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## The Roadmap for the Washington Region's Economic Future: A State and Local Level Economic Development Policy Gap Analysis



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by

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## Introduction

In the 2000s the Washington, DC region was perceived as an economic powerhouse; however, since 2010 the region has experienced an economic slowdown.<sup>1</sup> On several key economic indicators, such as job growth, the DC region is comparatively behind many other major United States metropolitan regions. Much of the slowdown can be attributed to the significant decrease in the amount of national government spending in the DC region. Between fiscal year 2010 and 2013, federal procurement spending in the Washington region declined by over \$13 billion.<sup>2</sup>

With reduced federal government spending, state and local government policies can be important tools for reviving DC's regional growth.<sup>3</sup> State and local government policy can advance regional assets and incentivize particular segments of the economy that are strategically situated for future economic growth. Moreover, local policies can mitigate specific regional economic development challenges.

To better understand the current Washington region economic development policy landscape, this report presents a gap analysis of incentives and programs that reach the Greater Washington Region. The “gap” analysis was performed on two levels: gaps in policies that target a set of seven predetermined high growth industrial clusters in the Washington region and gaps in policies that address the major economic development challenges highlighted in interviews with Washington region executives, who lead firms representing the identified industrial clusters.<sup>4</sup> It is important to note that this analysis only specifies policy priority areas and by no means estimates policy impacts or effectiveness in regards to stimulating economic growth.

The first level gap analysis was accomplished by assessing the online policy content of state and local government agencies as well as economic development partnership and associations.<sup>5</sup> A comprehensive policy scan was completed at the state level for Virginia, Maryland, and the District of Columbia as well as for selected DC suburban municipalities in Northern Virginia (City of Alexandria, Arlington County, Fairfax County, and Loudoun County) and Maryland (Montgomery County and Prince George's County). Policy incentives and programs were catalogued by whether they targeted one or more of the seven predetermined industrial clusters: Advocacy Services; Biological & Health Technology; Business & Leisure Travel; Business & Financial Services; Information & Communication Technology; Media & Information Services; and Science & Security Technology.<sup>6</sup> Policy targets were not mutually exclusive by industrial cluster as some policies touched on and were included in several cluster categories. If a policy potentially influenced all of the clusters, it was coded as having a non-cluster focus.

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<sup>1</sup> Marchio and Berube (2015).

<sup>2</sup> Fuller (2015).

<sup>3</sup> Leigh and Blakely (2013).

<sup>4</sup> See Hyra and Harpel (2015).

<sup>5</sup> The bulk of the state-level economic development policies were found by scanning the websites of Maryland's Department of Commerce, Virginia's Economic Development Partnership, and the District's Office of the Deputy Mayor for Planning and Economic Development. At the city and county level, most policies were discovered on each municipal economic development agency or partnership's website.

<sup>6</sup> For specific cluster definitions see Werling and Lemieux (2015).

The first level gap analysis demonstrated that in Maryland and Virginia as well as in the DC suburbs there was obvious policy focus on the Biological & Health Technology; Science & Security Technology; and Information & Communication Technology clusters. In DC the main cluster foci were Leisure & Business Travel and Information & Communication Technology. While no cluster was completely ignored, there was much less policy emphasis on Media & Information Services; Advocacy Services; and Business & Financial Services clusters. Beyond the specific clusters, we also investigated the extent to which these policies focused on business relocation versus retention. We found policies exclusively focusing on relocation were proportionately underrepresented compared to retention policies.

The second level gap analysis centered on whether the current state and local policies, programs and initiatives addressed major DC regional economic development themes and challenges identified by DC-area senior executives of firms representing the seven industrial clusters. Theses identified themes included: talent attraction and retention; social inequity across the region; transportation flexibility and adaptability; access to capital; entrepreneurial culture; a lack of a compelling regional branding; competition among local jurisdictions; and inefficiency among multiple governments. We examined how well the current state and local policy landscapes overlapped with each of these economic development themes. Where there existed a gap in policy coverage, we made state and local policy recommendations to address these regional economic development challenges. Our hope is that these gap analyses provide insights that can help prioritize state and local policy reform efforts to stimulate near-term growth of the Washington region.

## State-Level Policy Gap Analysis by Cluster

### *Maryland*

The state of Maryland mainly had a non-cluster and place-based economic development policy focus. The state's policy primarily centered on overall job creation and area-based redevelopment, exemplified with the *New Job Tax Credit*, which provides up to a \$1,000 tax credit per new job (\$1,500 in designated revitalization areas), the *Enterprise Zones* (income and property tax credits for hires and investments in particular designated areas), and the *Regional Institution Strategic Enterprise Zone Program* (income and property tax credits for anchor institutions in particular redevelopment areas). The non-cluster specific tax incentives cut across almost all of the seven designated clusters and represented 39% of the state's economic development policy focus (see Figure 1 and Table 1).

While many of Maryland's tax incentives were open to all clusters, the state's main within cluster policy focus was on Biological & Health Technology; Science & Security Technology; and Information & Communication Technology. Combined these cluster areas accounted for 43% of the state's policy focus. In regards to Biological & Health Technology, Maryland offered the *Biotechnology Investment Incentive Tax Credit*, a 50% income tax credit on investments in a Qualified Maryland Biotechnology Company. On the Science and Security front, the state had a *Cybersecurity Investment Incentive Tax Credit*, a 33% refundable tax credit for individuals or companies that invest in qualified Maryland cyber-security companies. The state also incentivized research and development (R&D) in these clusters with its *Research and*

*Development Tax Credit.* The R&D credit had two categories, a Basic R&D Tax Credit (3% credit on eligible R&D expenses) and a Growth R&D Tax Credit (10% credit on eligible R&D expense).

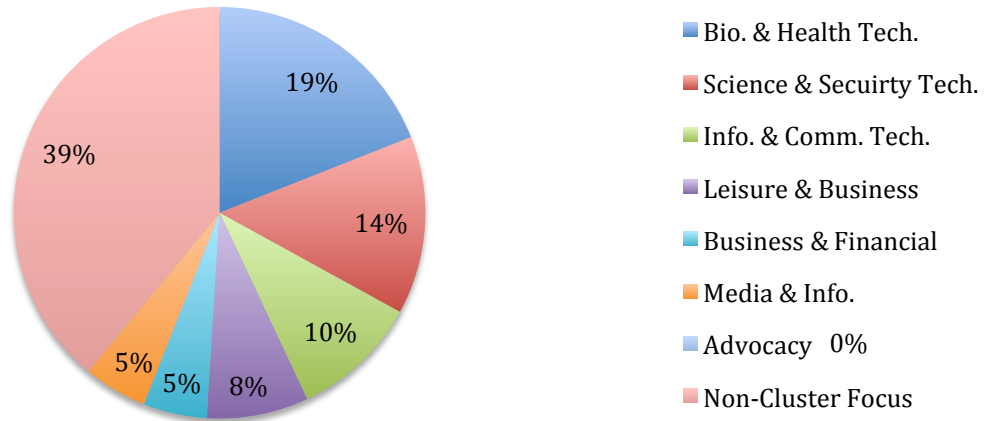
The state created the *Maryland Venture Fund* (MVF), which provides seed and early stage capital to highly innovative technology firms such as those that specialize in software development, communications, cyber-security, healthcare IT, medical devices, and diagnostics. The MVF has two subcomponent funds: the *Cybersecurity Fund* and the *Venture Capital Limited Partnerships*. The \$5 million Cybersecurity Fund directly invests in companies in this sector, while the \$84 million venture capital (VC) fund, known as the *InvestMaryland Program*, invests in VC firms that provide second-stage capital to Maryland companies. Lastly, in 2006, Maryland established the state's *Stem Cell Research Fund*, which provides grants in the range of \$500,000 to medical research experts in the state.

The state also invested in facilitating partnership with university and other non-profit entities to stimulate innovation within the Biological & Health Technology and Science & Security Technology clusters. These partnerships included the University of Maryland's *Mtech*, a business incubator, and the *Maryland Cybersecurity Roundtable*, a partnership (established in 2014) of major cyber-security stakeholders throughout the state, the *BioMaryland Center* (established in 2009), a coordinator of the state's university, government and private sector bio-health efforts, and the *Technology Development Corporation (TEDCO)*, established in 1998), which supports the commercialization of ideas that originate in university and federal lab settings.

Maryland had very few tax breaks for the Leisure & Business Travel, Media & Information Services, and Business & Financial Services clusters. However, they did have the *Wineries and Vineyards Tax Credit*, which provides an income tax credit equal to 25% of qualified capital expenses on Maryland wineries or vineyards. Additionally, the state supported the Prince George's *Community College's Center for Entrepreneurial Development*, which provides workforce development training in the Leisure & Business Travel cluster. Within the Media & Information Services cluster, Maryland offered the *Film Production Activity Tax Credit (Film Tax Credit)*, a 25% (for film) and 27% (for TV series) income tax credit on qualified direct costs of film production activity. In Business & Financial Services, Maryland encouraged capital investments with its *InvestMaryland Program*, and offered two investment tax credits, the *Biotechnology Investment Incentive Tax Credit* and the *Cybersecurity Investment Incentive Tax Credit*, to encourage capital investments in the Biological & Health Technology and the Science & Security Technology clusters.

In summary, a large portion of Maryland's business incentives and programs did not specifically target one or more of the seven industrial clusters; however, there was a policy focus on supporting high-tech innovation within the Biological & Health Technology; Science & Security Technology; and Information & Communication Technology. Maryland also supported, but to a lesser extent, the Leisure & Business Travel; Business & Financial Services; and Media & Information Services clusters. Maryland did not have a strong policy focus aimed at the growth of Advocacy Services, although this area was likely supported by some of the non-cluster focus policies such as the *Job Creation Tax Credit*.

**Figure 1. Maryland Policy Focus by Cluster**



**Table 1. Maryland Policy Focus by Cluster**

| CLUSTER                                   | MD POLICY/ INCENTIVE                                                                             |
|-------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Biological &amp; Health Tech. (12)</b> | Biotechnology Investment Incentive Tax Credit                                                    |
|                                           | The Maryland Venture Fund                                                                        |
|                                           | Maryland Economic Adjustment Fund (MEAF)                                                         |
|                                           | Maryland Stem Cell Research Fund                                                                 |
|                                           | BioMaryland Center                                                                               |
|                                           | Maryland Technology Economic Development Corporation's Technology Commercialization Fund (TEDCO) |
|                                           | TEDCO's Maryland Innovation Initiative (MII)                                                     |
|                                           | Maryland Life Sciences Advisory Board                                                            |
|                                           | Maryland Health Care Product Development Corporation (MHCPDC) – part of Tech Council of Maryland |
|                                           | BioHealth Innovation                                                                             |
|                                           | Research and Development Tax Credit                                                              |
|                                           | Maryland E-Innovation Initiative Fund (MEIF)                                                     |
| <b>Science &amp; Security Tech. (9)</b>   | Cybersecurity Investment Tax Credit                                                              |
|                                           | Employer Security Clearances Costs Tax Credit                                                    |

|                                                  |                                                                                                        |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Science &amp; Security Tech. (Cont.)</b>      | The Maryland Venture Fund                                                                              |
|                                                  | The Maryland Cybersecurity Roundtable (MCR)                                                            |
|                                                  | Maryland Economic Adjustment Fund (MEAF)                                                               |
|                                                  | Maryland Technology Economic Development Corporation's Technology Commercialization Fund (TEDCO)       |
|                                                  | Maryland Innovation Initiative (MII)                                                                   |
|                                                  | Research and Development Tax Credit                                                                    |
|                                                  | Maryland E-Innovation Initiative Fund (MEIF)                                                           |
|                                                  |                                                                                                        |
| <b>Information &amp; Communication Tech. (6)</b> | The Maryland Venture Fund                                                                              |
|                                                  | Maryland Economic Adjustment Fund (MEAF)                                                               |
|                                                  | Maryland Technology Economic Development Corporation's (TEDCO) Technology Commercialization Fund (TCF) |
|                                                  | TEDCO's Maryland Innovation Initiative (MII)                                                           |
|                                                  | Tech Council of Maryland                                                                               |
|                                                  | Research and Development Tax Credit                                                                    |
|                                                  |                                                                                                        |
| <b>Leisure &amp; Business Travel (5)</b>         | Maryland Wineries and Vineyards Tax Credit                                                             |
|                                                  | DBED, Division of Tourism, Film, and the Arts                                                          |
|                                                  | Maryland Resource-Based Industry Financing Fund Loan (MRBIFF)                                          |
|                                                  | Maryland Vineyard Planting Loan Fund (MVPLF)                                                           |
|                                                  | Maryland State Arts Council                                                                            |
|                                                  |                                                                                                        |
| <b>Business &amp; Financial Services (3)</b>     | InvestMaryland Program                                                                                 |
|                                                  | Biotechnology Investment Incentive Tax Credit                                                          |
|                                                  | Cybersecurity Investment Incentive Tax Credit                                                          |
|                                                  |                                                                                                        |
| <b>Media &amp; Information Services (3)</b>      | The Maryland Venture Fund                                                                              |
|                                                  | Maryland Economic Adjustment Fund (MEAF)                                                               |
|                                                  | Film Production Activity Tax Credit                                                                    |
|                                                  |                                                                                                        |
| <b>Advocacy Services (0)</b>                     |                                                                                                        |
|                                                  |                                                                                                        |
| <b>Non-Cluster Focus (24)</b>                    | Job Creation Tax Credit                                                                                |
|                                                  | Enterprise Zone Tax Credit                                                                             |
|                                                  | One Maryland Tax Credit                                                                                |
|                                                  | Regional Institution Strategic Zone Program (RISE)                                                     |
|                                                  | Brownfields Tax Incentive/ Revitalization Incentive Program (BRIP)                                     |
|                                                  | Economic Development Opportunities Fund (Sunny Day)                                                    |
|                                                  | State Small Business Credit Initiative (SSBCI)                                                         |
|                                                  | ADVANCE Maryland                                                                                       |
|                                                  | MD Economic Development Assistance Authority and Fund                                                  |



|                                  |                                                                                      |
|----------------------------------|--------------------------------------------------------------------------------------|
| <b>Non-Cluster Focus (Cont.)</b> | Maryland Industrial Development Financing Authority                                  |
|                                  | Maryland Economic Development Corporation (MEDCO)                                    |
|                                  | MD Industrial Partnership Program                                                    |
|                                  | Maryland Economic Development Commission                                             |
|                                  | Military Personnel and Veteran-Owned Small Business Loan Program                     |
|                                  | Small, Minority and Women-Owned Business Account – Video Lottery Terminal Fund (VLT) |
|                                  | Maryland Small Business Development Fund Authority (MSBDFA)                          |
|                                  | DBED Office of Small Business Resources                                              |
|                                  | MD Small Business Development Financing Authority (MSBDFA)                           |
|                                  | DBED: Recruitment and Training                                                       |
|                                  | Research Parks                                                                       |
|                                  | Small Business Development Center Network (SBDC)                                     |
|                                  | Maryland Entrepreneurs Resource List                                                 |
|                                  | Federal Facilities Advisory Board                                                    |
|                                  | Incubators                                                                           |

## Virginia

Virginia’s economic development policies were primarily centered on the Science & Security Technology; Biological & Health Technology; and Information & Communication Technology clusters. Over 65% of the state economic development policies focus was on one or more of these clusters (see Figure 2 and Table 2). One clue to the state’s emerging policy priority comes from the governor’s recent creation of two commissions: *Virginia Cyber Security Commission* (created in 2014) and *Virginia Unmanned Systems Commission* (established in 2015). Both commissions supported the state’s emerging emphasis on leveraging its universities and federal facilities to position itself as a leader in the unmanned systems industry (drones) and in unmanned system security. In charging the cyber security commission, the governor noted that it was expected to “proactively enhance [the state’s] national standing as one of the preeminent leaders in the cyber security arena.” The priorities that motivated these commissions will not only affect Northern Virginia but will also have the potential to influence the state’s re-tooling of formerly tobacco-dependent regions in the state.

Beyond the focus on cyber security, many Virginia state policies, programs and state-supported partnerships targeted the biotechnology industry and technology in general. Several specific incentives, such as the *Equity and Subordinated Debt Investments Tax Credit* (50% tax credit for qualified investments in bio and information technology companies), the *Capital Gain Exception for Technology Businesses*, the *Technology and Defense Production Zones*, explicitly targeted the Biological & Health Technology and Information & Communication Technology clusters, and to a lesser extent the Business & Financial Services cluster.



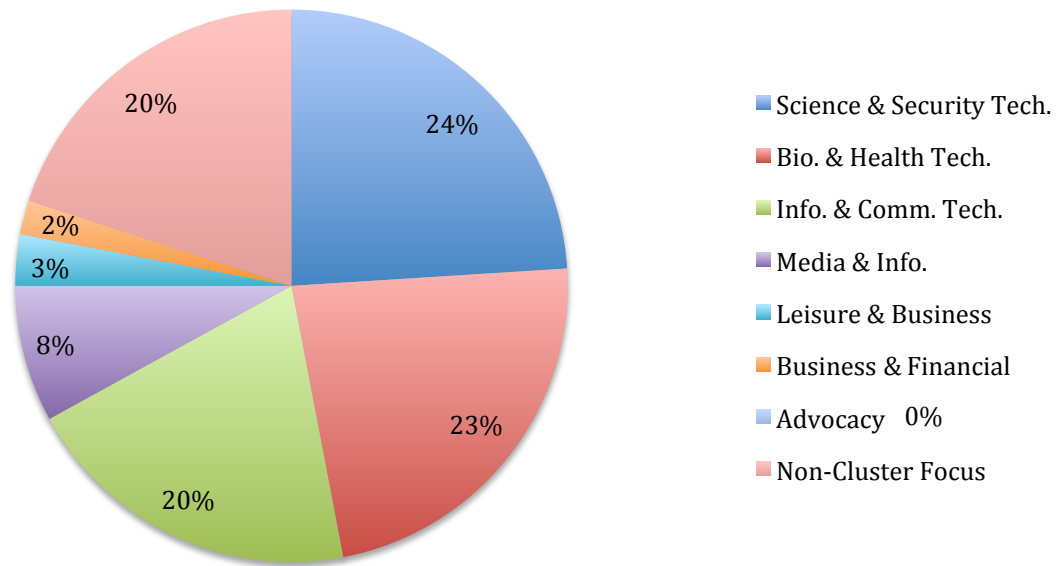
Several key state-supported centers and partnerships targeted technology innovation in the Science & Security Technology; Biological & Health Technology; and Information & Communication Technology clusters. One such center is the *Center for Innovation and Technology* (CIT), which is located in Herndon, Virginia (in Fairfax and Loudoun Counties) near Dulles International Airport. CIT provided a range of program supports for tech and bio-health companies. Through its *CIT Gap Funds* (GAP Fund I, GAP BioLife Fund, GAP Tech Fund, and Commonwealth Energy Fund), CIT provided seed capital to high growth tech startups. CIT also promoted commercialization of university and federal lab research through its *Commonwealth Research Commercialization Fund*, housed *Mach 37*, a cybersecurity accelerator, and had the *CIT Broadband* program.

While CIT had a broad policy mission across the Science & Security Technology; Biological & Health Technology; and Information & Communication Technology clusters, other Virginia organizations and initiatives focused on one or two of these clusters. For instance, the state-supported partnership of the *Virginia Technology Alliance* promoted the state's tech economy through advocacy, communication and education with policy makers. In Northern Virginia, the *Northern Virginia Technology Council* (NVTC), the largest technology council/trade association in the country (and Virginia Technology Alliance member), advocated for policies advantageous to the IT and cyber firms in the DC region. In Biological & Health Technology, the *Virginia Biosciences Health Research Corporation* provided grants (\$200,000 to \$800,000) to facilitate bio-health research. Furthermore, *Virginia Bio*, which is a Richmond-based non-profit, life sciences trade association, advocated for policy change in the health sector. There was also the *Virginia Commonwealth STEM Industry Internship Program* (CSIIP), which linked Virginia tech companies to STEM students.

Virginia had some programs and tax breaks for Media & Information Services cluster firms. These programs included the state's *Motion Picture Production Tax Credit*, a 20% income tax credit on qualified direct costs of film production activity, and the *Telecommunications Planning Initiative*. There were only a few policies that support the Leisure & Business Travel cluster, such as the *Farm Wineries and Vineyard Tax Credit*, which provided an income tax credit equal to 25% of qualified capital expenses. As in Maryland, there were no Advocacy Services cluster specific policies.

Virginia had a number of non-cluster focus policies and incentives that theoretically benefit all clusters, such as the *Virginia Worker Retraining Tax Credit*, the *Telework Expenses Tax Credit*, the *Major Business Facility Job Credit*, and the *Enterprise Zones*. Therefore, the state did not formally neglect any cluster, yet it was apparent that the Commonwealth of Virginia's economic development policy disproportionately targeted the Science & Security Technology; Biological & Health Technology; and Information & Business clusters. An important caveat: one can quibble about just how "targeted" some of these policies were, and whether they were categorized properly by cluster. Nonetheless, it was clear that the state's priority skewed toward the tech-intensive clusters.

**Figure 2. Virginia Policy Focus by Cluster**



**Table 2. Virginia Policies by Cluster**

| CLUSTER                       | VA POLICY/INCENTIVE                                           |
|-------------------------------|---------------------------------------------------------------|
| Science & Security Tech. (22) | Enterprise Zones - Defense Production                         |
|                               | Commonwealth Energy Fund                                      |
|                               | Clean Energy Manufacturing Incentive Grant Program            |
|                               | Office of Secretary of Technology - NASA Develop Program      |
|                               | Capital Gains Exemption for Technology Businesses             |
|                               | CIT Mach37 Cybersecurity Accelerator                          |
|                               | Center for Innovative Technology (CIT) GAP Funds              |
|                               | CIT Federal Funding Assistance Program                        |
|                               | CIT Commonwealth Research Commercialization Fund (CRCF)       |
|                               | CIT Innovative and Entrepreneurship Measurement System (IEMS) |
|                               | CIT Connect                                                   |
|                               | CIT Research and Technology Strategic Roadmap                 |
|                               | VA Technology Alliance                                        |
|                               | VA Cyber Security Commission                                  |
|                               | VA Unmanned Systems Commission                                |
|                               | VA Tech Office of Economic Development                        |

|                                                   |                                                               |
|---------------------------------------------------|---------------------------------------------------------------|
| <b>Science &amp; Security Tech. (Cont.)</b>       | VA Tech Corporate Research Center                             |
|                                                   | Virginia Tech Center Research Park                            |
|                                                   | NOVA Technology Council (NVTC)                                |
|                                                   | Virginia's University Economic Development Association (UEDA) |
|                                                   | VA Commonwealth STEM Industry Internship Program (CSIIP)      |
|                                                   | Research and Development Tax Credit                           |
|                                                   |                                                               |
| <b>Biological &amp; Health Tech. (21)</b>         | Enterprise Zones – Technology                                 |
|                                                   | Commonwealth Energy Fund                                      |
|                                                   | Clean Energy Manufacturing Incentive Grant Program            |
|                                                   | Office of Secretary of Technology - NASA Develop Program      |
|                                                   | Capital Gains Exemption for Technology Businesses             |
|                                                   | Center for Innovative Technology (CIT) GAP Funds              |
|                                                   | CIT Federal Funding Assistance Program                        |
|                                                   | CIT Commonwealth Research Commercialization Fund (CRCF)       |
|                                                   | CIT Innovative and Entrepreneurship Measurement System (IEMS) |
|                                                   | CIT Connect                                                   |
|                                                   | CIT Research and Technology Strategic Roadmap                 |
|                                                   | VA Technology Alliance                                        |
|                                                   | VA Tech Office of Economic Development                        |
|                                                   | VA Tech Corporate Research Center                             |
|                                                   | VA Biosciences Health Research Corporation (VBHRC)            |
|                                                   | Virginia Tech Center Research Park                            |
|                                                   | Northern Virginia Technology Council (NVTC)                   |
|                                                   | Virginia's University Economic Development Association (UEDA) |
|                                                   | VA Commonwealth STEM Industry Internship Program (CSIIP)      |
|                                                   | Virginia Bio                                                  |
|                                                   | Research and Development Tax Credit                           |
|                                                   |                                                               |
| <b>Information &amp; Communication Tech. (19)</b> | Enterprise Zones - Technology                                 |
|                                                   | CIT Broadband                                                 |
|                                                   | VA Telecommunication Program (Commerce)                       |
|                                                   | Office of Secretary of Technology - NASA Develop Program      |
|                                                   | Capital Gains Exemption for Technology Businesses             |
|                                                   | Center for Innovative Technology (CIT) GAP Funds              |
|                                                   | CIT Federal Funding Assistance Program                        |
|                                                   | CIT Commonwealth Research Commercialization Fund (CRCF)       |

|                                                 |                                                               |
|-------------------------------------------------|---------------------------------------------------------------|
| Information & Communication<br>Tech.<br>(Cont.) | CIT Innovative and Entrepreneurship Measurement System (IEMS) |
|                                                 | CIT Connect                                                   |
|                                                 | CIT Research and Technology Strategic Roadmap                 |
|                                                 | VA Technology Alliance                                        |
|                                                 | VA Tech Office of Economic Development                        |
|                                                 | VA Tech Corporate Research Center                             |
|                                                 | Virginia Tech Center Research Park                            |
|                                                 | Northern Virginia Technology Council (NVTC)                   |
|                                                 | Virginia’s University Economic Development Association (UEDA) |
|                                                 | VA Commonwealth STEM Industry Internship Program (CSIIP)      |
|                                                 | Research and Development Tax Credit                           |
|                                                 |                                                               |
| Media & Information Services (7)                | Motion Picture Production Tax Credit                          |
|                                                 | VA Telecommunications program (Commerce)                      |
|                                                 | Office of Secretary of Technology - NASA Develop Program      |
|                                                 | CIT Broadband                                                 |
|                                                 | VA Technology Alliance                                        |
|                                                 | Virginia Tech Center Research Park                            |
|                                                 | NOVA Technology Council (NVTC)                                |
|                                                 |                                                               |
| Leisure & Business Travel (3)                   | Farm Wineries and Vineyards Tax Credit                        |
|                                                 | Office of Secretary of Technology - NASA Develop Program      |
|                                                 | Tourism Zones                                                 |
|                                                 |                                                               |
| Business & Financial Services (2)               | Capital Gain Exception for Technology Businesses              |
|                                                 | Equity and Subordinated Debt Investments Tax Credit           |
|                                                 |                                                               |
| Advocacy Services (0)                           |                                                               |
|                                                 |                                                               |
| Non-Cluster Focus (19)                          | Economic Development Loan Fund (EDLF)                         |
|                                                 | Commonwealth’s Opportunity Fund                               |
|                                                 | Virginia Economic Development Incentive Grant (VEDIG)         |
|                                                 | VA Investment Partnership Grant                               |
|                                                 | Enterprise Zone – General                                     |
|                                                 | VA Workforce Retraining Program                               |
|                                                 | VA Jobs Investment Program (VJIP)                             |
|                                                 | Virginia Worker Retraining Tax Credit                         |
|                                                 | Telework Expenses Tax Credit                                  |
|                                                 | Major Business Facility Job Credit                            |
|                                                 | Industrial Revitalization Fund                                |

|                                  |                                                      |
|----------------------------------|------------------------------------------------------|
| <b>Non-Cluster Focus (Cont.)</b> | Community Development Block Grant                    |
|                                  | Private Activity Bonds for Local Housing Authorities |
|                                  | Small Business Financing Authority programs          |
|                                  | Biodiesel Fuel Credit                                |
|                                  | Green Job Creation Tax Credit                        |
|                                  | International Trade Facility Tax Credit              |
|                                  | Port Economic and Infrastructure Development Grants  |
|                                  | Sales and Use Tax Exemption                          |
|                                  |                                                      |

### *District of Columbia (DC)*

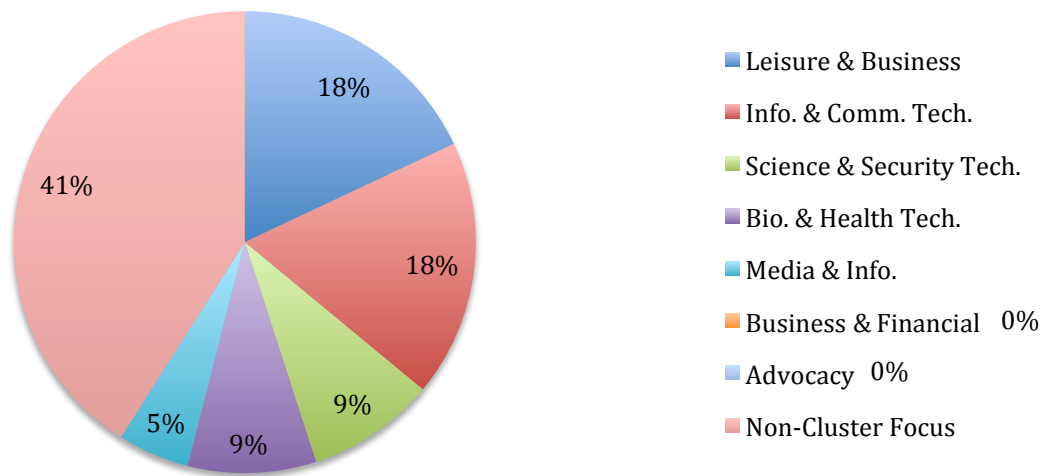
Washington, DC’s economic development policy approach mainly used non-cluster specific policies aimed to redevelop underserved parts of the city (see Figure 3 and Table 3). Most of these policies were administered by the city’s Office for the Deputy Mayor of Planning and Economic Development (DMPED). These policies included “*Hub*” zones to promote retail development in historically underserved neighborhoods, the *Anacostia Economic Development Corporation*, the *New Communities Initiative*, which targeted distressed neighborhoods, and the *Great Streets Initiative*, which provided a \$50,000 grant for qualified small business owners who wished to make improvements and/or renovations to their places of business within certain geographic areas within the city.

While DC focused much of its economic development policies on attempts to redevelop disadvantaged DC areas, Leisure & Business Travel was a core city policy cluster target. However, this was mainly within the lower and middle-wage leisure and business sector and included policies and programs, such as the *DC Workforce Investment Council* initiative to promote job placement, training and apprenticeships for culinary arts, hotels, and construction, and certain retail-focused *Tax Increment Financing Districts*.

However, recently the city implemented a set of incentives to attract high-tech firms into the city, which apply to the Information & Communication Technology, Science & Security Technology, and Biological & Health Technology clusters. The *DC Tech Incentives* provided tech companies a robust set of incentives to enter and grow within the District. Some of the *DC Tech* financial incentives provided businesses tax credits to reduce property and sales taxes, but these extended to hiring as well. For example, the *DC Tech Incentives* provided tax credits of up to \$10,000 per new hire (\$30,000 for veterans) and from \$5,000 to \$7,500 per employee that relocated to DC. This program also provided a \$20,000 credit for hiring and training veterans, \$10,000 of which was refundable in the event the business’s tax burden was zero. It also greatly reduced the corporate income (0% for the first 5 year and 6% for the life of the company), property (five year freeze on assessed value), and sales tax rates (exception for hardware and software purchase) for qualified tech companies. Additionally, to bolster the District’s tech sector the city invested in *Digital DC*, a marketing campaign to promote DC as a place of high-tech innovation, and *1776*, a high growth startup incubator that provides seed capital. Lastly, the *Washington, DC Economic Partnership*, and their new program *AccelerateDC*, provided mentoring teams for DC tech startups.

In the Media & Information Services cluster, DC offered tax rebates for eligible production companies up to 42% of the company's qualified production expenditures that were subject to taxation. DC did not provide specific economic development policy incentives under the Business & Financial Services and Advocacy Services clusters. It was possible that, for example, financial services and other types of firms took advantage of tax incentives under the non-cluster focus, such as *Tax Exempt Bond Financing*. That said, it was also quite possible that financial and consulting services have largely located in the broader DC metro area, and that there were limited economic incentives to induce moves from the Virginia corridors of Arlington and Fairfax Counties into DC.

**Figure 3. DC Policy Focus by Cluster**



**Table 3. DC Policies by Cluster**

| <b>CLUSTER</b>                                   | <b>DC POLICY/INCENTIVE</b>                                            |
|--------------------------------------------------|-----------------------------------------------------------------------|
| <b>Leisure &amp; Business Travel (4)</b>         | DMPED Downtown Retail Tax Increment Financing (TIF)                   |
|                                                  | Mayor's Multiagency Commercial Revitalization program – Great Streets |
|                                                  | DMPED Workforce Investment Council (WIC)                              |
|                                                  | DC Department of Energy and Environment                               |
|                                                  |                                                                       |
| <b>Information &amp; Communication Tech. (4)</b> | DMPED DC Tech Incentives                                              |
|                                                  | DMPED Digital DC                                                      |
|                                                  | DC Department of Energy and Environment                               |
|                                                  | Accelerate DC Venture Mentoring Service                               |
|                                                  |                                                                       |
| <b>Biological &amp; Health Tech. (2)</b>         | DMPED DC Tech Incentives                                              |
|                                                  | Accelerate DC Venture Mentoring Service                               |
|                                                  |                                                                       |
| <b>Science &amp; Security Tech. (2)</b>          | DMPED DC Tech Incentives                                              |
|                                                  | DMPED Digital DC                                                      |
|                                                  |                                                                       |
| <b>Media &amp; Information Services (1)</b>      | DC Office of Motion Picture and Television Development                |
|                                                  |                                                                       |

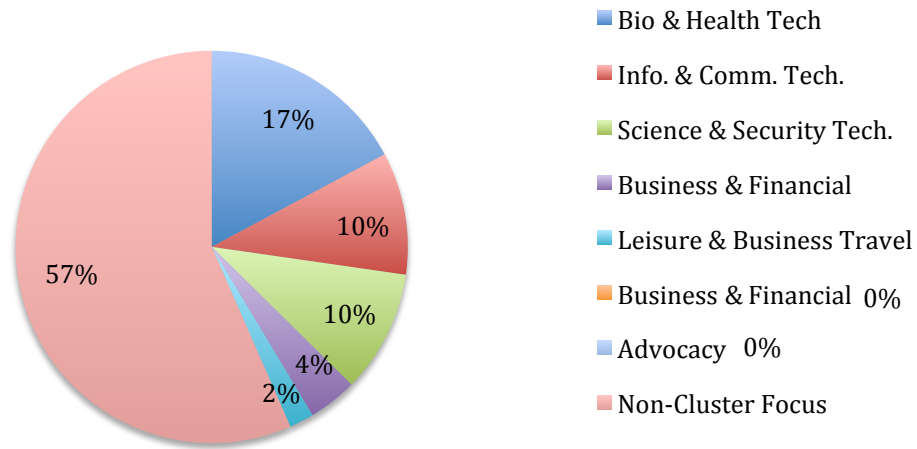


|                                              |                                                                                                                |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Business &amp; Financial Services (0)</b> |                                                                                                                |
|                                              |                                                                                                                |
| <b>Advocacy Services (0)</b>                 |                                                                                                                |
|                                              |                                                                                                                |
| <b>Non-Cluster Focus (9)</b>                 | Washington, DC Econ. Development Partnership (WDCEP)                                                           |
|                                              | Office of the Deputy Mayor for Planning and Economic Development (DMPED) – Hub Zones                           |
|                                              | Tax Exempt Bond Financing – Industrial Revenue Bonds                                                           |
|                                              | Anacostia Economic Development Corporation                                                                     |
|                                              | DC China Center (in Shanghai, China)                                                                           |
|                                              | DMPED Workforce Investment Act Adult and Dislocated Training Worker Services                                   |
|                                              | DMPED Dept. of Small and Local Business Development (DSLBD)                                                    |
|                                              | DMPED Supermarket Tax Credits                                                                                  |
|                                              | Creative Communities Initiative (housing, fashion, arts economic development, and creative startup incentives) |
|                                              |                                                                                                                |

### *Suburban DC Municipality Policy Focus*

While there are many policies designed to support business and economic development at the state level, it is equally important to understand the policy focus of county and city governments in the DC metropolitan region. To determine the DC suburban policy focus, a policy scan was conducted for certain municipalities in Maryland (Montgomery County and Prince George’s County) and Northern Virginia (City of Alexandria, Arlington County, Fairfax County, and Loudoun County). Results suggest that the largest percent of policies had a non-cluster policy focus (57% in Maryland and 41% in Virginia DC suburbs) but within the clusters there was a greater policy focus on the technology-related clusters (37% in Maryland and 42% in Virginia DC suburbs) compared to other cluster areas (see Figures 4 and 5 and Tables 4 and 5). Also, when comparing the policy focus of the Maryland’s DC suburban counties, compared to Virginia’s DC suburban municipalities, there is a slightly larger emphasis on Biological & Health Technology cluster (17% vs. 14%), while Virginia DC suburban governments have a slightly greater policy focus on the Science & Security Technology and the Information & Communication clusters compared to Maryland’s DC suburban governments. Overall, the Washington region municipal government policy landscape, with its large share of non-cluster policies and ones geared towards advancing technology-intensive companies, is similar to the Maryland and Virginia state-level policy focus.

**Figure 4. Maryland DC Suburban Policy Focus by Cluster**

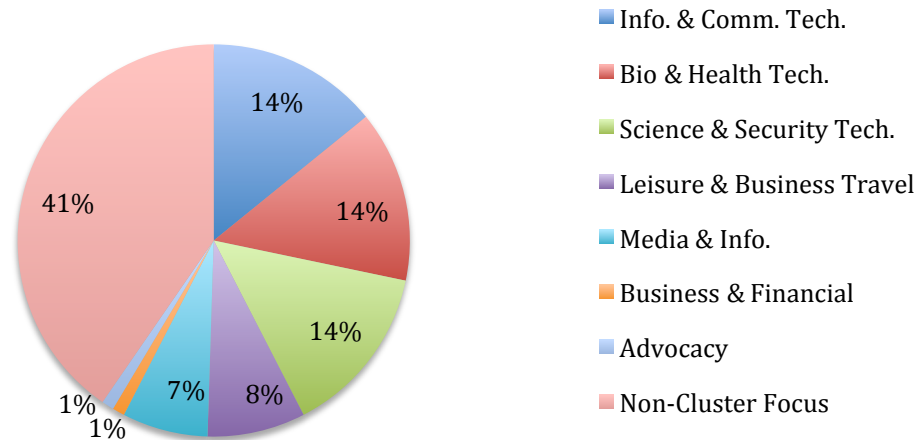


**Table 4.  
MD DC Suburban Policy Focus by Cluster**

| CLUSTER                                          | MONTGOMERY & PRINCE GEORGE'S COUNTIES<br>POLICIES/ INCENTIVES |
|--------------------------------------------------|---------------------------------------------------------------|
| <b>Biological &amp; Health Tech. (8)</b>         | Mont. Cnty. Biotechnology Investor Incentive Program          |
|                                                  | The Life Sciences Impact Grant Program                        |
|                                                  | Business Innovation Network of Mont. Cnty.                    |
|                                                  | Rockville Economic Development, Inc. (REDI)                   |
|                                                  | Mont. Cnty. Economic Development Grant and Loan Program       |
|                                                  | PG. Cnty. High Tech Real Property Tax Credit                  |
|                                                  | PG. Cnty. Technology Assistance Center (TAC)                  |
| <b>Information &amp; Communication Tech. (5)</b> | Mont. Cnty. Economic Development Grant and Loan Program       |
|                                                  | Mont. Cnty. Tech Transfer Program (MCT2)                      |
|                                                  | Business Innovation Network of Mont. Cnty.                    |
|                                                  | PG. Cnty. High Tech Real Property Tax Credit                  |
|                                                  | PG. Cnty. Technology Assistance Center (TAC)                  |
| <b>Science &amp; Security Tech (5)</b>           | Mont. Cnty. Economic Development Grant and Loan Program       |
|                                                  | Cybersecurity Investment Incentive Tax Credit Supplement      |
|                                                  | Business Innovation Network of Mont. Cnty.                    |
|                                                  | PG. Cnty. High Tech Real Property Tax Credit                  |
|                                                  | PG. Cnty. Technology Assistance Center (TAC)                  |

|                                              |                                                             |
|----------------------------------------------|-------------------------------------------------------------|
| <b>Business &amp; Financial Services (2)</b> | Green Investor Incentive Program                            |
|                                              | Mont. Cnty. Biotechnology Investor Incentive Program        |
|                                              |                                                             |
| <b>Leisure &amp; Business Travel (1)</b>     | Mont. Cnty.'s Arts & Entertainment Districts                |
|                                              |                                                             |
| <b>Media &amp; Info. (0)</b>                 |                                                             |
|                                              |                                                             |
| <b>Advocacy Services (0)</b>                 |                                                             |
|                                              |                                                             |
| <b>Non-Cluster Focus (27)</b>                | The MOVE program                                            |
|                                              | Mont. Cnty. Small Business Revolving Loan Program           |
|                                              | Property Tax Credit – Energy and Environmental Design       |
|                                              | New Jobs Tax Credit                                         |
|                                              | Enhanced New Jobs Tax Credit                                |
|                                              | Mont. Cnty. Chamber of Commerce (MCCC)                      |
|                                              | Mont. Business Development Corporation                      |
|                                              | City of Gaithersburg Office of Economic Development         |
|                                              | Rockville Economic Development, Inc. (REDI)                 |
|                                              | Home Computer Telecommuting Incentive                       |
|                                              | Equity Investment Program                                   |
|                                              | Brownfield's Property Tax Credit                            |
|                                              | PG. Cnty. Economic Development Incentive (EDI) Fund         |
|                                              | Foreign Trade Zone                                          |
|                                              | Enterprise Zone                                             |
|                                              | Small Business Services (SBS)                               |
|                                              | Workforce Services Division (WSD)                           |
|                                              | FSC First Small Business Growth Fund (SBGF)                 |
|                                              | FSC First Contractor Cash Flow Fund (CCFF)                  |
|                                              | City of Bowie Loan Fund                                     |
|                                              | Bowie Business Innovation Center (Bowie BIC)                |
|                                              | The Business Resource Coalition                             |
|                                              | PG. Cnty. Comm. College Center for Entrepreneurial Develop. |
|                                              | PG. Cnty. Redevelopment Authority                           |
|                                              | PG. Cnty. Chamber of Commerce                               |
|                                              | PG. Cnty. Economic Development Corporation                  |
|                                              | Revitalization Tax Credit                                   |
|                                              |                                                             |

**Figure 5. Virginia DC Suburban Policy Focus by Cluster**



**Table 5. VA DC Suburban Policy Focus by Cluster**

| CLUSTER                                           | Alexandria, Arlington, Fairfax, and Loudoun Policies/ Incentives |
|---------------------------------------------------|------------------------------------------------------------------|
| <b>Information &amp; Communication Tech. (10)</b> | City of Alexandria computer hardware/software deduction          |
|                                                   | Arlington Technology Zones                                       |
|                                                   | Arl. Business Professional Occupational License exemption        |
|                                                   | Fairfax Software Companies BPOL tax exemption                    |
|                                                   | Fairfax Computer hardware/software deduction                     |
|                                                   | Fairfax NOVA Workforce Development Division                      |
|                                                   | Fairfax Commonwealth Graduate Engineering Program                |
|                                                   | Fairfax Cnty. Office of Public Private Partnerships (OP3)        |
|                                                   | Loudoun Cnty. VA Commonwealth Opportunity Fund Match             |
|                                                   | Loudoun Cnty. BPOL exemption                                     |
| <b>Biological &amp; Health Tech. (10)</b>         | City of Alexandria computer hardware/software deduction          |
|                                                   | Arlington Technology Zones                                       |
|                                                   | Arl. Business Professional Occupational License exemption        |
|                                                   | Fairfax Software Companies BPOL tax exemption                    |
|                                                   | Fairfax Computer hardware/software deduction                     |
|                                                   | Fairfax NOVA Workforce Development Division                      |
|                                                   | Fairfax Commonwealth Graduate Engineering Program                |
|                                                   | Fairfax Cnty. Office of Public Private Partnerships (OP3)        |

|                                              |                                                               |
|----------------------------------------------|---------------------------------------------------------------|
| <b>Biological &amp; Health Tech. (Cont.)</b> | Loudoun Cnty. VA Commonwealth Opportunity Fund Match          |
|                                              | Loudoun Cnty. BPOL exemption                                  |
| <b>Science &amp; Security Tech. (10)</b>     | City of Alexandria computer hardware/software deduction       |
|                                              | Arlington Technology Zones                                    |
|                                              | Arl. Business Professional Occupational License exemption     |
|                                              | Fairfax Software Companies BPOL tax exemption                 |
|                                              | Fairfax Computer hardware/software deduction                  |
|                                              | Fairfax NOVA Workforce Development Division                   |
|                                              | Fairfax Commonwealth Graduate Engineering Program             |
|                                              | Fairfax Cnty. Office of Public Private Partnerships (OP3)     |
|                                              | Loudoun Cnty. VA Commonwealth Opportunity Fund Match          |
|                                              | Loudoun Cnty. BPOL exemption                                  |
|                                              |                                                               |
| <b>Leisure &amp; Business Travel (6)</b>     | Arlandria-Chirilagua Business Association                     |
|                                              | Del Ray Business Association (DRBA)                           |
|                                              | Old Town Business and Professional Association                |
|                                              | West End Business Association                                 |
|                                              | Columbia Pike Revitalization Organization                     |
|                                              | Fairfax Cnty. Office of Public Private Partnerships (OP3)     |
|                                              |                                                               |
| <b>Media &amp; Info. (5)</b>                 | Arl. Business Professional Occupational License exemption     |
|                                              | Fairfax NOVA Workforce Development Division                   |
|                                              | Fairfax Commonwealth Graduate Engineering Program             |
|                                              | Loudoun Cnty. VA Commonwealth Opportunity Fund Match          |
|                                              | Loudoun Cnty. BPOL exemption                                  |
|                                              |                                                               |
| <b>Business &amp; Financial Services (1)</b> | Fairfax Cnty. Capital Attraction Program                      |
|                                              |                                                               |
| <b>Advocacy Services (1)</b>                 | Fairfax Cnty. Office of Public Private Partnerships (OP3)     |
|                                              |                                                               |
| <b>Non-Cluster Focus (28)</b>                | Alexandria Economic Development Partnership                   |
|                                              | Alexandria Chamber of Commerce                                |
|                                              | Alexandria Small Business Development Center                  |
|                                              | Alexandria Capitol Post                                       |
|                                              | Eisenhower Partnerships                                       |
|                                              | Alexandria Marketing Fund                                     |
|                                              | Industrial Development Authority of Alexandria                |
|                                              | Workforce Development Center                                  |
|                                              | Property tax abatement/reduction on certain development deals |
|                                              | Property tax exemption for rehab in Columbia Pike area        |
|                                              | Arlington Smart Building Initiative                           |

|                                  |                                                    |
|----------------------------------|----------------------------------------------------|
| <b>Non-Cluster Focus (Cont.)</b> | Arlington Tax Exempt Revenue Bond program          |
|                                  | Arlington Business Improvement Districts           |
|                                  | BizLaunch                                          |
|                                  | Clarendon Alliance                                 |
|                                  | Arl. Rehab Tax exemption for mixed-use development |
|                                  | Arlington Chamber of Commerce                      |
|                                  | Arlington Employment Center                        |
|                                  | Fairfax Cnty. Economic Development Authority       |
|                                  | Southeast Fairfax Development Corporation          |
|                                  | Business Development Assistance Group              |
|                                  | Fairfax Cnty. Small Business Commission (SBC)      |
|                                  | Fairfax Cnty. Office of Community Revitalization   |
|                                  | McLean Revitalization Corporation                  |
|                                  | Loudoun Cnty. Department of Economic Development   |
|                                  | Loudoun Cnty. Business Assistance Team             |
|                                  | Loudoun Cnty. Chamber of Commerce                  |
|                                  | Loudoun Cnty. Workforce Resource Center            |

### *Summing Up State and Local Policy Cluster Targets and Gaps*

This state- and local-level policy scan demonstrates that Information & Communication Technology, Biological & Health Technology, and Science & Security Technology are the main combined priorities of Maryland, Virginia, and Washington, DC as well as the DC region's suburban municipalities. It is also the case that few policies specifically target the remaining clusters. However, many of the non-cluster specific policies likely help and support these clusters. Based on this analysis, it seems plausible to suggest that there is a "policy gap" in specific state- and local level policies that focus on Advocacy Services; Media & Information Services; Leisure & Business Travel; and Business & Financial Services, when compared to Information & Communication Technology; Biological & Health Technology; and Science & Security Technology. While this policy gap exists among the clusters, it should be left to state and local policy makers to decide whether their specific policy targets match their economic development priorities. However, if the Washington region is going to effectively diversify its economy across these clusters, more policy emphasis needs to be placed on Advocacy Services; Media & Information Services; Leisure & Business Travel; and Business & Financial Services.

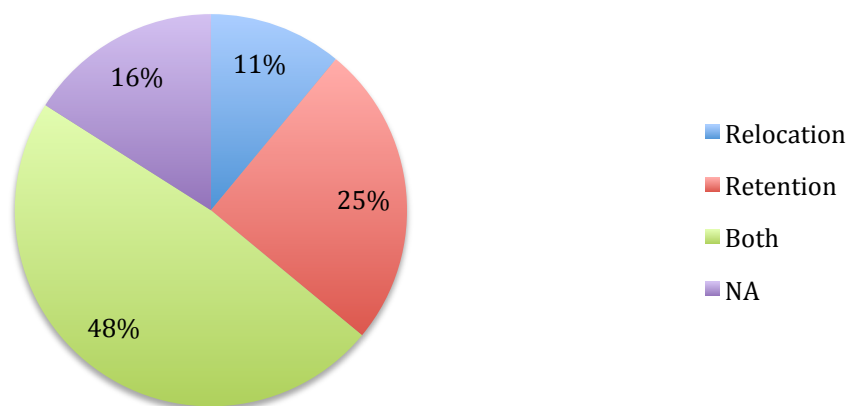
### **Relocation vs. Retention and Expansion**

To better understand the state and local economic development policy landscape in the Washington region, it is important to know the extent to which policies are attempting to attract new businesses as opposed to retain and expand existing companies. Much of the future job growth in the greater DC area will likely come from the expansion of existing business; however, several of the senior executives we interviewed noted the importance of attracting major tech firms to the DC region to better brand the region. Thus, it is critical to document and assess the extent to which economic development policies focus on the goals of business attraction and growth of existing firms. We coded the state- and local-level economic development policies,

programs and initiatives by noting whether policies were focused on attracting new businesses, retaining and expanding existing firms, or both.<sup>7</sup> Some policies and programs were not applicable or could not be coded with available information and these policies received a “not applicable” code. The figures (Figures 6-10) below indicate the percent of policies focused on relocation, retention or both for all of the state policies combined, separated out for each state, and for all of the Maryland and Virginia DC suburban municipalities combined.

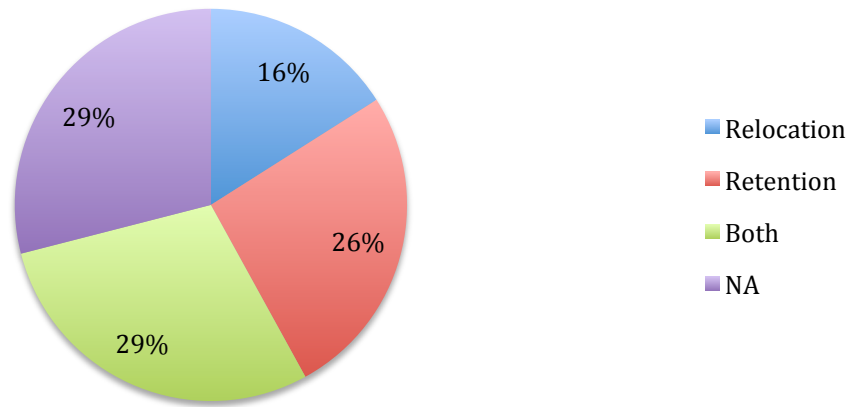
One of the key findings is that relocation seems to be the least emphasized category. In the figure for all states, relocation only represents 11% of the current economic development policies and for all DC suburbs it only represents 6% of the policy focus. It is difficult to completely decipher whether there is a lack of policy emphasis on relocation since a sizable proportion of state economic development policies, 48%, and DC suburban policies, 62%, focus on both relocation and retention. Furthermore, we do not know the amount of funds being dedicated to relocation or the effectiveness of these policies. However, it is apparent from the data that few state and DC suburban municipal policies solely focus on attracting new businesses. It is also important to note that DC, compared to Maryland and Virginia, had a higher proportion of policies, 37%, which sought to attract new businesses. Also, Virginia had the highest percent of policies and programs, 65%, that sought to attract and retain business at the same time, and also had the lowest percent of policies, 2%, that attempted to attract new businesses. While not shown in a figure below, the Northern Virginia municipalities, compared to the Maryland DC suburban counties, had a slightly higher percent of policies that targeted attracting new businesses, 7% vs. 4%.

**Figure 6. All States  
Relocation vs. Retention**

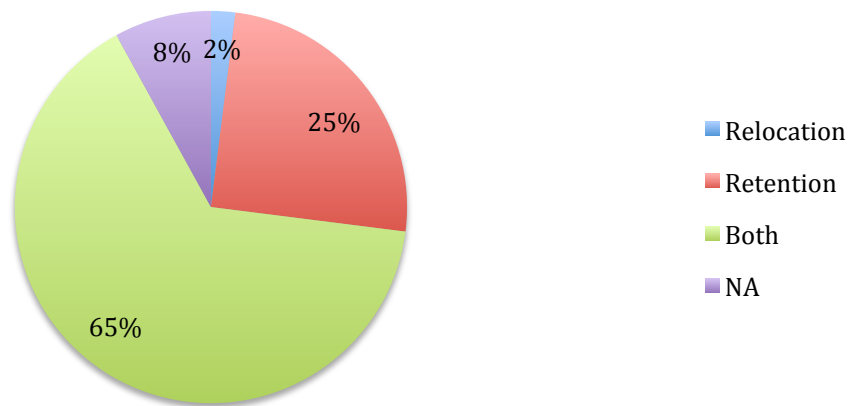


<sup>7</sup> The state-level policies were coded in the following manner: 1=relocation, 2=retention/expansion, 3=both, and 4=not applicable.

**Figure 7. MD Policy  
Relocation vs. Rentention**

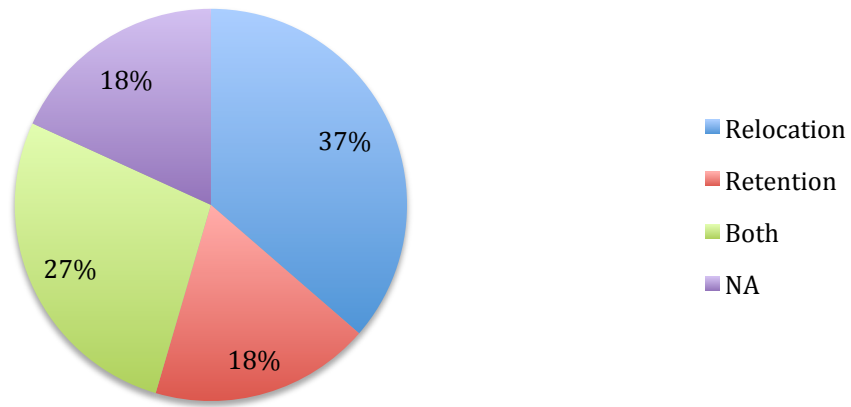


**Figure 8. VA Policy  
Relocation vs. Rentention**

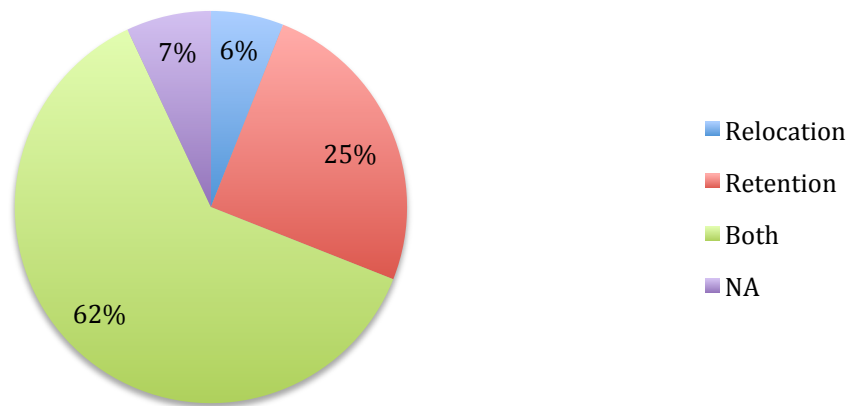




**Figure 9. DC Policy  
Relocation vs. Rentention**



**Figure 10. DC Suburban Policy  
Relocation vs. Rentention**



## Gap Analysis by Major Economic Development Themes

The remainder of this report centers on whether existing state and local policies target and address the major economic development themes and challenges highlighted by senior level executives who direct firms within the seven cluster areas. After interviewing 33 senior executives (nearly five per cluster), the following themes emerged:

- Talent attraction and retention;
- (In)equality-of-life across the region;
- Transportation flexibility and adaptability;
- Access to capital;
- Entrepreneurial culture;
- A lack of a compelling regional brand;
- Competition among local jurisdictions; and,
- Inefficiency among multiple governments.

Descriptions of each of these themes are given as well as the policy landscape or coverage for the issue discussed. Then recommendations are made to further address the stated economic development challenge. Some of the recommendations were based on the comments made by the senior executives who were interviewed.

### *Talent Attraction and Retention*

*Issue.* Several executives mentioned that the key to growing the DC regional economy was talent attraction and retention.<sup>8</sup> While the DC region, compared to other places, has an extremely educated population, there was a sense that the area lacked young entrepreneurial talent. Further, there were some that felt key senior leadership is poached from the region when startups and mid-level companies are purchased by larger national companies. An issue for the region remains how to cultivate, attract and retain the best talent pool to stimulate business growth among companies that do not exclusively cater to the federal government.

*Policy Landscape.* Many state-level policies and programs target talent attraction and retention, particularly in the Information & Communication Technology; Biological & Health Technology; and Science & Security Technology clusters. DC's *Tech Initiatives*, Virginia's *Jobs Investment Program*, and Maryland's *Job Creation Tax Credit*, are programs that seek to attract business talent by offering tax break to companies that come to the DC region. However, these are individual state and local municipal efforts and programs. It is evident from the state and local relocation versus retention analysis that there is less emphasis on acquiring new companies. It seems the DC region suffers from a lack of business relocation policy focus as a core strategy to bolster the area's economy.

*Recommendation.* Create a regional fund to attract talent from outside of the region. The relocation fund, supported by state and local governments, and business interests, and

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<sup>8</sup> The work of Richard Florida (2012) clearly suggests that regions that focus their local economic policies on attracting talent and the creative class will more likely succeed economically.

foundations, would seek high growth companies located in other regions, not within the region. In order for the fund to be perceived as equitable, it should have sufficient funds to at least attract one major company to DC, MD and VA. The target of the fund should be on high growth, mid-sized companies or satellites of well-known companies, such as Google, Amazon, Facebook, or Apple.

### *(In)equality-of-Life across the Region*

*Issue.* Many senior executives claimed that reducing social inequality across the DC region was critical to bolstering the region's economy. The logic is that a great quality-of-life will attract and retain talented employees. Quality-of-life can mean distinct things to different people. In the context of this report, it refers to policies attempting to reduce social inequity by increasing the number of quality affordable housing units, improving public safety, strengthening public education, and enhancing health outcomes across the region.<sup>9</sup>

*Policy Landscape.* While there are some state and lower level agencies and policies that attempt to tackle these issues within each state, county or city, there are fewer organizations and resources to tackle these issues across the region. Some of the organizations that focus regional equity issues include the Metropolitan Washington Council of Governments, the Washington Regional Association of Grantmakers, the Community Foundation for the National Capital Region, the Center for Regional Analysis, and the Metropolitan Policy Center.

The Metropolitan Washington Council of Governments has focused on regional transportation by coordinating the Transportation Planning Board (a federally-designated Metropolitan Planning Organization), but on the issues of housing, public safety, education, and health there has been much less, if any, regional successes. Within the District two organizations, the DC Fiscal Policy Institute and the Urban Institute, have addressed inequality, affordable housing and education; however, their efforts have largely been District-based and they have not embraced a regional perspective on equity-related issues.

*Policy Recommendation.* To tackle region equity issues, existing entities with regional approaches and perspectives will need to strengthen their regional efforts on these particular topics or new regional entities will need to be supported to tackle quality-of-life topics regionally. One of the senior executives interviewed suggested that a regional secondary education organization might be a place to start. He stated, “[Education is] really important to folks in each jurisdiction that not only their own schools are good but [also] the schools in the other jurisdictions are good. It’s going to elevate employability and benefit the entire area.”

While the *Consortium of Universities of the Washington Metropolitan Area* focuses on growing the capacity of the university system in the region, efforts on balancing the secondary education system in the region will be critical as well. Knowing that funding for secondary education is mainly local (based on property taxes), the interviewee quoted above suggested that a regional

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<sup>9</sup> Two recent investigations advance the notion that improving regional equity might help to stimulate metropolitan level economic growth (Benner and Pastor 2015; Pastor, Benner and Matsuoka 2009). Also, there is some literature that suggests certain quality-of-life improvements in some circumstances outperform local tax policies in determining firm locational decisions (see Fischer 1997; Wasylenko 1997).

secondary educational entity be charged with pulling together best practices across the region to help promote greater regional equity in school performance. While this is a laudable policy recommendation, it might not yield immediate results and should be considered a policy that might produce improved economic performance results over the long term.

### *Transportation Flexibility and Adaptability*

*Issue.* Traffic congestion and long commuting times were one of the most frequently economic development inhibitors mentioned by those interviewed. Many, across all clusters, spoke about the loss of employee productivity and staff turnover due to lengthy and unpredictable commutes. Some even noted that commuting issues inhibited innovation and collaboration among those in the region since it can be difficult to meet with colleagues and partners due to traffic concerns.

*Policy Landscape.* There is a host of transportation related policies focused on improving commuting across the DC region. Some include road alterations, such as the recently completed Virginia's 495/95 Express Lanes; bridge construction, such as DC's 11<sup>th</sup> Street Bridge and 16<sup>th</sup> and Military Bridge projects; rail proposals, such as Maryland's Purple Line Initiative and Virginia's Silver Line Expansion; streetcar infrastructure, such as DC's Streetcar Program; and bike infrastructure, such as the implementation of the Capital Bike Share. While these projects may help alleviate some road congestion by providing alternative modes of transportation, one core challenge remains - upgrading and maintaining reliable and safe Metro service throughout the region. In fiscal year 2015, the Washington Metropolitan Transit Authority, which operates Metro, received about 45% of its yearly operating budget from state and DC regional local government contributions.<sup>10</sup> To improve Metro operations, it is unlikely that local governments are going to contribute more funds. It will take creative ideas to sustain Metro, as it is a critical feature of the DC region's transportation network.

*Policy Recommendations.* The key to addressing regional commuting challenges will be a broad focus on policies that strengthen transportation infrastructure related to cars, buses, trains, and bikes. Currently, several policies are targeting those issues but maintaining the stability of Metro will be important. In addition, housing policy might contribute to reducing road congestion. Encouraging transit-oriented housing development near underutilized metro stations throughout the region might help to increase the use of public transportation, which could reduce road congestion. Also, creating housing near where jobs are being created might help as well. Dense work, living and play centers, such as the Reston Town Center, Rockville Town Square, and the Mosaic District might reduce traffic congestion, if people live near where they work. Thus, we should encourage local municipalities to alter zoning to allow for greater density and mixed-use zoning in strategic locations throughout the region. Lastly, creating economic incentives for telecommuting might be a viable solution to decrease traffic congestion. Virginia's *Telework Tax Credit*, which offers business tax credits for eligible expenses, such as laptop computers to work from home, might serve as a model for other jurisdictions throughout the DC region.

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<sup>10</sup> Washington Metropolitan Area Transit Authority (2015).

## *Access to Capital*

*Issue.* Some of those interviewed perceived that limited early stage and second stage capital access was inhibiting the region from reaching its full economic capacity. Access to capital is critical for helping startups and mid-size companies expand.

*Policy Landscape.* Maryland and Virginia have appropriations to support early stage seed capital and second stage venture capital funds. This is evidenced by Maryland's TEDCO's TCF and Virginia's CIT GAP Funds. Furthermore, Maryland has the *Biotechnology Investment Incentive Tax Credit* and the *Cybersecurity Investment Tax Credit*, and Virginia has the *Equity and Subordinated Debt Investments Tax Credit* and the *Capital Gain Exception for Technology Businesses*. However, those interviewed questioned the size and focus of these funds and tax credits. Clearly, there is not a gap in terms of policies geared to facilitating capital access but it is beyond the scope of this analysis to know if these programs are supplying or sufficiently encouraging capital flows to companies that will grow and contribute to the overall DC regional economy. It is important to note that DC does not have equivalent investment funds or investment tax credits to support startups. However, the DC government has invested in 1776 (a startup incubator), which does supply entity startups with seed funds.

Several interviewees mentioned that an important policy direction would be to encourage more exchanges between startup executives and those looking to invest in the region. However, there appears to be several DC regional entities, including TEDCO, CIT, 1776, and Washington, DC Economic Development Partnership (as well as most of the Roadmap sponsors), that already bring these two parties together.

*Policy Recommendations.* Access to capital is an important part of growing a business and a regional economy. Within the DC region there are state-supported seed capital and second stage capital access funds for Science & Security Technology; Biological & Health Technology; and Information & Communication Technology firms but there is little capital funds or incentives for capital investment for firms in other cluster areas (with the exception of investments in wineries). Having startup funds and tax investment incentives for other cluster area firms should be considered.

## *Entrepreneurial Culture*

*Issue.* Several people interviewed noted that the DC region does not have as much entrepreneurial spirit and culture compared to other parts of the country (e.g., Silicon Valley). Our participants suggested that the lack of an entrepreneurial ethos in the DC region relates to several factors including: 1) the presence of the federal government and existing large government contractors (who hire and maintain workers who do not tend to start companies), 2) the exiting of companies and talent to other localities, and 3) a reluctance of repeat investing among those who make money and stay in region.

*Policy Landscape.* Several entities attempt to harness the assets of the federal government and the university research community in the DC region to spur innovation and commercialization in the private market. In Maryland and Virginia, these organizations include TEDCO and CIT.

However, DC lacks a government-supported agency, policy or program that works on commercialization of federal or university-sponsored initiatives.

*Recommendation.* Given the number of federal government agencies and universities located in the District, DC should consider replicating or improving on Virginia and Maryland's ongoing federal lab and university commercialization initiatives. Also, the region might be relying too heavily on TEDCO and CIT and it would be potentially fruitful to have the *Consortium of Universities of the Washington Metropolitan Area (The Consortium)* take on a larger scope for work. For instance, the Consortium could start an initiative to improve connections among the federal government, the business community and the system of universities in the DC region.<sup>11</sup> One core strategy would be to have the *Consortium* facilitate a sustained dialogue with local universities and the business community geared toward refining the current teaching programming, especially in the DC area business schools, to strengthen the entrepreneurial spirit in the DC region.

### *A Lack of a Compelling Regional Brand*

*Issue.* Many of those interviewed noted that the DC region does not have a unified brand and it is often seen as merely a federal government company town.<sup>12</sup> Without a compelling brand that extends beyond the federal government, the DC region will have difficulty attracting new businesses that do not have an interest in the national government. Further, those companies that market across the country and around the world might have more difficulty if they are stereotyped as federal government service providers because of their DC region location.

*Policy Landscape.* There are currently two marketing/branding efforts for particular clusters (e.g., the Biological & Health Technology cluster by BioHealth Innovation in partnership with MedImmune, and others) or geographies (e.g., the DC Cool Marketing Initiative by Destination DC) within the DC region.<sup>13</sup> However, none of these efforts have comprehensively attempted to market the DC region as a place to do business beyond the federal government, nor do these marketing initiatives effectively embrace all of the identified high growth industrial clusters.

*Recommendation.* One of the regional business entities, such as the Greater Washington Board of Trade, needs to spearhead an inclusive marketing campaign that communicates the assets and opportunities in the region beyond the federal government, which will be relevant to all of the high growth industrial clusters.

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<sup>11</sup> A study by Bercovitz and Feldman (2008) suggests that university participation in commercialization activity is more likely to occur when external and internal university incentives and norms are present. A regional program on promoting entrepreneurial activity among graduate students and professors across the region might help strengthen the region's business ethos.

<sup>12</sup> The challenge of effectively branding the DC region has been noted in other studies (Versel, Chapman, Dani, and McCarthy 2014).

<sup>13</sup> For more on the Biological and Health Technology cluster marketing effort see, <http://www.biohealthinnovation.org/biohealth-news/bhi-press-releases/4717-maryland-regional-biotech-forum-aims-to-propel-washington-d-c-metro-region-to-a-top-three-ranked-u-s-biotech-hub-by-2023> and for more information about the DC Cool Initiative see, <http://www.dccool.com/> [accessed December 17, 2015].



## *Competition among Local Jurisdictions*

*Issue.* Some of those interviewed discussed how intra-jurisdictional competition helps to keep tax rates relatively stable across the region and at times assists particular companies; however, many noted that certain intra-competition inhibits the overall economic development prospects of the region. Incentives directed at poaching companies within the region, rather than focusing outward can be detrimental as moving companies around the region does not add jobs or revenue growth.<sup>14</sup> Further, sometimes within-region competition breaks up innovation clusters that have formed. Examples of this is the movement of the National Science Foundation from Ballston in Arlington to Alexandria or the movement of Hilton from Montgomery County, MD to Tyson's Corner in Fairfax, VA.

*Policy Landscape.* Some state and local economic development agencies and economic development partnerships target their incentives towards acquiring DC-area firms outside of their state or municipal boundaries and there is little public policy can do to alter this dynamic and pattern. Local political actors in the regional will always want greater development within their jurisdiction, even if that means poaching major companies from another jurisdiction inside the region.

*Recommendation.* We need to enhance organizational efforts within the region that focus on the interconnections among the local jurisdictions. We also need entities that will help local jurisdictions better understand how to effectively partner to maximize the growth of the region as a whole, as opposed to one jurisdiction against another. With the development of a collective fund to look for companies outside of the region, we might begin to change the region culture from one of intra-jurisdictional competition to one of collaboration. To effectively stimulate regional collaboration, steps need to be taken to strengthen the position of the DC government so it can participate as a more equal partner with Virginia and Maryland. DC does not have the same taxing authority and therefore its ability to partner with sufficient resources for joint ventures is limited. DC must figure out how to bolster its financial position so that it can contribute on a more equal level with its surrounding states and suburban jurisdictions.

## *Inefficiency among Multiple Governments*

*Issue.* Some interviewed spoke about public inefficiencies (e.g., too much paperwork) and delays that made it difficult to utilize policy incentives and programs offered by state and local governments.

*Policy Landscape.* While the policy scan revealed many policy and programs aimed at the Information & Communication Technology; Biological & Health Technology; and Science & Security clusters, few senior executives within these clusters spoke about taking advantage of these policies.

*Recommendation.* State and local governments need to better market their incentives and programs and make them easier to use. One possibility would be to have the Roadmap sponsors host forums where local policy makers speak to business leaders about the incentives that are

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<sup>14</sup> Logan and Molotch (2007).

available to firms within the clusters. At the same time, it might be useful to have business leaders at these forums discuss with government officials ways to streamline these incentives so that they become more efficient and widely used.

## **Conclusion**

This report provides useful information that can help guide policy formation to stimulate the growth of the Washington region in the near future. The state and local level policy scans revealed an economic policy emphasis on Information & Communication Technology; Biological & Health Technology; and Science & Security Technology. Whether this policy emphasis is sufficient to promote the future growth of these industrial clusters is beyond the scope of this analysis but it is clear that these cluster areas have greater policy support, at the state and local levels, compared to the Advocacy Services; Business & Financial Services; Leisure & Business Travel; and Media & Information Services clusters. It is also evident that there is proportionately less of a policy emphasis on programs that exclusively focus on recruiting new businesses compared to ones that seek to retain and expand existing ones or ones that attempt to do both. Lastly, several policies attempt to tackle some of Washington regional economic development challenges. However, while many policies attempt to address the core business challenges in the region, few take a regional approach and we need better cross-jurisdictional coordination and participation to make substantial headway on important regional issues including transportation, talent and business recruitment, branding, and reducing social disparities.



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