

Through 2020, D.C. is projected to create 231,100 job vacancies both from new job openings and from those becoming vacant due to retirement. Of the total number of job openings, 176,700 will be for those with postsecondary credentials, 19,700 for high school graduates and 34,700 for high school dropouts.

The District of Columbia ranks 1st in the South in the proportion of 2020 jobs requiring a bachelor's degree and in the proportion requiring a graduate degree. In contrast, D.C. ranks last in the proportion available to high school dropouts.

Virginia > High education > Tech-based

Virginia's unemployment remained well below the national average, throughout the recession and beyond. The rate has been consistently dropping since peaking at 7.2 percent in late 2009. Virginia's real GDP grew by 3.7 percent between 2007 and 2010, while many neighboring states' economies actually shrank. Furthermore, its 2010 per capita real GDP of \$47,600 put the state 3rd, behind only Delaware and the District of Columbia.

Industry in Virginia

Clearly, Virginia's close ties to the federal government have made it more resistant to recession and stronger in the recovery. In 2010 government and public education services comprised 17.5 percent of the state's real output and 20.9 percent of employment. Between 2007 and 2010, while many sectors lost jobs, government and public education in Virginia grew by 5.2 percent. In most states, at least two-thirds of government contributions come from the state and local level, and these tax revenues dropped precipitously during the recession. In Virginia, however, close to 55 percent comes from the federal civilian and military sectors. Major employers in the Old Dominion include the Department of Defense, the U.S. Postal Service, Fairfax County Public Schools, the County of Fairfax, and the City of Virginia Beach Schools.

Other sectors in Virginia, including professional and business services, also receive significant government outlays. In fact, 30 percent to 40 percent of all professional and business services contracts are with the federal government. This sector provided 19.0 percent of state employment and 18.2 percent of GDP in 2010. While professional and business services was hard-hit in other states, stimulus money and ongoing defense expenditures helped this sector's contribution to state GDP grow by 11.0 percent between 2007 and 2010, a growth rate 2nd only to natural resources. Government contracts are also important to other sectors; they have helped put Northrop Grumman Shipbuilding (manufacturing), and Booz, Allen and Hamilton (professional and business services) among the state's 10 largest employers.⁴⁴ Employment in government is expected to grow by 31.5 percent between 2010 and 2020, a rate exceeded only by healthcare and education services (37.2% and 31.9%, respectively).

44. "Economic Assumptions for the United States and Virginia: Calendar years 2010, 2011, and 2012, Program years 2010 and 2011." Virginia Employment Commission, Economic Information Services Division. http://www.alex.vec.virginia.gov/Imi/pdfs/eabook_2010.pdf

Financial services comprised 20.9 percent of the state's real GDP in 2010, but this highly productive and postsecondary-intensive sector accounted for only 6 percent of employment. The real estate, rental and leasing industry, a financial services sub-sector, is by itself a major contributor to the economy (13% of real GDP in 2010). In good times, it is closely related to the construction and manufacturing sectors, but it behaves very differently when the economy is weak. Construction output dropped by 17.1 percent between 2007 and 2010, but real estate grew by 4.9 percent, about one percentage point faster than the overall state economy.

The healthcare services industry is highly stable during recessions. It made up 8.8 percent of state employment in 2010 and includes one of the ten largest employers: Sentra Healthcare. Wholesale and retail trade services, which generates 10.0 percent of the state's GDP and employs 13.7 percent of Virginians, includes two of its top 10 employers: Wal-Mart and Food Lion.

Occupations in Virginia

Double-digit job growth is expected for all of Virginia's occupational clusters between 2010 and 2020. The growth rates reflect a clear bias toward postsecondary education. While blue-collar jobs are predicted to grow by 12 percent by 2020, healthcare support occupations are expected to grow by 29.3 percent, followed by STEM at 24 percent.

This expected growth in science and technology jobs is possible because of Virginia's strong high-tech infrastructure. According to a 2007 Cyberstates report, close to 9 percent of Virginia's private sector employees were in the technology industry, the highest of any state at the time. Workers were paid 99 percent more than other private sector workers.⁴⁵ Virginia's technology-based economy spans three main sectors: energy, information technology, and advanced manufacturing. The ongoing boom of these sectors is also attributable to state government incentives. Since 2006, Forbes' Best States for Business rated Virginia very high because of strong economic growth, low business costs and favorable quality of life.

68% OF JOBS IN VIRGINIA WILL REQUIRE POSTSECONDARY EDUCATION AND TRAINING IN 2020 (UP FROM 65% IN 2010)

Table 8: Snapshot of Education Demand for Total Jobs In Virginia (2010 And 2020)

	2010	2020	% in 2020
High school or less	1,327,900	1,474,800	32%
Some college	769,600	980,300	21%
Associate's	284,900	391,900	9%
Bachelor's	856,200	1,085,500	24%
Graduate	536,800	651,900	14%
Total	3,775,400	4,584,400	100%

In 2020, 68 percent of all Virginia jobs will require some postsecondary training.

45. Economic Assumptions For the United States and Virginia 2010.

During the same period, the state will add 1.4 million job vacancies both from new job opportunities and from those arising from retirement. Of these vacancies, 942,700 will favor candidates with postsecondary qualifications, while 447,100 will be appropriate for high school graduates and high school dropouts.

Virginia ranks 2nd in the South in the proportion of its 2020 jobs requiring a bachelor's degree, 3rd in jobs that will require a graduate degree, and 15th in jobs that will be available for high school dropouts.

West Virginia > Strong mining > Population loss

West Virginia's unemployment rate remained below the national average throughout the recession, though it climbed slightly in December 2010. Furthermore, the state experienced only a minor decline in real GDP between 2007 and 2008. Between 2009 and 2010 its growth was 4 percent, well above the national average of 2.6 percent. Despite its resilience, the state's per capita real GDP was the second-lowest in the southern states region, at \$30,217 in 2010.

Industry in West Virginia

West Virginia has been historically linked to the natural resources sector, especially to coal production, for which it ranks 10th in the nation.⁴⁶ In 2010, West Virginia coal mines produced in excess of 165 million tons of coal, generating an estimated \$3.5 billion in state revenues, which directly and indirectly accounted for more than 40,000 jobs.⁴⁷ In addition, natural gas production has accelerated. Although natural resources employed only 5.7 percent of the state's workforce in 2010, it contributed 9.5 percent of the state's real GDP. Industrial output grew by a remarkable 29.1 percent between 2007 and 2010, while total state real GDP rose by only 6.9 percent. Manufacturing continues to make significant efficiency gains, so that sector is more a source of economic than employment growth.

The healthcare services sector, which employs 14 percent of West Virginians, is projected to remain an employment leader through 2020. Top employers include West Virginia University Hospitals and the Charleston Area Medical Center. The state is also trying to expand its biotechnology, chemical and pharmaceutical industries using grants, incentives, and state universities to harness growing demand for healthcare products and services.⁴⁸

West Virginia's government and public education services sector comprised 19.1 percent of employment in 2010, and contributed over 17.3 percent of the state's real GDP. Not surprisingly, six of the state's top ten employers fall into this sector: IRS Data Center, Department of Veterans Affairs, the West Virginia Department of Highways, U.S. Postal Service, West Virginia University, and Kanawha County Board of Education.

46. This is if we include petroleum and petrochemicals in natural resources and mining.

47. Labor Market Information by West Virginia 2011

48. <http://wvcommerce.org/business/industries/biotech.aspx>