The Washington Region: The Transformation of Company Town Economy, 1800-2019

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The Stephen S. Fuller Institute for Research on the Washington Region's Economic Future

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As this is my last lecture, I thought I should share with you some of what I have learned from my research on the Washington region's economy over the past five decades. In doing so, I will hopefully set up a framework for better understanding the near- and longer-term futures of this region as these are reported in the coming years and for addressing the region's many challenges that could undermine its ability to achieve its full development potential.

To help simplify this story, I have divided the economic history of the Washington region into three periods: (1) company town, (2) the first transformation and (3) the second transformation.

(1) The company town period starts at the beginning—1800 and runs to 1979. This is a period when the region's economic growth was driven by the growth of the federal government in response to the nation's growing population, wars and economic crises, the nation's increasing prominence in world affairs, and increases in the scope of the federal government's functions.

(2) The first transformation, 1980-2010, reflects the shift in federal policies regarding privatization of federal functions as seen in the outsourcing of these to the private sector—that is, the growth of federal procurement contracting to support the changing nature of federal work and its adoption of technology, especially IT, to increase its efficiency and effectiveness. This period is characterized by the continuing dependency of the region's economy on federal spending, the shift of job growth from the public sector to the private sector that effectively masked the economy's continuing federal dependency, and the region's rapid economic growth rate and the increasing relative magnitude of its overall economy vis-à-vis its peer metropolitan areas.

(3) The second transformation began in 2011 and was jump started by the reduction of federal procurement spending and federal employment in response to Congressional mandates to reduce the federal growing deficit culminating in the Budget Control Act of 2011 and deepened by the Sequester that took effect March 1, 2013. This sudden reversal in federal spending from its peak in 2010 to a full federal shutdown for 16 days in October 2013 resulted in the slowdown of the region's economy and its actually declining while the national economy was accelerating. This economic crisis resulted in the rethinking of local and state economic development policy with the objective of reducing the dependencies these economies on federal spending by expanding non-federally dependent businesses serving non-local markets.

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*Condensed from "The Transformation of the Washington Region's Economy" presented by this author at the Stephen S. Fuller Institute's Third Annual Economic Forum on December 10, 2019.

This second transformation is still in its infancy. Today, the region's economy still remains strongly influenced by federal spending. But, with Amazon's decision to locate its HQ2 in Arlington, the region's non-federal assets may have gained traction and may be pointing to a future growth trajectory that will have sufficient scale to compensate for the declining role of federal spending in driving the region's future economic growth.

This will not happen automatically. It will not happen quickly. And, of course, it might not happen at all. Succeeding in today's political climate in which (a) residents are resistant to tax increases necessary to pay for the quality and availability of services they want and need to maintain a competitively attractive quality-of-life and in which (b) elected leaders are unwilling to provide long-range vision or to risk alienating the voters by making the decisions needed to advance the region has resulted in the Washington region falling further and further behind its peers' economic performances. How will this second transformation end? The answer to this question is unclear as the region begins this new decade of change.

The Washington Region's Growth As A Company Town

As the history of Washington, DC has been thoroughly researched and documented, the intent here is only to establish the economic trajectory of the Capital City as an administrative center and to demonstrate that City's grew in response to the growth of the nation and the expansion of federal functions over its history. The scale of the District of Columbia's and Washington region's population growth and the growth of the federal employment base located in the Capital City are presented in Table 1 and leave little doubt of the City's rapid ascendancy.

President George Washington was authorized to select the site for the new Capital City by Residence Act of July 1790 with the result that the ten-mile square was located as a political compromise (principally between New York and Virginia) at the head of navigation on the Potomac River incorporating two existing cities: Georgetown, MD and Alexandria, VA. While its founders had visions that Washington would grow into an important commercial center that complemented its role as a federal government center, similar in the form of other major capital cities such as Paris and London, its design and location were not guided specifically by this vision. In its early years, the new Capital City's development as an industrial, transportation, distribution, or financial center was limited by its emergence in the shadows of Philadelphia, New York and Boston, whose commercial functions and trading partners were well established by 1800 when the federal government relocated from Philadelphia to Washington with its 131 employees.

During its first one hundred years the population residing in the Washington region grew six times as fast as the nation's population and its population grew thirteen times as fast as the nation's population during its second one hundred years. These new residents were moving to the Washington region because of the existence of or potential for employment. As the broader Washington area, beyond the new city and its immediately surrounding urban settlements, had a well-established, agriculturally based economy, these new residents were not moving to the Washington area to become farmers but rather to find work directly in commerce or government.

Table 1. The Washington Region: A Company Town

Year	Population			Federal Jobs in DC (Number)[1]
	DC	Washington Region	US	
1800	8,144	63,653	5,308,483	131[2]
1900	278,718	378,605	76,090,000	20,834
1950	792,234	1,452,349	152,880,000	214,077
2000	572,510	4,843,280	282,160,000	183,600 326,200[3]

Sources: U.S. Census, National Capital Planning Commission,
[1]District of Columbia as defined since 1846.
[2]Frederick Gutheim, The Potomac, p. 11.
[3]Washington metropolitan area as defined by the U.S. Census in 2000.

The rapid growth of the District of Columbia generated demands for a full range of commercial services and skills. However, beyond the jobs needed to support the resident population and the growing number of visitors to the Capital City, the economy did not develop a manufacturing base or become a major transshipment center built at the convergence of major highways, railroads, canals, and ocean shipping. Regarding the later, the region did not develop as a transportation-based economy in part because it had few natural resources with national or international markets and its agricultural base was already in decline. While Alexandria's economy had enjoyed modest growth in the early eighteenth century as a transportation center where tobacco was shipped, warehoused, graded and taxed, and then loaded and shipped to Europe, these markets were disrupted by the War of Independence and later, by the Civil War. Efforts to establish the new city as a shipping center rose and fell with the efforts to construct the C & O Canal to connect it to the coalfields in the Allegany Mountains and agricultural centers in the Ohio Valley. While the C & O Canal opened in 1830, it never was completed and was unable to compete with the B&O Railroad that opened the same year connecting Baltimore to the same markets.

What truly defined the Washington region's economy after 1800 was its growth as a federal government center. The federal government grew as the United States expanded westward, as the provision of public services shifted to the federal government, as the U.S. increased its international posture, fought wars and increased its regulatory functions. The expanding range of services being exercised by the federal government translated into the growth of the federal job base located in the Capital City. For the 1800-1900 period, the increase in federal jobs base was meteoric, increasing by a factor of 159. The federal job base increased by a factor of 10 between 1900 and 1950 and, for the full 1900-2000 period, federal jobs increased by a factor of almost 16. This federal job gain compares to the region's population gain by a factor of 13 during this same 100-year period. There can be little argument that the growth of the Washington region's economy during its formative years was directly linked to the growth of the federal government.

While the Washington region's economy was developing as a government center, with a full complement of supporting business and advocacy functions, the nation's other major cities were progressing through a more typical economic sequence of growth, building on their regional market functions, expanding their core industrial activities and related export functions, and building out their transportation services to link their economies with their consumers nationally and internationally. The hierarchy of these major city/regional economies in 1950, when the U.S. manufacturing sector was at its peak, illustrates both the results of their 150 years of economic evolution and the early emerge of a new economic driver—professional or knowledge-based services—that would displace manufacturing over the last half of the 20th Century as the principal source of future economic growth. This changing economic order is clearly seen in Table 2.

Table 2. Top Ten Largest Metropolitan Area Economies, 1950-2010-2018[1]

1950	2010	2018
New York City	New York City	New York City
Los Angeles	Los Angeles	Los Angeles
Chicago	Chicago	Chicago
Philadelphia	Washington, DC	San Francisco
Detroit	Houston	Washington, DC
San Francisco	Philadelphia	Dallas
Boston	Dallas	Houston
Pittsburgh	Boston	Boston
Washington, DC	San Francisco	Philadelphia
St. Louis	Atlanta	Atlanta

Sources: U.S. Bureau of Economic Analysis, The Stephen S. Fuller Institute
[1]ranked by dollar value of metropolitan area's gross regional product.

While there was no change in the order at the top three rankings over the years shown in Table 2, these largest metropolitan area economies still underwent major changes. If they had not shifted away from transportation and distribution (or shifted mode from seaport or rail center to airport) and from manufacturing to finance and professional and business services they might not have maintained their relative rankings.

The large manufacturing-based economies that were unable to diversify away from their historic base—St. Louis, Pittsburgh, and Detroit—experienced relative decline and dropped off the Top Ten list while those economies that adjusted and/or emerged with a competitive mix of technology- and/or knowledge-based services—Dallas, Houston, Atlanta, Seattle—experience relatively faster growth and moved up to the Top Ten list. Boston's and Philadelphia's economies experienced slower growth than most of these "new" economies but remained in the top ten, but at lower rankings, by virtue of their diversification away from transportation and distribution, ship building and heavy manufacturing and by building on their knowledge-based and technology-driven industries and services. The San Francisco/Oakland metropolitan area economy succeeded in overcoming its past economic history, having left its shipping and industrial base behind and rebounded with its new economic base driven by technology-driven global services and with its concomitant rapid growth pushing it from ninth to fourth place in just eight years.

The Washington region's economy was the outlier in these rankings during the 1950-2010 period, when it rose from ninth to fourth place. Its major advantage was the federal government's rapid expansion in both defense and domestic agencies and related professional and business services and it was not handicapped by its economic history, as were the metropolitan area economies that had been industrial based. Additionally, it had a disproportional mix of professional jobs and workers with above-average educational levels and workforce with a more favorable gender mix (female labor force participation rates in the Washington region exceeded those in any other large metropolitan area during this period). However, the region's competitive advantage that pushed it up the rankings until 2010 became a liability after 2010 and it slipped to fifth place in the 2018 ranking.

The Washington region's economy benefitted in the post-World War II period from its sectoral structure in which government and professional services were the driving forces and its other export-based sectors (manufacturing, transportation, wholesaling trade, finance) remained underdeveloped and therefore never constituted a drag on the economy as they declined—they never were important drivers of the region's growth. Still, the Washington region's economy did experience changes during this post-1950 period that were misinterpreted and that also masked the implications of these changes. Understanding this first transformation is essential to understanding the fundamental changes that have become the focus of today's public policies at the local and state levels.

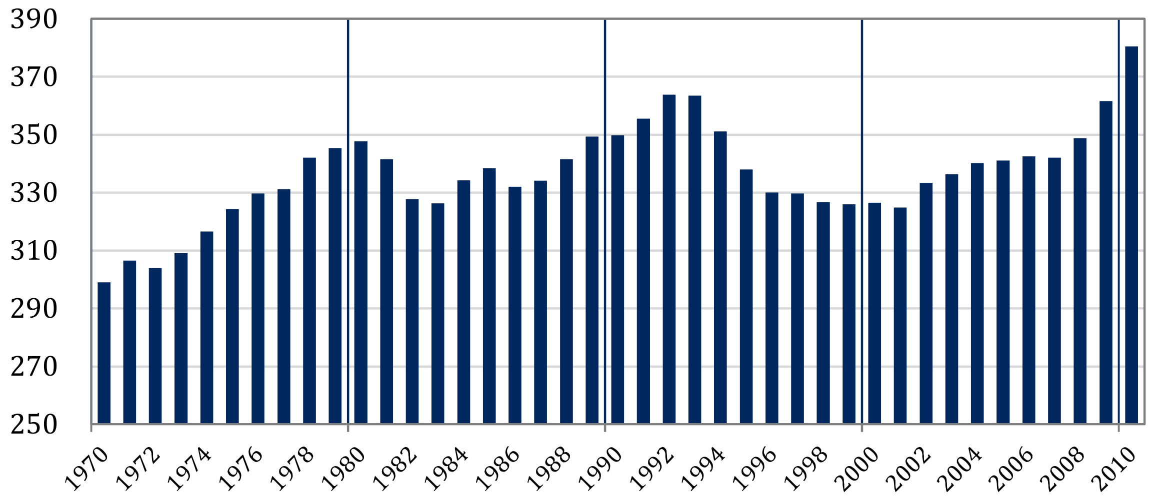
The Washington Region's First Economic Transformation: 1980-2010

The Washington region's first economic transformation reflects the changes in the economy that encompassed the growth of federal procurement contracting with the resultant shifting of work, which had previously been accomplished by federal employees, to private sector. This shift altered the principal driver of the Washington region's economy from direct federal job and payroll growth to the growth of federal procurement contracting.

This shift had several important impacts on the region. It shifted job growth from government to the professional and business services sector and it shifted the geography of job growth from its former concentration in the District of Columbia to more dispersed suburban locations.

The federal workforce in the Washington region did experience further growth over this period but its pattern of growth was uneven, as shown on Figure 1, with federal employment peaking in 2010 at 380,400, up from 347,640 in 1980. This uneven pattern of growth was largely the result of policy shifts of changing Administrations, wars, the rise of international terrorism, and the Great Recession.

Figure 1. Federal Jobs in the Washington Region
1970 – 2010 (in 000s)



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

There were some early signs during this period that the Washington region's economy was changing. One of the first was a report issued by the Government of the District of Columbia, Department of Employment Services in 1986 entitled "The Federal Government: A Declining Industry" (February 12, 1986). This document reported that between 1956 (the first year that BLS began tracking federal employment data in the District) and 1985, the federal government's share of the District's employment base had declined from 42.4 percent to 33.6 percent. The report noted that federal employment still was the largest source of jobs in the District but its downward trend highlighted the local economy's future vulnerability as a result of this dependence. This point was illustrated by the fact that since the beginning of the Reagan Administration, with its policies aimed at reducing the size of the federal government, the District had lost 17,100 federal jobs between 1980 and 1985.

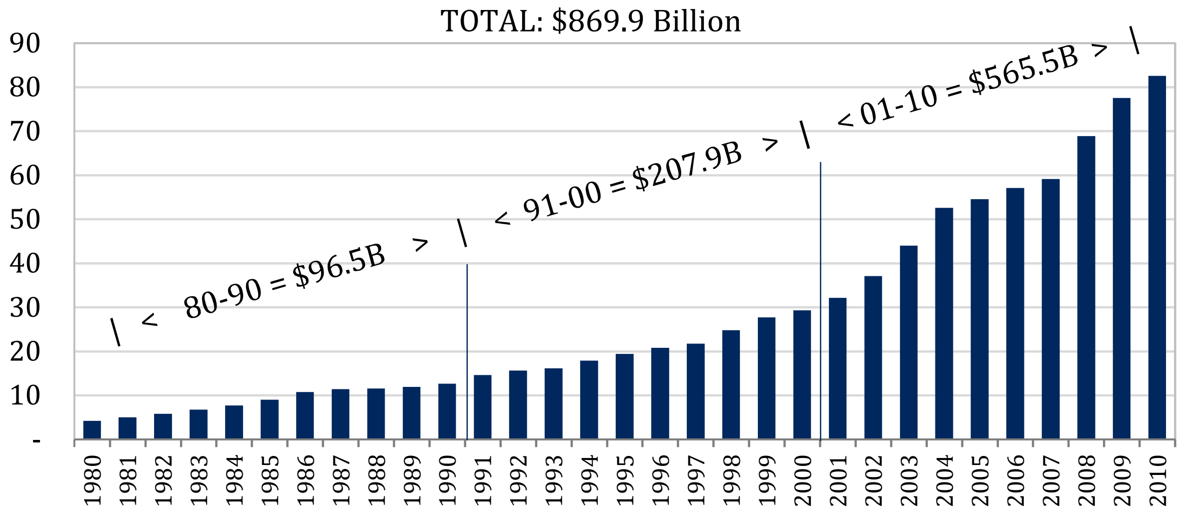
The first research report on federal procurement in the Washington region was issued by the Greater Washington Research Center in November 1984. "Federal Purchases in the Washington Metropolitan Area" (S. Fuller) reported on the magnitude and importance of federal contracting to the Washington region's economy and was based on newly available information from the Federal Procurement Data Center. These data for the first time permitted federal contracting to be disaggregated and reported by place of performance (local jurisdiction), contract value, contracting agency, and type of goods or services provided by year dating from 1979. This report's first sentences stated what seems only too obvious today. "Most assessments of the federal government's importance in the Washington metropolitan area's economy focus on government employment…. The federal government affects the area's economy in another significant way, however. It purchases goods and services from the private sector." (p. 5)

The federal role in the Washington region' economy was entering a period of change with increased reliance on outsourcing of federal government work to the private sector combining with efforts to redefine the federal workforce through the adoption of workplace technology. This shift in federal policy would result in a new source of federal spending dependence that would become a more impactful force in the Washington region's economy by the mid-1990s as the value of federal procurement contracting surpassed the value of the federal payroll in the Washington region (FY 1996 is the first time in which procurement outlays exceeded federal payroll in the Washington region).

In 1980, federal procurement spending in the Washington region totaled $4.2 billion. By 2010, when federal procurement spending peaked in the Washington region, it had grown to $82.6 billion (in current year dollars). This year-after-year annual growth in federal procurement spending—it increased in current year value every year for 30 years, as shown in Figure 2, totaled $869.9 billion over period.

Research released by the National Capital Planning Commission in September 2002, "The Policy Implications of Federal Procurement in the National Capital Region" (S. Fuller) included analyses of the correlation between federal spending (procurement and wages and salaries) in the Washington region and the region's economic growth rate. The correlation value (R) of between federal spending during the 1983-2001 period and annual increase in gross regional product was 0.956. The report concluded "a dollar spent for federal procurement in the National Capital Region economy has been more important than a federal dollar spent for salaries and wages; based on the relative coefficients, a procurement dollar had two times (2.05) the economic impact of the payroll dollar (p. 8).

Figure 2. Federal Procurement in the Washington Region, 1980-2010
($s Billions)



Sources: US Census, Consolidated Federal Funds Report and USAspending.gov
The Stephen S. Fuller Institute at the Schar School, GMU

While the changing structure of federal spending in the Washington region's economy—federal jobs being replaced by private sector jobs—was not fully appreciated at the time, this shift is clearly evident by the percentages shown in Table 3. Regionally, federal jobs accounted for slightly more than 1 in 5 jobs in 1980 (they accounted for 1 in 3 jobs in the District of Columbia) and their share continued to decline through this period. The exceptions to this trend occurred in 2009 and 2010, in response to the Great Recession, when federal jobs grew a result of the implementation of new federal recovery programs and from the temporary hiring associated with the decennial census in 2010 further illustrating the counter-cycling benefit of the economy's federal spending base.

With jobs data being the most cited and easily available measure of the economy's performance, it was too easy to interpret this decline in federal government employment as a sure sign of decreasing dependence on the federal spending in determining the health of the region's economy. By the early 1990s it had become more widely understood that federal procurement spending was the new form of federal economic dependence and that the company town economy was performing well and bolstered the region's competitive advantage as the "Capital of the Free World."

When the Clinton Administration instituted the National Performance Review in 1993, commonly referred to as "Reinventing Government," the threat to the region's federal workforce was quickly recognized by the business and public leaders and efforts were initiated to identify the economic impacts of these possible federal employment reductions—the region's federal job base shrank by 33,400 jobs or 9.2 percent between 1993 and 1996. (It is interesting to note that the federal workforce in 1996 was roughly the same size as it was in September 2019).

Table 3. Federal and Professional & Business Services Jobs
as a Percentage of Total Jobs, WMSA 1970-2010

Year	Federal Jobs	Prof. & Business Service Jobs
1970	27.3%	9.5%
1980	22.5%	13.6%
1990	15.5%	16.4%
2000	12.1%	20.9%
2010	12.8%	22.9%

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

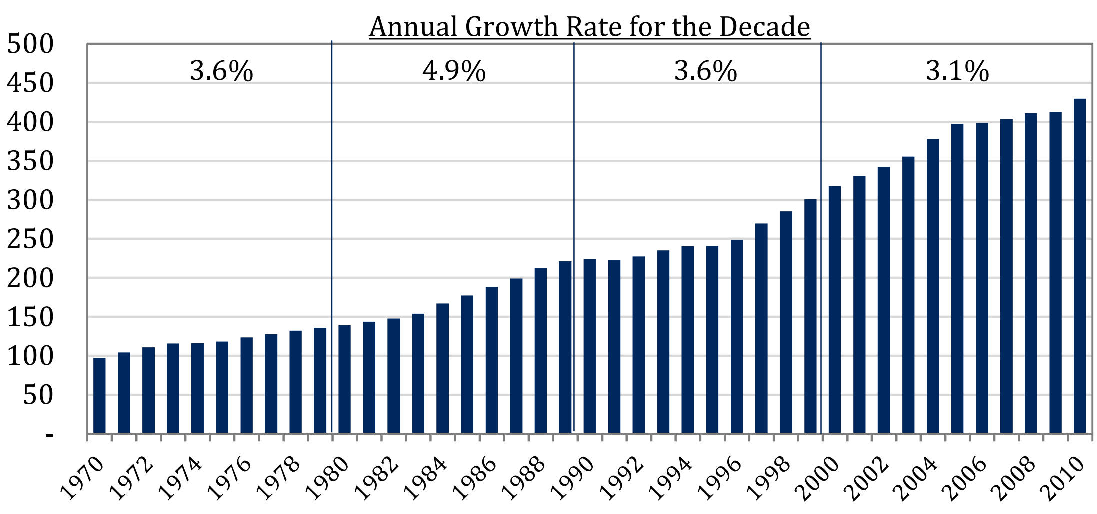
This experience did not result in the region's business leaders or elected public officials identifying the consequences of this continuing dependency on federal spending, rather it focused on the short-term impacts of federal job reductions. And, it did not result in efforts to achieve greater diversification by targeting non-federally dependent business investment that would strategically diminish the region's vulnerability to rapid and possibly politically motivated reductions in federal spending within the Washington region.

With federal spending—the combination of federal payroll and federal procurement outlays—continuing to grow within the Washington region at rates exceeding the annual growth rate of the region's economy, there wasn't much to complain about. Clearly, federal spending was not the problem, as it was outperforming—growing faster than—the growth being generated by the economy's other sectors, most notably, its non-federally dependent business activities.

The average annual performance of the Washington region's economy during the thirty years between 1980 and 2010 was remarkable, as shown in Figure 3. The region's economy, its gross regional product, totaled $144.5 billion in 1980. It increased to 233.0 billion by 1990 for a ten-year gain of 61.2 percent. It increased to 330.3 billion by 2000, gaining 41.8 percent and, by the end of this period in 2010, it totaled $451.2 billion, in inflation adjusted 2012 dollars, up 36.6 percent, and this was a ten-year period that had included two recessions, the 2007-2009 being the worst in more seventy years. Over this thirty-year period the Washington region's economy experienced a real gain of 212.2 percent and averaged an annual increase of 3.87 percent.

The Washington region's economy was the among the best performing economies among the nation's largest metropolitan areas during the 1980-2010 period, rising in ranking from ninth to fourth (Table 2). In 2010, total federal spending in the region accounted for 39.8 percent of its gross regional product—with 19.1 percent of GRP attributable to federal procurement spending, 10.0 percent attributable to federal payroll and 10.7 percent attributable to other federal payments or transfers such as federal retirement and disability payments. What made the Washington region's economy different from its peers was its large federal payroll and procurement: approximately 15 percent of total outlays for goods and services and 10 percent of the total federal payroll nationwide.

Figure 3. Gross Regional Product in the Washington Region 1970 – 2010
(Billions of 2012 $s)

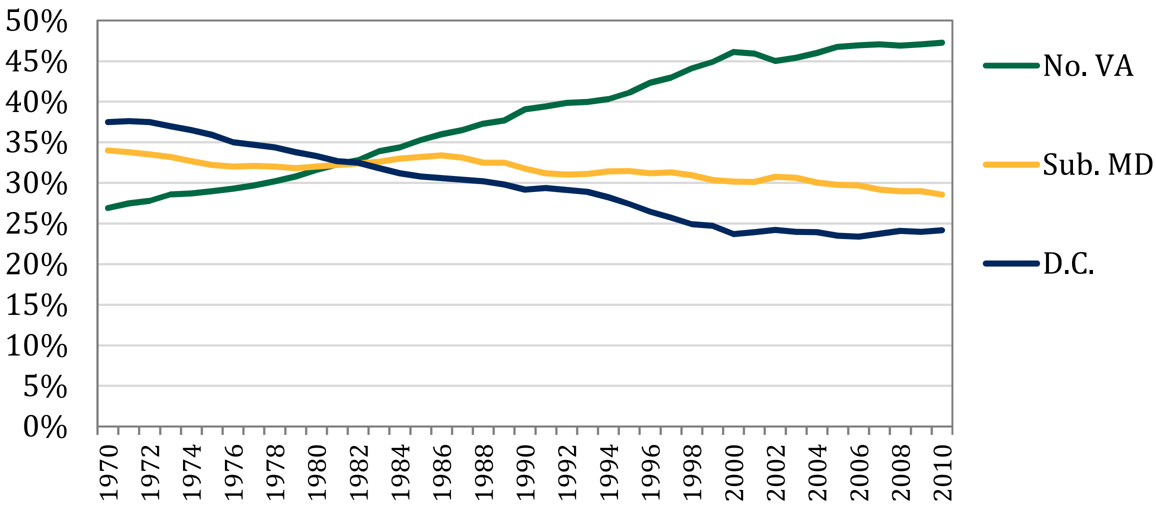


Sources: The Stephen S. Fuller Institute at the Schar School, GMU

While federal spending at the regional level has supported above-average growth rates in the Washington region's economy over the past thirty years, this pattern of growth has not been experienced evenly across the region. When federal government jobs were the measure of the federal government's importance in the region's economy, these federal jobs were principally located in the District of Columbia as this was where the federal departments were historically required to be located. Even through the federal government began to widen its footprint after WW II for defense reasons (locating certain agencies beyond the nuclear blast zone), the National Capital Planning Commission continued to employ the guideline that 60 percent of the federal workforce should be located within the District. But, as the source of federal economic impact shifted from federal jobs to federal procurement spending, the suburbs began to capture an increasing share of the federal dollars flowing into the regional economy.

The results of these changing patterns of federal spending and the direct, indirect and induced jobs and economic activity that this federal spending generated can be seen in the differing growth rates and, therefore, changing shares of the region's gross regional product generated in the District of Columbia, Suburban Maryland and Northern Virginia over this period, as shown in Figure 4.

Figure 4. Percent of GRP Washington Region Economy, 1970-2010



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

Between 1980 and 2010, businesses located in Northern Virginia captured approximately 48 percent of all federal procurement dollars while the District and Suburban Maryland economies captured the remainder in roughly the same shares. And, not all federal procurement was the same. In the District, federal procurement spending has been dominated by the procurement of goods and services that are required to house and support the federal workforce, such as the rental of office space and training services for federal employees. In suburban Maryland, the procurement spending can be characterized as administrative-support services reflecting the federal agencies that are located in suburban Maryland that are regulatory or research-oriented in nature. In contrast, in Northern Virginia federal procurement spending has been dominated by the Departments of Defense, Homeland Security (since its establishment in 2002) and Treasury and the

Environmental Protection Agency with these agencies' contracting being largely focused on technology-intensive services.

These procurement patterns over time have shaped the economic structure of their host jurisdictions, shaped their talent pools of non-federal government workers and determined the personal earnings profiles and household incomes of local residents. The long-term consequences of the evolution of these sub-regional economies, besides being reflected in the scale of economic growth they have enjoyed over this period, are likely to determine the future capacities of these sub-regional economies to support future growth and achieve greater independence from their "company town" economic past.

The rise of federal procurement spending since 1980 had the effect of misleading public and business leaders into thinking that the region's economy was becoming less dependent on federal spending to drive its growth and to think instead that the economy's vitality was becoming increasingly tied to the private sector economy and becoming more like the economies of other prominent metropolitan areas. In reality, this first economic transformation did not reduce the economy's dependency on federal spending; this dependency continued to increase throughout this period.

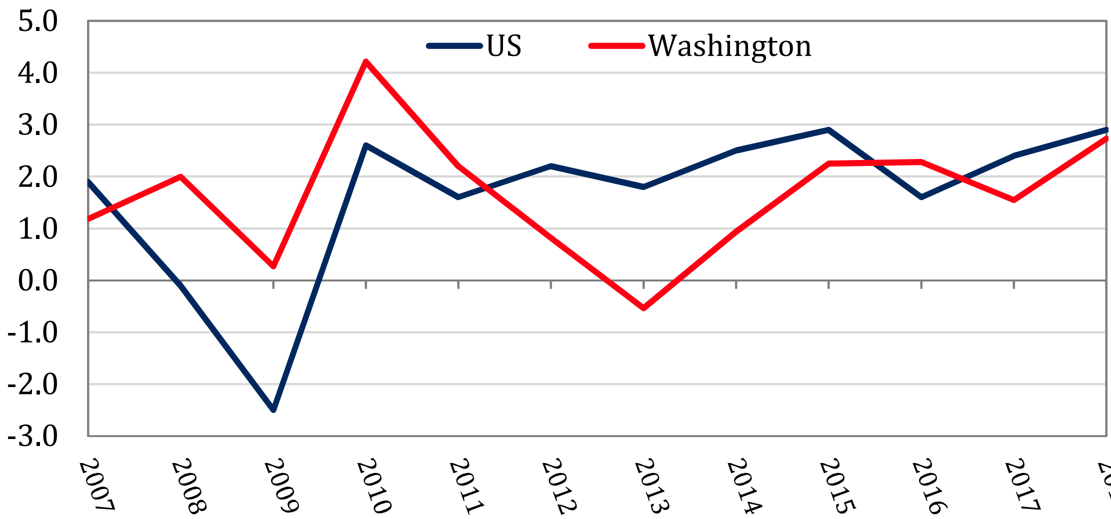
This transformation represented the shift from federal government jobs and their related federal payroll to federal procurement spending and the private businesses these contract outlays attracted to locate and/or expand in the Washington region. The growth of this federal contractor base within the regional economy also established a non-local-serving business base that may have the capacity to diversify away from federal contracting if federal contracting becomes unprofitable or is disrupted. Consequently, this first transformation established the foundation for the second transformation that is currently underway in response to the decline of federal government spending as the fuel that will drive future economic growth in the Washington region.

The Washington Region's Second Transformation: 2011-20XX

The Washington region's strong economic performance that characterized the 1980-2010 period, driven in large part by accelerating federal spending in the form of procurement outlays rather than payroll disbursements, came to an abrupt end in 2011. In 2010, the Washington region had the third fastest growing economy (4.2%) among the nation's fifteen largest metropolitan areas. By 2013, it had the slowest growing economy among these same metropolitan areas. The Washington region's economy actually declined 0.54 percent in 2013 while the U.S. economy (GDP) achieved a 1.8 percent gain and was recovering from the worst recession since the Great Depression. This reversal in the region's economic performance is shown in Figure 5.

So, what happened? In simple terms the region's competitive advantage—a federal government-based economy—became a disadvantage. During the Great Recession, while the national economy was experiencing its greatest decline in employment and income in more than 70 years, the federal government added 18,500 jobs and the region's economy (gross regional product) expanded by a total of $31.7 billion (2007-2010). What happened next has left an indelible imprint on the economic history of the Washington region and resulted in publicly and privately sponsored initiatives to diversify the region's economy to make it less dependent on federal spending (see "The Roadmap for the Washington Region's Future," The Center for Regional Analysis, 2015, sfullerinstitute.gmu.edu).

Figure 5. U.S. GDP and Washington MSA GRP
2007 – 2018 (Annual % Change)



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

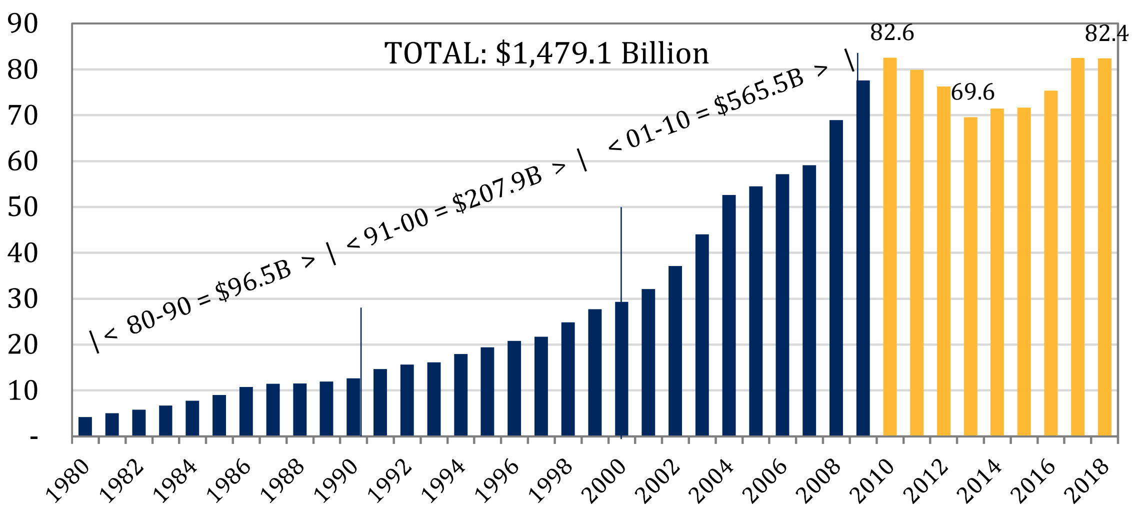
What precipitated the region's economic decline following thirty years of rapid growth? The control of Congress changed with the 2010 national election and with this change came a plan to sharply reduce federal spending. This plan was codified by the Budget Control Act of 2011 that mandated immediate and continuing spending reductions of \$50-\$55 billion annually (from previously proposed future annual spending levels) by the Department of Defense followed by a similar level of spending reductions spread across all domestic agencies. This legislation called for these spending reductions to continue for 10 years but the budgets to implement these reductions would have to be negotiated annually. Initial spending reductions impacting federal procurement and the federal workforce were put in motion and sharply reduced federal spending in the Washington region and nationally beginning in 2011 and continued for three years, through FY 2014.

The effects of these spending reductions on the Washington region are shown in Figures 6 and 7. The magnitudes of these spending reductions peaked during FY 2013 and FY 2014 and resulted in \$22 billion fewer federal dollars being spent in the region's economy in both 2013 and 2014 than had been spent in 2010 (adjusting for inflation), representing a 20 percent reduction in federal procurement spending and a 5 percent decline in federal payroll from their peaks in 2010. These spending reductions became associated with what was called "The Sequester" but the duration of these effects far exceeded the actual sequester that started in December 2012 with the "Fiscal Cliff," followed by the March 1, 2013 budget agreement for FY 2013 spending imposing sharp spending reductions for the full budget year, and ended with a 16-day, full federal shutdown in October 2013.

The economic impact of these federal spending reductions can be visualized by comparing the track for GDP in Figure 5 with the track of the Washington region's GRP. The cost of this underperformance compared to the U.S. economy during this period of federal spending reductions totaled $49.3 billion (in 2012 $s), more than off-setting the GRP gains achieved between 2007 and 2010 due to the region's long- establish economic advantage—increased federal government spending.

The downshift in federal procurement spending that occurred as a result of the Budget Control Act of 2011 is clearly visible in Figure 6. These spending totals are presented here in current year dollars. Still, even with this decline from the 2010 peak, the total value of this spending was $609.2 billion over the 2011-2018 period exceeding the previous ten-year total of $565.5 billion and bringing total procurement dollar directly benefiting by the Washington region's economy since 1980 to $1.5 trillion.

Figure 6. Federal Procurement in the Washington Region, 1980-2018



Sources: US Census, Consolidated Federal Funds Report and USAspending.gov
The Stephen S. Fuller Institute at the Schar School, GMU

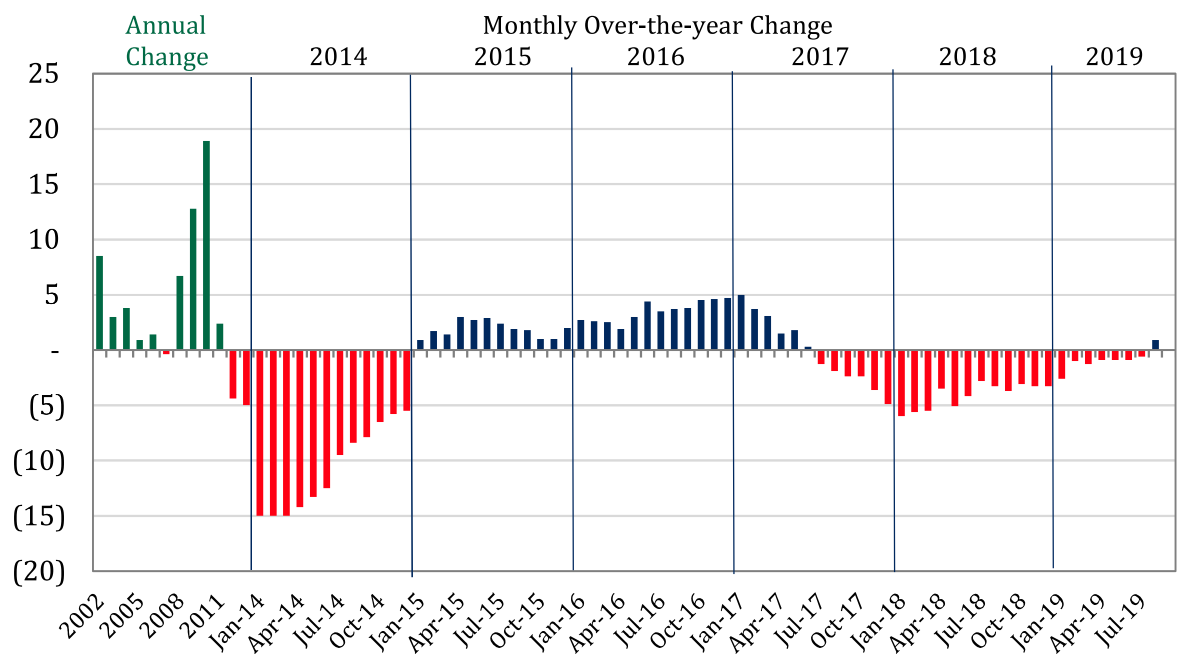
The $13 billion reduction in federal procurement spending between 2010 and 2013 is estimated to have cost the region's private sector employment base 75,000 to 100,000 jobs. The actual cost cannot be calculated. Some of these workers moved out of the region to take advantage of the economic expansion going on elsewhere across the country while other workers may have changed employers in the region, possibly shifting occupations or perhaps their employers shifted idled workers to non-federal contract work.

The severity of these spending reductions is actually greater than shown in Figure 6; in inflation adjusted dollars, federal procurement spending in 2018 was $82.4 billion (in 2018

$s) compared to $95.1 billion in 2010 (in 2018 $s) with the low point of $75.0 billion recorded in 2013 (federal spending in 2014 and 2015 was basically unchanged from 2013 in real dollar value).

The federal spending reductions resulting from the Budget Control Act of 2011 also impacted the federal workforce. Federal employment in the Washington region declined in 2012, 2013 and 2014 by a total of 20,030 workers, as shown in Figure 7, resulting in the loss of 33,670 worker years, with losses totaling $3.9 billion over those three years. At the end of the decade, both federal procurement spending and federal employment remained well below their peak 2010 levels.

Figure 7. Federal Government Jobs
Washington MSA

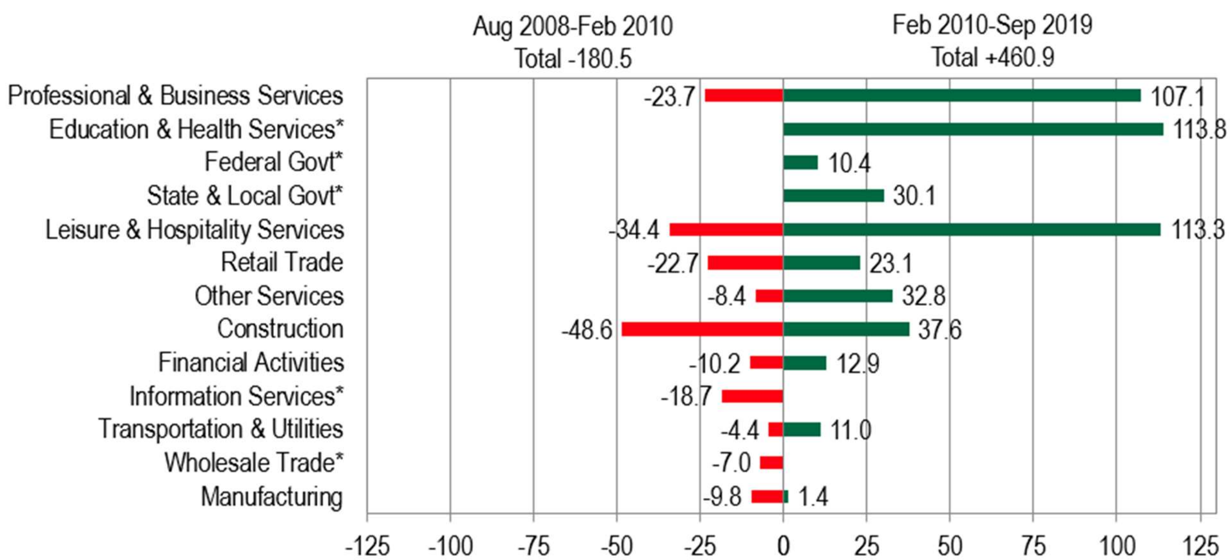


Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted)
The Stephen S. Fuller Institute at the Schar School, GMU

The Washington region's economy has undergone structural changes since 2010 in response to the major reductions in federal spending and active efforts by local governments and the broader business community to diversify the region's economy to reduce its federal dependency. Some of these structural changes have been the result of changing global and national conditions (e.g., the increasing adoption of technology in the workplace and emergence of Millennials as the largest generation with differing cultural values from past generations). And, some of these structural changes may provide clues to how the region's competitive advantages will position it for economic growth in the coming decade and beyond.

The employment pattern that has developed over the August 2008 to September 2019 period, a period that spans the Great Recession and the subsequent expansion through the third quarter of 2019, provides some important insights (see Figure 8). The federal government remained an important source of jobs but not as important as in 2010 (it added 18,500 jobs during the Great Recession and has lost 8,100 during the period following the recession through September 2019 (see Figure 7). State and local government jobs continue to increase but were growing at about the annual rate of the region's population so this sector's growth path doesn't point to anything unusual. The region's smaller sectors have either not recovered the jobs they lost during the Great Recession by their subsequent expansion or they have been relatively flat over this period. The transportation and utilities sector is the outlier among these smaller sectors having added doubled the number of jobs that it had lost during the recession. Still, this is still a small sector and doesn't portend anything notable for the future.

Figure 8. Washington Region Job Change: The Great Recession and Recovery



Sources: U.S. Bureau of Labor Statistics (Not Seasonally Adjusted), The Stephen S. Fuller Institute at the Schar School, GMU
*Net change for the period; sector did not have losses during recession and/or did not have gains during recovery.

The retail trade sector, a historically important source of job growth in the region, is undergoing its own transformation. It lost 22,700 jobs during the Great Recession and has added 23,100 jobs during the expansion. Where this sector had represented 8.1 percent of the region's job base in 2018, its net contribution to the region's job growth over the recession-expansion cycle has been negligible (0.1%). Job growth in the retail trade sector is being affected by online shopping, labor- saving technology (self-checkout and inventory management), and the changing consumer services environment. The impact of these changing market conditions on retail trade is continuing and is also evident in other sectors that are experiencing job erosion due to consolidation (e.g., information services, especially by the media) and the adoption of labor-saving technology (e.g., online banking).

The principal takeaway from Figure 8 is that three sectors have accounted for almost all of the region's job growth since the end of the Great Recession: professional and business services, education and health services and leisure and hospitality services. Combined, these three sectors accounted for 90 percent of the region's job growth since 2010.

All three sectors have experienced disproportionally large gains compared their share of the region's total employment base: professional and business services represented 23 percent of the region's total jobs and accounted for 27.2 percent of its job growth between 2010 and 2019; education and health services accounted for 13.4 percent of the region's total job base and generated 37.2 percent of its job growth; and leisure and hospitality services accounted for 10.1 percent of the region's job base and generated 25.8 percent of its new jobs over this period. While it is clear that the region's economy is becoming less dependent on federal government jobs, at the same time it has become more concentrated in just a three large private sectors. Consequently, diversification away from federal dependence appears to be paralleling a decrease in diversification within the private sector.

Furthermore, this trade off may not be yielding the expected outcome. It should be noted that while these private sector job gains and their new earnings helped the Washington region's economy to recover from the losses it experienced due to reductions in federal spending, these new jobs are not necessarily equal in value added to the jobs lost.

The economic value, on a per job basis, differs by sector, as shown in Table 4. This value may reflect the amount of capital supporting the job, whether the job is export-based or local serving, and/or by the skills and educational levels the job requires, among other factors. The average value for all jobs in the Washington region in 2018 (the average per worker contribution to the region's gross regional product) was $170,332; that is, each worker employed in the Washington region generated $170,332 in gross regional product in 2018.

One example illustrates these differences among the region's private sectors currently driving its economic expansion. Jobs in the professional and business services sector generated an average of $166,728 per job while jobs in the leisure and hospitality services sector generated an average of $56,992 per worker. By this measure, the leisure and hospitality services sector would have to generate almost three new jobs to produce the same total contribution to the region's economy generated by one professional and business services job.

The value added by federal government jobs was $209,039. It should not be a surprise, then, that when the federal sector is expanding, the Washington region's economy grows, too, and when the federal sector is contracting, this represents a major drag on the region's economy. Furthermore, that replacing lost federal jobs is not just a simple numbers calculation; it matters what types of jobs are being generated to replace high-value added job reductions in the federal sector.

Table 4. The Economic Impact of the Recession & Recovery

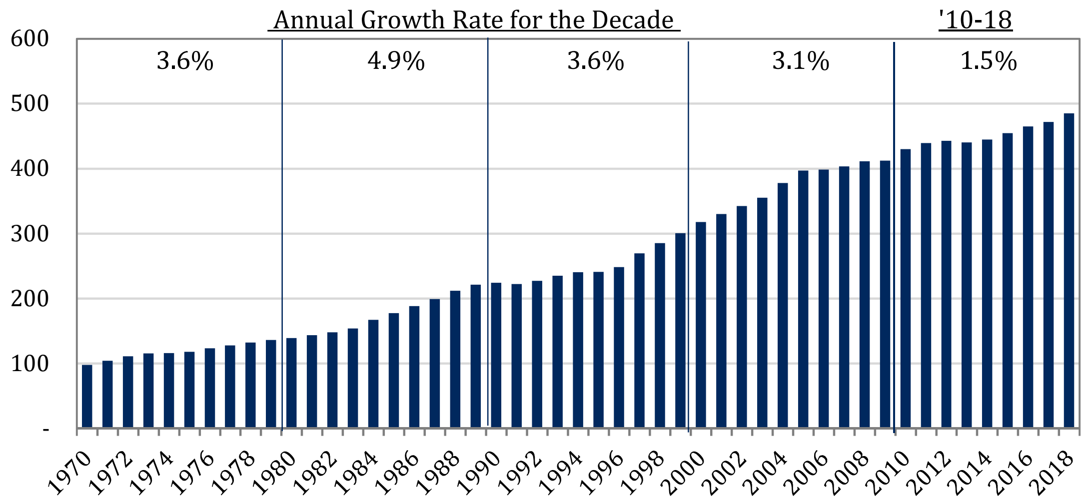
Sectors	% of all jobs	% of job change	GRP Value per job*
P&BS	23	27.2	$166,728
Ed & Health Services	13.4	37.2	$79,676
Federal	11	3.4	$209,039
S & L Gov't	10.2	9.8	$93,276
Leisure & H. Services	10.1	25.8	$56,992
Retail Trade	8.3	0.1	$79,188
Other Services	6.3	8	$99,569
Construction	4.9	-3.6	$129,035
Financial Activities	4.8	0.9	$773,558
Information Services	2.2	-6.1	$365,029
Transp. & Utilities	2.1	2.2	$214,340
Wholesale Trade	1.9	-2.3	$252,614
Manufacturing	1.2	-2.7	$294,485
Average per job GRP			$170,332

*GRP Value in 2018 $s
Sources: U.S. Bureau of Labor Statistics, The Stephen S. Fuller Institute

The mix of new jobs added in the Washington region since the Great Recession—through the period of the Sequester and since 2014 to September 2019—has not been as favorable in terms of their average value added compared to the jobs that already existed in the regional economy. Where the average value added of the region's existing employment base in 2018 was $170,332, the average value added of the net new jobs generated since February 2010 was only $84,741. So while the region's economy generated a total of 305,600 new jobs during the February 2010-September 2019 period, compared to the 180,500 jobs it lost during the Great Recession, the value added mix of these jobs did not support the same rates of annual growth over the past decade as the mix of jobs that had been supporting the region's economy over the three decades leading up to 2010, when the region's economy was more dependent on federal spending.

The annual average economic growth rates, averaging 3.87 percent over three decades (1980-2010), fell to 1.5 percent for the 2010-2018 period (see Figure 9). Rather than ranking among the top of nation's fifteen largest metropolitan areas, the Washington region's economy was ranked fourteenth, the one of the slowest. The Washington region's 1.5 percent average annual growth rate compares poorly with top-ranked San Francisco's 4.9 percent average annual growth rate or with second-ranked Seattle at 426 percent.

Figure 9. Gross Regional Product in the Washington Region 1970 – 2018
(Billions of 2012 $s)



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

The transformation of the Washington region's economy has carried a substantial cost as measured by its slower economic growth since 2010. For the region's second transformation to succeed, its restructuring of the economy must focus on generating higher-value added jobs. While most of the higher-value added jobs added during the first transformation were still federally dependent they did established the framework for tapping into national and global markets and could provide the foundation for growing high-value added, export-based, fast-growing, non-federally dependent jobs for which the Washington region has a competitive advantage nationally and globally. This became the goal underlying the formulation of the "Roadmap for the Washington Region's Economic Future" (2015), as noted previously.

The primary objectives of the "Roadmap" analyses included:

(1) defining the industrial clusters that existed in the Washington region's economy that were higher-value added, export-based, not federally dependent and for which the Washington region had a competitive advantage; and,

(2) determining the requirements for successful diversification into the types of businesses that would support the region's economic growth while offsetting its historic dependency on federal government spending.

A subsequent analysis of the region's non-federally dependent clusters' performances in 2015 and 2016 found them to be generally under-performing their respective national clusters' performances. This changed in 2017 with the clusters achieving overall job growth of 2.4 percent, up from an average 1.2 percent for each of the two preceding years. With federal spending continuing to lag its 2010 level and the region's predominant sources of job growth occurring in lower-value added sectors since 2010, the region's economic performance lagged its peers and the U.S. The weaker-than-expected performances for these non-federally dependent clusters help to explain the slower GRP growth rates experienced by the Washington region's economy during this period.

New research into the Washington region's economic future will re-examining the industrial clusters identified in the 2015 "Roadmap" analysis to test their original definitions and to refine the clusters' definitions on which the Washington region can rely to support faster future growth to offset the diminishing economic stimulus provided by federal payroll and procurement spending. As noted previous, federal spending in 2010 accounted for 39.8 percent of the region's gross regional product. By 2018, this percentage is estimated to have declined to 30.9 percent so advancing the region's higher-value added, export-based, non-federally dependent industrial clusters will be key to accelerating the region's future economic growth rate.

One might think that the location of Amazon's HQ2 in Arlington is what this "new" economy might look like. But more likely, this "new" economy might look more like the kinds of businesses that will co-locate in the region as collateral growth complementing Amazon's decision to locate its HQ2 in Arlington. It is too soon to know what this collateral growth will look like. However, it would be misguided to just assume that Amazon's decision to locate its HQ2 in Arlington is the answer to the continuing downward trend in the contribution of the federal government to the Washington region's economic engine. Amazon's projected job growth of possibly 38,000 jobs by 2035 is only a small percentage of the total job growth forecast for the Washington region over the next fifteen years, only about 8 percent. Where are the other jobs coming from and what will be their value-added profile?

As the region looks back on the last decade and looks forward to the next, there are many critical questions the answers to which remain unclear. The federal government is still a major player in the region's economy and the longer-term outlook is that it will still constitute about one-quarter of the region's GRP by 2030; Amazon's HQ2 doesn't come close to federal government spending as a generator of jobs or of value added now or in the foreseeable future.

What is clear now is that growing an alternative economic structure that can carry the region's economy, as the federal government has for more than 200 years, will take a long time. It should also be clear that with the continuing importance of federal spending to the region's annual economic performance, changes in federal policies affecting the federal budget and its priorities can have an almost instantaneous effect on the region's economy. By the stroke of the pen the President can shut down the federal economy in the region and nation; this has happened before and seems to be happening with increased frequently. Major federal spending disruptions or cut backs, such as occurred during the Sequester, tested the regional economy's resilience and it came up short.

The region's economic brand has been diminished on occasion by past Administrations and their policies and positions. The Washington region's brand has been under attack by the current Administration (see "The Washington Region's Declining Economic Brand," July 12, 2017, The Stephen S. Fuller Institute.) Business investment is critical to economic modernization and advancement. Having the capacity to accommodate growth and to provide the quality-of-life required by the talent needed to support the "new" economy requires up-front substantial investment. The question remains whether the Washington region can raise this investment in the private and public sectors and whether it is sufficiently attractive and competitive relative to its peers to move up in the ranking of its peer economies. A tarnished brand will not be an advantage in attracting increased business investment.

Can the Washington Region's Economy Escape its Company Town Origins?

Washington is a company town and its economy remains dependent on this dominant source of spending and high-value added employment in spite of the diversification that is slowly transforming the region's economy. Consequently, while seeking to advance the economy's diversification, it is important to acknowledge that the Washington region's economic performance remains dependent on federal spending and, that while this can cushion the effects of national recessions, it can also generate downside effects when federal spending slows or is disrupted.

As a company town, Washington may very well be suffering the consequences of an inverted economic equation. In a normal capitalist system, private enterprises are supposed to be the primary risk-takers. In the Washington region, enterprises may be following the lead of the federal government, shaping their investment plans around government policy, not only the Fed's monetary policy but also federal fiscal policy; that is, private enterprises in the region may be including the federal budget and its signals—the potential for growth or reductions, shutdowns and interruptions—in their business plans with local enterprises determining their risk levels following government's lead. As a result, federal spending uncertainty since 2010 may have resulted in adoption of wait-and-see strategies that have delayed the economy's ability to transform itself, to diversify away from this dependency. This government dependence has had a "perverse effect" delaying or subverting the Washington region's ability to evolve.

This is the Washington region's uniqueness and its competitive advantage or disadvantage. Since 2010, this federal dependence has been a drag on the region's economic performance. With a strong national economy and increasing federal spending under the Bipartisan Budget Act of 2019, covering both FY 2020 and FY 2021, the Washington region is positioned for above-trend growth. However, the Washington region's economy remains vulnerable to declining, interrupted or uncertain federal spending. In 2019, this disruption (35-day partial shutdown followed by continuing uncertainty), more than any other set of factors, is what caused its performance to lag behind its peers.

Closing Questions

Considering the Washington region's economic history there is one fundamental question that remains unanswered by the progress achieved towards diversifying its economy since

2010; that is, can the Washington region achieve a competitive economy building on its federal government base complemented by an expanding core of high-value added, fast-growing, export-based, non-federally dependent business and not-for-profit activities or will its future growth trajectory always be defined by its federal government base?

Regardless of the answer to this question, the larger question may be whether the Washington region can position itself to achieve its inherent economic growth potentials building on its unique assets; that is, does the region have the will power to build the capacity necessary to attract the business investment and to accommodate the growth that will define its future vitality and quality of life? Restated, the key question is: can the Washington region overcome its multi-layered jurisdictional governance structure to build on its competitive assets and overcome its capacity constraints to achieve the region's inherent growth potentials?

In the absence of local, state and federal government collaboration and commitment to building the region's capacity for growth before it becomes a constraint to growth, the region's economy and the quality of life that it will support will lag its competitors. Once the Washington region's falls behind its peers in building and supporting the "new" economy—the economy that will drive the nation's economy in the future—its future will be defined by its past following in the footsteps of other previously high-performing metropolitan areas whose economies were built around economic drivers that lost their relevance as they were supplanted by new technologies—St. Louis, Detroit, Cleveland, Philadelphia, Pittsburgh, and other transportation- and manufacturing-based economies. If this is the outcome, the Washington region will survive as a federal government center—a national capital with global relevance—with collateral administrative and management functions in the private and not-for-profit sectors. This economy would be characterized by slower growth, similar perhaps to the last decade, and have the benefit of being somewhat counter-cyclical and able to cushion the region from future recessions.