LABOR MARKET INFORMATION

AN OVERVIEW OF OUR LEADING PUBLICATIONS, REPORTS, AND WEBSITE

Economic Information & Analytics





FOR MORE INFORMATION OR QUESTIONS ABOUT OUR LABOR MARKET INFORMATION (LMI) PUBLICATIONS OR LMI DATA, PLEASE CONTACT:

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LABOR MARKET DATA

Labor market information includes all data and analysis related to the status of the labor market.



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Economic Information & Analytics

PUBLICATIONS

Through our various publications and reports that are available on our Labor Market Information (LMI) webpage, the Economic Information & Analytics (EIA) division of the Virginia Employment Commission strives to provide valuable information pertaining to labor market subjects such as employment, unemployment, occupations, wages, industries, careers, and demographics, as well as topical subjects such as the "gig economy" and underemployment. Everything produced by EIA focuses on Virginia specific data and information. The publications are designed to meet the needs of a wide-range of end users including, but not limited to, workforce professionals, economists, government agencies, law makers, teachers, students, counselors, job seekers, employers, and veterans.

This overview gives a brief look at each of EIA's leading publications that are available on our website at www.virginiaLMl.com.

COMMUNITY PROFILES

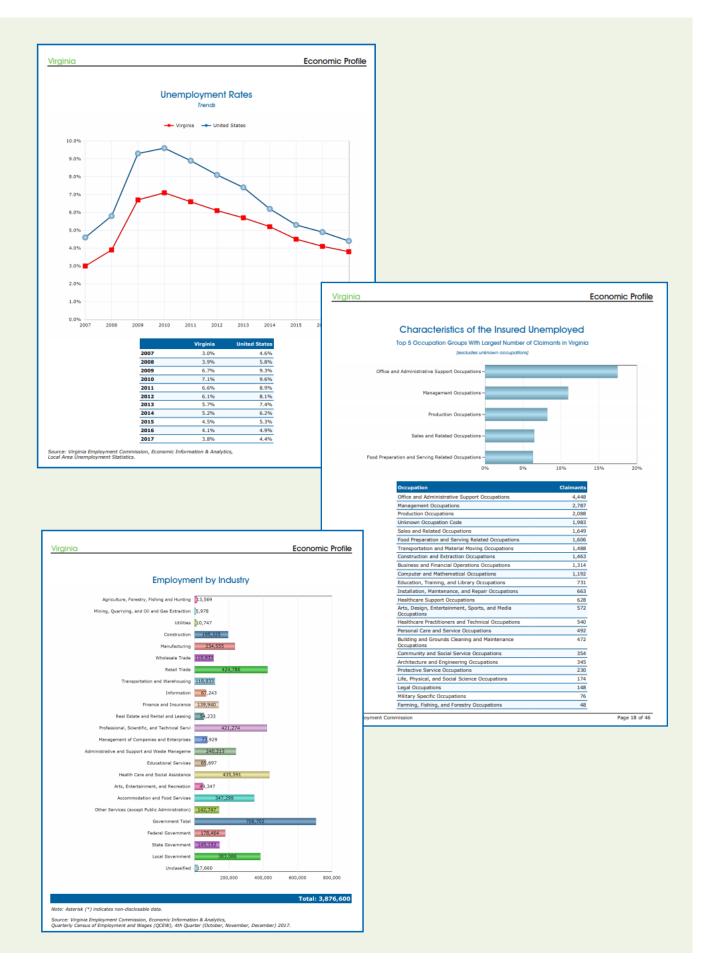
The Community Profiles feature a wealth of information including demographic, economic, and educational data. Each report is automatically updated every time we make changes to our database, so you can be assured they will always be up-to-date.

Reports are generated for Statewide; Counties and Cities; Planning Regions; Local Workforce Development Areas; Congressional Districts; Metropolitan Statistical Areas; and Virginia Community College Regions.

The reports feature:

- **Demographic Profile** (age, race, gender, population)
- Economic Profile (unemployment rates, characteristics of the
 insured unemployed, unemployment insurance payments,
 employers by size of establishment, employment by size of
 establishment, 50 largest employers, employment by industry,
 new startup firms, new hires by industry, turnover by industry,
 average weekly wage by industry, age of workers by industry,
 industry employment and projections, occupation employment
 and projections, growth occupations, declining occupations,
 consumer price index, and local option sales tax)
- **Education Profile** (education attainment by age, gender, and race, graduation data trends, and training providers)

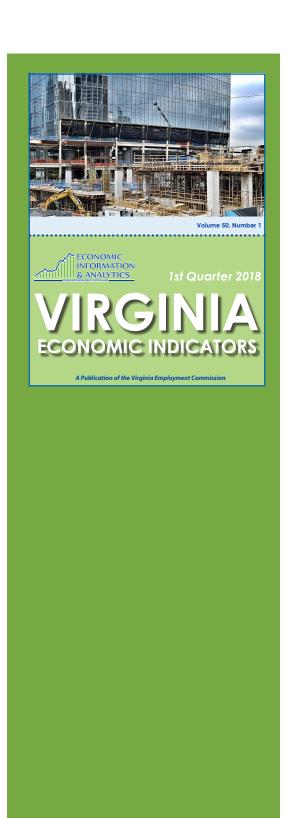




VIRGINIA ECONOMIC INDICATORS

For those who are interested in studying the business cycle, the Virginia Economic Indicators quarterly publication is designed to depict the movement of the key economic indicator series readily available in Virginia. They are brought together in both graphic and tabular form, under one cover, and grouped so that they may be analyzed and interpreted easily.

All but one of the series currently used are produced in-house by EIA and are comparable to similar national series produced by the U.S. Department of Labor. All series published in the Indicators have been seasonally adjusted to minimize regular seasonal fluctuations in the data in order to show only activity related to the business cycle. The Virginia Economic Indicators is the only seasonally adjusted publication of some of the Virginia series.



FEATURE ARTICLE

Summary Analysis of Virginia 2017 and 2016 Benchmark Revisions of Nonagricultural Employment and Unemployment

(Data is Not Seasonally Adjusted.)

—Virginia nonfarm employment gained 36,900 jobs, or 0.9 percent, in 2017—
—Seven of the ten metropolitan areas added jobs—

-Jobless rate averaged 3.8 percent in 2017, compared to 4.1 percent in 2016-

The annual benchmark revision of employment estimates from the Current Employment Statistics to the Quarterly Census of Employment and Wages lowered Virginia's nonfarm employment estimate in 2016 by 0.1 percent and lowered it in 2017 by 0.4 percent; and as a result, nonfarm employment growth was revised downward in 2017 from 1.2 percent to 0.9 percent. For Virginia, the 2016 average nonfarm employment was revised downward by 3,500 jobs to 3,914,100, and the 2017 average nonfarm employment was revised downward by 14,300 jobs to 3,951,000. With these revisions, average nonfarm employment posted a job gain of \$5,000, or 1.4 percent, in 2016 and a job gain of 36,900, or 0.9 percent, in 2017. The nation experienced nonfarm employment growth of 1.8 percent in 2016 and 1.6 percent in 2017.

The benchmark revision represents a once-a-year realignment, based on March data, of sample-based employment estimates to universe counts of employment derived primarily from Unemployment Insurance tax records. For Virginia, the March 2017 total nonfarm employment estimate was revised downward by 7,900 jobs, or 0.2 percent, compared to the national March sample-based upward revision of 138,000 jobs, or 0.1 percent. In Virginia, five industrial sectors so persented downward revision to their March 2017 employment level, while the other six experienced upward revisions. The five industrial sectors that experienced downward revision ductation and health services (-1,3200 jobs); professional and business services (4,900 jobs); trade and (-3,900 jobs); finance (-1,300 jobs), and manufacturing (-200 jobs). The six industrial sectors that experiences were construction (+4,200), telsure and hospitality (+3,100 jobs); information (+2,800 jobs) is services (+2,050 jobs); on services (+2,050 jobs).



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1st Quarter 2018

Note: All figures reported are Seasonally Adjusted

Nonfarm seasonally adjusted employment rebounded from 2017's stationary ending, increasing in the first three months of 2018 before ending with a record high of 5,987,200. As 3,978,400, the average quarterly employment set a new record as well. With the exception of recessions in 2008/0°9 the early 2000s and the early 1990s, nonfarm employment in the commonwealth has had an unyielding upward trend, with most variation occurring in the growth rate rather than the direction of change. This is underscored when looking at annual averages, which have increased every year since the data series began in 1990, with exceptions again coinciding with recessions in 1991, 2002, and 2007/10. Moreover, every major industry sector saw an over-the-year employment gain in the final month of the quarterly, with the exception of information. While most of the increase came from service-providing industries, goods-producing also saw a substantial over-the-year gain of approximately 14,000.

The total unemployment rate fell in the first quarter of 2018, following 5 months of stasis that came on the heels of a brief uptic is in the latter half of 2016. The continued decline continues to be somewhat surprising as full employment has been surpassed, as has been reported in previous publications. March's seasonally adjusted unemployment rate of 3.4 percent is the lowest Virginia has seen since March of 2008, immediately before the last secession hit. While it is still our economic hypothesis that in the long run this continued decline is not sustainable, there is no indication that the trend will cease in the near future. The Insured unemployment rate also declined each month, ending with a record low of 6.6 secent and matching the record setting quarterly average low point of 6.6 secent

Average weekly initial claims totaled 7,435 in First Quarter 2018, a 65 percent decrease from the end of 2017, and a new record low. The decline also marks the seventh cornecutive quarter of declining initial claims. While behaving somewhat erratically at the monthly level, February had the lowest weekly initial claims of any month since the data series began. The continued decline and all-time lows of average weekly initial claims can tell us a fold about the economy. For example, as the first step in the claimsarp process, filing an initial claim—and the data that follows—is largely reactionary to the ups and downs of the economy. Threats of layoffs and closings, reductions in hours, and other fluctuations such as the business cycle, and changing demands of consumers all lead to an increase in initial claims. Taken alone, the decline of initial claims suggests an improving labor market.

Final payments declined enough in the second and third months of the quarter to make up for the increase during January. In the endt, the first quarter of 2018 saw final payments total 6,669. While not a record, this is the lowest amount of final payments into the second quarter of 2018 saw final payments to talded 6,374. Individuals receiving final payments are recorded because they have exhausted brieffs or claim weeks. Taken together, the declines in the insured unemployment rate, average weekly initial claims, and final payments suggest that the labor market is improving. Workers that fose their jobs may be finding work sooner than they were in the immediate aftermath of the last recession. Alternatively, it is possible that less people are qualifying for unemployment benefits which could drive these numbers down. This may be a result of the increasing number of undesemployed individuals that hold multiple positions. Finally, the declines may actually hint at an economy in trouble. It has been documented in numerous publications that the labor force participation rates have been declining across the ocurting, as well as

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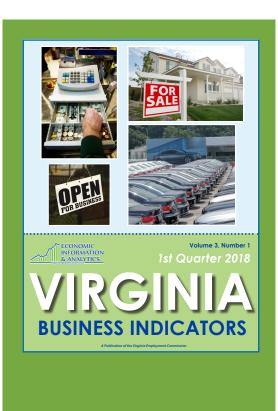
1st Quarter 2018

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VIRGINIA BUSINESS INDICATORS

The Virginia Business Indicators is a quarterly publication analyzing key business indicators including taxable retail sales, deflated taxable retail sales, single family building permits, new business incorporations, and new vehicle registrations.

All series currently published in the Virginia Business Indicators have been seasonally adjusted to minimize regular fluctuations in the data in order to show only activity related to the business cycle.



Virginia Business Indicators

(Seasonally Adjusted)

	Taxable Re (Millions o		Deflated Taxable Retail Sales (Millions of 1982-84 Dollars)		
2017	Unadjusted	Adjusted	Unadjusted	Adjusted	
January	8,695	9,952	3,671	4,164	
February	8,890	10,057	3,744	4,239	
March	10,564	10,464	4,445	4,397	
April	9,959	9,930	4,177	4,169	
May	10,371	10,144	4,346	4,269	
June	11,067	10,523	4,634	4,431	
July	10,066	10,162	4,218	4,278	
August	10,308	10,362	4,305	4,346	
September	10,471	10,492	4,346	4,371	
October	10,195	10,021	4,238	4,169	
November	10,394	10,574	4,319	4,369	
December	12,319	10,513	5,122	4,333	
2018					
January	9,079	10,392	3,753	4,256	
February	9,058	10,247	3,728	4,221	
March	10,783	10,681	4,429	4,381	

	Single Fam	ily Permits	New Business	Incorporations	New Vehicle Registrations		
2017	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	
January	1,704	1,966	1,005	937	41,592	40,449	
February	1,727	1,822	929	917	34,228	44,878	
March	2,226	2,112	1,182	1,043	45,491	42,179	
April	1,935	1,641	954	878	39,414	34,001	
May	2,146	1,930	959	894	43,040	38,346	
June	2,270	2,020	980	969	45,978	40,223	
July	2,204	1,981	882	885	39,540	36,768	
August	2,148	2,034	1,026	1,090	41,376	40,788	
September	1,870	1,898	892	932	38,930	38,239	
October	1,992	2,080	976	1,005	38,504	39,976	
November	1,604	1,957	826	988	34,319	43,417	
December	1,717	2,178	946	1,036	35,207	41,667	
2018					i		

January 1,791 2,066 1,044 973 February 1,757 1,021 1,006 1,665 2,222 1,006 2,106

1st Quarter 2018

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Virginia Business Indicators

(Seasonally Adjusted)

- Total nominal taxable retail sales increased 0.7 percent from last quarter, setting a new record high in March. However, the total for the inflation-adjusted series decreased 0.1 percent from last quarter.
- Single family building permits fell 4.6 percent from fourth quarter's total and are now about 54 percent below the average monthly pre-recession high of 4,300.
- New business incorporations fell 1.4 percent from last quarter and are still about 42 percent below the 1,730 peak monthly average attained in 2005.
- New vehicle registrations were 0.1 percent lower than last quarter's total. The first quarter average was still over seven percent below the pre-recession high of about 45,000 per month.





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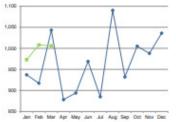
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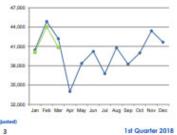


Single Family Housing Permits





New Vehicle Registrations

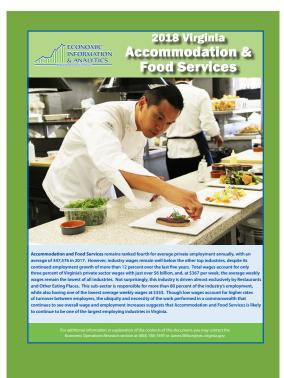


1st Quarter 2018

VIRGINIA INDUSTRY PROFILES

The Virginia Industry Profiles provide information on the top five industries within Virginia based on employment. Each profile gives a summary of the industry in Virginia, followed by tables and graphs for the industry's establishments, employment, and average weekly wage for the state. The report also provides a table showing the total establishments, employment, and average weekly wage for that industry in each county and city.

The data within the profiles come from the Quarterly Census of Employment and Wages (QCEW) program.







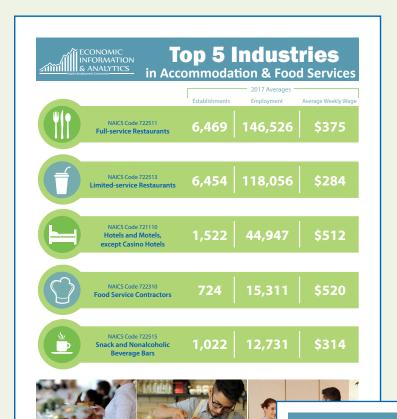
		1997	1997 2012 2017			
721110	Hotels and Motels, except Casino Hotels	1,114	1,477	1,522	44,947	30
721191	Bed-and-breakfast inns	89	101	107	579	5
721199	All Other Traveler Accommodations	27	26	37	267	7
721211	RV Parks and Campgrounds	80	82	86	915	11
721214	Recreational and Vacation Camps	41	38	39	530	14
721310	Rooming and Boarding Houses	40	45	42	127	3
722310	Food Service Contractors	298	697	724	15,311	21
722320	Caterers	251	223	234	3,424	15
722330	Mobile Food Services	11	55	113	516	s
722511	Full-service Restaurants	4,145	5,953	6,469	146,526	23
9	Limited-service Restaurants	4,683	6,080	6,454	118,056	18
	Cafeterias, Grill Buffets, and Buffets	169	214	164	3,336	20
	Snack and Nonalcoholic Beverage Bars	498	927	1,022	12,731	12
3	Restaurant and Other Eating Places Total	9,494	13,173	14,109	280,648	20
	Accommodation Total	1,391	1,769	1,833	47,369	26
	Food Services and Drinking Places Total	10,054	14,154	15,210	300,207	20
	lation and Food Services Total	11,445	15,923	17,043	347,576	20
	es.	182,029	234,932	262,959	3,836,960	15

TOP FIVE INDUSTRY FACT SHEETS

These two page fact sheets provide an at-a-glance look at the top five industries within the top industries in Virginia based on employment. The front side of the publication gives industry details such as establishments, employment, and average weekly wages. The back side gives samples of potential career paths for the industry, the education needed, and the occupational projections for each of the listed careers.

The data within the profiles come from the Quarterly Census of Employment and Wages (QCEW) program and the Bureau of Labor Statistics.





Sample of Career Paths in Accommodations & Food

In the Accommodation & Food Service industry, jobs that require specific skills, like cooking or managing hotel staff, usually require certification or some higher education. Most jobs in this industry, however, only require on-the-job training.







Recommended

Most chefs and head cooks learn their skills through work experience. Others receive training at a community college, technical school, culinary arts school, or 4-year college. A small number learn through apprenticeship programs or in the Armed Forces.



Waiters and Waitresses



Recommended

Most walters and waitresses and related workers learn their skills on the job. No formal education or previous work experience is required. Some establishments might require a high school diploma or GED.



Meeting, Convention, and Event Planners



Recommended

Most meeting, convention, and event planning positions require a bachelor's degree. Some hospitality industry experience related to event planning is considered valuable for many positions.



Concierges





Source: Bureau of Labor Statistics: Occupational Outlook Handbook

Sample of Occupational Projections in Accommodations & Food

The Restaurants and Other Eating Places sub-sector is responsible for more than 80 percent of the industry's employment. High demand for jobs in this industry continues to see overall wage and employment increases which suggests that Accommodation and Food Services is likely to continue to be one of the largest employing industries in Virginia.

The table below shows the long-term industry projections for Multiple Industries in Virginia for the 2016-2026 projection period.

Industry	2016 Estimated Employment	2026 Projected Employment	Percent Change 2016-2026
Chefs and Head Cooks	3,320	3,770	13.6%
Waiters and Waitresses	70,210	77,190	9.9%
Meeting, Convention, and Event Planners	4,320	5,050	16.9%
Concierges	1,910	2,280	19.6%

Source: Virginia Employment Commission, Industry and Occupational Projections

For more information, visit <u>www.virginialmi.com</u> or call (804) 786-8824



LMI CAREER & LABOR MARKET NEWS

This is a quarterly newsletter highlighting recent developments in labor market and occupational activities in Virginia. It is broken into five sections that feature various articles on LMI news, employment, education/training, and career advice aimed at workforce professionals and LMI specialists, job seekers, career counselors, students, and veterans.



SECOND QUARTER 2018

May 2018

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Virginia Economy at a Glance:

Data Series	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
Labor Force Data					
Civilian Labor Force(1)	(2)4,318.5	4,317.0	4,320.8	4,325.3	4,331.0
Employment(<u>1</u>)	(2)4,162.2	4,163.1	4,171.1	4,178.4	4,187.0
Unemployment(<u>u</u>)	(2)156.3	154.0	149.7	147.0	144.0
Unemployment Rate(2)	(2)3.6	3.6	3.5	3.4	3.3
Nonfarm Wage and Salary Employment					
Total Nonfarm(4)	3,954.1	3,964.9	3,983.2	3,989.0	3,994.3
12-month % change	0.5	0.6	0.9	1.0	VIR
Mining and Logging(4)	8.2	8.2	8.2	8.2	111
12-month % change	2.5	3.8	3.8	2.5	
Construction(4)	197.3	198.0	201.5	201.7	
12-month % change	3.4	3.3	4.0	4.6	
Manufacturing(4)	236.4	237.1	239.3	238.6	CI
12-month % change	1.5	1.7	2.3	1.9	Ci
Trade, Transportation, and Utilities(4)	662.0	660.1	662.3	664.7	
12-month % change	-0.1	-0.6	-0.2	0.2	
Information(4)	67.2	67.9	67.6	67.4	20
12-month % change	-1.2	-0.4	-1.2	-1.3	Iv
Financial Activities(g)	206.2	205.1	205.5	206.5	w
12-month % change	1.5	0.8	0.8	1.2	On
Professional & Business Services(4)	730.0	735.0	737.1	737.7	Nu
12-month % change	1.2	1.9	1.7	1.7	Jol
Education & Health Services(4)	528.9	532.1	533.8	536.0	
12-month % change	0.4	0.7	1.0	1.3	En
Leisure & Hospitality(<u>s</u>)	397.9	400.5	405.1	406.4	Ed
12-month % change	-1.2	-0.8	-0.1	0.4	
Other Services(4)	203.9	205.3	206.6	205.9	A h
12-month % change	1.1	1.6	2.2	1.8	eith
Government(<u>a</u>)	716.1	715.6	716.2	715.9	
12-month % change	0.0	-0.2	-0.1	0.0	Du

(1) Number of persons, in thousands, seasonally adjusted.

(2) Reflects revised population controls, model reestimation, and a new seasonal adjustment procedure.

(3) In percent, seasonally adjusted.
(4) Number of jobs, in thousands, seasonally adjusted.
(P) Preliminary

VIRGINIA LMI CAREER & LABOR MARKET NEWS

SECOND QUARTER 2018

Career Spotlight

Claims Adjusters, Appraisers, Examiners, and Investigators

Quick Facts: Claims Adjusters, Appraisers, Examiners, and Investigators				
2017 Median Pay	\$64,690 per year \$31.10 per hour			
Typical Entry-Level Education	See How to Become One			
Work Experience in a Related Occupation	None			
On-the-job Training	See How to Become One			
Number of Jobs, 2016	328,700			
Job Outlook, 2016-26	-1% (Little or no change)			
Employment Change, 2016-26	-3,600			



Education

A high school diploma or equivalent is typically required for a person to work as an entry-level claims adjuster, examiner, or investigator, although some positions may require a bachelor's degree or insurance-related work experience. Auto damage appraisers typically have either a postsecondary nondegree award or previous work experience in identifying and estimating the cost of automotive repair.

Duties

Claims adjusters, appraisers, examiners, and investigators typically do the following:

- ▶ Determine whether the insurance policy covers the loss claimed
- ▶ Decide the appropriate amount the insurance company should pay
- ▶ Contact claimants' doctors or employers to get additional information on questionable claims
- ▶ Confer with legal counsel on claims when needed
- ▶ Negotiate settlements

VIRGINIA LMI CAREER & LABOR MARKET NEWS

SECOND QUARTER 2018

, appraisers, examiners, and investigators have varying duties, depending on the type of insurance company they work for a lot about what their company insures.

		Median	
Virginia	\$91,340	\$62,660	\$41,670
United States	\$97,080	\$64,900	\$38,930

The Best Civilian Career Fields For Veterans

What are the best civilian career fields for veterans? what are the best civilian caper fields in vectorists. Transitioning out of the military and back into civilian life can be difficult in more ways than one, and there's no one-size-fits-all career path for those making the jump. But in general, some fields and industries offer

Government

Government jobs are a natural for anyone leaving military service with an honorable discharge. Veterans frequently take advantage of hiring preferences for Civil Service, state jobs, and municipal positions.

Government jobs often require screening tests that may feel quite familiar to anyone who has taken professional military education, distance learning for career progression, or promotion tests. Military members are used to taking exams to advance a career, which can be a big advantage over first-time government test-

The veteran brings her experience and military discipline to the table, and government hiring processes tend to favor people usine, an operation in ming process sent of using people with military hand skills' and 'soft skills' alike. Your exact military experience may not directly translate with some government work but the fact that you successfully completed your military service commitment speaks volumes to the employer.

Consider those who have moved out of forward-deployed military duty in combat zones who go on to become defense contractors or employees of aerospace industries that have ties with the government.

There are three basic resources you can use to get started There are three basic resources you can use to get started hunting for a government job- one is a Federal search tool called USAJobs that can help you find open positions at the federal level. Your state Department of Veterans Affairs may feature government jobs at both the VA and state/hocal level depending on how extensively the official site is maintained.

You can also find local job hunting resources via the usual places such as LinkedIn, Monster.com, etc. When searching for these types of jobs, it helps to try both general and specific terms. "State



medical jobs" or "Federal medical jobs in Provo, Utah" are fairly broad, but a search for "Freelance X-ray technician positions in Baltimore VA clinics" may yield interesting results.

Another way to locate government jobs is by searching the official sites of government agencies like the Depa Affairs (which has a section specifically for VA job openings).

How wide-open is the technology field for vets? Five out of eight jobs listed in a Monster.com article, "Eight High-Paying Jobs For Veterans" were tech-related.

It's not surprising, really, the tech industry is a very large one, covering everything from IT and intelligence gathering to aerospace, renewable energy, and much more. The United States Department of Labor published a report in 2016 estimating job growth in the tech sector-speculating that more than half a million new tech jobs will be added between the time of the report to 2026

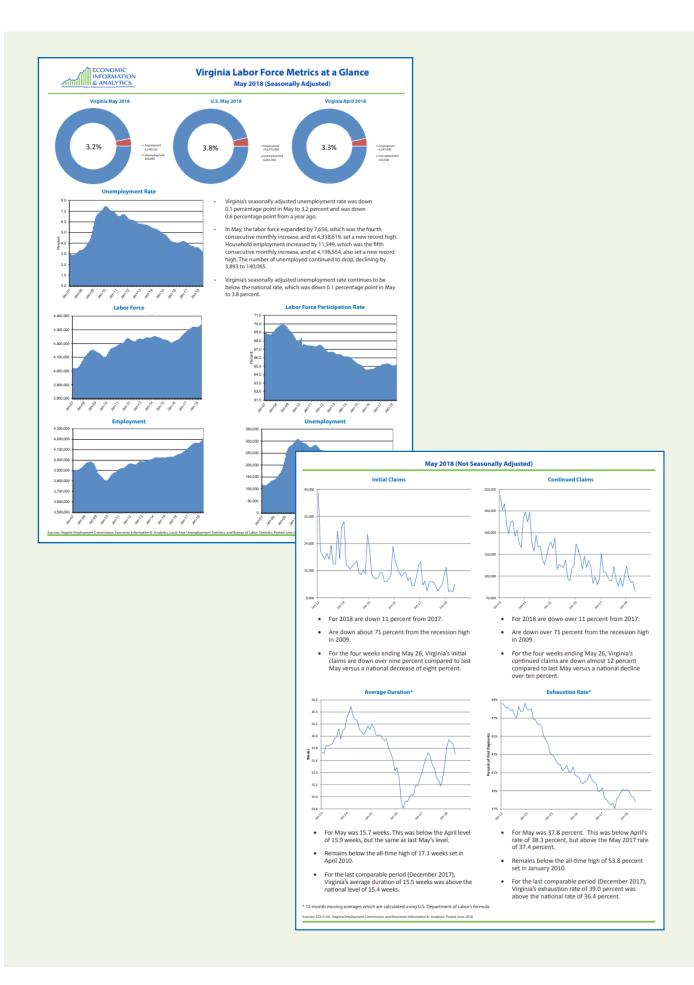
the tech sector for jobs' is naturally related to the veteran's military career, the vastness of the industry, and the desired specialty. How can a military member decide which aspect of the industry to

LABOR FORCE METRICS AT A GLANCE

Virginia Labor Force Metrics at a Glance provides a snapshot of the most recent unemployment rate for Virginia and the U.S. as well as a historical graphic representation of Virginia's unemployment rate, labor force, labor force participation rate, employment and unemployment. In addition, a historical graphic representation of Virginia's initial claims, continued claims, average duration, and exhaustion rate along with bullet points for each is also shown.

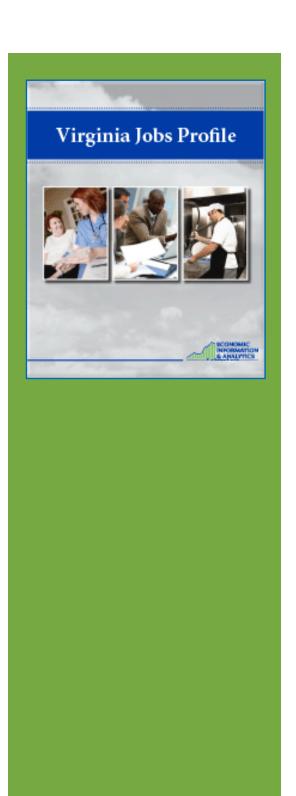
This one sheet publication is updated monthly.

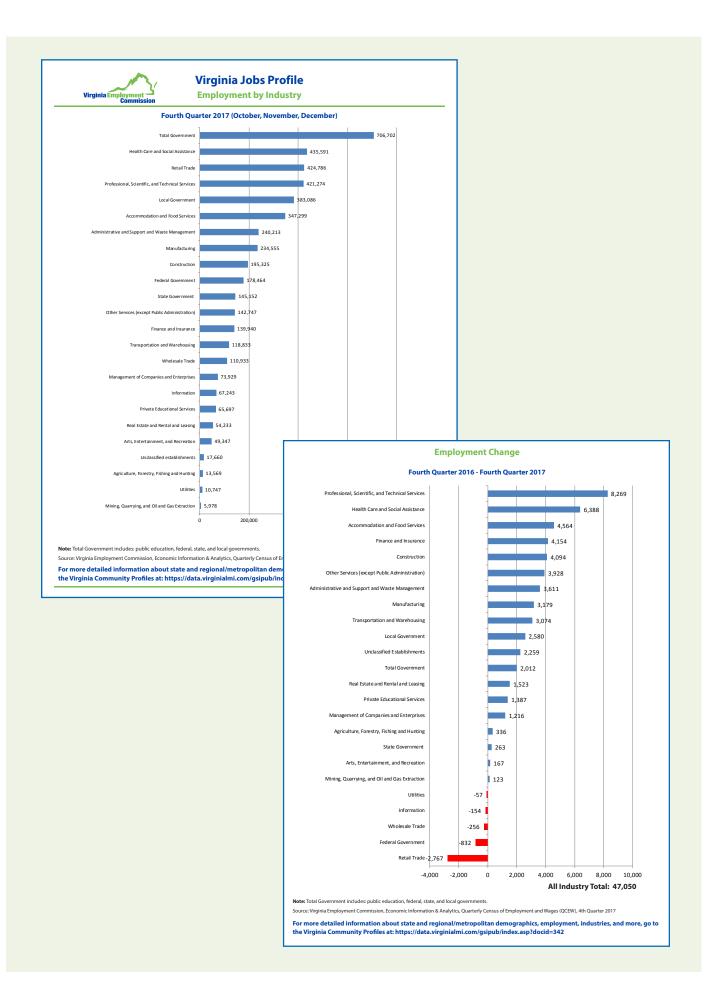




VIRGINIA JOBS PROFILE

Virginia Jobs Profile provides a quarterly snapshot of employment by industry in Virginia and the quarterly year-over-year employment change.





VIRGINIA JOB OUTLOOK

The Virginia Job Outlook is a publication that provides occupations projected to have the highest number of openings along with expected salaries broken down by educational attainment. This publication is updated every other year.







Job opportunities in Virginia are expected to continue to expand. Overall, employment in Virginia is projected to grow 9.3 percent by 2024 exceeding the national growth rate of 6.5 percent.

Which jobs are expected to grow or decline in Virginia?

This Job Outlook brochure lists a sampling of high-growth occupations by educational attainment and annual wages projected to 2024 as well as occupations that are projected to decline.

For more information, visit these websites:

www.bls.gov/ooh www.VirginiaLMI.com

High-Growth Occupations by Educational Attainment:

		Wage*	Associate's Degree, Post Secondary Non- Degree Award, or Some College	Projected Job Growth to 2024	Median Annual Wage*	High School Diploma or Equivalent	Projected Job Growth to 2024	Median Annual Wage*
Registered Nurses	8,949	\$64,600	Nursing Assistants	9,644	\$24,900	Customer Service Representatives	6,878	\$32,500
Management Analysts	8,911	\$97,100	Licensed Practical and Licensed Vocational Nurses	4,546	\$40,800	Office Clerks, General	5,413	\$31,000
Software Developers, Applications	8,019	\$105,000	Medical Assistants	3,434	\$31,000	First-Line Supervisors of Office and Administrative Support Workers	4,862	\$54,500
Computer Systems Analysts	7,090	\$96,800	Teacher Assistants	3,398	\$25,200	Receptionists and Information Clerks	4,829	\$28,200
Accountants and Auditors	6,319	\$75,900	Computer User Support Specialists	3,339	\$53,500	Security Guards	4,537	\$30,200
Software Developers, Systems Software	5,393	\$112,600	Heavy and Tractor-Trailer Truck Drivers	2,243	\$39,000	First-Line Supervisors of Food Preparation and Serving Workers	3,471	\$33,800
General and Operations Managers	4,443	\$120,300	Hairdressers, Hairstylists, and Cosmetologists	2,201	\$29,100	Maintenance and Repair Workers, General	2,845	\$37,700
Elementary School Teachers, Except Special Education	3,950	\$60,000	Dental Assistants	2,048	\$37,600	Sales Representatives, Services, All Other	2,614	\$60,400
Market Research Analysts and Marketing Specialists	3,683	\$64,700	Automotive Service Technicians and Mechanics	1,739	\$41,000	First-Line Supervisors of Retail Sales Workers	2,360	\$40,100
Computer and Information Systems Managers	2,892	\$155,400	Web Developers	1,472	\$79,800	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	2,304	\$35,900
Network and Computer Systems Administrators	2,770	\$91,400	Emergency Medical Technicians and Paramedics	1,404	\$30,800	Police and Sheriff's Patrol Officers	2,298	\$50,800
Information Security Analysts	2,741	\$104,200	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1,399	\$47,900	Childcare Workers	2,191	\$19,900
Secondary School Teachers, Except Special and Career/Technical Education	2,628	\$60,700	Firefighters	1,235	\$49,700	Electricians	2,053	\$47,800
Personal Financial Advisors	2,453	\$87,700	Phlebotomists	1,193	\$31,500	Billing and Posting Clerks	1,990	\$36,900
Lawyers	2,291	\$125,000	Massage Therapists	1,134	\$34,200	Supervisors of Construction Trades and Extraction Workers	1,968	\$60,700
Operations Research Analysts	1,945	\$107,500	Paralegals and Legal Assistants	1,077	\$50,200	Recreation Workers	1,809	\$24,100
Middle School Teachers, Except Special and Career/Technical Education	1,857	\$58,600	Dental Hygienists	1,057	\$81,900	Carpenters	1,661	\$39,400
Physical Therapists	1,768	\$85,500	Preschool Teachers, Except Special Education	947	\$33,000	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,625	\$58,300
Mental Health Counselors	1,637	\$44,100	Medical and Clinical Laboratory Technicians	922	\$37,500	Fitness Trainers and Aerobics Instructors	1,539	\$38,800
Physicians and Surgeons, All Other	1,548	\$187,200	Physical Therapist Assistants	894	\$55,300	Medical Secretaries	1,513	\$33,700







Occupations That Are Declining:

Jobs	Projected Decline to 2024	Median Annual Wage*
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	-2,747	\$23,800
Bookkeeping, Accounting, and Auditing Clerks	-2,519	\$38,300
Postal Service Mail Carriers	-1,854	\$57,700
Farmers, Ranchers, and Other Agricultural Managers	-1,589	\$61,800
Cooks, Fast Food	-1,161	\$18,400
Computer Programmers	-1,147	\$92,800
Postal Service Mail Sorters, Processors, and Processing Machine Operators	-899	\$57,000
Tellers	-742	\$29,700
Photographic Process Workers and Processing Machine Operators	-709	\$28,100
Switchboard Operators, Including Answering Service	-668	\$26,600
Mail Clerks and Mail Machine Operators, Except Postal Service	-530	\$26,500
Postal Service Clerks	-499	\$58,100
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	-490	\$32,800
Sewing Machine Operators	-479	\$22,800
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	-452	\$35,100
Telecommunications Line Installers and Repairers	-438	\$64,400
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	-428	\$34,800
Bill and Account Collectors	-414	\$35,000
Executive Secretaries and Executive Administrative Assistants	-406	\$57,000
Printing Press Operators	-377	\$36,200

Industries in Virginia with the Largest Growth in **Employment Projected to 2024**



Industries	Projected Employment to 2024
Health Care and Social Assistance	97,087
Professional, Scientific, and Technical Services	70,701
Educational Services	42,378
Accommodation and Food Services	31,290
Retail Trade	29,162
Construction	22,760
Administrative and Support Services	19,692

*Note: Median annual wage is based on Virginia Employment Commission, Occupational Employment and Wage Rates, May 2015 data.

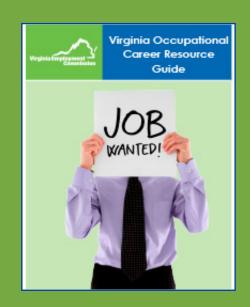
Sources for the brochure:
America's Career Infonet, Occupational Profile.
Wirginia Employment Commission, Long-term Industry and Occupational Employment
Projections, 2014-2024.
Wirginia Employment Commission, Occupational Employment and Wage Rates, May 2015.
Wirginia Employment Commission, Virginia Community Profile.

For information, contact: Virginia Employment Commission nomic Information & Analytics Division

(804) 786-8824 Fax: (804) 786-7844 VRC/TDD VA Relay 711 www.VirginiaLMI.com

VIRGINIA OCCUPATIONAL CAREER RESOURCE GUIDE

The Virginia Occupational Career Resource Guide is produced to assist any person who is looking for information to aid them in researching and finding a new career. Information is provided on a variety of career choices, how to plan for a career, education needed to qualify for various jobs, how to apply and interview for jobs, and much more.





Introduction

Career Planning and Education Career Clusters... Occupational Growth Trends..... Wages and Salaries 15) Overview of Virginia Occupation Applying for Jobs. Job Interview 34 Resources

	Employme	ent Trend	Median Annua	I Salary (2016)	Most Common Education
Occupation	VA	US	VA	US	Training Level
rt, Drama, and Music Teachers, lostsecondary	1111	M	\$57,590	\$68,650	Master's Degree
udio and Video Equipment Technicians	11111	1111	\$40,260	\$42,230	Associate's Degree/Certification/OTJ
Iroadcast Technicians	-	-	\$43,800	\$38,550	Associate's Degree/Certification/OT
ilm and Video Editors	11111	7777	\$55,850	\$62,760	Associate's Degree/Certification/OT
iraphic Designers	111	-	\$52,470	\$47,640	Bachelor's Degree
ibrarians	11	- 1	\$62,910	\$57,680	Master's Degree
Aultimedia Artists and Animators	11	17	\$68,120	\$65,300	Bachelor's Degree
peech-Language Pathologists	11111	1777	\$82,180	\$74,680	Master's Degree
ideo Game Designers	-	-	\$101,330	\$86,510	Bachelor's Degree
Neb Developers	2002	BBBB	\$79,490	\$66,130	Associate's Degree/Certification/OTJ

Business, Management, and Administration

Occupation	Employment Trend		Median Annual Salary (2016)		Most Common Education	
	VA	US	VA	US	Training Level	
trative Services Managers	111	77	\$94,870	\$90,050	Associate's Degree/Certification/OTJ	
nd Business Managers of Artists, ers, and Athletes	-	S	\$75,760	\$62,080	Bachelor's Degree	
Continuity Planners	- N	77	\$79,730	\$69,040	Bachelor's Degree	
Operations Specialists, All Other	N	77	\$79,730	\$69,040	Associate's Degree/Certification/OTJ	
cutives	N	_	\$208,000	\$181,210	Master's Degree	
Managers, Branch or ent	11	11	\$136,430	\$121,750	Bachelor's Degree	
lesources Specialists	11	77	\$67,640	\$59,180	Bachelor's Degree	
nent Analysts	11111	1777	\$95,320	\$81,330	Master's Degree	
rks, General	17	-	\$31,300	\$30,580	High School Diploma or Equivalent	
nd Timekeeping Clerks			\$44,260	\$42,390	High School Diploma or Equivalent	

Virginia Occupational Career Resource Guide 19



Job Searching

The most common way people used to search for jobs was through the Classified section of their local newspaper or word-of-mouth. That has changed over the years. Today, you can still find job openings in the local newspaper, but there are now more resources available to the job seeker—the Internet, job fairs, and career services.

Online Job Search

Online Job — The Internet has become a powerful tool for the job seeker. There are multiple job posting sites such as wow. Indeed.com and www.Monster.com; sites that link to state and federal government jobs; and company websites their own job openings.

This site focuses on job openings for upper-level executives and professionals who are aiming for the management suite. Not for entry-level jobs.

apply for a job opening.

Popular Job Search Sites

CareerBuilder (http://www.careerbuilder.com/)

CareerBuilder is one of the biggest job boards, and its robust search function allows you to filter by several criteria, including location, degree required and pay range. CareerBuilder partners with news media around the country and collects job listings from them. It also provides career advice and resources for candidates.

28 Virginia Occupational Career Resource Guide

Indeed (https://www.indeed.com/)

A huge aggregator of postings from across the Web, this site consolidates listings from many job boards in one place. It also compiles information from various company career pages and allows you to search locally or globally.

Job.com (http://www.jobs.com/)

This large site offers weekly job alerts, job search advice, a résumé builder, and job postings. This job search website also allows you to upload your résumé for hiring managers and recruiters to search.

This top networking site enables you to find jobs through your extended network. Additionally, you can create a work experience profile, join groups, participate in conversations and follow companies you find interesting and relevant to your job search.

Glassdoor (https://www.glassdoor.com/index.htm)

Job search website Glassdoor boasts a large database of company reviews—submitted by employees. Glassdoor promotes itself as giving job seekers insights into a

POCKET RESUME

The Pocket Resume is a PDF form that can be filled out with a job seeker's education, work history, and references, that they can print, cut, and fold to fit in a pocket, purse, or wallet. This is a handy resource that can be quickly referenced when filling out a job application or preparing for a job interview.



The actual interview: • Be prompt.	Fusalible Interview Questions: • Tell me about yourself?	I Pocket R					
		Keep this handy to applications and job					
 Unless the interviewer uses your 	 Why are you interested in the july? 	Propering for Job Inter-					
name, introduce yourself politely. • State hand briefly, but firmly.	 Why are you the best candidate? 	. Learn about the co					
. Answer questions directly and hon-	 What are your strength/ weaknesse? 	 Have a specific job 	in minul				
mily	 How has your education/training/ 	Review your job qu					
 Be polite, profescional, and cooperative. 	experience prepared you for this just?	 Practice answering questions 	possible interview				
 July questions and show enthusiasm. 	 When are you available to work? 	Approximen					
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The actual interviews	Passible Interview Questions:	Pocket R	ésumé				
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INTERVIEW SKILLS POSTER

The Interview Skills Poster gives helpful tips for preparing for interviews. It is 11" x 17" (tabloid) and can be downloaded and printed by anyone, but it is designed especially for use by career counselors and workforce centers.





- ➤ Dress appropriately.
- ➤ Look neat and clean.
- ➤ Be enthusiastic.
- > Be polite and show respect.
- > Be on time.

BE PREPARED

- ➤ Bring your résumé and references; a notepad and pen; a list of questions to ask about the job and/or company; and a sample of your work (if applicable).
- Learn as much about the company as possible. The more you know about the company, the more you show your interest in working for them.

KNOW YOURSELF, THEN SELL YOURSELF

- > Be prepared to discuss your strengths and weaknesses.
- > Present your weaknesses as positive attributes.
- Talk about your accomplishments, skills, and abilities and how they can be applied to the job.

FOLLOW UP

> Follow up your interview the same day (or the next day) with a thank-you note or email! Let them know you are interested in the job.



www.VirginiaLMI.com

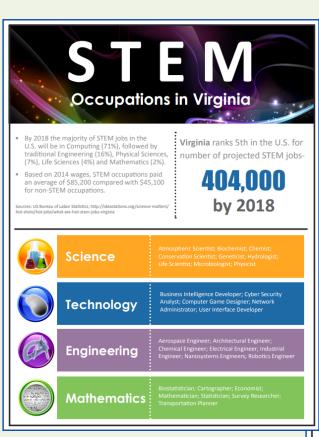
This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration, but does not necessarily reflect the official position of the U.S. Department of Labor.

1/2016- 400

STEM FLYER

The STEM flyer provides labor market information on occupations in the fields of Science, Technology, Engineering, and Mathematics (STEM). It has been designed as a career aid particularly for students who might be considering a career in a STEM field.





Architecture and Engineering (Total Projected Job Growth - 3,210) 2015 Annual Median Wage Minimum Education Civil Engineers \$82.072 Mechanical Engineers 578 \$83,590 Bachelor's degree \$87,845 Electrical and Electronic Engineering Technicians \$64,948 Associates degree 2015 Annual Median Wage Minimum Education Software Developers, Applications 8,019 \$104,990 Bachelor's degree 7,090 \$85,800 Software Developers, Systems Software \$100,690 Bachelor's degree Computer User Support Specialists 3,339 \$53,494 Post Secondary \$91,355 Post Secondary Certificate Healthcare Practitioners and Technical (Total Projected Job Growth - 37,296 2015 Annual Median Wage Associates degree Licensed Practical and Licensed Vocational Nurses 4,546 \$40,823 Post Secondary Certificate Doctoral/Professional degree Doctoral/Professional degree \$85,522 Physicians and Surgeons, All Other 1,548 \$92,806 (entry level) Nurse Practitioners

2024 Projected Job Growth

295

229

Occupation

2015 Annual

\$69,828

\$86,272

\$66,277

Minimum Education

Bachelor's degree

Bachelor's degree

Bachelor's degree

Top 5 High Growth STEM Occupations in Virginia to 2024 by Major Occupational Group

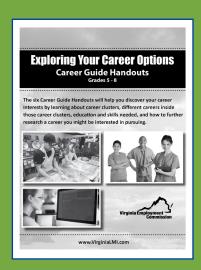
Management (Total Projected Job Growth -14,640) 2,892 \$155,396 Medical and Health Services Managers 1,260 \$97,812 Architectural and Engineering Managers \$143,883 \$129,167 Clinical, Counseling, and School Psychologists Environmental Scientists and Specialists, Including Health Medical Scientists. Except Epidemiologists 2015 Annual Median Wage Biological Technicians Health Specialties Teachers, Postsecondary 1,272 \$64,613 Forensic Science Technicians Mathematical Science Teachers, Postsecondary 452 \$51,283 Biological Science Teachers, Postsecondary 344 \$60,748 Master's/Doctoral degree Psychology Teachers, Postsecondary For More Information on STEM Occupations: Article -https://www.bls.gov/spotlight/2017/science-technology-engineering-and-mathematics-stem-occupans-past-present-and-future/home.htm Article - http://ideastations.org/science-matters/hot-shots/hot-jobs/what-are-hot-stem-jobs-virginia Data - https://www.bls.gov/oes/2015/may/stem.htm Data - https://data.virginialmi.com (Labor Market Data/Occupations) ECONOMIC INFORMATION & ANALYTICS

High Growth STEM-Related Occupations in Virginia to 2

by Major Occupational Group

EXPLORING YOUR CAREER OPTIONS: CAREER GUIDE HANDOUTS

The six Career Guide Handouts will help students discover their career interests by learning about career clusters, different careers inside those career clusters, education and skills needed, and how to further research a career they might be interested in pursuing. These Handouts are designed especially for students in grades 5 - 8.





Exploring Your Career Options

Career Guide Handout

#1: Career Clusters

Clusters are groups of things that share similarities to each other in some way. For example: apples, pears, and oranges are all *fruits*; New York, Chicago, Richmond, and Orlando, are all *cities*; and cats, bears, dogs, and horses are all *animals*. A career cluster is a grouping of occupations and broad industries that all have things in common. Every Career and Technical Education class falls into one of 16 "career clusters."

- 1. Agriculture, Food, and Natural Resources
- 2. Architecture and Construction
- 3. Arts, Audio/Visual Technology, and Communications
- 4. Business, Management, and Administration
- 5. Education and Training
- 6. Finance
- 7. Government and Public Administration
- 8. Health Science
- 9. Hospitality and Tourism
- 10. Human Services
- 11. Information Technology
- 12. Law, Public Safety, Corrections, and Security
- 13. Manufacturing
- 14. Marketing, Sales, and Services
- 15. Science, Technology, Engineering, and Mathematics
- 16. Transportation, Distribution, and Logistics

Within each cluster, there are cluster "pathways" that correspond to a collection of courses a opportunities to prepare you for a given career.

The 16 clusters were established at the national level by the States' Career Clusters Initiative a recognizable across the United States in middle schools, high schools, community and tech and the workforce.

By figuring out your interests and finding out what career cluster those interests fall in can he down what sort of career you might be interested in perusing. A job can be hard work and rebut you will enjoy your job more and get satisfaction from your work if it is something that i



Exploring Your Career OptionsCareer Guide Handout

#4: Learning Job Skills

Summers are a great time for you to earn some extra money and gain some job skills that will help put your résumé ahead of the rest when applying for "real" jobs in high school. You can learn time management, dependability, people skills, communication and marketing skills, self-confidence, and money management (in addition to earning money!).

Identifying Potential Summer Jobs for Middle School Students

It is difficult to find a job at such a young age. But, here are some steps to go through to help you identify areas in which you may be able to earn some extra money:

1. Think about the jobs performed around your own house each day (or week).



- ▶ Who waters the lawn and patio plants?
- Who mows the lawn and sweeps the patios?
- ▶ Who washes the car(s)?
- Who takes care of the kids who are out of school for the summer?
- Who walks and feeds the dog? Makes dinner for the family?
- ▶ Who sorts the mail or takes out the recycling?

All of these are potential summer job ideas. You could work for relatives, neighbors, and friends who are going on vacation or working outside the home while their children are home for the summer. Make any additions to this list here:

2. Observe what you see others doing, such as neighbors or family friends. Would they invite a middle school student to help them? Add your observations here:



Exploring Your Career OptionsCareer Guide Handout

#6: Researching Careers

There are plenty of resources available for you to further research a career on your

- wn. You can:
 Interview your parents, teachers, or family friends to find out first-hand what their jobs are
 - ▶ Attend Career Day at your school
 - Spend a day shadowing your parent or other adult at their job.
 - Visit your local or school library to find books or magazines about different careers.
 - Search the web for online career information.

Websites You Can Visit for More Career Information:

https://www.virginiaLMI.com

https://www.bls.gov/k12/

http://www.vaview.org/

https://www.careerkids.com/careers

https://www.knowitall.org/series/kids-work

https://www.sciencebuddies.org/science-engineering-careers

Preparing for the Future

High School—Freshman Year

When you start your freshman year of high school, be sure to:

- Meet with your counselor to discuss your college plans and review your class schedule for appropriate classes.
- Start a calendar with important dates and deadlines.
- ▶ Get involved in extracurricular activities
- Start preparing for the PSAT test.



Research and Analytics

RESEARCH PAPERS AND REPORTS

The various LMI research papers and reports provide data sets that are outside the Bureau of Labor Statistics core program products. These reports and research papers—developed and written by LMI staff—cover LMI-relevant articles such as the "gig economy" in Virginia and studying the impact of underemployment in Virginia's job market.

A few samples:

- Summary Analysis of Virginia 2017 and 2016 Benchmark Revisions of Nonagricultural Employment and Unemployment
- Labor Supply and Demand in Virginia: A Dynamic Approach to Understanding the Labor Force 1st Quarter 2018 Average
- An Understanding of Alternative Measures of Labor Underutilization



STRUCTURAL UNEMPLOYMENT: A NEW MEASUREMENT AND CONTINUING DISCUSSION OF AN ELUSIVE ECONOMIC INDICATOR

Paul L. Daniels, Statistician, Virginia Employment Commission Timothy O. Kestner, Director of Economic Information & Analytics, Virginia Employment Commission Salvatore Lupica, Chief Operating Officer, Virginia Employment Commission

Abstract

The Workforce Innovation and opportunity Act (WIOA) and the Trade Act of 1974 were both intended to address conditions that today may be characterized as contributors to "structural unemployment." These contributors include, primarily, mismatch between worker skillsets and the skills needs of employers in the relevant labor markets. WIOA seeks to coordinate skill development and credentialing at a local level to better match workers' abilities with employers' skills needs. The Trade Act is intended to assist workers adversely affect by foreign trade by providing, among other things, training to prepare them for new careers. Our review of the relevant literature suggests that there is no uniform definition or accepted quantitative measure of "structural unemployment" that would be comparable to the standard unemployment rate (U3) or U3 plus marginally attached workers (U5). We propose two new measures of economic labor utilization based on data from the Bureau of Labor Statistics that provide both a qualitative and quantitative measure of structural unemployment, called U-7X and U-7XR. We believe that these measures gauge the extent of unemployment intrinsic in an economy that is intransigent because of a variety of factors including skills-based-employer need mismatch, aging demographics, and people with disabilities. In turn, these measures can b assessment of the state level implementation of both WIOA and the Trade Act.

ECONOMIC INFORMATION & ANALYTICS

Nonemployer Statistics—An Indicator of Virginia's "Gig Economy

By Ann Lang, Senior Economist • Ann.Lang@vec.virginia.gov

hor's Note: This article attempts to provide an indication of Virginia's "gig economy"—a much discussed but hard to define or of the economy. This analysis is not a comprehensive look at the "gig economy" and is based solely on nonemployer istics from the Census. Nonemployer statistics are used to gain insight into this sector of the economy, as many gig workers fit the definition of nonemployers.

e "gig economy" is a much talked about phenomenon. However, there is no official, agreed upon definition. And as such, ere is no easy, direct way to collect data on this segment of the labor market and measure its economic impact. Gig work e not easily identified or counted in the usual surveys of employment and earnings making it difficult to capture their im,

The Bureau of Labor Statistics describes a gig as "a single project or task for which a worker is hired, often through a digital marketplace, to work on demand." ¹ Workers often use a website or mobile app that helps to match them with customers who are interested in their particular products or services. Some gig workers enter into a formal agreement with an on-demand company, such as Uber, providing services to the company's clients; most of these gig workers are viewed as independent contactors by the company. Other gig workers are hired on an on-demand basis for specific projects and paid accordingly.



Timothy O. Kestner

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Labor Supply and Demand in Virginia: A Dynamic Approach to Understanding the Labor Force First Quarter 2018

By Paul Daniels
Virginia Employment Commission, Division of Economic Information & Analytics

*Note: Unless otherwise noticed, all figures and tables are produced from data provided by the Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics program. Data on the Alternative Measures of Labor Underutilization can be obtained at the following website: https://www.bls.gov/lan/stalt.htm. Previous versions of this report can be found under the title "Alternative Measures of Labor Underutilization."

Current Supply and Demand in Virginia

The most recent four quarter average for the alternative measures of labor The most recent four quarter average for the alternative measures of labor underutilization ends with the first quarter of 2018. As evidenced in Table 1, every measure decreased from the previous average. While U-1 and U-3 had modest decreases of 0.1 percentage point, the decline in other measures was slightly more substantial with U-6 dropping by 0.3 percentage point. Looking at over-the-year changes, all measures are again markedly down with U-6 again having the greatest transformation with a 1.0 percentage point decline from the same point last year.

As U-6 represents the broadest definition of labor underutilization, its continued strong decline is a powerful indicator that the demand for workers is working towards parity with the decline is a powerful midicator that the demand for workers is working towards parity with the excess supply left over from the last recession. Remember that U-6 contains not only traditionally unemployed, but those who are not working full-time, but desire and have the ability to. With all measures declining, it is safe to say that the number of job losers, long-term unemployed, and traditionally unemployed are decreasing. One concern is that these individuals are returning to work but at fewer hours than before. However, the large declines in U-6 suggest that this group is, in all likelihood, finding full-time employment once again.

Nationally, Virginia has once again out-performed the country with every measure below Nationally, Virginia has once again out-performed the country with every measure below the current national average. It is one of 25 states (including Washington DC) to have all measures at or below the national average; one of nine states east of the Mississippi¹, one of four states in the southeast region of the United States²; and has only one neighboring state² (Tennessee) that meets this designation. As suggested by the traditional unemployment rate, Virginia regionally has one of the best labor utilizing economies, which is impressive for a state so heavily reliant on government funding, particularly in a time when funding remains an uncertain and politically volatile topic.

salaried employment to gig workers or are supplementing their workforce with gig workers who are hired for specific ile a comprehensive count of gig employment does not currently exist, nonemployer statistics data from the U.S. nay provide some insight into this trend. The U.S. Census compiles the nonemployer statistics data using Internal nay provide some insight into this trend. The U.S. Census complies the nonemployer statistics data using Internal Service (IRS) tax data. According to the U.S. Census? A nonemployer business is one that has no paid employees, has usiness receipts of \$1,000 or more (\$1 or more in the Construction industry), and is subject to federal income taxes. hemployers are self-employed individuals operating very small unincorporated businesses, which may or may not be \$7 principal source of income?* Since this definition of nonemployers fits most gig workers, an examination of this provide useful information about gig employment, whether it's through a digital marketplace or not.

nomy and business climate changes and evolves, some employers and industries are shifting away from conventiona

plover Establishments in Virginia, 2010-2015



ensus.gov/epcd/nonemployer/view/define.htm

<sup>There are 26 states east of the Mississippi River.
The 12 states used for comparison are in the Southeast region as designated by the Bureau of Economic Analysis, Alabama, Arkansas, Flordia, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.
Feur states and the District of Columbia neighbor Virginia.</sup>

LMI Website & Social Media

VIRGINIA LMI WEBSITE

All the publications and reports featured in this guide are available for viewing and download from www.VirginiaLMl.com, EIA's labor market-dedicated website.

Along with the publications, the website provides access to multiple databases for: Labor Force Data; Industry Data; Occupational Data; Demographics Data; Industry and Occupational Projections; and more.

There is also a section of the website dedicated to providing labor force data, such as Unemployment Rates by LWDAs, Labor Force Participation Rates, and Historical and Forecasted Employment and Wages, for the 15 Local Workforce Development Areas (LWDAs).

As new and/or updated LMI publications become available, announcements of availability are posted on our LMI Facebook page and LMI Twitter account.



