



The
STEPHEN S. FULLER INSTITUTE
for Research on the Washington Region's Economic Future

The Washington Region's Economy in 2017 and Outlook for 2018 and Beyond

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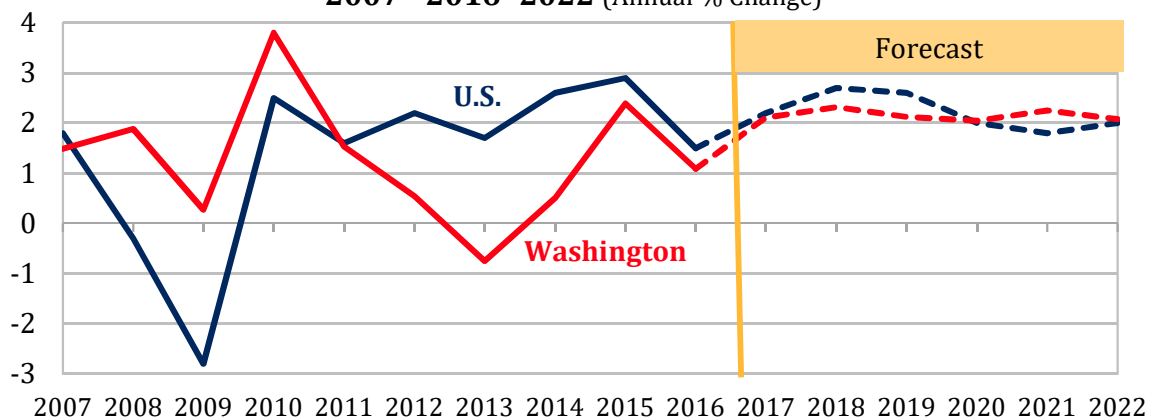
The Washington Region's Economy in 2017 and Outlook for 2018 and Beyond

Executive Summary

The Washington region's economy outperformed its beginning-of-the-year forecast in 2017 growing at an estimated 2.1 percent and improving significantly on its 1.1 percent gain in 2016. While still not outperforming the national economy (GDP), the region's economy has recovered sufficiently to closely mirror the current and projected near-term performance of the U.S. economy (see Figure 1 below).

In spite of the uncertainty introduced into the region's economic equation by the new Trump Administration with its threats of "draining the swamp" and "shutting the government down might be good for the economy," and proposing to shift significant budget resources from domestic agencies (and closing more than 30 smaller federal agencies) to the departments of Defense and Homeland Security, the actual negative impacts of the Trump Administration have been difficult to measure beyond the modest loss of federal jobs during the second half of 2017. The new Administration's positive impacts (indirect) have included accelerated job growth in the region's business and leisure travel and advocacy clusters and a stronger national economy that has bolstered the regional economy with rising consumer confidence, increased personal income, growth of corporate income and increased foreign trade.

Figure 1. U.S. GDP and Washington MSA GRP
2007 - 2016 - 2022 (Annual % Change)

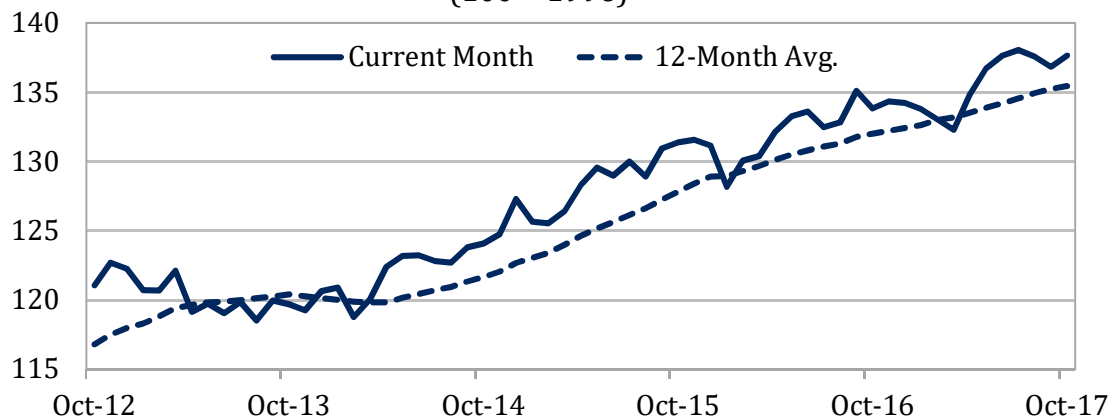


Source: U.S. Bureau of Economic Analysis, IHS Economics, The Stephen S. Fuller Institute, the Schar School, GMU

The Washington region's Coincident Index provides the key aggregate measure of the region's continuing economic expansion following its Sequester-induced contraction in 2013 and 2014. The Coincident Index was designed to measure the

current performance of the regional economy and has now increased (on a monthly over-the-year basis) for 43 consecutive months since April 2014 through October 2017 (see Figure 2), the latest month for which the Index is available. Job growth has continued to exceed the forecast in spite of a low unemployment rate that has reduced the availability of qualified workers with the result that wage inflation and spot labor shortages are impacting several of the region's major growth sectors (e.g., construction, leisure and hospitality, education and health and professional and business services).

Figure 2. Washington Region Coincident Index
(100 = 1996)



Source: The Stephen S. Fuller Institute at the Schar School, GMU

The outlook for the Washington region's economy in 2018 is for accelerating growth (2.3%). This forecast does not account for the expected bounce nationally (0.3% additional GDP growth spread over two years) from the net effects of the recently enacted federal tax law. While it is still unclear what the net effect of the personal and corporate income tax changes will be on the region's economy in 2018, the region's economy could also experience a small bounce but this could be offset by federal spending changes in the FY 2018 federal budget when it is finally adopted.

There is a broad consensus that the U.S. economy will have its best year of the decade in 2018 and the current expansion, dating from mid-2009, will likely extend into 2019. However, it will not maintain its 2018 growth rate beyond one year with economic growth moderating in 2019 and in successive years into the 2020's, assuming that the current business cycle can be sustained over this period. Global economic and political forces and the emerging imbalances in the U.S. economy, compounded by the uncertainty of the 2018 political season and the political positioning for the Presidential election in 2020, will introduce wildcards to the forecast beyond 2018 and require continuing vigilance to protect against unexpected surprises across the region's public, not-for-profit and business sectors. For the short-term, the Washington region's Leading Index, designed to forecast the economy's performance six to eight months in advance, is pointing to continuing growth in 2018 (see Figure 7).

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The Washington Region's Economy in 2017

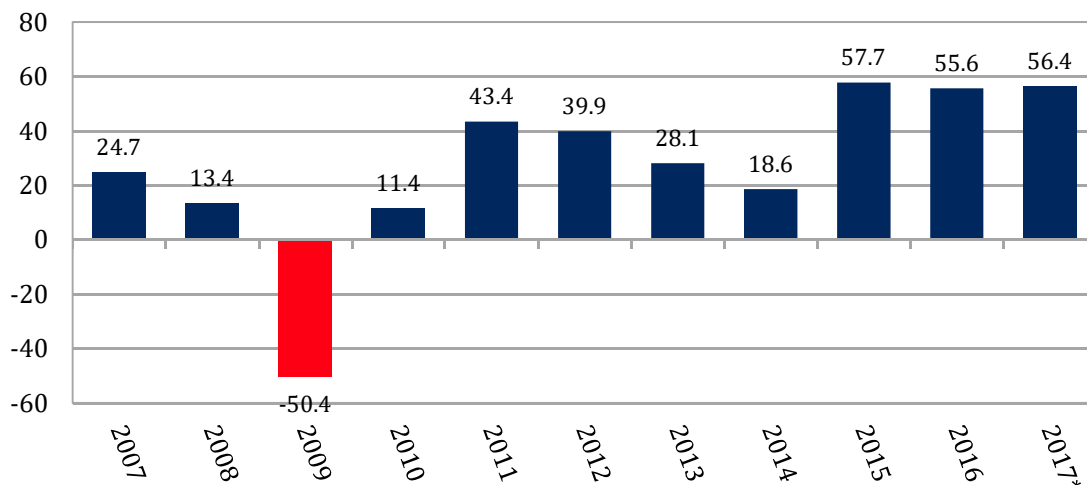
The Washington region's economy achieved an estimated 2.1 percent growth rate in 2017, up from 1.1 percent in 2016. While still slightly lagging the U.S. economy's growth rate, the region's economic recovery since its contraction in 2013 (stemming from the Sequester-induced reductions in federal spending) points to the local economy's resilience and its potential for repositioning its growth sectors away from their historic federal dependence.

Diversification of the Washington region's economy has been a clear objective of the Maryland and Virginia Governors and the District of Columbia's Mayor and other public and private sector leaders voicing their views on the economy's future. However, the evidence regarding diversification is still thin. Nevertheless, the Washington region's economy has sustained its recovery from the Sequester; the Washington region's Coincident Index has increased each month since April 2014, for 43 consecutive months through October 2017 (the latest month the Index is available) providing a convincing measure of recovery and expansion.

Job Growth Remains Strong in 2017

The Washington region has experienced strong job growth since the Great Recession when in 2009 the region's job base lost 50,400 jobs. In the eight years since then the region has averaged 38,900 jobs annual (the region's 20-year average between 1990 and 2010 was 36,300 jobs). Job growth since the Sequester has accelerated far exceeding this long-term average; job growth averaged 56,550 annually for the most recent three years (see Figure 3).

Figure 3. Washington MSA Job Change, 2007-2017
in thousands



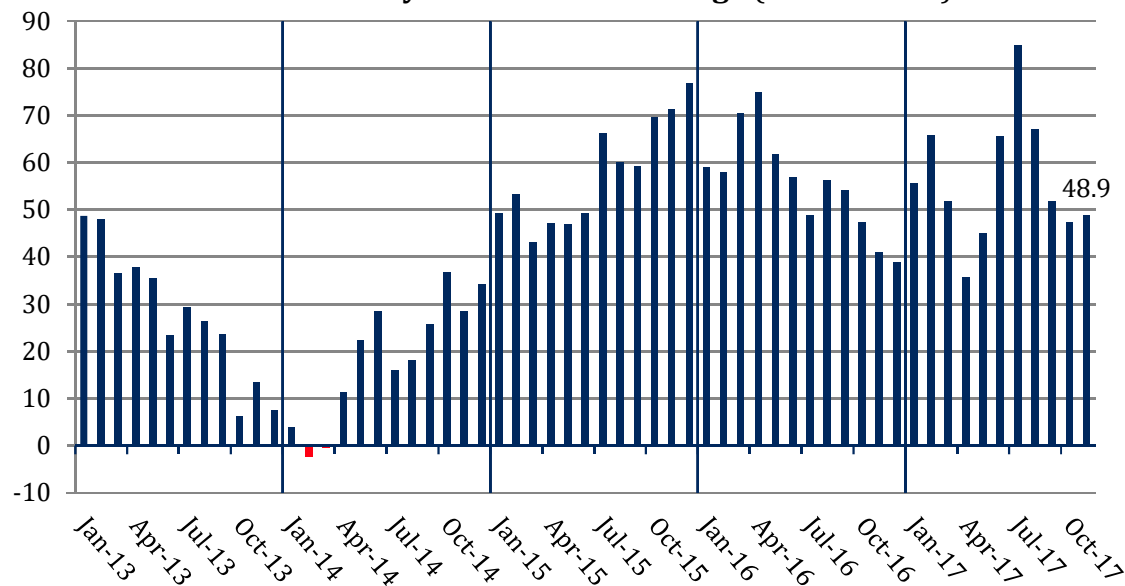
Sources: U.S. Bureau of Labor Statistics; The Stephen S. Fuller Institute at the Schar School, GMU

*Through November

The composition of this job growth is important but before analyzing the changing mix of jobs, the trend itself warrants examination. At first glance, the trend must be considered a positive measure of the region's recovery. A closer look (see Figure 4) reveals wide variation in job growth occurring in 2016 and 2017. In 2016, the second half of the year experienced weaker job growth than the first half; this may reflect the impacts of the end of a congressional session coinciding with the end of a presidential administration and shifting of campaign activity out of Washington.

In 2017, strong gains in June, July and August have skewed the annual average higher. Exceptionally large increases in the private education services, state and local government and entertainment sectors drove the summer gains.¹ However, it is important to remember that the jobs data for 2017 are preliminary estimates by the Bureau of Labor Statistics and are subject to revision. These preliminary data suggest that this summer growth, especially the monthly over-the-year gain of 85,000 initially report for July 2017, will be revised downward; the final estimates will be released on March 12, 2018. These revisions can be substantial and will be assessed by the Stephen S. Fuller Institute immediately following their release.

Figure 4. Washington MSA Job Change, 2013-2017
Monthly Over-the-Year Change (in thousands)



Sources: U.S. Bureau of Labor Statistics; The Stephen S. Fuller Institute at the Schar School, GMU

Two independent forces are combining to slow job growth in the Washington region beyond 2017. The first of these is the lengthening duration of the business cycle. The job growth cycle tends to lag the business cycle in its initial phase (businesses have underemployed workers on their payrolls), job growth tends to lead the business

¹ See Uneven Job Growth Continues in 2017 at <http://sfullerinstitute.gmu.edu/2017/10/23/uneven-job-growth-2017/>

cycle in its middle phase (businesses hire workers to fill gaps in production and in anticipation of growing future demand and in response to anticipated shortages of qualified labor), and then job growth tends to slowdown during the later stages of the expansion (qualified labor is becoming more scarce, labor costs are rising, businesses have right-sized, and cautious businesses are beginning to anticipate a future slowdown). The U.S. expansion is 8½ years old. By historic standards it is aging. At the U.S. level, even though job growth was strong in 2017, it was slower (1.5%) than in 2016 (1.7%) and in 2015 (2.1%). However, while job growth rates are expected to slow as the business cycle ages, job growth trends in the Washington have run counter to the nation's and have exceeded projection in each of the last three years.

Beyond this cyclical trend, there is a second job growth dynamic that is affecting the Washington region. This dynamic is purely local and reflects the inherent strengths and weaknesses of the region's economy. For the Washington region this dynamic reflects the pace of federal spending. The FY 2018 federal budget continues to be extended via Continuing Resolution with the threat of a shut down hanging over the economy. This uncertainty may be undermining business confidence and have contributed to the slowdown in hiring since August as seen in Figure 4.

The performance of the Washington region's economy in 2017 and in the coming years will reflect this combination of national and regional factors—the aging of the business cycle, the stimulus provided by the new tax law, and the outcome of the federal budget process for the current fiscal year and for FY 2019. Changes in federal employment and procurement spending, either directly or as a result of shifting budget authorities between agencies, will be reflected in the region's job and income growth patterns in 2018 and beyond.

The region's strong job growth since 2014, even while the economy's gross region product (GRP) was underperforming the national economy and its peer metropolitan areas (see Appendix Figure 1), is explained by:

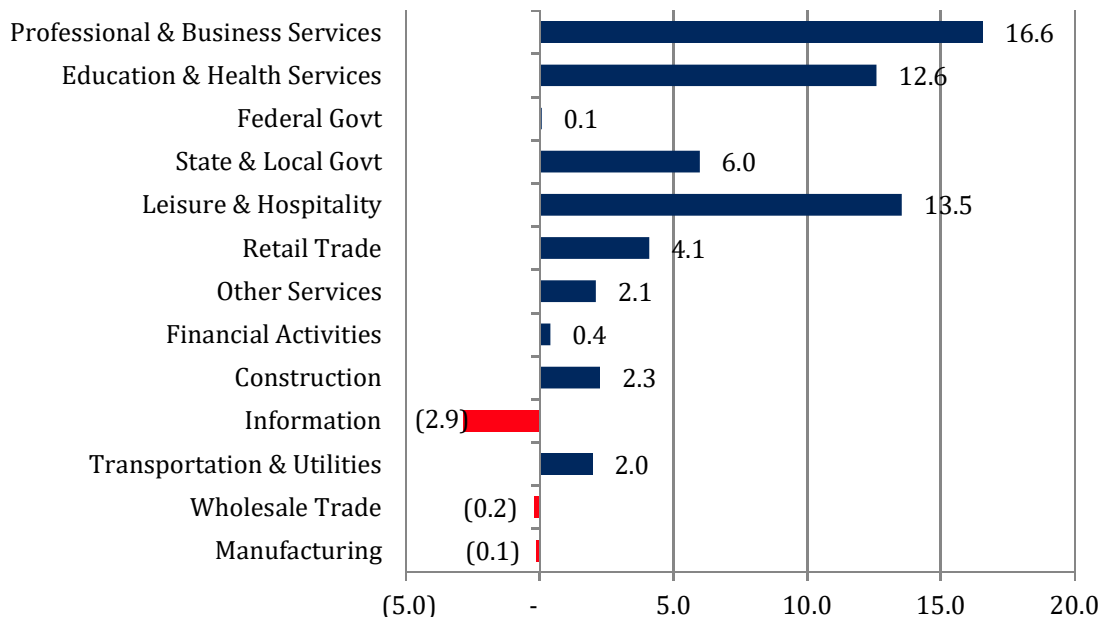
- (1) the shift in job growth to sectors characterized by lower-value added; that is, more jobs are required to produce the region's GRP than before the Great Recession;
- (2) more of the region's jobs are in local-serving sectors that are supported by both the region's higher-income households and spending by non-residents (business and leisure visitors, part-time residents, international entities including organizations and governments); and,

(3) the emergence of the region's non-federally dependent, export-based, higher-value added advanced industrial clusters for which the region has been shown to have a competitive advantage in the national economy.²

What Sectors Are Driving Job Growth

The region's mix of new jobs in 2017 is shown in Figure 5. Job growth is concentrated in three sectors—professional and business services, education and health services, and leisure and hospitality services. These three sectors accounted for 1.49 million jobs and 46.2 percent of the total job base in 2016. In 2017, these three sectors accounted for 75.8 percent of the job growth. In contrast, the economy's third largest source of jobs, the federal government, with 367,100 jobs in 2016 (11.4% of the total), ended the year with roughly the same number of jobs that it had in the beginning and has been experiencing accelerating job losses since July 2017.

Figure 5. Washington MSA Job Change by Sector
2016-2017 (avg. through November of each year, in thousands)



Sources: U.S. Bureau of Labor Statistics; The Stephen S. Fuller Institute at the Schar School, GMU

Several other sectors have experienced above-average job growth rates, but are much smaller and do not represent the economy's foundational base; that is, they will not likely emerge individually as a major source of new jobs displacing any of the four largest employment sectors. Construction is one of these. While it is showing continuing growth its job base remains below its pre-recession total so its current growth is still contributing to its post-recession recovery.

² See the Roadmap for the Washington Region's Future Economy at <http://sfullerinstitute.gmu.edu/research/reports/the-roadmap/>

Figure 5 also shows that a large number of sectors experienced slow job growth, no job growth or job declines in 2017. This performance underscores the narrow specialization of the Washington region's economy and its lack of sectoral diversification; that is, diversification is not occurring between sectors but more likely (and less visibly) within sectors, for example, by firms shifting markets from federal to non-federal.

The Value-Added Contribution of Jobs

Beyond the numbers of jobs being generated, it is the value added of these jobs that ultimately determines the economy's growth rate; that is, the GRP value of the jobs added and lost will determine whether a large number of net new jobs equates to a high economic growth rate. These values are presented in Table 1 and are developed from estimates provided by IHS Markit, an international economics services company.

**Table 1. Job Growth in Washington Region
By Principle Sector and Value Added, 2016-2017**
(jobs in thousands, value added in 2009 \$s)

Principal Sector	Total Jobs in 2016	Net New Jobs, 2017*	GRP Value per Job in 2016
Professional & Business Services	737.9	16.6	\$142,618
Education & Health Services	434.6	12.6	65,274
Federal Government	367.1	0.1	169,612
Leisure & Hospitality	320.6	13.5	43,457
Subtotal	1,860.2	42.8	112,785
<i>As % of Total</i>	<i>57.6%</i>	<i>75.9%</i>	
Construction	156.2	2.3	102,669
Retail Trade	278.4	4.1	67,946
Financial Activities	157.0	0.4	586,136
Other Services	194.7	2.1	80,065
State & Local Government	328.5	6.0	76,391
Subtotal	1,114.8	14.8	150,394
<i>As % of Total</i>	<i>34.5%</i>	<i>26.3%</i>	
Total¹	3,229.4	56.4	\$136,595

Sources: U.S. Bureau of Labor Statistics, IHS Markit, The Stephen S. Fuller Institute at the Schar School, GMU

¹Total of all sectors, includes sectors not shown.

The importance of the region's largest sectors is clear. As presented in Table 1, the four largest sectors accounted for approximately 58 percent of the region's job base in 2016 and generated approximately 76 percent of the region's new jobs in 2017. This disproportional dependency on three growing sectors (federal government only added 100 jobs in 2017) is important but even more important is the

differential GRP contributions of these sectors. The federal government sector, which is not growing and is projected to decline in 2018, had an average GRP value per worker of \$169,612, a substantially higher value added per worker than in the sectors on which the region is now depending to generate new jobs in the absence of growth in the federal sector. Furthermore, the largest sector—professional and business services—with the greatest GRP value per worker among these three large private sectors and upon which the region's economy is becoming more dependent, is not growing as fast as the education and health services and leisure and hospitality services sectors with GRP values of less than one-half of that of jobs in the professional and business services sector.

The result of this job growth pattern in 2017, and a pattern dating back to 2010, is that it now requires greater numbers of job gains to achieve a higher economic growth rate than it did prior to the Great Recession. As a result, the large job gains registered in 2015, 2016 and 2017 have been critical to the upward trajectory of the region's economy. And, continuing high levels of job growth will be required to support even greater economic growth rates unless the job mix changes to favor job growth in higher-value added sectors with slower job growth in the sectors characterized by lower-value added jobs.

Non-Federally Dependent Job Growth

The Roadmap for the Washington Region's Future Economy, released in January 2016, identified clusters of businesses that were not federally dependent, had higher-value added jobs, were projected to grow at above-average rates over the next ten years, and for which the Washington region had a competitive advantage by virtue of having above-average numbers of workers already present within the regional economy. Seven clusters were identified that met these criteria. These advanced industrial clusters accounted for approximately 25 percent of the region's employment base in 2014.

The performance of these clusters in the Washington region's economy has been reported previously for the March 2014-March 2016³ and March 2014-March 2017 periods⁴. In both cases, these clusters in aggregate were underperforming their counterparts in the U.S. economy. The good news was that three of the region's seven clusters were outperforming their respective national clusters during this three-year period and two of these clusters—advocacy and business and leisure travel—had experienced accelerated growth in the March 2016-2017 period after having lagged their respective national clusters during the March 2014-2016 period. The region's bio and health technology cluster, even though it is small compared to competing markets, is performing well and does match the region's strengths

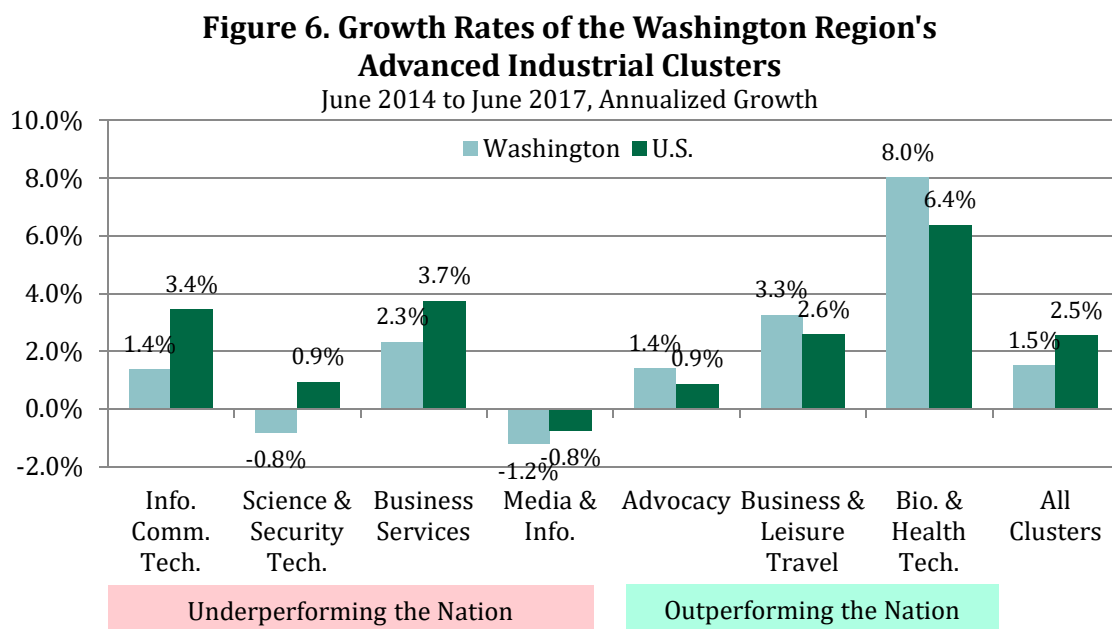
³ See Comparative Performance of Regional and National Clusters: March 2014 – March 2016 at <http://sfullerinstitute.gmu.edu/research/reports/roadmap-updates/>

⁴ See The Washington Region's Key Economic Challenges at <http://sfullerinstitute.gmu.edu/2017/10/04/washington-regions-key-economic-challenges/>

including its complementary federal agencies (e.g., NIH and FDA) and major teaching and research hospital centers.

Recent analysis of these clusters shows that this relatively weak performance has continued through mid-year 2017 (see Figure 6). Between June 2014 and June 2017, the number of jobs in these clusters increased 1.5 percent in the region but 2.5 percent in the U.S. Had the Washington region kept pace with the national growth within these clusters, it would have added 56,300 jobs over this three-year period rather than the 33,220 jobs its clusters actually generated. Despite lagging the nation over this period, regional performance between June 2016 and June 2017 was somewhat stronger and matched the nation's growth rate for this period.

Among the clusters, three continue to outperform the nation: bio and health technology, business and leisure travel, and advocacy. Each of these clusters had accelerated growth between June 2016 and June 2017. Additionally, the media and information cluster outperformed the nation for this one-year period; nationally, this cluster continues to decline while it increased a modest 0.5 percent regionally. The remaining three clusters—information communication technology, science and security technology, and business services—continue to significantly lag the performance of their respective clusters nationally.



Sources: U.S. Bureau of Labor Statistics (QCEW); The Stephen S. Fuller Institute at the Schar School, GMU

The Washington region has twice the concentration of jobs in these clusters as the nation, confirming the region's competitive advantage in these clusters and indicating that the region should benefit disproportionately from national growth. The region has not yet done so, significantly underperforming during the June 2014 to June 2016 period and matching the nation's growth during the June 2016 to June

2017 period. This underperformance shows that the region has not yet begun to diversify away from the federal government towards these private-sector, higher-value added clusters.

The Economic Framework for 2018

The Washington region's forecast for 2018 is predicated on the consensus that the U.S. economy will have its strongest performance since the Great Recession with its beginning-of-the-year (January 2018) GDP projection set at 2.7 percent, bolstered by the net stimulus of the new federal tax law. Other drivers of U.S. economic growth in 2018 will include: increased personal consumption spending reflecting both higher personal income (wage growth), increased disposable income due to lower tax rates effective January 1, continuing high consumer confidence, and increased fixed investment in residential and non-residential buildings plus increased outlays for non-building construction and, if an infrastructure bill can get through Congress in 2018, these increases will spill over into 2019 extending 2018's strong growth another year.

This stronger U.S. economic performance will be supported by stronger global economic growth and energy prices are expected to remain subdued over the year. Excluding consideration of the typical wildcards—it is a political year in the U.S.—the positive factors supporting a strong economic performance reflect a confluence of good timing rather than building a foundation to support stronger growth into the next decade. However, growth in 2019 is projected to be relatively strong, reinforced by delayed personal consumption and business fixed investments resulting from the new federal tax law. The gains projected for 2018 and 2019 are not expected to carry over to 2020 and beyond with the end of the business cycle casting a shadow over these forecasts.

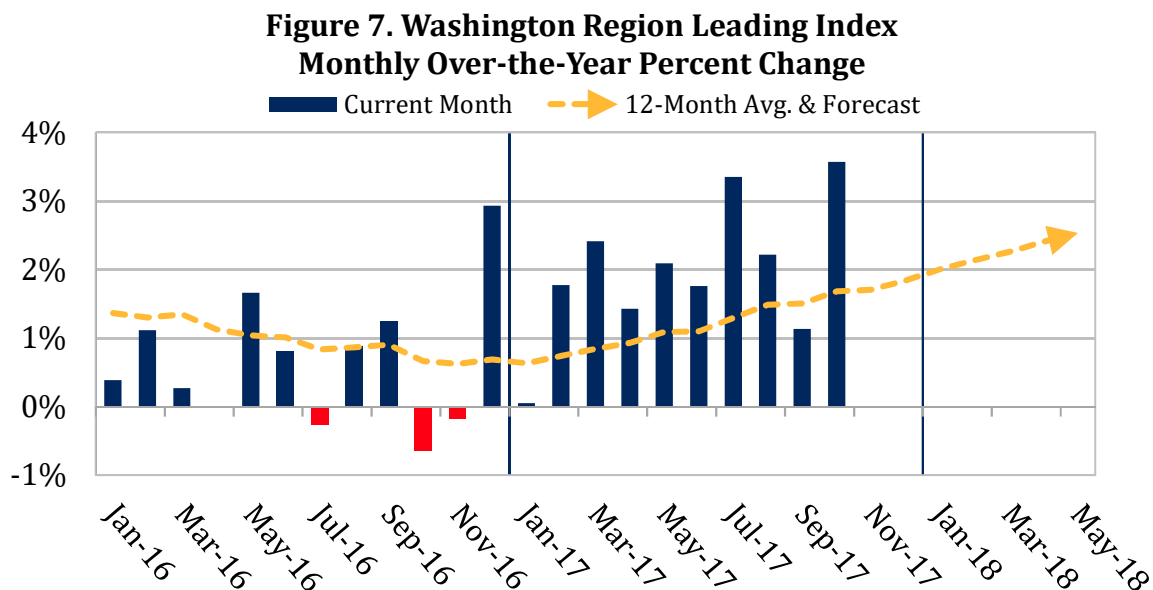
The Washington Region's Economy in 2018 and Beyond

With the national economy's projected strong performance setting the framework, the Washington region is projected to achieve stronger economic growth in 2018 than it did in 2017 but job growth will slow, for many of the reason enumerated earlier (normal for this stage of the business cycle, shortage of qualified labor, rising wage rates, increased productivity). Beyond the national economy's expected strong performance, the Washington region's mix of new jobs and the economy's ability to pivot away from its federal dependence will determine its economic performance in 2018. And, federal fiscal policy will continue to have an impact on this year's performance and beyond.

The Washington region's Leading Index was designed to forecast the economy's performance six to eight months in advance. The Leading Index exhibited several months of negative performance during the second half of 2016 but since that period the Leading Index has been positive each month and registering above-

average gains. For the most recent monthly performance, reflecting October data, the Leading Index was up 3.6 percent from October 2016. This was its largest monthly over-the-year gain in three years. The Leading Index's upward trend in 2017 (see Figure 7) points to the Washington region's economic expansion continuing at least through mid-year. Longer-range forecasts for 2018 show the Washington region's economy growing 2.3 percent (without adjusting for the new tax law) and then slowing slightly in 2019 and possibly outperforming the national economy after 2020 (see Figure 1).

The burden that the Washington region's economy is carrying in 2018 and beyond is the likelihood of flat or declining federal spending. If this proves to be the case, then the region's economic growth will fully depend on the growth of its non-federally dependent export-based sectors and local-serving sectors that also serve non-local markets. If the Washington region's economy is to outperform this baseline forecast, it will require federal spending to increase thereby generating additional growth beyond that which can be generated in the absence of the growth of federal spending. This added federal spending could consist of growth in federal jobs and payroll or increases in federal procurement outlays to the benefit of local contractors or both.



Source: The Stephen S. Fuller Institute at the Schar School, GMU

Job Growth Forecast for the Region's Sub-State Areas

The job growth forecasts for 2018 and the following four years are presented in Table 2. After generating substantial job gains in each of the previous three years (2015, 2016, and 2017) and exceeding the long-term annual average by more than 20,000 jobs for each of those years, the region's job growth is projected to moderate

in 2018 and 2019 and then fall below the historic long-term average annual gain in 2020.

In the near-term, the job growth projections for 2018 and 2019 remain well above the long-term average for the Washington region; however these gains are not evenly spread throughout the sub-state areas of the region. As the economy begins to moderate in 2019, after peaking in 2018 and with the aging of the business cycle, the sectoral structure of the separate sub-state portions of the region will increasingly shape their own economic futures.

Table 2. Employment Change by Sub-State Area, 2017-2022
(jobs in thousands)

	2015	2016	2017	2018	2019	2020	2021	2022
D.C.	15.9	13.0	9.6	5.9	4.6	5.0	4.2	5.2
Suburban MD	12.5	14.4	23.2	15.7	11.0	9.1	7.1	9.3
Northern VA	29.8	31.0	21.6	25.9	22.3	17.6	16.0	17.5
Region	57.7	55.6	56.4	47.4	38.2	31.8	27.4	32.1

Sources: IHS Markit, U.S. Bureau of Labor Statistics, The Stephen S. Fuller Institute at the Schar School, GMU NOTE: The regional totals include Jefferson, WB

The District of Columbia is the most dependent (directly and indirectly) among the three sub-state areas on the federal government for its economic vitality and its economy is the most specialized. Among the District's principal "growth" sectors, the federal government is projected to continue contracting its job base each year through 2022 with an accumulated loss of 5,200 jobs between 2018 and 2022. The education and health services sector registered a strong gain in 2017 and is expected to add 2,100 additional jobs in 2018. However, after 2018 this sector is not projected to increase further and is projected to experience small job losses in 2020 and 2021. Leisure and hospitality services added an estimated 5,000 jobs in 2017, for a 6.7 percent gain, reflecting the opening of the Wharf and several new hotels as well as the benefits of a Presidential Inauguration year. Its growth is projected to moderate in 2019 and then will remain relatively steady and positive over the remainder of the forecast period.

The District's largest private sector, second in size only to the federal government among all sectors, is professional and business services. This sector is projected continue its strong pattern of growth in 2018 and increase 2.2 percent, slightly exceeding its 2017 rate of 2.1 percent. Gains in this sector accelerate in 2019 (2.7%) and then moderate slightly maintaining a growth rate near 2.3 percent for the 2020-2022 period. The challenge for the District of Columbia's economy is that its growth depends almost entirely on one sector, professional and business services, which is projected to account for from 65.0 to 100.0 percent of its net job gain in each of the next five years. The continuing contraction of so many of its other sectors is making the District's economy overly dependent on fewer sectors at a time when its largest sector—the federal government—is projected to decline. As a consequence, the

District's job growth will experience a greater slowdown than the region's two suburban sub-state areas over the coming five years.

Suburban Maryland experienced what might appear as a breakout year for job growth in 2017. But this unusually strong performance is largely explained by one-time expansions in two sectors that have not positioned the sub-region for a repetition of this magnitude of job growth in 2018 and beyond. These one-time expansions occurred in Prince George's County—the opening of the MGM Casino and the expansion of state and local government agencies; these two expansions respectively swelled the county's leisure and hospitality and state and local government job totals that together accounted for 12,200 new jobs in 2017, based on the preliminary release. Because of a likely downward revision to the state and local government jobs, the revised total will be somewhat smaller, at around 7,000-8,000. Combined, these two sectors are expected to add 5,100 new jobs in 2018 and only 1,500 new jobs in 2019.

After this strong showing in 2017, job growth in Suburban Maryland economy is projected to slowdown in 2018. Its challenge is that the sub-state area's economy is specialized in the federal government's non-defense agencies and the state and local government sector is accounting for a growing percentage of its job base. Additionally, Suburban Maryland's private sector economy depends too heavily on local-serving businesses. With federal spending for domestic programs projected to slow and possibly decline, and local-serving businesses projected to grow more slowly after 2018, Suburban Maryland's economy is not well positioned for faster growth going forward.

The performance of Northern Virginia's economy remains closely tied to federal procurement spending as seen in the continuing strong performance of its professional and business services sector; this is the sector in which most of the federal contractors are located. Projections show this sector in Northern Virginia accounting for more than one-half of the Washington region's job growth in this sector and, within Northern Virginia, this sector's gain is projected to account for more than one-half of the sub-region's total job growth each year over the forecast period. Education and health services are projected to experience a strong gain in 2018 but then its growth is expected to moderate but still grow each year in the out years of the forecast. Leisure and hospitality services are also projected to continue growing in the out years after a relatively weak growth forecasted for 2018. Two other important sources of Northern Virginia's job growth in 2018 will be financial services and construction. Beyond these, Northern Virginia's other sectors are projected to experience marginal gains or losses over the forecast period and not contribute to the sub-state area's overall growth rate.

None of the Washington region's sub-state areas is showing signs of diversification across their private sectors. The District of Columbia's private sector economy is narrowly concentrated on professional and business services, education and health services and leisure and hospitality services and slower job growth is projected for

the latter two sectors making the District's economy even less diversified in 2022 than it is today. The Suburban Maryland economy is specialized in government (federal, state and local), leisure and hospitality services and educational and health services with local-serving businesses being a large component of these non-government sectors. The professional and business services sector is a relatively small part of Suburban Maryland's economic base compared to the District of Columbia and Northern Virginia. This mix of sectors is not favorable to job growth or to the growth of higher-value added jobs to offset the slow erosion of federal jobs in Suburban Maryland over the next five years.

Northern Virginia's economy has a strong professional and business services sector that will drive its future growth. This sector is complemented by broad-based strength in education and health services, leisure and hospitality services and growth in construction and financial services although these latter two sectors will experience slower growth after 2019.

Job Growth Forecast For Region's Principal Sectors

The sum of these sub-state areas describes the regional economy's job growth patterns for the next five years, as summarized in Table 3. The patterns are clear: the professional and business services sector will become more important to the region's economic health as the other large sectors—federal government, educational and health services, and leisure and hospitality services—either decline or experience slower growth. Of the other larger sectors, construction and state and local government will continue to grow. Financial services will experience little or no job growth after 2019 while retail trade and the other services sector will both expected to be losing jobs by 2020.

The job forecasts for 2018 and 2019 are for above-trend gains but the foundations for future economic growth will have become more narrowly specialized in the private sector. In the absence of increased federal spending in the region's economy, the region's private sector will not be able to sustain the higher growth rates achieved in 2018 and 2019 into the out years.

Economic Growth Forecast for the Region's Sub-State Areas

The economic forecast for the Washington region for the 2018-2022 period by sub-state area is presented on Figure 8. As was shown on Figure 1, the region's economy is projected to achieve and sustain a growth trajectory that closely parallels the U.S. economy's growth path over the next five years with several years late in the forecast in which it might outpace the U.S. economy. However, these growth rates will be sensitive to changes in federal fiscal policies to a much greater degree than U.S. GDP trends.

Assuming that federal fiscal policy does not change abruptly in the future from its pattern since 2014, the Washington region's economy will be able to grow even as

federal spending becomes a smaller share of its gross regional product with annual gains, peaking in 2018 and 2019, and then followed by slower growth rates in 2020 and beyond. However, the principal wild card going forward beyond 2018 is the aging of the business cycle, when it will end, and what underlying conditions will shape the subsequent economic recovery.

Table 3. Job Growth for Principle Sectors in Washington Region, 2017-2022
(jobs in thousands)

Sectors	2017*	2018	2019	2020	2021	2022
Professional & Business Services	16.6	23.7	25.7	21.4	17.3	20.8
Education & Health Services	12.6	11.2	3.4	2.3	2.7	3.1
Federal Government	0.1	(5.3)	(3.6)	(0.9)	(2.9)	(1.6)
Leisure & Hospitality	13.5	3.3	2.1	2.2	2.8	2.1
Sub-total	42.8	33.0	27.6	24.9	19.9	24.3
All Sectors	56.4	47.4	38.2	31.8	27.4	32.1
<i>Big-Four as % of Total</i>	<i>75.9%</i>	<i>69.5%</i>	<i>72.3%</i>	<i>78.3%</i>	<i>72.5%</i>	<i>75.8%</i>
Other Major Sectors						
Construction	2.3	5.6	7.0	5.0	3.9	4.1
Retail Trade	4.1	0.1	(0.0)	(1.7)	(0.7)	(0.6)
Financial Activities	0.4	2.7	1.3	0.3	0.2	0.3
Other Services	2.1	(0.1)	(1.3)	(0.8)	(0.1)	(0.4)
State & Local Government	6.0	4.9	2.1	1.9	2.7	3.2

Sources: IHS Markit, U.S. Bureau of Labor Statistics, The Stephen S. Fuller Institute at the Schar School, GMU

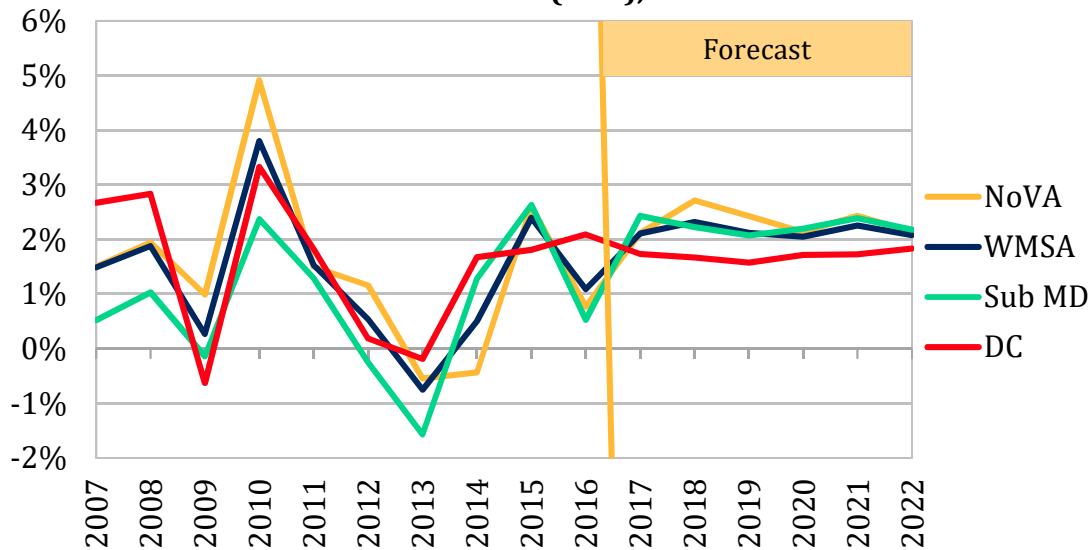
*Through November

The magnitude of the region's future growth will be experienced to differing degrees across its sub-state areas depending on their respective sector dependencies and competitive positions within the regional and national economies. The impacts of the Sequester and the sub-state areas' differing federal spending dependencies are seen in the variations in the magnitude and timing of their respective growth rates between 2012 and 2016. This pattern of performance was generated by a 6 percent reduction in federal employment (payroll) between 2010 and 2014 and a 15 percent reduction in federal procurement outlays between 2010 and 2013. With federal spending experiencing small gains in 2015 and 2016 and with the region's economy continuing its recovery from the shock of the Sequester, these performance variations among the region's sub-state areas appear to be normalizing.

With federal fiscal policy tracking within its post-Sequester range, and not adjusting for the impacts of the new federal tax law, the economic performances of the region's sub-state areas are projected to reflect their structural strengths and weaknesses. Northern Virginia's economy will grow the fastest of the three sub-state areas in 2018 and 2019 benefiting from the combination of relatively steady

federal spending and the stronger national economy. Slowing growth rates in the U.S. economy after 2019 will negatively impact the Northern Virginia economy.

**Figure 8. Washington MSA and Sub-State Areas
Economic Outlook (GRP), 2007-2022**



Source: U.S. Bureau of Economic Analysis, IHS Economics,
The Stephen S. Fuller Institute at the Schar School, GMU

Suburban Maryland's economy will not benefit as much from strong U.S. growth in 2018 and 2019 but is projected to sustain its growth trajectory longer, to 2020, due to its sources—federal state and local government spending, growing consumer spending, and continuing expansion of the education and health services sector. Also, the 2020 Census, managed from Suitland, Maryland, will likely inject extra federal spending into the region with Suburban Maryland capturing a greater share of these benefits.

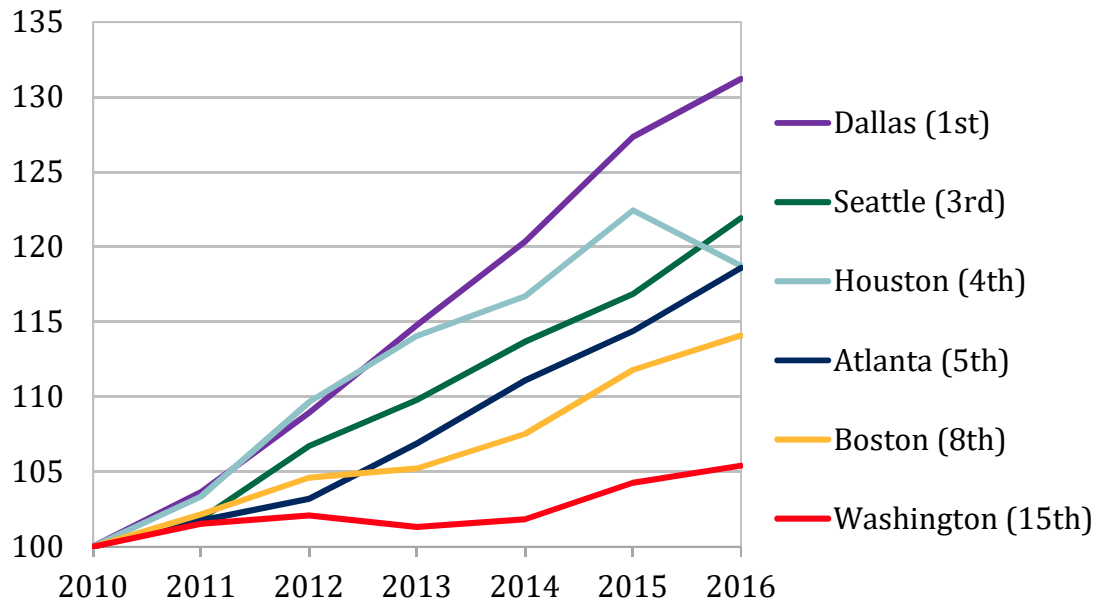
The District's pace of economic growth during this period lags the suburban-based economies. Its growth rate is projected to hold relatively constant from 2017 going forward in spite of having to contend with continuing losses of federal employment. If federal government employment begins to grow after 2020, this would be a boost to the District's economy. Otherwise, its growth is dependent on a narrow range of national capital functions and their benefits as reflected in the growth of professional and business services, including a wide range of not-for-profit organizations, and leisure and hospitality services.

Conclusions

- The Washington region's economy in 2017 experienced faster growth than it had in 2016 but still lagged the U.S. economy's performance.
- The uncertainty and threats of the Trump Administration did not impact the Washington region's economy in a negative way during 2017; only federal employment appears to have been negatively affected in the second half of the year with total federal employment ending the year at about the same level as it was at the beginning of the year.
- Job growth in the Washington region exceeded beginning-of-the-year projections but has continued to become more specialized; the region's principal sectors accounted for a disproportional share of the net new jobs added in 2017.
- Diversification away from the region's economic dependency on federal spending remains elusive although there were modest gains in 2017.
- The outlook for 2018 is for stronger economic growth than achieved in 2017 in both the U.S. and Washington region's economies.
- The potential growth effects of the new federal tax law will add an estimated 0.1 percentage points of growth to the U.S. economy in 2018 (and 0.2 points in 2019) and may also propel the Washington region's economy at a faster-than-current forecast rate; the full impacts of changing federal fiscal policies on the region's economy will become clearer after the FY 2018 budget is approved.
- Job growth in 2018, and looking forward over the next five years, points to slowing annual growth with job growth remaining highly concentrated within the region's three dominant private sectors—professional and business services, education and health services, and leisure and hospitality services; federal employment is projected to continue declining and could experience larger reductions than currently projected if the Administration's budget plan is adopted and enforced going forward.
- There is broad-based consensus that the U.S. economic expansion, which is now 8 ½ years old, will continue through 2018 but there is growing speculation regarding how long the business cycle can be sustained beyond 2018 or 2019. The international and national political forces at play in the global economy over the next 18 months bear on-going monitoring in order to be protected against the downside of the business cycle.

Appendix

**Figure 1. GRP Growth in Washington and Peer Metros
2010-2016, 100 = 2010**



Source: U.S. Bureau of Economic Analysis, The Stephen S. Fuller Institute at the Schar School, GMU