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Labor Supply and Demand in Virginia: A Dynamic Approach to Understanding the Labor Force 2018 Annual Average

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*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/lau/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 underutilization ends with the fourth quarter of 2018, thereby providing an annual average. As depicted in **Table 1**, all six measures have modestly improved from the previous 4-quarter average. The largest movement was a decrease of 0.3 percentage point in both U-5 and U-6. Compared to the 2017 annual averages, all measures showed improvement with the smallest change of a 0.3 percentage point decrease in U-1, and the largest of a 1.5 percentage point decrease in U-6. Such large movement in U-6 compared to the other measures is typical since U-6 is the broadest measure. Additionally, such a large decrease in U-6 is indicative that the individuals returning to work are most likely finding full-time employment as opposed to part-time work. Virginia continued to have all measures below the national readings, with differences ranging from 0.5 percentage point in U-1 to 1.3 percentage point in U-6.

In regards to job-seeker discouragement and underemployment, **Table 2** shows both of these measures have decreased from the 2017 annual averages. More specifically, job-seeker discouragement decreased by a modest 0.2 percentage point, bringing it to 0.1 percent. It is important to note that while the discouragement rate ideally isolates those who feel the labor market contains no jobs that fit their skillsets, there are some potential limitations that explain such a low reading. For instance, the discouragement rate does not include those who are currently working a job, but have a skillset better suited for some other career path. Therefore it follows that even if an individual feels discouraged about finding a job in a certain industry, he or she won't be counted in this statistic if they currently hold a job in another industry. Meanwhile, underemployment decreased by 0.5 percentage point to rest at a rate of 2.8 percent. In terms of annual averages, 2018 had the lowest reading of job-seeker discouragement since 2008, and the lowest reading of underemployment since 2006. Overall, this is a positive indicator that Virginia's labor market has mostly recovered since the recession. Both measures are marginally below the national rates which sit at 0.2 percent for job-seeker discouragement and 2.9 percent for underemployment.



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Interestingly, when looking at the size of the civilian labor force, we see an increase of approximately 67,000 people since the same point in 2017. Coupled with the 0.8 percentage point decrease in U-3 from a year ago, we can infer that the decreases seen in U-3 came from people finding employment as opposed to dropping out of the labor force. Also, the significant decreases across the six measures seen in 2018 were somewhat surprising. Most of the measures had begun to slow their decreases leading up to the end of 2017, with some measures even becoming stagnant. Remember that in the publication for the 2017 annual averages we postulated that Virginia was nearing full employment and that these numbers would largely be stationary. However, all measures dropped significantly further, leading into questions of whether or not such levels of employment in the commonwealth are sustainable.

Overall, Virginia's labor supply and demand seem to have both increased throughout 2018, with the U-1 being the only measure to increase at any point in the year. Every measure except U-1 consistently fell or stayed the same period-over-period since 2017. Compared to the nation, Virginia had lower rates across all measures for every four-quarter average of 2018. As some measures hit lows not seen since the 2000's, it is safe to say that the commonwealth continues to be one of the best labor-utilizing economies in the nation. However, it is important to raise the question as to whether or not the level of employment we see is sustainable. With measures hitting lows not seen since before the last recession, if we continue to see decreases Virginia may very well begin to have employment tick up to never-before-seen highs, and thus landing the state into uncharted waters.

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Appendix

Table 1: Alternative Measures of Labor Underutilization

Measurement	Virginia's current 4 quarter average (2018:I – 2018:IV)	Virginia's previous 4 quarter average (2017:IV – 2018:III)	National Data (2018:I – 2018:IV)	Virginia's 4 quarter average from previous year (2017:I – 2017:IV)
U-1	0.9	1.0	1.4	1.2
U-2	1.1	1.2	1.8	1.6
U-3*	2.9	3.1	3.9	3.7
U-4	3.0	3.2	4.1	4.0
U-5	3.6	3.9	4.8	4.6
U-6	6.4	6.7	7.7	7.9

^{*} Measurement utilized as the "official" unemployment rate, defined as the total number of unemployed reported as a percentage of the civilian labor force

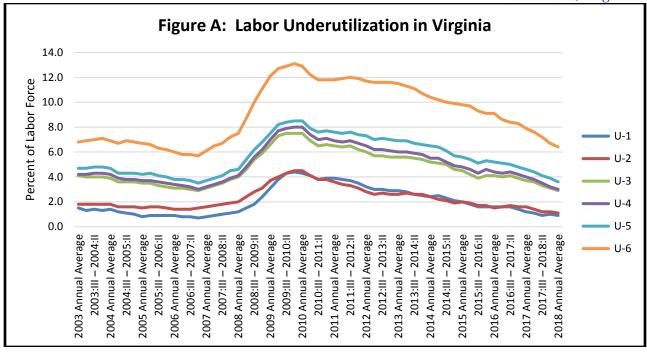
Note: Quarters reflect calendar year and not Virginia's fiscal year. National Data is seasonally adjusted.

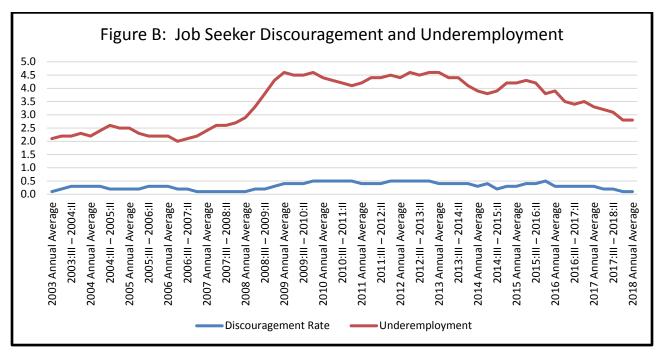
Table 2: Underemployment and Job Seeker Discouragement

Measurement	Virginia's current 4 quarter average (2018:I – 2018:IV)	Virginia's previous 4 quarter average (2017:IV – 2018:III)	National Data (2018:I – 2018:IV)	Virginia's 4 quarter average from previous year (2017:I – 2017:IV)
Underemployment	2.8	2.8	2.9	3.3
Job Seeker	0.1	0.1	0.2	0.3
Discouragement				



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Glossary of Terms

Civilian Labor Force: All persons classified as employed or unemployed. Civilian meaning not living in institutions such as correctional facilities, long-term care hospitals, and nursing homes, and not on active duty in the Armed Forces

Discouraged Workers: Persons not in the labor force who want and are available for a job and who have looked for work sometime in the past 12 months (or since the end of their last job if they held one within the past 12 months), but who are not currently looking because they believe there are no jobs available or there are none for which they would qualify

Employed: Persons 16 years and older in the civilian non-institutional population who, during the reference week, (a) did any work at all (at least 1 hour) as paid employees; worked in their own business, profession, or on their own farm, or worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family; and (b) all those who were not working but who had jobs or businesses from which they were temporarily absent because of vacation, illness, bad weather, childcare problems, maternity/paternity leave, labor-management dispute, job training, or other family or personal reasons, whether or not they were paid for the time off or were seeking other jobs. Each employed person is counted only once, even if they hold more than one job.

Involuntary Part-Time Workers: Persons who are available and want to work full-time, but accept part-time work for economic reasons

Job Losers: Unemployed persons who involuntarily lost their last job or who had completed a temporary job. This includes persons who were on temporary layoff expecting to return to work, as well as persons not on temporary layoff. Those not on temporary layoff include permanent job losers and persons whose temporary jobs had ended.

Job-seeker Discouragement: A measurement of would-be job-seeker discouragement, calculated as the difference between alternative measures **U-4** and **U-3**. While the actual figure is somewhat artificial and difficult to interpret on its own, the overall trend gives an idea of perceptions about the labor market.

Marginally Attached Workers: Persons not in the labor force who want and are available for work, and who have looked for a job sometime in the prior 12 months (or since the end of their last job if they held one within the past 12 months), but were not counted as unemployed because they had not searched for work in the 4 weeks preceding the survey. Discouraged workers are a subset of the marginally attached.

Marginally Attached Workers Plus Civilian Labor Force: Measure of the "Full" labor force, often used when calculating alternative measures of underutilization in order to include discouraged workers

Underemployment: A measurement of the underemployment rate, calculated as the difference between alternative measures **U-6** and **U-5**. This essentially looks at the widest possible definition of unemployment and the labor force, and separates out those that, while employed, feel that they are not in a position which suits their needs and abilities.



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Unemployed: Persons aged 16 years and older who had no employment during the reference week, were available for work, except for temporary illness, and had made specific efforts to find employment sometime during the 4-week period ending the reference week. Persons who were waiting to be recalled to a job from which they had been laid off need not have been looking for work to be classified as unemployed.

- U-1: Persons unemployed 15 weeks or longer, as a percent of the civilian labor force
- U-2: Job losers and persons who completed temporary jobs, as a percent of the civilian labor force
- **U-3:** Total unemployed, as a percent of the civilian labor force (this is the definition used for the official unemployment rate)
- **U-4:** Total unemployed, plus discouraged workers, as a percent of the civilian labor force, plus discouraged workers
- U-5: Total unemployed, plus discouraged workers, plus all other marginally attached workers, as a percent of the civilian labor force, plus all marginally attached workers
- **U-6:** Total unemployed, plus all marginally attached workers, plus total employed part-time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers
- U-1 Diff.: Difference between alternative measure U-1 and official unemployment measure U-3
- U-2 Diff.: Difference between alternative measure U-2 and official unemployment measure U-3
- U-4 Diff.: Difference between alternative measure U-4 and official unemployment measure U-3
- U-5 Diff.: Difference between alternative measure U-5 and official unemployment measure U-3
- U-6 Diff.: Difference between alternative measure U-6 and official unemployment measure U-3