

## STATE OF THE REGION

Economic Competitiveness Report

2016



















#### **ABOUT COG**

The Metropolitan Washington Council of Governments (COG) is an independent, nonprofit association that brings area leaders together to address major regional issues in the District of Columbia, suburban Maryland and Northern Virginia. COG's membership is comprised of 300 elected officials from 22 local governments, the Maryland and Virginia state legislatures, and U.S. Congress.

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**JANUARY 13, 2016** 

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#### **MESSAGE FROM THE CHAIRMEN**

At the Metropolitan Washington Council of Governments, there's a long history of area leaders working together across borders on a variety of shared challenges from transportation to the environment to homeland security. Over the years, people have come to understand the value of regional cooperation and coordination. No one jurisdiction is going to solve these issues on its own.

Now, we believe joint action is urgently needed on another challenge. Given the new reality of decreasing federal spending and increasing competition both nationally and internationally, we need to work together more closely to strengthen the region's economy.

To advance this effort, the Board of Directors made economic competitiveness the focus of 2015. We invited a diverse group of leaders and stakeholders to talk with us at our monthly meetings and annual retreat as well as the quarterly meetings of our Region Forward Coalition. Through these discussions, we gained a better understanding of our region's economic climate as well as our human and built infrastructure.

This report includes input from these discussions as well as research around key economic indicators. We see this report as a logical next step following our Region Forward vision and Economy Forward report with some new ideas for advancing regional cooperation such as joint trade missions, and we commend COG staff for their work in putting these findings and recommendations together.

We also believe this report complements other current initiatives like the industry cluster analysis in the Roadmap for the Washington Region's Economic Future and Benchmarking Greater Washington's Global Reach, a forerunner to the hoped-for Global Cities Initiative in the Washington region. The fact that other influential groups are converging on the same topic is a positive sign. It demonstrates the urgency of our challenge and reminds us that governments, businesses, nonprofits, and universities all have key roles to play.

We encourage our fellow leaders to look beyond contending for corporate headquarters and government agencies. There's so much more we can do jointly to ensure our region's future prosperity and quality of life. Together, we can better sell our region-and its goods and services—to the rest of the world. Together, we can leverage our valuable assets from federal labs to prestigious universities. And together, we can build and maintain communities and the infrastructure needed to support economic growth.



WILLIAM EUILLE 2015 COG Board Chairman City of Alexandria



ROGER BERLINER 2016 COG Board Chairman Montgomery County



#### **EXECUTIVE SUMMARY**

Region Forward, adopted in 2010, by the Metropolitan Washington Council of Governments (COG) Board of Directors, charted a new course for growth around shared regional goals and in recognition of the many differences among the diverse cities and counties that comprise our region. State of the Region: Economic Competitiveness Report builds upon the work of Region Forward and subsequent COG reports to benchmark regional performance. This State of the Region report examines the region's economic competitiveness through an assessment of cross-cutting targets and indicators that address our shared economic climate, built infrastructure, human infrastructure, and quality of life. These indicators correspond closely with the four pillars outlined in Region Forward that focused on Prosperity, Accessibility, Sustainability, and Livability. State of the Region shows both considerable regional assets but also a number of sobering trends that threaten our economic competitiveness today and in the long-term.

Metropolitan Washington is a dynamic region with one of the strongest economies in the nation, attracting talent and investment from around the globe. Much of our regional economic growth over the past three decades has been fueled by the federal government—first as employer and then as contractor—but this once strong relationship has diminished. Since 2010, federal employment has fallen almost 6 percent and procurement outlays are down 13.6 percent in the region. Due to sequestration, the forced budget cuts that began to take effect in 2013, the federal portion of the local economy is forecast to drop from its high of nearly 40 percent in 2010 to less than 30 percent in 2020. Beyond the federal footprint, COG has identified a number of areas where regional economic competitiveness is threatened.

# **Forward**

Region

Region Forward established a shared vision and goals for future regional growth. It was adopted by COG and its 21 member jurisdictions in 2010.

#### **Economic Climate**

TARGET OR INDICATOR	MEASURED PERFORMANCE
Annual rate of growth in median wages will exceed the rate of inflation.	Since 2011, growth in inflation has outpaced regional median wages.
Sustain an annual 1 to 3 percent increase in the number of new jobs.	In 2014, the annual job growth rate was 0.5 percent.
Sustain an annual 2 to 4 percent growth rate in Gross Regional Product.	In 2014, metropolitan Washington's GRP growth rate was 2 percent.

Disparities in economic opportunity exist between and within jurisdictions and between different income and skill levels. Increased economic disparities threaten our competitiveness. Housing affordability and traffic congestion impose costs to workers across the entire region. Focusing development in Regional Activity Centers and prioritizing transportation connections between these centers is one strategy regional leaders are using to address these threats and support existing job centers.

#### **Built Infrastructure**

TARGET OR INDICATOR	MEASURED PERFORMANCE
Beginning in 2012, capture 75 percent of the square footage of new commercial construction and 50 percent of new households in Activity Centers.	In 2014, 73 percent of new commercial construction occurred in Activity Centers. Approximately 35 percent of household growth between 2010 and 2015 occurred within Activity Centers
By 2020, combined housing and transportation (H+T) costs in Activity Centers will not exceed 45 percent of area median income (AMI).	In 2013, the average combined H+T costs in Activity Centers were 36.9 percent of AMI, compared to 42.1 percent for the region as a whole. For households earning 80 percent of AMI, average H+T costs were 45.6 percent of income in Activity Centers, and 52 percent for the region as a whole.
Percentage of the region's restricted affordable rental housing units located in Activity Centers.	Currently, 48.6 percent of restricted affordable rental units are located within Activity Centers and 65.7 percent are within a half-mile.
Percentage of the region's housing stock affordable to households earning less than 80 percent of AMI, less than 50 percent of AMI, and less than 30 percent of AMI.	Approximately 44 percent of all housing units were affordable to those at or below 80 percent of AMI in 2011, including 19 percent affordable at 30-50 percent of AMI, and 8 percent affordable at less than 30 percent of AMI.

Yet our region also benefits from many strong assets, including a highly-educated workforce, vibrant neighborhoods, and rich cultural, natural, and recreational amenities that attract employers and talent. Numerous educational assets are located across metropolitan Washington, including dozens of world-renowned universities, colleges, and technical schools, providing a diversity of educational opportunities. The region is home to some of the most talented, skilled, and well-educated workers in the nation. Harnessing this talent, and increasing coordination among employers, entrepreneurs, local government, and academic partners is critical to meeting the changing needs of industry and preparing workers to thrive.

#### **Human Infrastructure**

TARGET OR INDICATOR	MEASURED PERFORMANCE
By 2020, the percent of population over 25 with a Bachelor's degree is 45 percent or higher, and the percent with a professional or advanced degree is 20 percent or higher.	In 2014, 49 percent of the region's population over 25 had a Bachelor's degree or higher, and 23 percent had a professional or advanced degree.
By 2020, increase the rate of students graduating from area high schools to 90 percent.	In 2014, 87 percent of students enrolled in area high schools graduated.

#### Quality of Life

TARGET OR INDICATOR	MEASURED PERFORMANCE
Percentage of residents living in high-poverty Census tracts (where more than 40 percent of the population is at or below 200 percent of the Federal Poverty Level).	Regionwide, 10.3 percent of the population lives in high-poverty Census tracts. However, this varies considerably by race: 4 percent for white residents compared to 21 percent for African American and 20 percent for Latino residents.
Percentage of renters and homeowners who are housing cost-burdened (paying more than 30 percent of annual income for housing).	Over 48 percent of households in the region pay more than 30 percent of annual income for housing, of which 39 percent are severely cost-burdened (paying more than 50 percent of income for housing).

#### A Regional Action Agenda to Enhance Economic Competitiveness

What will the next decade bring for metropolitan Washington? Will the region continue to see slow economic growth or increased economic disparities between different demographic groups or jurisdictions? Or, will regional leaders—civic, business, and elected officials—come together to chart a new course that builds upon the region's numerous assets?

COG is already working with partners to address the challenges our region faces to enhance regional economic competitiveness. Turning the tide on some of the most troubling economic indicators will require cross-sector and cross-jurisdiction collaboration and a commitment to working together to expand and create new global markets. There are several actions COG will take in 2016, many in partnership with allies from the Greater Washington Board of Trade, the 2030 Group, the Urban Land Institute's Washington District Council, the Brookings Institution, and other private sector leaders, as well as federal agencies such as the Government Services Administration (GSA), local economic development directors, and research partners at several of the region's universities.

COG will work with others to re-brand the region to better emphasize its considerable strengths and offer an alternative to its national and international reputation as a government town. COG will also work with local jurisdictions and workforce boards to align workforce development with economic priorities of key industry sectors, including advanced industries in high-technology fields such as cyber security, financial services, bio-tech, and health services.

To support these goals, in the coming year COG leaders will:

- 1. Launch a coordinated regional export promotions strategy.
- 2. Convene top economic development directors from the district, maryland, and virginia to explore joint trade missions and other collaborative opportunities.
- 3. Support workforce development programs aligned with regional infrastructure investment.
- 4. Facilitate partnerships with the GSA and the federal laboratory consortium for technology transfer for regional economic gain.
- 5. Learn from regional performance and assess peer metropolitan regions.



#### **OVERVIEW**

#### The Challenge

Metropolitan Washington boasts one of the premiere global economies. Ours is the sixth largest metropolitan economy in the United States and globally we rank seventh for business, financial, professional, and local services. 1 The region has among the highest educational attainment levels in the nation and is a top destination for highly educated Millennials. For decades, metropolitan Washington's economy has benefitted from the federal government presence as a major regional employer, land owner, tenant, and contractor. Direct federal employment and spending account for 38 percent of the \$400 billion regional output.<sup>2</sup>

The influence of the federal government has begun to shift, however. Starting in 2008 with the Great Recession, and then in 2013 when federal sequestration took effect requiring mandatory spending cuts, the region's economy has undergone profound change. Since 2010, federal employment has fallen 5.6 percent and procurement outlays are down 16.1 percent. At the same time, the private sector is adding new jobs and today roughly three-quarters of regional jobs are non-federal.<sup>3</sup> Professional and business services, construction, education, healthcare, and hospitality are among the region's key non-federal industries and account for the largest growth in jobs.

The region's economic standing has fallen nationally and internationally. Between 2008 and 2014, regional economic growth slowed and remains well below the national average. According to research conducted for the Global Cities Initiative, a project by Brookings and JP Morgan Chase to help regions compete in the global marketplace, Metropolitan Washington ranked 93<sup>rd</sup> among the top 100 largest U.S. metro areas and 249<sup>th</sup> among the 300 largest global metro areas in terms of its annual GRP growth between 2010 and 2014. Local tax revenues are down, vacant office and commercial space is up, and job growth has stagnated.

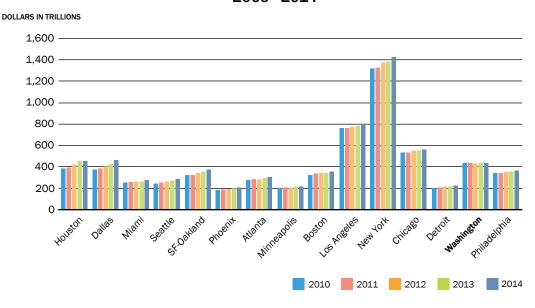
Metropolitan Washington boasted the sixth strongest gross regional product (GRP) in the country for 2014, but the annual GRP growth rate has not risen more than 2 percent since 2010. In 2014, the growth rate fell to 0.3 percent, putting the region in 261<sup>st</sup> place nationally. Job growth is similarly stagnated. Metropolitan Washington has one of the lowest rates of job growth among its peers with just a 0.6 percent increase in jobs between 2013 and 2014.

"When we act together as a region, there is probably not another [region] on the globe that can compete with us. With the assets that we have here in metropolitan Washington, we are about as powerful as any region could be."

> -Virginia Governor **Terry McAuliffe**

Figure 1

#### **Gross Regional Product in the 15 Largest Employment Metropolitan Areas,** 2009 - 2014



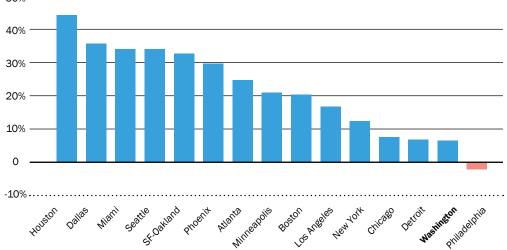
This new and startling reality has caught the attention of regional elected, business, and community leaders who came together during the past year to address the economic challenges facing local jurisdictions, business owners, and workers across the region. During 2015, the Metropolitan Washington Council of Governments' Board of Directors and the Region Forward Coalition focused their work on the theme of economic competitiveness. COG

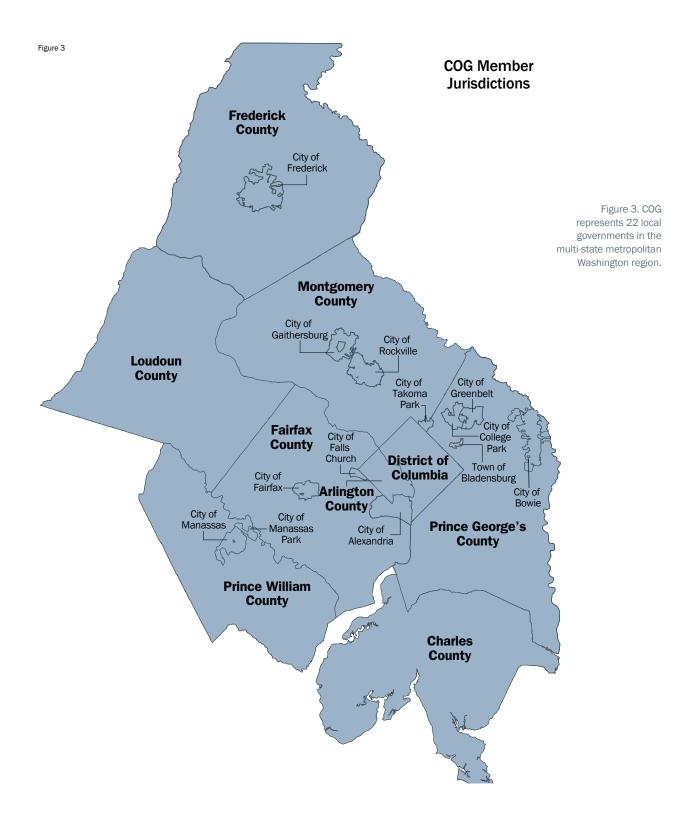
Job Change in the 15 Largest Metropolitan Area: Nov 2013 - Nov 2014 Figure 2. Job growth in 50%

Figure 2

metropolitan Washington has been significantly lower than that of many peer regions in recent years.

Source: GMU Center for Regional Analysis, January 2015





convened state, regional, and local elected officials and economic development directors together with the Greater Washington Board of Trade, academics, and think tanks working to study and shape the region's evolving economic profile.

#### The Opportunity

Metropolitan Washington is home to 5.3 million residents and 3.2 million jobs, spread across 22 member jurisdictions in Maryland, Virginia, and the District of Columbia. Each local jurisdiction and state devotes considerable resources to advancing their own economic development initiatives.

Yet, no one jurisdiction alone influences the regional economy, while all are influenced by it. Each day we see this in the flow of commuters and the exchange of capital, both of which present challenges and opportunities to local governments. Metropolitan Washington suffers from some of the nation's worst traffic congestion with workers enduring long commutes, yet the regional job market pulls talent from across the globe and the extensive transit system allows workers to access a wider range of job opportunities throughout the region.

Nationally and internationally, our local jurisdictions are often defined by Washington's "Government" brand which is not typically seen as a positive outside of our region. "Washington" has become shorthand for incompetence, gridlock, and dysfunction. This negative image obscures the region's diverse economic advantages, many of which are not directly related to federal expenditures. The region's image problem was cited as the key reason it lost the bid to host the 2024 Summer Olympics, and it underscores the necessity of public and private sector leaders working together to improve our brand in the global marketplace.4



Regional leaders realize that growing, retaining, and creating new industries and jobs is critical to the region's future economic competitiveness. This involves more than just a focus on traditional economic development and attracting an employer to a single jurisdiction. Improved cooperation is necessary to re-brand, market, and prepare the region to compete on the national and global stages. And while the pain of sequestration is most acute in our region, we are not alone in our intense focus on regional competitiveness given shifting economies. We've seen other regions such as Detroit and Seattle, to name just two, pivot from dominant single industries to embrace regional economic diversity with a goal of creating more resilient economies.

Economic globalization means that competition is happening at a larger scale and capital investment is more fluid. Disruptive technologies such as cloud computing and greater broadband access increase the attractiveness and affordability of a greater number of regions to compete for jobs and talent. National demographic changes are having major economic impacts. The aging of the workforce, increased racial and ethnic diversity, and growing income inequality create new workforce development challenges but also are fueling a wave of local entrepreneurship and innovation.

From Phoenix to Seattle and Houston to Chicago, our competitor regions across the country are aggressively pursuing regional strategies, partnerships, and performance measures to foster their own economic competitiveness. This creates a double imperative for leaders in the metropolitan Washington region to act lest we fall further behind.



The Olympic bid experience highlighted the need to improve the region's brand.

While collaboration in a region as complex as metropolitan Washington is never easy, we do have a foundation on which to build. Approved in 2010, Region Forward established specific, measureable milestones based on available data to determine progress across a set of issues related to regional prosperity, sustainability, livability, and accessibility. Many of these themes focus on Activity Centers where jobs, housing, and economic activity are clustered. These targets are not intended to be stagnant, but rather a set of measures that can be refined and tracked to inform local and regional action.

#### A Look at Regional Economic Competitiveness **Strategies**

Regional economic competitiveness work is being advanced in many other peer regions across the country by business leaders working with local governments and elected officials. Here is a quick snapshot of other metro areas working to enhance their competitiveness:

ATLANTA: Metro Atlanta is implementing a regional competitiveness strategy adopted in 2012. The Atlanta Regional Commission (ARC) is coordinating the region's multiple workforce boards with regional employers to inform investments in public education, apprenticeships and worker training in coordination with local governments.

**DENVER:** The region has a comprehensive economic development strategy developed and managed by the Metro Denver Economic Development Corporation. A diverse set of public agencies including regional and local jurisdictions, non-profits, philanthropic and business organizations are active partners with Metro Denver EDC working to cross-promote and brand the region globally and nationally.

HOUSTON: The metro Houston Regional Economic Development Plan connects social, economic, and environmental resiliency and prioritizes investments that advance all three, allowing the regional economy to withstand shocks and speed recovery.

KANSAS CITY: The Kansas City metro includes two states and 119 cities with a history of deep competition with one another. The Mid-America Regional Council (MARC) manages several regional economic development programs in coordination with states and local jurisdictions including tracking workforce trends and economic forecasting. Its 2014 economic development strategy emphasizes diversifying the regional economy which has been dominated by government jobs.

**SEATTLE:** The Puget Sound Regional Council (PSRC) manages the regional economic development strategy in partnership with the private sector and the region's 82 cities and four counties. PSRC has developed a robust set of performance measures tied to key regional industry clusters which are monitored and prioritized when making public investments.













#### Four Pillars of Economic Competitiveness

The Region Forward targets and indicators, together with work by COG leaders laid out in the 2012 Economy Forward report, align with the "Four Pillars of Economic Competitiveness" that can be found in similar efforts being advanced by other regions around the country. These four pillars are:

- 1. **Economic Climate:** how well the region is performing and positioned to support innovation, job growth, entrepreneurialism and business expansion, and economic performance.
- 2. Built Infrastructure: how resilient and available regional transportation, stormwater, sewer, energy, and broadband systems are to support both industry and employees.
- 3. Human Infrastructure: how well workers are able to compete and thrive based on their education, skill level, and economic opportunity.
- 4. Quality of Life: how affordable and attractive the region is to current and future residents.

Each of the pillars contributes to economic competitiveness, whether building upon key industry sectors and economic performance; providing the infrastructure needed to support workers and employers; ensuring the availability and work-readiness of current and future workers; or investing in regional amenities that attract and retain workers across income levels. Competitive regions recognize the need to assess performance on these four pillars and promote actions to strengthen each through regional collaboration.

Organized according to these four pillars of economic competitiveness, this report details metropolitan Washington's performance on a series of targets and indicators related to each pillar and informed by Region Forward.

During 2015, a variety of leaders addressed the theme of regional economic competitiveness at COG meetings and events.

Clockwise from top left: Montgomery County Executive Isiah Leggett; Maryland Lieutenant Governor Boyd Rutherford; Mayor Muriel Bowser, District of Columbia; Mayor Bill Euille, Alexandria; Prince George's County Executive Rushern Baker; Virginia Congresswoman Barbara Comstock, Credit: Official Congressional Photo; Virginia Governor Terry McAuliffe; Chuck Bean, COG; Denise Turner Roth, GSA Administrator, Credit: GSA



### **ASSESSING METROPOLITAN** WASHINGTON'S ECONOMIC CLIMATE

#### Regional Snapshot

Metropolitan Washington faces several challenges regarding its recent economic performance, but also has considerable assets including a skilled and educated workforce, strong connectivity to national and international markets, and an entrepreneurial climate. The region is home to fifteen Fortune 500 companies including Fannie Mae, Freddie Mac, and Capital One in the finance sector, several large aerospace and defense support companies like General Dynamics and Lockheed Martin, and hospitality giants such as Marriott International and Hilton Worldwide Holdings. Regional labor force participation is higher than the national average, at a rate of 77.7 percent of men and 65.5 percent of women, compared to the national rate of 69.7 percent and 57.2 percent for men and women, respectively. Almost half of the region's population over the age of 25 has a bachelor's degree or higher (versus about 30 percent nationally).5

However, the structure of the regional economy is changing. According to research by the Center for Regional Analysis at George Mason University, in 2010 federal wages and salaries and procurement comprised almost 40 percent of metropolitan Washington's economy, but is forecast to shrink to just under 30 percent by 2020.6

The federal government is an important asset providing access to national research laboratories, decision makers, and a significant number of job opportunities across industries, and at a range of skill levels. Since 2000, federal jobs have held steady at about 12 percent of all regional jobs.7

In contrast, federal procurement underwent rapid growth during much of this time and had been an important driver in the regional economy. Between 1980 and 2010, federal procurement spending in the Washington area increased from \$4.2 billion to \$82.4 billion. This represents an astounding 1,862 percent increase (an average of 7.75 percent compounded annually) and eclipsed the value of the federal payroll.8

This trend changed radically beginning in 2010. As other regional economies began to recover from the Great Recession, metropolitan Washington began to lose federal jobs during the recovery, which accelerated with federal Sequestration. George Mason University's Center for

Figure 4 **Structure of the Greater Washington Economy** 2010

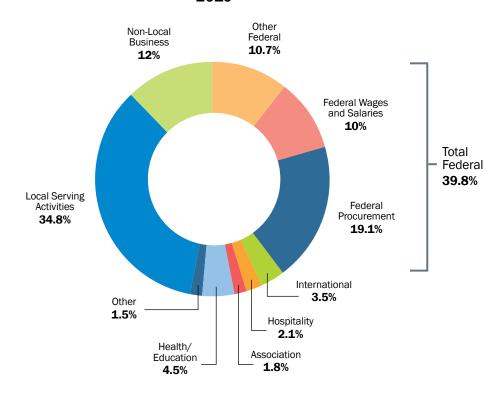
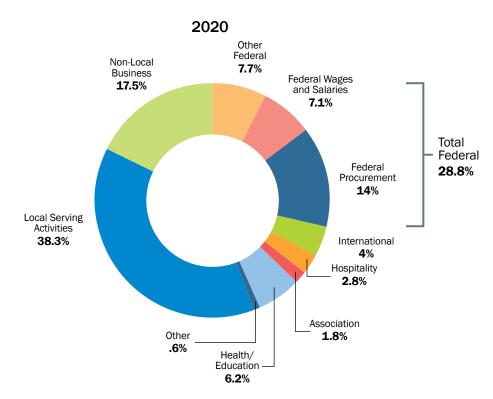


Figure 4. The influence of the federal government on the metropolitan Washington regional economy is forecast to decline by the end of the decade. Source: GMU Center for Regional Analysis, September 2015



Regional Analysis estimates that 8,400 federal jobs were eliminated in the region and the loss of federal contracts further eliminated some 28,000 jobs in the first year of the Sequester.9 Federal procurement spending has declined by \$11.2 billion or 13.6 percent since the 2010 high water mark while the federal workforce declined by 22,300 workers.<sup>10</sup> Continued declines of both are projected for at least the next five years. 11

Local leaders are changing how they approach economic development as a result. For instance, in 2014, Frederick County adopted a new form of government and elected their first County Executive. With this new leadership came new efforts to improve economic development within the County. To create a more competitive environment to attract new businesses and jobs, the County created three new programs. In 2015 a Business and Industry Cabinet (BIC) was established to bring together a team of business and industry leaders to serve as the eyes and ears of the business community and provide input to the County Executive and Office of Economic Development. The Cabinet is comprised of business leaders from a wide variety of industries, including biotech, retail, manufacturing, agriculture, information technology, healthcare, construction, finance, and international business. The BIC is currently working with the County to develop a new brand for economic development within Frederick.

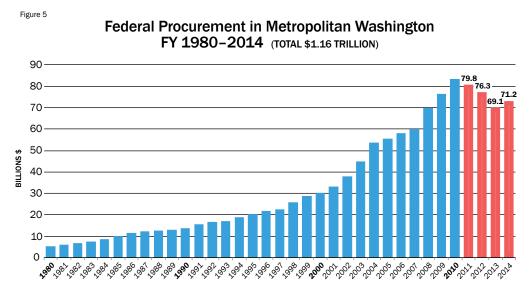


Figure 5. Federal procurement spending grew dramatically beginning in the late 1990s, but has declined noticeably due to sequestration. Source: GMU Center for Regional Analysis, January 2015

#### Beyond the Federal Government, Core Industry Sectors

At the same time, other key industries are growing in significance. The figure below shows employment in the region's Advanced Industries Clusters, which account for 27 percent of non-government jobs in metropolitan Washington. Those industries with highly skilled knowledge workers are driving job growth. In addition, average wages in each advanced industrial cluster are approximately 50 percent higher than the corresponding national average. 12 The biggest growth has been in the business and financial services and the biotech

and health industries. Nearly a quarter (23 percent) of the region's workforce is employed in professional or business service jobs, compared to 13.7 percent nationally.

"Future growth opportunities will be found in building out the region's knowledge- and information-based platforms to extend their businessto-business transactions into national and global markets."

> -Dr. Stephen Fuller at the George **Mason University Center for Regional Analysis**

The region is also home to numerous nonprofit and advocacy organizations in which employment has grown 19 percent over the past decade. 13 The advocacy sector leverages Washington's position as a national and global power, irrespective of federal spending. Job growth is also happening in the information and communication industries (5.5 percent) and science and security industries (10.9 percent), two key industry clusters driving national and international economies in which the region has a competitive edge.<sup>14</sup>

Metropolitan Washington's regional economy is built on the creation and dissemination of knowledge. According to the Global Cities Initiative, metropolitan Washington is one of the nation's top ranking regions in its share of jobs in research and technologyintensive "advanced" industries.15

Advanced education and research are at the heart of this, with the region home to 23 colleges and universities, numerous technical colleges and specialty schools, and nationally-recognized research laboratories within universities and federal government. This gives the region a powerful economic competitiveness edge going forward, as these institutions support the development and application of new technologies global in reach and scale.

Table 2 **Washington Metropolitan Advanced Industrial Clusters:** 2014 Employment

CLUSTER	JOBS	% CHANGE 2013-2014	LOCATION QUOTIENT	METRO/US WAGE RATIO
Advocacy Services	115,731	19	3.5	1.7
Information and Communications Technology	204,489	5.5	2.7	1.4
Science and Security Technology	112,717	10.9	1.8	1.6
Biology and Health Technology	55,396	25.1	2.0	1.6
Business and Financial Services	204,952	43.8	1.0	1.6
Media and Information Services	35,745	-20.1	1.5	1.7
Leisure and Business Hospitality Services	85,919	-1.3	1.1	1.3
All Clusters	729,030	16.8	1.9	1.6

Source: George Mason University Center for Regional Analysis.

Table 3

#### **Prince George's County Industry Clusters**

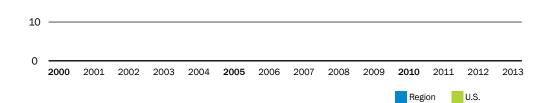
INDUSTRY CLUSTER	TYPES OF INDUSTRIES		
Aerospace, Defense and Related Engineering and Research and Development Services	Aircraft and aircraft engines and parts manufacturing; guided missile and related parts manufacturing; search and navigation; engineering services; and Research and Development (R&D)		
Business Services	Involving three interrelated activities, including:		
	Company-related administrative offices		
	Management consulting services		
	Marketing and advertising services		
	Business support services such as back office administration services, facility support, security guards and janitorial		
Computer and Communications Equipment and Components	Computer and related device manufacturing; communications and media equipment; and semiconductors and electronic components		
Construction	Commercial, industrial and residential contractors		
Destination Retail	Home centers, clothing stores, book stores		
Federal Government	Offices of various federal agencies		
Finance and Insurance	Commercial banks, investment banking, insurance agencies		
Healthcare and Life Sciences	Hospitals, outpatient facilities, nursing care, mental health facilities, kidney dialysis centers, biotech R&D, medical labs, drugs, and pharmaceuticals, medical devices, agricultural biosciences		
Information and Communications Technology Services	Data processing/hosting, programming, systems design, computer facilities, internet and wireless and landline telecommunications services		
Transportation, Distribution, and Logistics	Commercial transportation, wholesalers, warehousing, transportation support		
Travel and Tourism	Hotel and lodgings, museums, amusement, travel agencies, etc.		

Source: Prince George's County 2013 Targeted Economic Development Strategy.

Within these industry clusters are such jobs as computer system analysts, information security analysts, and system managers that comprise a large percentage of the IT and Business Services cluster for the region. Scientists including both medical and physical systems as well as microbiologists and natural science managers represent occupations in the region's Bio-Health industry cluster. And while the region is known for having an abundance of lawyers, where it stands out from its peers is the concentration of public relations specialists, social scientists, and fundraising managers all of whom are part of the Advocacy cluster.<sup>16</sup>

These same industry clusters often play an important economic development role within individual jurisdictions, and variation between jurisdictions is evident in terms of where specific sectors are growing or shrinking. Some jurisdictions have seen declines in certain industry





clusters and growth in others. Arlington County, Manassas City, and Falls Church, for example, have experienced a loss of jobs in education and health services, while Fairfax, Loudoun, Montgomery, Prince George's, and Prince William Counties all saw significant growth in these sectors. The region as a whole added 25,360 jobs in education and health services between 2011 and 2014.17

Metropolitan Washington is home to both large university research facilities and small business entrepreneurs that generate major investment in research and development. Their impact can be seen through the growing number of patents awarded. Montgomery County leads the region with 681 patents awarded in 2013, with Fairfax, Loudoun, and the District of Columbia also contributing significant numbers to the regional total of 2,081.18

Federal small business innovation and technology transfer funds have benefitted the region but are on the decline more recently. Since 2010, Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STRR) investment in the region has fallen from almost \$3.4 million to \$2.3 million per 100,000 residents. 19 Other forms of investment, both for early stage and second stage venture capital, are viewed as necessary to support increased activity by startups and to help grow regional businesses.

Venture capital investment is an important source of funding essential to growing the region's economy through investments in those enterprises the market sees as positioned for high growth. According to a recent Global Cities Initiative report, "[venture capital] recipients are three to four times more patent-intensive than other firms, and are much more likely to translate their R&D activities into high-growth ventures.<sup>20</sup> While venture capital investment in metropolitan Washington is down from its high point in the late 1990s, several jurisdictions have seen renewed investment.<sup>21</sup> In the District, for example, 32 deals were funded in 2014 at an average of \$7.5 million per deal and a total investment of \$242 million in venture capital.<sup>22</sup> During the past five years, the region received nearly \$6 billion in venture capital.<sup>23</sup>

Figure 6

20

#### Spurring Innovation from Government R&D

Metropolitan Washington is home to a world-renowned research cluster and the Federal Laboratory Consortium for Technology Transfer (FLC), a national network of federal laboratories devoted to strategies and opportunities that link laboratory technologies with the marketplace. The FLC develops and tests transfer methods, addresses barriers to the process, provides training, highlights grass-roots transfer efforts, and emphasizes national initiatives where technology transfer has a role. COG is working with FLC to further accelerate opportunities for innovation and business development that builds upon federally-supported research facilities. The region is third after New York and Boston in total employment in scientific research and development, yet more can be done to translate R&D into economic development.

Among the industries with potential for growth is cyber security. Metropolitan Washington has a strong cyber security developer community and average annual salaries in the industry are \$129,000. The industry has evolved with the changing federal role, first through direct jobs in IT and cyber security, then through growth in contracting and procurement, and now through establishment of new private firms around big data management and security. Ironically, one of the industry's biggest hurdles is a regional strength. Most workers in cyber security need government clearances, and this is where the region stands out among its peers. Metropolitan Washington had more than 23,000 job postings for cybersecurity positions in 2013. On a per capita basis, Virginia and Maryland ranked first and second in the country.

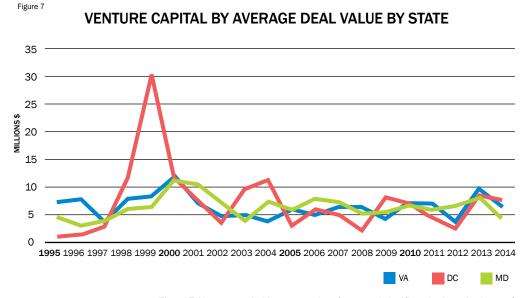


Figure 7. Venture capital investment has fluctuated significantly since the burst of the Tech Bubble in the late 1990s. Source: MoneyTree Quarterly /PwC and National Venture Capital Association, 2015

Metropolitan Washington ranked third, behind San Francisco and Sacramento, on its rate of venture capital growth over the past five years. The region is also a leader in the share of venture capital invested in advanced industries. While this is a solid foundation, the share of venture capital invested in the region's advanced industries declined from 98 percent in 2005 to the current level of 93 percent.24

#### **Region Forward Prosperity Targets**

COG's Region Forward established a set of targets to track regional prosperity, several of which are directly related to economic competitiveness. Performance measured against the following three Region Forward Prosperity Targets reinforces cause for concern and the need for stronger coordination to support economic growth across the region.

#### **RF TARGET:**

Annual rate of growth in median wages will exceed the rate of inflation.

## MEASURED PERFORMANCE:

Since 2011, growth in inflation has outpaced regional median wage growth.

Since 2001, the regional median wage has increased 44 percent, from \$16.66 per hour to \$24.07 per hour. However, since 2011, annual wage growth has slowed and been outpaced by annual inflation change. In 2014, annual wage growth was 0.46 percent while inflation was 2.17 percent.<sup>25</sup> When inflation exceeds our rate of growth in wages, it directly impacts lifestyle choices and influences whether businesses and skilled labor remain or relocate from our region.

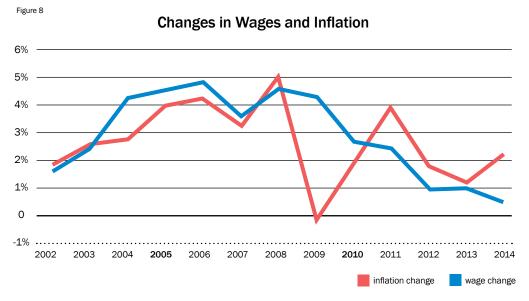
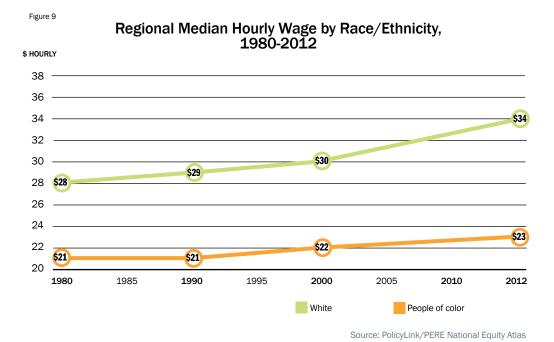


Figure 8. The rate of inflation exceeds the growth in wages.

Source: Bureau of Labor Statistics, 2001 - 2014

Across the region, the effects of the changing job market on household income are varied. The District of Columbia has the region's lowest median household income. In 2013 it was \$67,575, up almost \$3,000 from 2009. In contrast, Loudoun County has the region's highest median household income. In 2013 it was \$116,768, a drop of over \$7,000 since 2009.<sup>26</sup> Growth in wages and income is not felt evenly by workers at different income and skill levels. Since 1979, Washington area workers in the upper 90th percentile saw their earned income grow 25 percent, considerably higher than the national average of 15 percent for this same income group. Conversely, workers in the bottom 10th percentile saw their earned income decrease 7.2 percent during this same time, compared to 11.4 percent nationally.<sup>27</sup> There are also notable economic disparities among different races. In 2012, the median hourly wage for people of color working in metropolitan Washington was about a third less than that made by their white counterparts.<sup>28</sup>



Since 2000, employment in the metropolitan Washington region has increased from 2.5 million to 2.8 million jobs, but the rate of growth has been declining for each of the past ten years. In

2014, the region's job growth rate was one of the lowest in the country at 0.5 percent.<sup>29</sup>

Job growth varies across industry sectors and jurisdictions. Between 2013 and 2014, the region lost jobs in federal government, information technology, and manufacturing, but gained jobs in professional and business services, state and local government, leisure and hospitality, and construction.30 Within the region, Fairfax County typically accounts for between one-third and one-half of the overall job growth every year.31

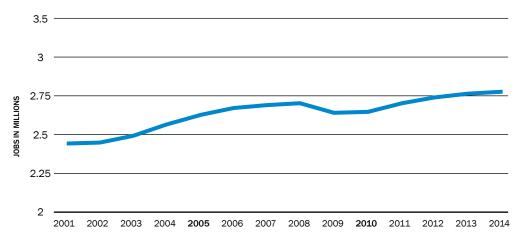
## **RF TARGET:**

Sustain an annual 1 to 3 percent increase in the number of new jobs.

#### **MEASURED PERFORMANCE:**

The most recent annual job growth rate was under 1 percent.





Source: BLS and COG

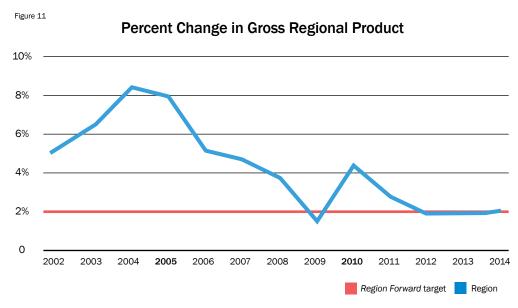


Figure 11. GRP growth rate has slowed significantly over the past 12 years. Source: Bureau of Economic Analysis and COG

#### **RF TARGET:**

Sustain an annual 2 to 4 percent growth rate in GRP for the region.

#### **MEASURED PERFORMANCE:**

In 2014, metropolitan Washington's GRP growth rate was 2 percent.

Gross Regional Product (GRP) is the market value of all goods and services produced by a region, and it is often correlated with an area's standard of living. The majority of economic output in the U.S. is dominated by metropolitan regions.

In 2014, metropolitan Washington ranked 6th among all metropolitan areas with a GRP of \$471.5 billion. On a GRP per capita basis, the region ranks 7th.32 However, the growth rate has slowed significantly from a decade ago when the region boasted one of the fastest growing GRPs in the nation. Between 2001 and 2010, the region's average annual growth of GRP was 6.7 percent; between 2013 and 2014, it was 2 percent.33

The sectors driving GRP growth are professional and business services with an average value added per job of \$157,969, and construction with an average value added per job of \$111,992.34 Conversely, jobs in hospitality services are typically lower paying, with an average value added per job of \$51,110. These represent different skill levels and job types, each of which is important to workers across the income spectrum. A healthy regional economy requires a diversity of job types with opportunity for workers at different skill levels and a mix of industry sectors.

#### Regional Case Studies

#### 1776 Incubator (Washington, DC and, Arlington County, VA)

Housed in a nondescript Washington office building, the 1776 Incubator is changing the face of industries that impact millions of people around the globe through its support of start-ups involved with education, energy, health, transportation, and local government.35 These are challenging and complex industries that are heavily regulated and hard to enter for small, new businesses. 1776 was launched in 2011 as a place to foster and invest in new technologies and business models that build upon the new economy, open data, and more efficient and transparent government. The incubator's co-founders saw sequestration as an opportunity to tap into the region's deep technology, engineering and government expertise that had been locked up in government contracting work. Named for the year the United States declared



1776 Incubator Credit: 1776

information from a variety of transportation sources including taxis, ridesharing options, public transportation, and private vehicles so that users can more easily plan trips. RideScout, which was part of 1776's expanding shared

use mobility portfolio, was acquired by Daimler.

its independence from Great Britain, 1776 the Incubator hopes "entrepreneurs in the region will claim their independence by entering the startup ecosystem."36

In addition to a physical space for entrepreneurs to build and grow their new ventures, 1776 provides mentoring support and connects startups to a larger peer network of innovators and investors through such efforts as the global Challenge Cup competition. Among the companies that got their start at 1776 is RideScout, a mobile app that pulls together

> "While some people bemoan the bureaucratic nature of Washington, the founders of 1776, a startup incubator, hope to leverage the city's political machine to unleash an army of disruptive companies on the Greater Washington region and the world."

> > -Biz Tech magazine



Prince William County officials and business leaders celebrate the opening of the Prince William Science Accelerator in Innovation Park Credit: Business Wire

#### Accelerating Growth of Life Science Industries (Prince William County, VA)

Prince William County leverages its considerable science and technology assets, including the Marine Corps Warfighting Laboratory, and federal and state research institutions, to catalyze business development in the advanced life science industries. "Life sciences" refers to those disciplines that involve the scientific study of living organisms, often with emphasis on improving human health and the overall standard of living. The County is home to one of the fastest-growing biotechnology clusters in metropolitan Washington. The number of life sciences companies located in Prince William County has more than doubled since 2003. Similarly, the number of persons employed in the industry has grown significantly, increasing by approximately 30 percent since 2011. As of 2014, there were more than 340 life sciences firms in Prince William County, employing over 2,200 persons.<sup>37</sup>

At the epicenter of this burgeoning growth is Innovation Park, which is anchored by the George Mason University Science and Technology Campus. The Park houses a number of public and private biotech and information technology companies including the Prince William Science Accelerator.

Launched in 2012 to provide a unique space for faster growth and commercialization of life sciences, the Science Accelerator offers the only public-private, commercially available wet lab space in Virginia providing start-ups an innovative, intellectual environment. The Accelerator supports small businesses in scaling up to market and connects entrepreneurs with industry networks, partnering, and internships. Life science start-ups benefit from the County's already well-established and growing Life Sciences ecosystem, where opportunity exists to work with some of the foremost leading scientists, laboratory talent, and business resources. Close proximity to GMU, two world-class hospitals, and medical centers provides opportunities for research collaboration and access to medical resources, while the short distance from I-66 and I-95 provides quick access to key federal agencies.

#### Strategic Plan to Facilitate the Economic Success of Fairfax County (Fairfax County, VA)

In response to recent trends, including higher office vacancy rates, fewer federal jobs, and a need for flexibility to capitalize on developing business trends, the Fairfax County Board of Supervisors created an Economic Advisory Commission (EAC) and tasked it with the following:

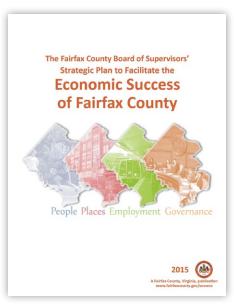
- Identifying hindrances and barriers to Fairfax's recovery,
- · Identifying opportunities to improve, and
- · Developing a vision of where Fairfax wants to go.

The EAC developed the Strategic Plan to Facilitate the Economic Success of Fairfax County, adopted by the Board of Supervisors in March 2015. The Plan envisions what economic success looks like for Fairfax County, and identifies a list of actions to take to achieve that success. The overarching vision states, in part, that "...Prosperity can only be achieved and sustained when a community's citizens, businesses, and government work in concert for everyone's benefit... Our vision is a community where businesses, residents, and employees of a variety of ages, abilities, and experiences want to live, work, play, learn, and thrive..."

The six goals of the Plan are:

- 1. Further Diversify Our Economy
- 2. Create Places Where People Want to Be
- 3. Improve the Speed, Consistency, and Predictability of the Development Review Process
- 4. Invest in Natural and Physical Infrastructure
- 5. Achieve Economic Success through Education and Social Equity
- 6. Increase Agility of County Government

While activities are ongoing in all six goal areas, of particular note is the work being done under Goal 3 to create a regulatory process that is collaborative and nurturing for industry and business customers, both big and small, while balancing the needs and values of the community. To that end, the Board approved a "Booster Shot" that raised fees to fund 28 new staff positions and an outside review of the review process. The development community agreed to the increase in fees as a way to improve the speed and reliability of the system. While this is an on-going effort, staff positions have been created and filled, while a third-party outside review of the County development process is underway. The County has committed to addressing identified issues as soon as possible, rather than waiting until the full process review is complete.



Strategic Plan to facilitate the economic success of Fairfax County was adopted in 2015.



## **ASSESSING METROPOLITAN** WASHINGTON'S BUILT INFRASTRUCTURE

#### Regional Snapshot

Resilient infrastructure is key to sustaining an economic edge in today's global marketplace. Investment in infrastructure generates multiple economic benefits, including direct job creation. The resilience of regional infrastructure systems, including their maintenance and ability to recover from vulnerabilities or damage, is now seen as critical to support and sustain economic growth. Economically competitive regions have transportation systems that provide for the efficient movement of goods and provide a variety of mobility choices. These regions possess reliable information technology (IT) networks and energy systems that can meet the demands of a growing innovation economy.

"Transportation is the most important issue facing the region. Our ability or inability to address transportation needs will have a major impact on the region's economic competitiveness. Elected officials need to better engage with communities on the economic benefits of regional cooperation on interconnected issues like transportation."

> -Montgomery County Executive Isiah Leggett

Figure 12

#### Infrastructure Components of the **Metropolitan Washington Region**



Figure 12. Infrastructure Systems Serving Metropolitan Washington Source: COG 2015 State of the Region Infrastructure

#### Daily Travel - Mode Share by Regional Core, Inner Suburbs, and Outer Suburbs 2015-2040

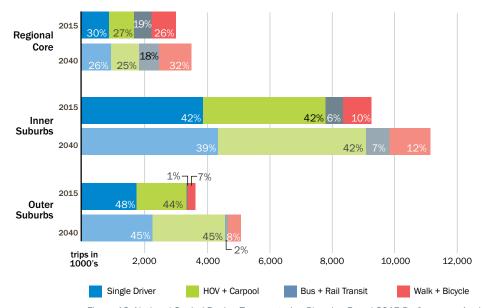


Figure 13. National Capital Region Transportation Planning Board 2015 Performance Analysis of the Comprehensive Long Range Plan Source: COG

Housing choice also has a profound effect on the ability to access jobs and influences metropolitan Washington's economic health. Across all of these infrastructure systems transportation, IT, energy, and housing-affordability is a critical issue influencing regional competitiveness.

Metropolitan Washington benefits from an extensive network of roads, airports, transit, energy, communications, and water infrastructure investments. The region is unique in having three major airports connecting people, employers, and goods to global and national marketplaces. Connectivity between airports and roads and transit is essential to keeping our region competitive. At the same time, however, our infrastructure systems are aging and not keeping pace with economic growth needs.

In the 2015 State of the Region Infrastructure Report, COG estimates a total infrastructure investment gap of at least \$58 billion over the next 15 years just to keep pace with a projected 33 percent increase in population.38 On the transportation side, this includes projects identified by local, regional, and state agencies in the region's Constrained Long Range Plan and the estimated \$1 billion needed annually to maintain and replace the Metro system's assets on a regular life cycle basis. At least \$25 billion is needed to replace aging water pipes and valves, improve stormwater management, and upgrade electrical and natural gas transmission lines and continue to improve energy efficiency measures.

Metropolitan Washington continues to be a leader in clean energy technologies, achieving its best ranking yet in 2015 in the U.S. Clean Tech Leadership Index. The U.S. Clean Tech Leadership Index tracks and ranks clean tech categories including electric vehicles, renewables, and patent and investment activity for 50 states and the 50 largest metropolitan areas. The objective of the Index is "to serve as a tool for regional comparative research, a source for aggregated industry data, and a jumping-off point for deep, data-driven analysis of the U.S. clean-energy market."39 Metropolitan Washington's overall Index ranking in 2015 jumped three places from last year to its best-ever finish in the Index, a score of 55.2, just behind San Diego. The region continues to rank first in the green buildings category by nearly 20 points over San Francisco. Metropolitan Washington places in the top 15 in three other categories, and is the highest-ranking metropolitan area in the eastern U.S.40

#### The Jobs, Housing, and Transportation Nexus

Transportation influences the regional economy through lost productivity resulting from traffic congestion and increased household costs associated with owning and operating a car necessary to access many regional jobs.

Congestion is felt differently across the region, depending in large part on where there are mobility options. In the regional core, transit, walking, and bicycling comprise a higher percentage of trips than driving alone. In suburban communities, this pattern of travel is reversed.

"Activity Centers are existing urban centers, priority development areas, transit hubs, suburban town centers, and traditional towns. They are the locations that will accommodate much of the region's future growth and development in the coming decades. Their success is critical to advancing the Region Forward vision."

> —COG's Place + Opportunity: Strategies for Creating Great Communities and a Stronger Region

Through Region Forward and subsequent long-range transportation plans, COG leaders are advancing policies that support the 141 regional Activity Centers where jobs and housing are concentrated.41 As noted in Economy Forward, strong Activity Centers are a key competitive advantage that attract and retain workers and businesses. Improving access to and circulation within these Centers by automobile, transit, walking, and biking can help improve mobility and productivity for those living and working nearby.

Mobility needs are changing in response to new technologies and workplace needs. This is evident in the decreasing use of office space, declining popularity of suburban office parks, increased telecommuting, growing numbers of workers holding multiple jobs, and greater interjurisdictional connectivity. Just as regions with robust, resilient, and affordable transportation systems are attractive to employers and workers, the location and availability of jobs and housing is an important factor to regional competitiveness. Both influence the cost of living and doing business, and are considerations for attracting and retaining workers and large employers.

#### Region Forward Accessibility Targets and Indicators

COG's Region Forward established a set of targets and indicators to track regional accessibility progress, with an emphasis on strengthening and connecting regional Activity Centers as a key strategy. The following targets and indicators support regional economic competiveness by evaluating the accessibility of low income workers and their families to affordable housing and transportation. Both are critical factors influencing the ability of those most vulnerable to economic downturns to participate in regional economic opportunity.

Businesses are increasingly basing location decisions in part on housing affordability. proximity to amenities, and transportation choices. Currently, 38 percent of the region's 2 million households and two-thirds of its jobs are located within one of the 141 regional Activity Centers. 42 As a result, job accessibility is greater within and between Activity Centers. On average, the number of jobs accessible within a 45 minute transit commute  $^{\rm 43}$  is 57 percent higher in Activity Centers than the regional average.44

The region is close to meeting its target for new commercial construction but is further from its target for new households. Approximately 73 percent of commercial construction in 2014 occurred in Activity Centers. Only 35 percent of new housing between 2010 and 2015 was located in Activity Centers. 45 However, the region anticipates capturing a larger share of new households in Activity Centers in the coming years, meeting the target of 50 percent of new households in Activity Centers by 2030.46

#### **RF TARGET:**

Beginning in 2012, capture 75 percent of the square footage of new commercial construction and 50 percent of new households in Activity Centers.

#### **MEASURED PERFORMANCE:**

In 2014, 73 percent of new commercial construction occurred within Activity Centers. Between 2010 and 2015, approximately 35 percent of the region's household growth was in **Activity Centers.** 

Figure 14

#### Percent of 5-Year Household Growth in Activity Centers 2010-2040

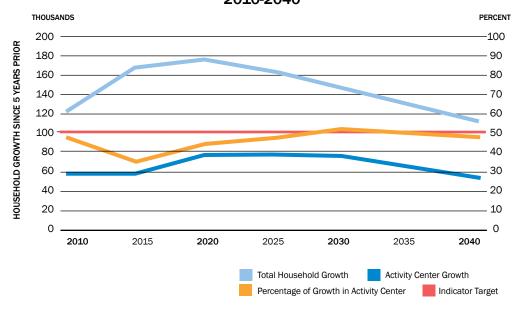
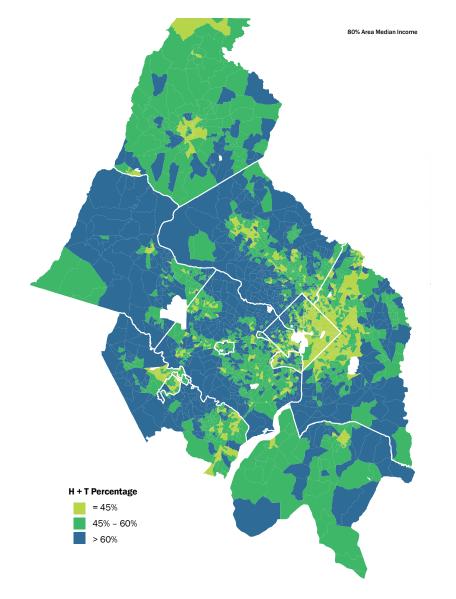


Figure 14. The region has not yet met its target of capturing 50 percent of household growth in Activity Centers, but is projected to capture a greater proportion of new households in the coming decades. Source: Round 8.4 Cooperative Forecast 2005 Household Figures are from the Round 8.0a

Regional cost of living is largely influenced by the two largest household expenditures: housing and transportation. On average, American households spend 19 percent of their annual income on transportation.<sup>47</sup> The Center for Neighborhood Technology, creator of the national Housing and Transportation Affordability Index, considers a household cost burdened if more than 45 percent of income is spent on these two needs. On average, combined housing and transportation costs (H+T) comprise 42 percent of household income in the metropolitan Washington region.

The influence of Region Forward goals and strategies are reflected in this percentage. Access to transit, bicycling, and walking options helps to reduce transportation costs, while supporting growth in Activity Centers helps to ensure that more housing, jobs, and services are accessible. The reduced transportation costs can offset higher housing costs. For households in Activity Centers earning the area median income of \$90,540, this average combined cost is only 37

Figure 15 Housing and Transportation Costs (H+T) as a Share of 80% Area Median Income



### **RF TARGET:**

By 2020, combined housing and transportation costs in Activity Centers will not exceed 45 percent of area median income (AMI).

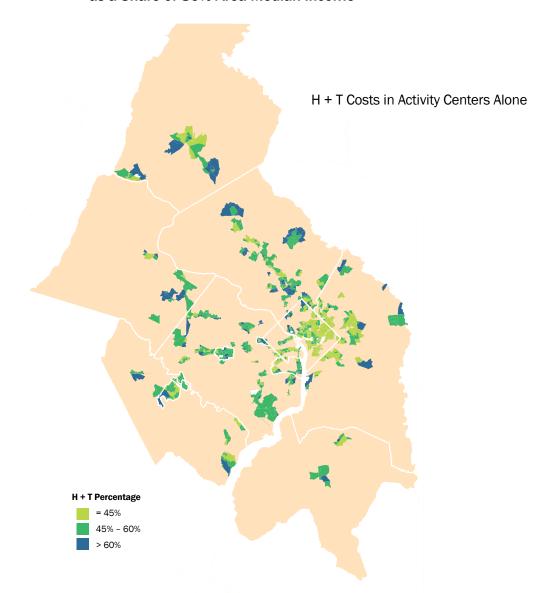
#### **MEASURED PERFORMANCE:**

In 2013, the average combined H+T costs in Activity Centers were 36.9 percent of AMI, compared to 42.1 percent for the region as a whole. For households earning 80 percent of AMI, average H+T costs were 45.6 percent of income in **Activity Centers, and 52** percent for the region as a whole.

Figures 15 and 16. Combined housing and transportation costs vary significantly across the region, reflecting access to transportation options and mixed use development. Source: Center for Neighborhood Technology

Figure 16

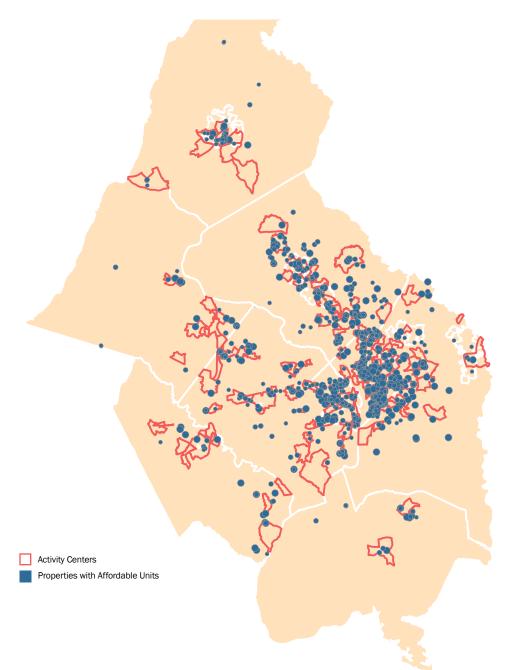
# Housing and Transportation Costs (H+T) as a Share of 80% Area Median Income



percent, compared to 42 percent for the region overall. In fact, 86.5 of these households have a combined H+T cost of less than 45 percent of income, whereas for the region as a whole, that percentage is 63.48 For households in Activity Centers earning only 80 percent of AMI, this cost burden is more pronounced, with an average combined housing and transportation costs of 45.6 percent of income. However, even at lower income levels, households living in Activity Centers have lower combined H+T costs compared to the regional average of 52 percent of income for households at 80 percent of AMI. And approximately half (52.5 percent) of low income households living in Activity Centers have H+T costs less than 45 percent of income, compared to only 32 percent of low income households for the region overall.

Currently, the region has approximately 114,000 income-restricted affordable rental units, of which 87 percent receive federal subsidy. Almost half of all these units (48.6 percent) are located in Activity Centers, and more than 65 percent are located within a half-mile of an Activity Center.<sup>49</sup> Theoretically, this means that low-income workers in these units have greater access to economic opportunity compared to those located outside Activity Centers.

Figure 17 **Income Restricted Affordable Housing in Activity Centers** Properties with Federally subsidized or locally-created affordable housing



### **ADDITIONAL INDICATOR**

The percentage of the region's restricted affordable rental housing units located in **Activity Centers.** 

#### **MEASURED PERFORMANCE:**

Currently, 48.6 percent of restricted affordable rental units are located within Activity Centers, and 65.7 percent are within a half-mile.

Figure 17. Location of income restricted affordable housing throughout the region. Source: National Preservation Database, local housing departments



The Greensboro Green Pop-up Park on the Meridian property near the Silver Line is a great example of business leaders working with property owners and the County to create a new image for Tysons as a dynamic place to live, work and play. Credit: Fairfax County

"By 2050, Tysons will add 45 million square feet of new construction, and will be home to 100,000 residents and 200,000 jobs. Tysons will become the downtown of Fairfax County, a vital, 24hour community rich with amenities, attractions, and a network of parks, paths, and places to gather. Three-quarters of this future growth will be within a half mile of a Metro Silver Line station. Many offices and homes will be a 3-6 minute walk from a station. Circulating bus and van routes will connect neighborhoods further from a station. Sidewalks and bike paths will span from one end of Tysons to the other. People will be able to move throughout this New Downtown without a car."

-Tysons Partnership

## Regional Case Studies

### Tysons Transformation (Fairfax County, VA)

Tysons has long been synonymous in the region with economic growth. Home to two major shopping malls, Tysons Corner Center and Tysons Galleria, and the corporate headquarters for some of the region's largest employers, Tysons is Fairfax County's central business district and a regional commercial center. The introduction of Metrorail service in 2015 is transforming Tysons as it provides improved access to the District and regional Activity Centers also

connected by the Metro system. With the upcoming extension to Dulles Airport, Tysons will offer even greater access to national, international, and regional markets.

The Silver Line served as a catalyst for redevelopment of Tysons from an auto-dominated office and commercial hub into a more walkable community with a mix of new housing, parks, and other urban amenities. "Transforming Tysons, Tysons Corner Urban Center Comprehensive Plan" was adopted by the Fairfax County Board of Supervisors in 2010 to fundamentally remake this quintessential "Edge City".50

The Tysons Corner Center redevelopment, originally approved in January 2007 and recently amended in October 2015, represents a microcosm of development Tysons-wide. A major factor in redeveloping Tysons is how to retrofit a financially successful but overwhelming single-use suburban development pattern into a higher density, mixed-use city. Tysons Corner Center is the largest regional mall in Virginia. The proposed redevelopment will transform much of the existing surface parking around the traditional, enclosed retail mall into a mixeduse development, capitalizing on the proximity to the Tysons Corner Metrorail station. The redevelopment will add over 4 million square feet of office, residential, and hotel and retail uses, to be constructed in four phases.

The Tysons Partnership was formed by a number of businesses located in Tysons as a forum to work together with Fairfax County in transforming and rebranding Tysons. 51 The Partnership has been active in programming events such as a farmer's market in an existing surface parking lot and various art, music, and food festivals on a larger vacant parcel near the Metro.

### Wheaton Redevelopment Project (Montgomery County, MD)

Montgomery County is shepherding the redevelopment of a major site in downtown Wheaton conveniently located in the center of three major thoroughfares, and less than two miles north of the Capital Beltway. The Wheaton Redevelopment Project will provide a government office building, below-ground parking garage, and a town square as part of the revitalization strategy for the central business district.<sup>52</sup> Next door, the developers will build a 200-unit apartment building with retail.

The planned mixed-use development was designed with substantial community input and is designed to improve mobility, increase ridership at Wheaton Metro Station, diminish negative environmental impacts including reducing traffic congestion, and increase the range of employment and services in one of the most economically and racially and ethnically diverse communities in the region. The County will maintain ownership of the site and plans to relocate several county services providing nearby residents and workers with convenient access to a range of services, and greater choices in retail, jobs, and housing.53



Artist rendering of Wheaton Redevelopment Credit: Montgomery County



# **ASSESSING METROPOLITAN** WASHINGTON'S HUMAN INFRASTRUCTURE

# Regional Snapshot

Our region benefits from having some of the most highly skilled, well-educated workers in the nation. Regional workforce participation is 73.3 percent, well above the national rate of 64.3 percent.<sup>54</sup> The region is among the top markets for Millennials, with the District of Columbia claiming a higher share than any other major U.S. city and Arlington the highest among U.S. counties.55

The region is also home to some of the top colleges and universities in the country as well, many with global brand recognition. These institutions play a key role in educating the workforce of the future, and are themselves important employers and innovation leaders influencing local economic development, and the larger regional economy.

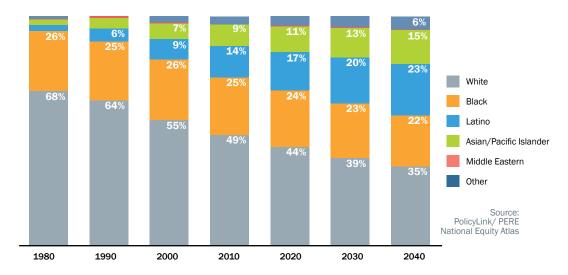
Among the region's research universities, The University of Maryland, College Park generated the most scientific research and publications, accounting for 21 percent of total academic publications produced between 2010 and 2013.56 George Washington, Georgetown, and George Mason Universities are also major contributors of scientific research. These are important intellectual assets for the region to extend its impact globally.

"A higher share of Greater Washington's adults possess a college degree not only relative to peer regions, but also compared to all major US metro areas. Moreover, the region has more highly educated immigrant adults than its peer regions."

-Global Cities Initiative

At the same time, prosperity and advancement opportunities are not realized equally by all residents. Some do not have the education or English language skills to advance beyond

Figure 18 Metropolitan Washington's Racial/Ethnic Composition, 1980-2040



Credit: Lloyd Greenberg

low-wage employment or face limited opportunities to upgrade their skills particularly in such a highly educated region. Residents growing up in neighborhoods of concentrated poverty face additional hurdles affecting their ability to work regularly or succeed in school. Metropolitan Washington also benefits from a racially diverse and growing population.

Advanced industries are an important and growing source of jobs in metropolitan Washington. These industries are heavily reliant upon research and development (R&D) and STEM (science, technology, engineering, and math) worker training. The region's advanced industry jobs in research and technology generated \$113,000 in compensation per worker on average compared to \$64,000 for workers in other industries.<sup>57</sup> Investments in education and training to support continued growth in these sectors returns economic dividends.

Despite a generally well-educated workforce, employers in metropolitan Washington face challenges in filling job vacancies. The region has several workforce development boards funded to provide job training and career development, yet coordination among them remains a challenge. Building a reliable pipeline of workers to meet the needs of current and future employers will require improved collaboration between different partners involved in job training, workforce education, and career counseling. This includes support for on-going education and career path opportunities for working adults and enhancing apprenticeships, job training, and high school curriculums to prepare students of all races and income levels to succeed in the regional job market. Regional workforce boards are coming together and the region was selected to participate in the national Communities that Work Partnership supported by the U.S. Economic Development Administration to build more effective, employerled workforce initiatives across the country.58

## **Region Forward Prosperity Targets**

Analyzing educational attainment by race and jurisdiction uncovers disparities across metropolitan Washington's population. While the region works to build a pipeline of workers with advanced degrees it must also provide an environment in which low-skill workers can achieve self-sufficiency.

#### **RF TARGET:**

By 2020, the percentage of the population over age 25 with a Bachelor's degree is 45 percent or higher, and the percentage with a professional or advanced degree is 20 percent or higher.

### **MEASURED PERFORMANCE:**

In 2014, 49 percent of the population over 25 had a Bachelor's degree or higher, and 24 percent had a professional or advanced degree.

At least 45 percent of all jobs today in metropolitan Washington require more than a high school diploma.<sup>59</sup> That number is projected to increase as future jobs require ever-higher levels of skills and education, particularly those in the advanced industries. By 2020, 51 percent of all jobs in metropolitan Washington will require a Bachelor's degree or higher, compared to 43 percent nationally.60

Metropolitan Washington is on track to meet that need. Today, 49.3 percent of the population over 25 years of age has a Bachelor's degree or higher, and 24 percent has an advanced degree. Several jurisdictions are well above the regional average. For instance, in Arlington County, 74.3 percent of the population has at least a Bachelor's degree. Disparities exist, however, when analyzed by race. Of the 491,000 immigrants living in the region in 2014, 42 percent held at least a bachelor's degree, but among Latino immigrants only 20 percent had at least a BA. 61 Increased education is a pathway to better paying jobs; however, a 2015 equity profile discovered that a significant wage gap exists between racial groups at all levels of educational attainment, as shown in the following graphic, which was prepared for Fairfax County as part of their 2015 Economic Development Strategy. 62

### Figure 19 Median Hourly Wage by Educational Attainment and Race/Ethnicity, 2012

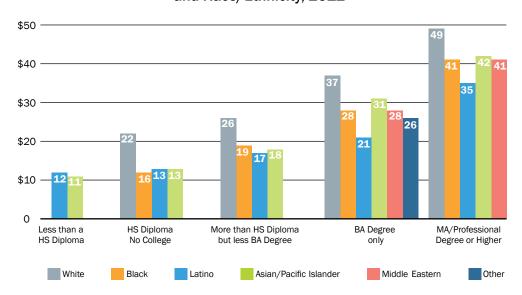


Figure 19. People of color earn lower wages than Whites at every educational level. Wages rise with education, but gaps by race remain. People of color with a BA degree have houly medium wages that are \$9 less than their white counterparts. Latinos face the largest gap of \$16 at that educational level.

Source: PolicyLink/PERE National Equity Atlas, Universe includes civilian noninstitutional full-time wage and salary workers ages 25 through 64.

In 2014, 87 percent of the 764,803 students enrolled in area high schools graduated on-time. This percentage is up from past years. Significant regional differences are evident in the quality and performance of public education (K-12). In some jurisdictions, less than 60 percent of high school students graduated on time, whereas in others the rate exceeded 90 percent. 63 Public schools continue to face fiscal pressure long after the end of the Great Recession, straining one of the region's competitive advantages. Across Virginia, for instance, schools are facing a shortage of 11,000 staff needed to meet the needs of growing student enrollment.<sup>64</sup>

An Equitable Growth Profile prepared earlier this year for Fairfax County found that while only 1 percent of the County's white, U.S.-born population between the ages of 16 and 24 did not have a high school degree or were in pursuit of one, among Latino immigrants in this age group the rate was 26 percent. Among U.S.-born Latinos and African Americans, the rate was 6 percent for each group.65

In 2010, COG established a Regional Workforce Development Task Force and issued the Closing the Gaps to Build the Future report specifically to better integrate local education, career development, and training goals and needs. At that time, only 59 percent of Latinos living in the region had a high school degree, as did 43 percent of African-Americans. In response, this Task Force developed a multifaceted approach to engaging the region's youth and providing the access to quality and affordable education that has been promoted by COG and its community, educational, and business partners.66

### RF TARGET:

By 2020, increase the rate of students graduating from area high schools to 90 percent.

#### **MEASURED PERFORMANCE:**

In 2014, 87 percent of students enrolled in area high schools graduated.

# Regional Case Studies

### Middle-skill jobs as a foundation for greater regional competitiveness (Prince George's County, MD)

Prince George's County has found a way to use new federal stormwater management rules to spur new industry and jobs. The EPA mandates that 15,000 acres of the County's impermeable surfaces be retrofitted by 2025 with treebox raingardens, bioswales, permeable asphalt and pavers, and other green infrastructure. Recognizing that the magnitude of the challenge would require creative approaches, the County formed a 30-year public-private partnership with project management company Corvias Solutions to oversee the design, construction, and long-term maintenance of stormwater management systems. "As government, we can start a

"Stormwater management can create a living piece of infrastructure. It takes a lot of maintenance, but it's a tremendous economic opportunity."

> -Adam Ortiz, Director of Prince George's **County Department of the Environment**

conversation, but we can't always finish a conversation," says Adam Ortiz, Director of Prince George's County Department of the Environment. "This is where we need the private sector. By and large, the private sector builds stuff better than the government does."67

In the first three years, the County will invest \$100 million in the project. In addition to the traditional time and budget requirements, Corivas must also meet socioeconomic targets. They will use local small and minority-owned businesses and local residents for at least 40 percent of the hiring, contracting, and procurement needs.

The County is already training classes of workers and contractors through partnerships with community colleges and nonprofits.

Prince George's County's partnership with Corvias Solutions is part of a broader effort to grow stormwater based middle skill jobs in the region. The COG is working with Prince George's County Department of the Environment, the Anacostia Waterfront Trust, the Greater Washington Board of Trade, and the Aspen Institute to facilitate creation of a robust system for training and credentialing stormwater workers to help meet the workforce needs of the industry. The effort will bring together the initiative partners, local stormwater program managers, DC Water and other utilities that must procure stormwater services, and workforce services and training providers to identify the growing demands for stormwater workers, identify procurement mechanisms that can facilitate timely procurement of cost-effective projects, and

coordinate with local stormwater programs and the regional networks of workforce training providers to develop effective training and credentialing of stormwater workers to result in a common system that will meet the needs of the local government, utility, and private businesses.



Credit: Prince George's County Department of the Environment

### Capitol Post (Alexandria, VA)

In 2013, a group of veterans, government agencies, nonprofits, and businesses in the City of Alexandria came together to discuss the lack of coordination and community-based support for veterans transitioning from the military to the business world. From these discussions, Capitol Post was born to build a community where veterans would be successful after their military service.68

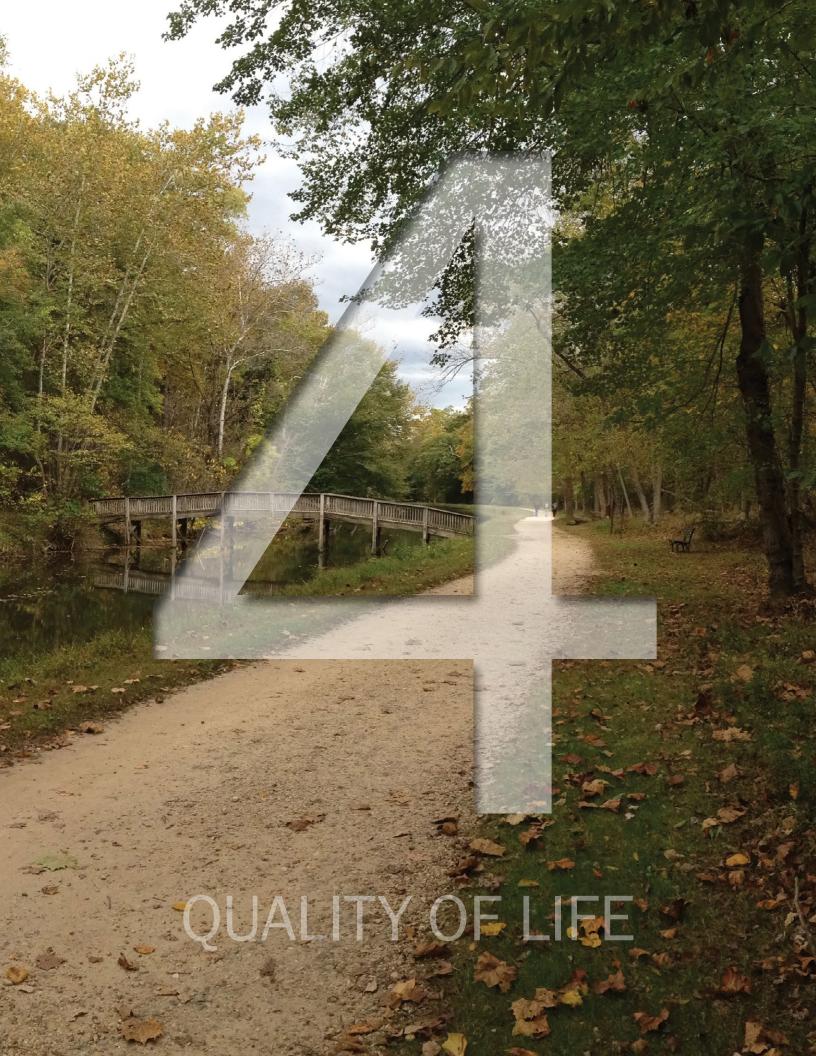
Capitol Post offers veterans in the region personalized guidance through mentoring, business counseling, and access to key resources, programs, and leaders. Its mission is to establish and cultivate a supportive community in which to start a business, grow a business, or explore a new career. Consultants and staff meet one-on-one with veterans to develop a personalized plan and connect them to the right resources to ensure their professional success. Capitol Post's focus areas include providing personalized professional guidance, connecting veterans to top business resources, leaders, and mentors, and facilitating business connections and networking opportunities.

To facilitate these activities, Capitol Post opened a physical space in early 2015 with seed funding from the Alexandria Economic Development Partnership. Part accelerator, part co-work space, part training space, this facility provides events, workshops, and classes and a location for veteran businesses to work together and learn from each other. Capitol Post continues to add programs and services to meet the needs of veterans in today's business world.

In 2015, Capitol Post also kicked off the first cohort of veteran business owners who are participating in an intensive six-month program at Bunker Labs DC, an accelerator program that is part of a larger network of veteran entrepreneur programs across the country. Capitol Post is the home for this program in metropolitan Washington and is instrumental to helping the region's veterans.



Bunker Labs DC helps support veterans and their spouses grow sustainable and scalable businesses. Credit: Bunker Labs



# **ASSESSING METROPOLITAN WASHINGTON'S QUALITY OF LIFE**

## **Regional Snapshot**

The region's high quality of life is one of its best economic assets, helping to attract and retain workers, and fueling growth in the tourism and hospitality industries. Among the many regional attractions are dozens of museums, embassies, and entertainment venues, combined with natural amenities including major rivers and almost 190,000 acres of parklands. The racial and ethnic diversity of the region itself is another factor that attracts people to metropolitan Washington and contributes to a culturally rich economy.

The extensive regional transportation network, including 97 miles of bicycling and walking paths, earned the District of Columbia the rating of "America's Fittest City" three years in a row.69

Figure 20



**MUSEUMS** TO VISIT

19 **SMITHSONIAN** MUSEUMS & **GALLERIES** 

**137M** 

WORKS OF ARTS AT THE **SMITHSONIAN** 



### **NATIONAL ZOO**

2,000 ANIMALS

**400 SPECIES** 

**100** ENDANGERED



# 2 OF THE **TOP 3**

MOST VISITED **MUSEUMS** IN THE WORLD





Figure 20. Presentation to the COG Board (September 9, 2015). "WASHINGTON 2024: An Urban Games for a Changing City"



### Parks in Metropolitan Washington

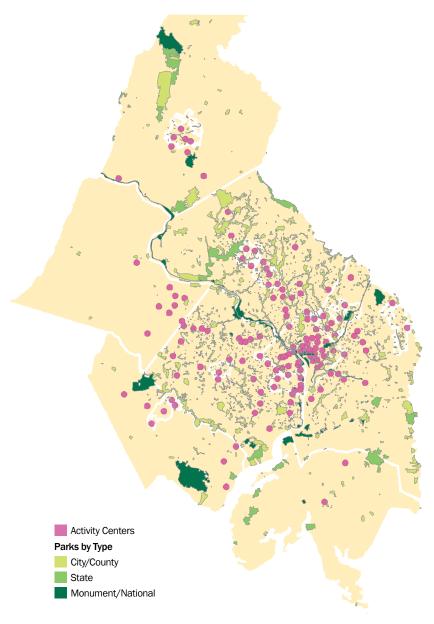


Figure 21. Region Forward includes a Sustainability Target to "identify, conserve and enhance a network of protected open spaces, parks and green infrastructure to provide ecological benefits, wildlife habitats, recreational opportunities, and scenic beauty."

Food, wine, and craft brew industries are making the region not just a political capital but a foodie capital as well. Over the last decade metropolitan Washington has quietly and quickly become one of the nation's top dining regions, adding not only to the quality of life but also the regional economy. This trend has attracted venture capitalists willing to back several of the region's top chefs and restaurant chains. Rockville-based restaurant chain Cava Grill raised \$44.5 million in 2015, and District of Columbia-based organic salad chain Sweetgreen raised \$35 million. In the first ten months of 2015, venture capitalists have invested over \$850 million in the Washington-Baltimore region of which \$85 million have been for consumer products and services including restaurants.<sup>70</sup>

The region's rich agricultural land and scenic vistas combined with local entrepreneurship have helped the region's wine and craft brewery industries become major economic engines in Loudoun County, among others. A 2010 study found the number of wine-related tourists visiting Virginia increased from 1 million in 2005 to 1.62 million in 2010. Spending related to winery tourism also increased from \$57 million in 2005 to \$131 million in 2010.71

Local philanthropic partners play an important role in supporting investments in education, the arts, public health, and other ingredients critical to quality of life, especially for those most economically disadvantaged. Total philanthropic giving in 2013 among members of the Washington Regional Area Grantmakers totaled almost \$228 million, but is far less than in other peer regions, such as Philadelphia and Houston where it exceeded \$1 billion.72

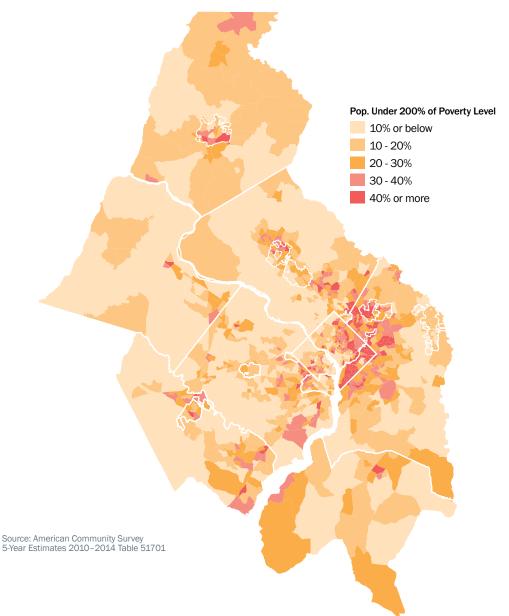
## **Livability Indicators**

The regional economy is supported by a strong quality of life found in the many vibrant urban, suburban, and small town neighborhoods. Yet as the following indicators demonstrate, housing affordability pressures and concentrated poverty have the potential to undercut these advantages.

Social inequity hinders the region's economic competitiveness and limits the potential of the region's residents. It also creates additional fiscal strains on local and regional agencies to provide housing, employment, education, and health care support services. In 2013, 8 percent of the region's population and more than 10 percent of children under the age of 18 were living at or below the federal poverty line. The poverty rate for African Americans and Latinos is approximately 30 percent.73

Figure 22

### **Concentrated Poverty: Population Under 200%** of Poverty Level by Census Tract 2010–2014



#### **RF INDICATOR:**

The percentage of residents living at or below the federal poverty line.

### **MEASURED PERFORMANCE:**

Regionwide, 8 percent of the region's population and over 10 percent of children live at or below the federal poverty line. Approximately 30 percent of African **American and Latino** residents live in poverty. The high cost of living in metropolitan Washington means that even households earning well above the federal poverty threshold struggle, and the concentration of poverty within neighborhoods exacerbates these challenges. In 2013, 10.3 percent of the population lived in census tracts with 40 percent or more of the population at or below 200 percent of the poverty level. This equates to an annual income of \$47,100 for a four-person household or \$22,980 for a single-person household.<sup>74</sup> Looking at concentrated poverty by race, less than 4 percent of the white population lived in these impacted census tracts versus 21 percent and 20 percent of African Americans and Latinos, respectively.<sup>75</sup>

#### **ADDITIONAL INDICATOR:**

The percentage of the region's total housing stock affordable to households earning less than 80 percent of area median income (AMI), less than 50 percent of AMI, and less than 30 percent of AMI.

#### **MEASURED PERFORMANCE:**

As of 2011, 43.5 percent of total housing stock was affordable at or below 80 percent of AMI, 19 percent was affordable at or below 50 percent of AMI, and 8 percent was affordable at or below 30 percent of AMI.

Housing prices have been rising in the region since the Great Recession. Approximately 43.5 percent of all rental and homeownership units were affordable to households at or below 80 percent of AMI. To put this in context, a four person, low income household earning \$67,600 a year could afford to pay a monthly rent between \$1,330 - \$1,690. However, many of these potentially affordable units are occupied by higher income households and therefore not available to low income households. A recent study prepared by the Urban Institute and COG that examined housing security across metropolitan Washington found that "more than half of the Washington region's 714,500 rental units were potentially affordable to very low or extremely low income households. However, a substantial share of affordable units were not available to very low or extremely low income renters because they were occupied by households with higher incomes." The shortage of available affordable housing is particularly



acute for extremely low income households, those earning less than 30 percent of AMI. The report found that an additional 94,200 units are needed to affordably house all extremely low income households in metropolitan Washington.

Credit: Shashi Bellamkonda

Housing prices and land values are rising across the region, stretching household budgets for workers of all income levels. In 2013, the District of Columbia was reported to have the secondhighest costs for a four-person family among all cities. 76 Regionally, 48.6 percent of renter households and 44.7 percent of owner households are considered housing cost burdened, paying more than 30 percent of annual income on housing. Among renters, 72 percent of extremely low income and 25 percent of very low income households are severely cost burdened, meaning they pay more than 50 percent of their income for housing expenses.<sup>77</sup>

Rising housing costs and rents are impacting many jurisdictions. Between 2011 and 2013, more than 50 percent of renters in the District of Columbia, and Prince George's, Prince William, and Montgomery Counties were cost burdened, and roughly 20 percent were severely cost burdened.78

#### Figure 23 Percent of Region's Renter Households That are Cost Burdened by Income Level, 2009-2011 PERCENT 100 90 80 70 60 50 529 40 30 20 10 3% 1% 0% 0 **Extremely Low** Very Low Low Middle High Cost Burden Severely Cost Burden

Source: Housing Security in the Washington Region, Urban Institute & Metropolitan Washington Council of Governments

The same trend is true for homeowners, with 44.7 percent reporting paying more than 30 percent of annual income on housing. Higher income buyers are crowding out lower income households looking for housing that may be more affordable to them. "Of the 43,500 units in the region affordable to an extremely low income, first-time homebuyer, 32,100 units, or 74 percent, were occupied by an owner with a higher household income than was needed to afford the units. Higher income households occupied approximately 69 percent of units affordable to the very low income and 66 percent of those affordable to the low income." As a consequence, there are very few homeownership options for lower income households, prompting many to seek housing further from their jobs. This in turn impacts household budgets as more money must be spent on transportation.<sup>79</sup>

### **ADDITIONAL INDICATOR:**

The percentage of households who are housing cost burdened. defined as paying more than 30 percent of annual income for housing.

#### **MEASURED PERFORMANCE:**

Over 48 percent of renter households and 44 percent of owner households pay more than 30 percent of annual income on housing.

# Regional Case Studies

### Fueling Innovation (College Park, MD)

In 2005, the City of College Park implemented an economic development strategy that successfully transformed it from being an auto-dominated community to one with thriving walkable retail nodes. Now ranked among the Top 50 Small College Towns in the United States, College Park has attracted a series of economic development projects that are collectively forecasted to generate over 500 new hotel rooms, approximately 93,000 square feet of new retail space, and over 1,000 new multifamily housing units.

With over 37,000 students and 4,400 faculty, the University of Maryland at College Park is

"We've got over 100 student-led companies in our start-up 'shell'... we see the Innovation District—where those ideas which start on campus with great students and faculty members-really have an opportunity to grow."

> -Ken Ulman, **President of Margrave Strategies**

a major economic engine both for Prince George's County and the region.80 The University contributes more than \$3.4 billion into the economy, supporting 23,000 jobs and generating an 8:1 economic return.81 University and community leaders are working to take this impact to the next level with a focus on cultivating innovation while also redeveloping land along the City's Baltimore Avenue commercial corridor and the proposed Purple Line light rail station into a mixture of apartments, university housing, retail, offices, and laboratory buildings. This initiative has already helped to attract a new wave of technology companies to College Park-including such groundbreaking startups as Immuta and FlexEl.

Small businesses continue to play a major role in College Park's economy. The City of College Park has created several grant programs to assist local businesses with sustaining their economic growth. This year the City awarded approximately \$50,000 in business expansion grant funds to local small businesses. These funds were matched by approximately \$170,000 in private capital investment.82



Credit: College Park



Manassas Train Station. Credit: Laura Henderson

### Leveraging History and Transportation Access for Economic Gain (Manassas, VA)

The City of Manassas has an important place in American history and a strategic location in metropolitan Washington with access to a range of regional transportation connections. City officials have leveraged both in their economic development strategies. The City of Manassas has developed partnerships with the Virginia Railway Express (VRE) that includes a municipal parking deck constructed adjacent to the Downtown Manassas station. This structured parking feature allows the City to increase density in its Downtown by eliminating surface parking. Having a VRE station in Downtown enables Manassas to take advantage of transit-oriented development trends while serving the needs of residents who live in the Greater Manassas area and wish to use mass transit as their preferred commuter alternative, further reducing congestion in the region. The proximity of the station to Downtown employers allows those businesses who have only an occasional need to meet with customers and clients inside the beltway to locate outside the beltway and to take advantage of proximity to a skilled workforce, lower business costs and avoid costly commutes.

Historic Manassas Inc. (HMI) is primarily funded by the City but operates as an independent 501(c)3 organization under the umbrella of the National Main Street model. The group has paid staff and a volunteer Board of Directors that focuses on special events, tourism promotion, and business development. Last year the City of Manassas attracted more than 250,000 visitors to events in Historic Downtown and will grow participation each year. The special events, festivals and parades contribute to creating a vibrant central business district attractive to businesses, residents and visitors. With the aid of HMI, Manassas has revitalized its Downtown with strategic public and private investments that have created a business environment wherein nearly all of the storefronts are occupied and new businesses and residents consider Downtown a preferred location. This contributes greatly to the City's property tax base as well as generating revenues from retail and restaurant sales.



# **OPPORTUNITIES TO STRENGTHEN** REGIONAL ECONOMIC COMPETITIVENESS

Metropolitan Washington is at an economic crossroads. The region benefits from a number of assets including a highly educated workforce, a strong presence in several advanced industries that offer good wages and business growth, and a high standard of living and quality of life. However, declining local revenues, slowed job growth, growing economic inequality, and a rising cost of living threaten these assets. The shifting role of the federal government, once a major driver of economic growth, is creating both challenges and opportunities for local jurisdictions. Our region's economic competitiveness hangs in the balance.

While there is no single organization that has the capacity to lead all facets of economic competitiveness—our tri-state region has the nation's sixth largest metropolitan economy-COG is well-positioned to play a leadership role through partnering with business and civic leaders. A critical role that COG plays is to provide a forum for elected officials, business leaders and nonprofit partners to advance critical regional issues collectively and advocate a shared set strategies to improve regional competitiveness.

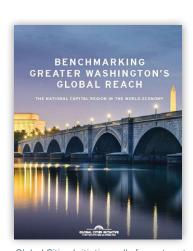
"Because the race to achieve prosperity is now global, we're in competition with Sydney, London and Berlin. We should focus on the region's principal economic assets such as scientific and technical services, higher education and health services as sources of growth."

-Dr. Terry Clower, Center for Regional Analysis, **George Mason University** 

As our major competitors across the country and globe are stepping forward to improve their own economic prosperity we do not have a moment to lose. Throughout the past year, COG leaders and staff initiated several important initiatives to improve the region's economic competitiveness. More can be done in the coming year to expand this work and its impact. Additional strategies can be advanced in the coming year to help us compete in an increasingly global marketplace.

# Expanding What We've Started—2016 Initiatives

- 1. Launch a coordinated regional export promotions strategy. In November 2015, the Global Cities Initiative, led by the Brookings Institution and JPMorgan Chase, released a report "Benchmarking Greater Washington's Global Reach," which argued for a strong regional export strategy to elevate our place in the global marketplace.83 In 2016, metropolitan Washington hopes to join 28 other metropolitan areas participating in the Global Cities Exchange to develop and implement regional strategies to boost global trade and investment. COG is helping to lead this effort to forge partnerships between its member jurisdictions, business leaders, and other domestic and international metropolitan areas. The focus of this work will be on developing a regional export promotions plan.
- 2. Convene top economic development directors from the District, Maryland, and Virginia. In each jurisdiction and state, efforts are underway to assess and fine-tune economic development strategies to better meet the current



Global Cities Initiative calls for a strong regional export strategy.

Credit: Thisisbossi

economic challenges and opportunities. Fairfax County, for instance, introduced a bold new Economic Strategic Plan<sup>84</sup> in 2015 that focuses on strategies to diversify its economy while prioritizing investments in placemaking and improving government performance.85 In 2016, COG will convene top economic development directors from across the region to coordinate and share best practices, including undertaking a collaborative international trade mission.

- 3. Support workforce development through infrastructure investment. As part of its work with the Commerce Department's national Communities that Work Partnership, COG is leading a regional team of public and private sector leaders to advance workforce development and job opportunities, especially among low-income and low-skill workers in the regions rapidly growing stormwater infrastructure sector, which is expected to receive \$10 billion in investment in the next decade. The goal is to create a robust system for training and credentialing to meet the need for stormwater management, an industry that is expected to create jobs that cannot be exported, stimulate regional economies, and provide environmental benefits.86
- 4. Facilitate federal partnership for regional economic gain. Within the federal government the Government Services Administration (GSA) is the critical regional player with significant land holdings and leased space across the region. COG initiated conversations with new GSA leadership to explore opportunities for the agency to leverage its presence in the region to spur economic development.87 In 2016, COG will also support expanded information exchange and technology transfer between federal labs and the region's governments, businesses, and universities. Through a partnership with the Federal Laboratory Consortium for Technology Transfer (FLC), the network that develops strategies and opportunities for linking federal laboratory technologies and expertise with the marketplace, COG will identify regional economic development proposals that could be supported by federal lab assistance.
- 5. Learn from regional performance and assess peer regions. The 2016 State of the Region: Economic Competitiveness Report offers a compendium of important indicators for assessing regional competitiveness. This report builds upon COG's 2010 Region Forward Indicators. COG is partnering with other organizations and academic institutions including the Greater Washington Board of Trade, the Brookings Institution and Center for Regional Analysis at George Mason University to assess our performance across additional measures. COG has participated in the "Roadmap" conceived by the 2030 Group and others. The Urban Land Institute is working to identify a set of peer regions by which our performance can also be analyzed to see where metropolitan Washington leads and where we lag. Other metropolitan areas such as Phoenix, Chicago, and Kansas City have created online dashboards to monitor performance and provide information to help local and regional decision makers in prioritizing investments that support regional economic competitiveness. Still other regions including Seattle and Minneapolis-St. Paul have undertaken deep analysis of their core industry clusters to inform strategic investments and coordination on workforce development and international trade missions. COG will also conduct analyses of real-time labor market data to better understand in-demand jobs and skills in the region. These are areas where the work started by COG in 2015 can be expanded upon to provide better data and information to assist state and local economic development offices, workforce development boards, colleges and universities, and vocational partners.





## Committing to Deeper Regional Coordination

Beyond the efforts COG has already identified for early implementation, there is the need for deeper and more sustained regional coordination to address the critical economic competitiveness challenges identified in this report. We must turn around economic performance to grow jobs; to build advanced industry sectors and diversify our regional economy, rather than maintain a federal dominance; and to address economic disparities and unequal access to opportunity rather than exacerbating the divide between communities and workers of different skill or income levels.

Globally competitive regions share a number of characteristics. These include:

- · a unified, comprehensive economic strategy with clear action steps for how to improve regional competitiveness;
- · a culture of cooperation, connectivity, and innovation; and
- a clear global identity that highlights distinct areas of economic specialization<sup>88</sup>

At the root of all of this is the need for greater cross-jurisdictional and crosssector collaboration. This is difficult in a region where competition between localities and states has been a long-standing tradition. The reality is that we can no longer afford a "go it alone" economic strategy. Local poaching of jobs and employers has real costs. Most notably, it undercuts the ability to market metropolitan Washington as a unified region that would result in a much more persuasive case for investment, expansion, or relocation to the region. Metropolitan Denver witnessed this first hand, and as a result, business leaders and public economic development directors came together to create a Code of Ethics that first and foremost markets the region.89

"Working with the COG, and working as a region, and understanding where the priorities are, is an important part of us being successful if we truly want to be a partner in this."

—GSA Administrator Denise Roth

Among the most critical action items for 2016 where COG can lead are to help foster regional "innovation industries" and to support efforts that improve the region's brand. This involves overcoming the region's identity as a "company town" of the federal government and the corresponding dysfunction associated with Congress. The Global Cities Initiative provides a timely path for informing both of these efforts as regional leaders from the private and public sector will engage with their peers from around the globe to better focus on areas of strength and improvement for marketing the region's identity and economy.

COG plays an important leadership role in several of the factors that contribute directly to the region's competitive environment. COG is involved with each of the four pillars of economic competitiveness. Beyond the actions articulated above to improve the region's Economic Climate, COG is engaged in an array of efforts to improve the region's infrastructure. This includes coordinating multiple jurisdictions' long-term transportation planning goals through the Transportation Planning Board and spearheading efforts to create shared regional greenhouse gas reduction and green energy goals. COG influences regional human infrastructure through continued efforts to improve workforce development coordination and alignment with industry needs. COG also is working with philanthropy, public agencies, and area nonprofits to highlight the region's growing housing affordability crisis and advance solutions that improve regional quality of life. COG is coordinating with area health officials to address public health concerns.

"Greater cooperation across borders on a variety of issues will be critical to the region's future economic success."

> -Prince George's County Executive Rushern Baker III

Going forward, the Region Forward Coalition provides a forum for stakeholders from across jurisdictions and sectors to advise the COG Board on additional strategies to improve the region's economic competitiveness. These efforts, unique in their scope and the partners involved, are threads which woven together create a strong metropolitan Washington where people, businesses, and communities can thrive.

This report is not the first to identify the need for improved regional action to address growing economic threats, nor will it be the last. However, it does underscore the fact that the region's economic future is not just a function of individual economic development actions. Rather, succeeding in the global market place to attract and retain jobs, workers, and venture capital requires a comprehensive set of strategies influencing the quality of place, of people, and of economies. Innovation is at the heart of this work, not only as it relates to entrepreneurship and new markets but also in how government works with the private sector. In the coming year, COG will continue to elevate the critical need for regional business, civic, and political leaders to work collaboratively to address the growing threats to our region's economic competitiveness and to foster greater innovation.

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- Bob Sweeney and Jordan Goldstein presentation to the COG Board (September 9, 2015). "WASHINGTON 2024: An Urban Games for a Changing City.'
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- 6 Ibid.
- 7 US Bureau of Labor Statistics (not seasonally adjusted), GMU Center for Regional Analysis
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- 9 George Mason University (November 2014) Improving the Washington Region's Global Competitiveness
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- 16 Fuller, Stephen S. (July 9, 2015) Road Map for the Washington Region's Future.
- 17 NAICS 2015
- 18 COG analysis of US Patent Office 2015 data
- 19 The Small Business Innovation Research (SBIR) program is a highly competitive national program that encourages domestic small businesses to engage in Federal Research/Research and Development (R/R&D) that has the potential for commercialization, and the ability to translate scientific research into marketable products. The Small Business Technology Transfer (STTR) is another program that expands funding opportunities in the federal innovation research and development arena. A core element of the program is a required public/private sector partnership to include the joint venture opportunities for small businesses and nonprofit research institutions. https://www.sbir.gov/
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- 26 Fuller, Stephen S. Presentation to the Region Forward Coalition, January 23, 2015.
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- 28 Ibid.
- 29 QCEW, State BLS Data 2015, Note: figures do not include estimates of military personnel, self-employed, and other
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