota from 2014 through 2024. Both manufacturing subsectors that hire the majority of these workers (fabricated metal product manufacturing and plastics and rubber products manufacturing) are expected to have double digit percentage growth. This subsector industry growth will account for some of the employment increases in this occupation. However, the demand for these workers will also be spurred by technological advancements as manufacturers' utilize computer numerically controlled (CNC) machine tools and robots to improve quality and lower production costs.

Industrial Machinery Mechanics

Industrial machinery mechanics in South Dakota are projected to grow by 28 percent. This growth is nearly double the projected growth for this occupation at the national level. In addition, this growth is nearly four times faster than the statewide average for all occupations. Much of the job growth in this occupation will be spurred by technological advancements in the equipment utilized by the manufacturing industry. Advancements in technology go hand-in-hand with the need for daily servicing and repair of equipment which require the specialized skill of industrial machinery mechanics. Another driver in the growth of this occupation is the fact that more companies will keep production lines rolling 24-7 to remain competitive in the global market, which in turn creates the need for more mechanics to cover all of the shifts.

Nurse Practitioners

Coming in at number three on the top 10 list of fastest growing occupations in South Dakota is the nurse practitioners occupation, with a growth rate of 24 percent.

Although this is not an article about industry trends, it is important to point out that South Dakota's health care and social assistance industry has experienced substantial growth for the last several years. In the past, much of the growth in this industry has been attributed to South Dakota's growing population, as well as the aging of the state's population. And, while that analogy is a good base reason for the growth of the health care industry in South Dakota, a closer look needs to be taken to understand where the growth of nurse practitioners fits in.

The foundation of much of the growth within this occupation was largely born out of necessity. For years, perhaps decades in some parts of South Dakota, the rural areas of state have faced doctor shortages. Towns that used to have hospitals gave way to having a doctor's office; then as time progressed and the cost of providing local healthcare continued to rise, the "doctor's office" became a satellite office. Doctors from surrounding larger towns and cities would travel to the satellite office once a week, or perhaps a couple times a month, to see and treat patients. Before long, communities that housed the doctors who travelled to the small towns lost their doctors too. Sometimes the doctors would retire and the community was unable to find a replacement, or sometimes the doctors took other more lucrative offers in larger communities. Other times (especially in communities where the hospital, nursing home or doctor's office was part of the city government) the cost of doing business became prohibitive and it was no longer feasible. Regardless of the reasoning, the doctor who was traveling to the more rural areas in the state was no longer there.

Many of the more rural South Dakota areas started turning to nurse practitioners to fill this void, and this occupation soon became more commonplace in South Dakota. However, there were, are and will continue to be limitations to what nurse practitioners can do. Therefore, most nurse practitioners are now affiliated with a regional care facility where there is access to doctors and specialists. Recent technological changes (satellite conferencing, the ability to visit with patients via internet chat and web portals) have made clinics a popular part of the health care industry in South Dakota. Because nurse practitioners often staff these clinics, this occupation is projected to grow.

Secondly, as the regional facilities serving the satellite clinics and care facilities continue to expand their services, additional nurse practitioners will be hired to care for the patients at these facilities as well. And finally, employment for nurse practitioners is projected to grow much faster than the average for all occupations in the state due to federal legislation requiring all Americans to have health insurance. As more people utilize services because they now have insurance, there will be continued demand for the nurse practitioner occupation.

Web Developers

Web developers are projected to grow at 24 percent in South Dakota, closely following national growth for this occupation (27 percent). This occupation is projected to grow at a much faster rate than the average for all occupations in South Dakota for the same reasons it is trending up nationally. South Dakota's e-commerce business is flourishing as both small and large businesses find themselves reaching customers from all across the United States and the world. A good website which provides online offerings is imperative in today's business world and can mean the difference between success and failure. Therefore, larger businesses which may have contracted this service in the past will hire a web developer to produce and maintain their site, including the technical aspects (such as e-commerce security) of it. In addition, some of these same employers will hire additional web developers who will be required to build and maintain mobile sites which will work on many different devices and screen sizes. Small businesses specializing in designing and maintaining websites for clients who don't have a web developer on their payroll, but need and want their own interactive and secure web page and mobile site, will continue to grow.

Machinists

The machinist occupation in South Dakota is projected to grow much faster than the average for all occupations, at 23 percent. Despite employment growth in technologies such as computer numerically controlled (CNC) machine tools, autoloading, high-speed machining, etc., machinists will continue to be

needed to set up, monitor and maintain a variety of production machines. The key component to the machinists who will be in demand is versatility. As manufacturers invest in new equipment, modify production techniques and implement product design changes at a rapid pace, they will continue to add machinists to their payrolls. However, these machinists will need to possess a strong skill base, which will include the capability to use modern equipment and production techniques.

Physical Therapist Assistants

Physical therapist assistants are projected to continue faster than average growth in South Dakota (nearly 22 percent), continuing the employment growth they have experienced for the last few decades. Nationally, physical therapist assistants are projected to grow faster (41 percent) than in South Dakota. Regardless, South Dakota employers are hiring for the same reason as employers across the nation. As the baby boom generation continues to age, the demand for therapeutic services for chronic and debilitating conditions will continue to grow. Also, as medical and technological developments continue to increase, the mortality rate of trauma victims and newborns with birth defects decreases and the need for care and therapeutic services to improve life for these individuals increases. In addition, employers within the health care industry will continue to cut costs while increasing convenience for patients. One way they will accomplish this is to continue to provide at-home physical therapy services to patients who would have problems going to a clinic for treatment. Physical therapy assistants will be the workers providing those services once a physical therapist has evaluated the patient and designed a care plan. In fact, as employers try to lower the cost of doing business, the role physical therapists play in an individual's health plan will continue to change regardless of where treatment is received. Instead of spending much of their time performing therapy, physical therapists will evaluate the patient and design a care plan, then the assistant will provide treatment under the direction of the therapist.

Brickmasons and Blockmasons

Brick and blockmasons are projected to see much faster (just over 21 percent) than average growth in South Dakota for all occupations. This occupation is mirroring the national growth rate of 19 percent. Like the nation, the construction industry in South Dakota is showing fast growth. Much of this is due to the building or refurbishing of infrastructures taking place in many South Dakota cities and towns. Because consumers in South Dakota tend to choose the durability of brick and block, this occupation is projected to grow.

Cooks, Restaurant

Eating out and trying new or different cuisine is one of this country's favorite past-time activities, and South Dakota is no exception to this rule. In recent years, South Dakota's cities and towns have experienced the opening of new upscale, chain and mom and pop restaurants. This trend is expected to continue. Another trend expected to continue is niche restaurants popping up in rural South Dakota towns, drawing patrons from the surrounding area and visitors to the area and even state to their town. These small town restaurants often provide rural communities with an economic boost as patrons flock to their town to try the local cuisine and hopefully spend additional time shopping the stores and businesses. Restaurant cooks in South Dakota are projected to grow at a much fast pace than the average for all South Dakota occupations at 20 percent.

Market Research Analysts and Marketing Specialists

Market research analysts and marketing specialists in South Dakota are expected to grow at a much faster rate than the average for all occupations, increasing by 20 percent. The projected increase for this occupation is mirroring the nation (which is projected to increase by 19 percent). This occupation is diversified and employed in or hired by nearly every industry. Some of these analysts and specialists work for private businesses, some are hired by marketing firms that contract with businesses, some are self-employed and contract their services, and others work for government. The diversification of industry employment will create some of the projected employment growth. As South Dakota businesses and governments continue to compete in national and global markets, the skills these workers possess are and will continue to be vitally important, creating more occupational growth. Analysts and specialists conduct vital surveys and use other methods to develop detailed profiles of competitors and consumers. These workers also do intel work and gather data vitally important for making business and economic decisions, such as whether or not a business should move into or expand in one area versus another, types of products to carry and/or drop in a given market area and what kind of promotion is most effective.

Farm Equipment Mechanics and Service Technicians

Farm equipment mechanics and service technicians round off the list of 10 fastest growing occupations in South Dakota, projected to increase just over 19 percent from 2014-2024. The reason for the swift growth in this occupation is a restructuring of staffing patterns within the agriculture industry. The agriculture industry is projected to increase slightly from 2014-2024 in South Dakota, with much of the growth due to technological advancements. Today's farming operations are significantly larger than those of a generation before. In order to remain competitive and produce more products while lowering overhead costs, the operators of these farming operations purchase larger and more sophisticated machinery. Maintenance of this technologically advanced machinery and equipment requires the latest knowledge and skills of trained service technicians. In some instances these service technicians provide training on the operation of high tech equipment used by farm operators. This equipment calculates a variety of variables such as how deep to plant the seeds, the amount of moisture in the ground, how many bushels per acre they are harvesting and the quality of the yield they are producing. In addition, these farm equipment mechanics and service technicians occasionally perform major overhauls to equipment. But, the reason for most of the growth in this occupation will be the demand for the service they provide to customers in the field. Rather than shutting down production and running to town for the part, a quick call is made and an equipment mechanic or service technician is dispatched to make the repairs.

Where to Find More Information on Occupational Employment Projections for 2014-2024

The employment projections to 2024 recently completed for all 561 occupations by the LMIC are available through our virtual labor market data system. Please visit the LMIC website at dlr.sd.gov/lmic and choose Employment Projections by Occupation for our menu page with links, helpful data and tips on using the virtual system.