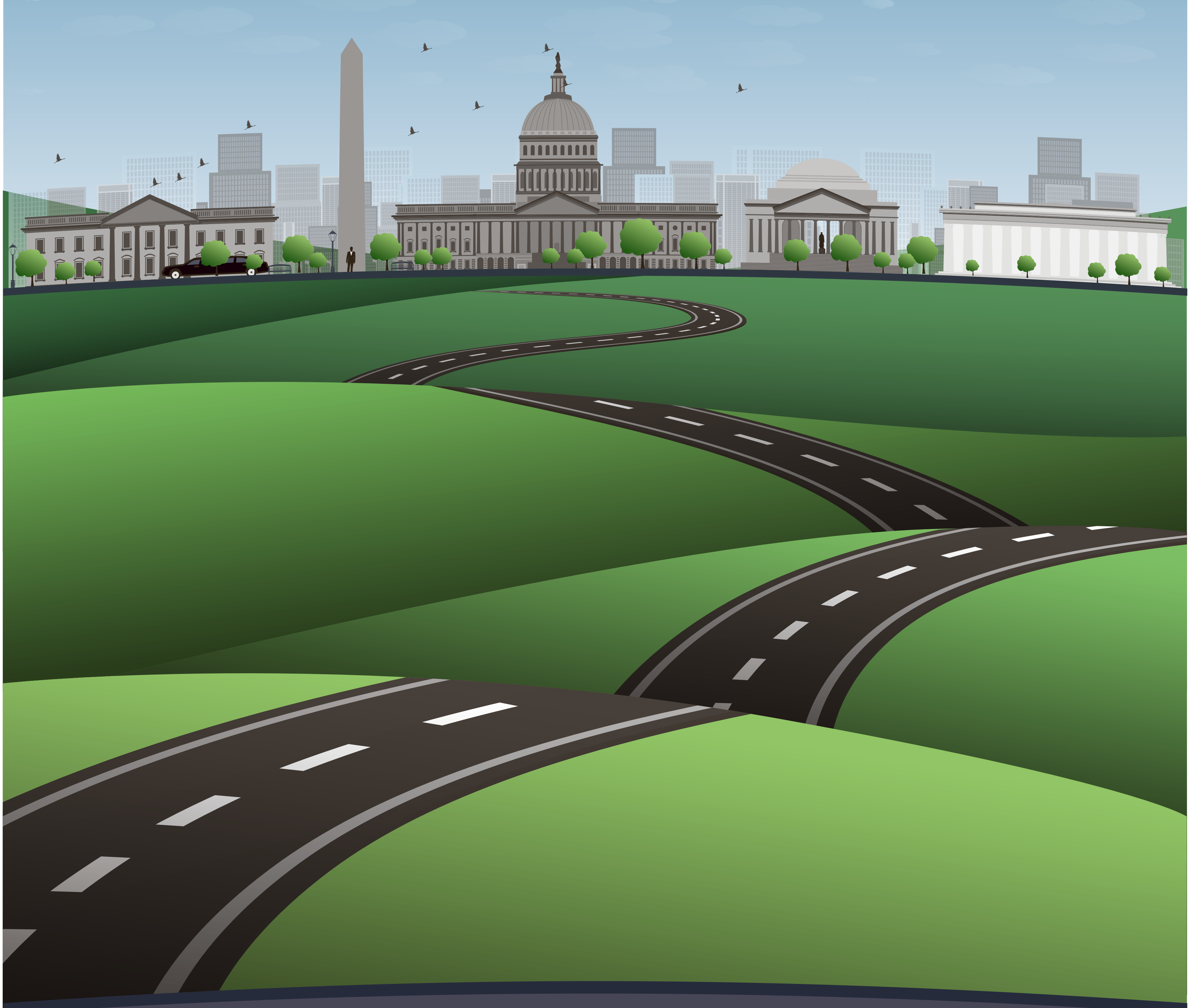
The 2030 Group



UPDATE

ROADMAP

FOR GREATER WASHINGTON'S ECONOMIC FUTURE

www.2030roadmap.com

DR. STEPHEN FULLER
Senior Advisor and Director of Special Projects, Center for Regional Analysis at George Mason University

The Washington Region's Economic Pivot

The Washington Region's economy has had to respond to two major shocks since 2007: the Great Recession (2008-2009) and the Sequester (2011-2014). These events permanently altered the region's economic structure and disrupted its growth cycle.

Since 1980, the Washington Metropolitan Area's economic growth was explicitly tied to federal spending. This economic model worked well until federal spending cutbacks between 2010-2014 resulted in the region's economy registering no growth in 2013, and having the smallest job growth rate among the nation's largest 15 metropolitan areas in 2014. These events pointed out Greater Washington's overreliance on the federal government to sustain its regional economy, instead of leveraging its proximity to the federal government to grow private sector industries better suited to compete on a global scale.

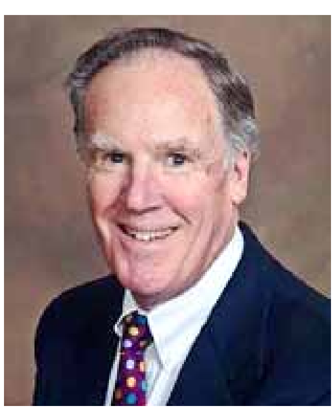
Recognizing the need to reposition our regional economy, the 2030 Group and a strong cross-sector coalition of regional leaders came together to support The Roadmap for the Washington Region's Future Economy.

The Roadmap identified seven non-federally dependent, export-based, high-value added advanced industrial clusters with high-growth potential for which the region has a competitive advantage over other peer regions, as well as the actions needed to accelerate the growth of these clusters. These seven advanced industrial clusters account for one-fourth of the region's job base and have the potential to replace federal spending as the principal driver of the region's future economic growth.

"Recognizing the need to reposition our regional economy, the 2030 Group and a strong cross-sector coalition of regional business leaders came together to support The Roadmap for the Washington Region's Future Economy."

The remarkable job growth experienced by the Washington region during 2015 confirms the inherent growth potentials of these clusters. Federal spending did not increase in 2015; in fact, it declined slightly. Still, the region generated 59,800 net new jobs last year and has started off very strong this year with job growth averaging 75,000 over the first quarter, suggesting that the region's economy has begun to pivot away from federal dollars, toward national and global markets.

While the Washington region appears to have regained its economic groove, the outlook is not all sunny. The national economy is lagging initial forecasts due to global uncertainty combined with expected tightening of interest rates, rising energy prices, weakening consumer confidence, and fiscal constraints that will moderate government spending. The generation of jobs paying below-average salaries still predominates. And while the region's job growth is projected to be strong in 2016, it is expected to slow in each successive year over the decade.



BOB BUCHANAN
President, The 2030 Group
Chair of The Montgomery County Economic Development Corp.

Collaborative Action

For many years, this region was fortunate to have an economy that sustained its growth and high quality of life; but the reduction in federal spending over the past five years pointed out that the historic model of relying solely on these funds to drive the region's economy was no longer sustainable.

The long-term overreliance on federal spending lulled many into a false sense of security and may have contributed to the lack of proactive action around building up our private sector businesses and establishing the public-private partnerships necessary to compete in an increasingly global economy. This complacency has left Greater Washington's regional economy lagging both the national economy and peer metropolitan areas that have better positioned themselves to compete globally.

As Benjamin Franklin famously said, "If you fail to plan, you are planning to fail!"

The Roadmap for the Washington Region's Economic Future is the plan that can put our economy back on a positive and sustainable economic trajectory, strengthen employment opportunities, and provide a high quality of life for current and future residents.

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Regional leaders across a variety of sectors—business, government contracting, philanthropic, health, tech, and academic—joined together to support this effort, regularly convening over the course of this past year to discuss and debate the research findings and to determine the best path forward. The result of their efforts represents a clear idea of where we want to go as a region and the actions needed to get us there.

This unified vision and the spirit of collaboration behind the Roadmap are its strengths. To successfully implement this plan over the next decade, it will require a continued commitment to this level of regional collaboration and political courage.

ROADMAP REFRESH

The Roadmap Research team, led by Dr. Stephen Fuller of George Mason University's Center for Regional Analysis, identified the private sector industries best positioned for growth in our region based on our competitive advantages. The team interviewed more than 30 of the region's top business leaders to better understand what it will take to accelerate the growth of these industries in Greater Washington over the next decade.

Competitive Advantages

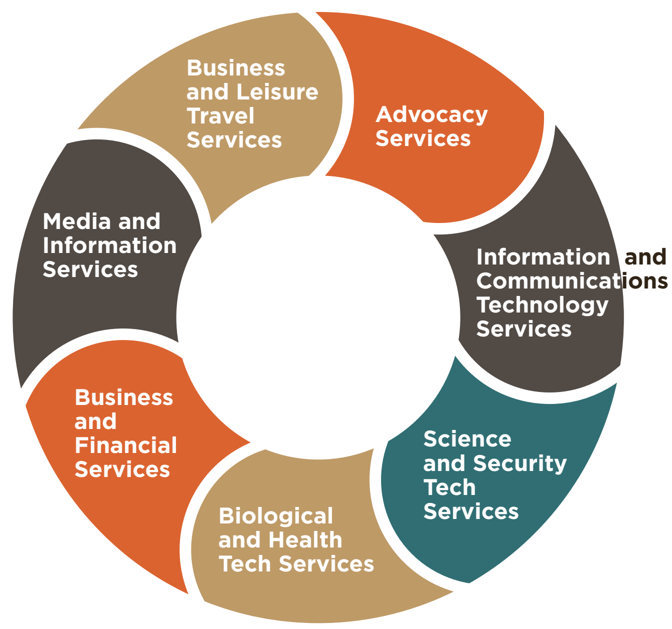
Knowledge-based Economy. The economies that will thrive in the future are those built around the dissemination of knowledge, the advancement of ideas, and the application of innovative technologies to solve global problems. Greater Washington's economy has always been more knowledge-based and is well positioned to thrive in this environment.

Global Government Power Center. As the nation's capital and the world's number one government power center our region is home to foreign governments and consulates, which enables top business leaders and cultures to connect regularly. This position provides the region with a uniquely attractive business ecosystem.

Reinforcing this distinctive ecosystem are the region's high quality of life, cultural diversity, world-class education centers, and highly educated and skilled workforce.

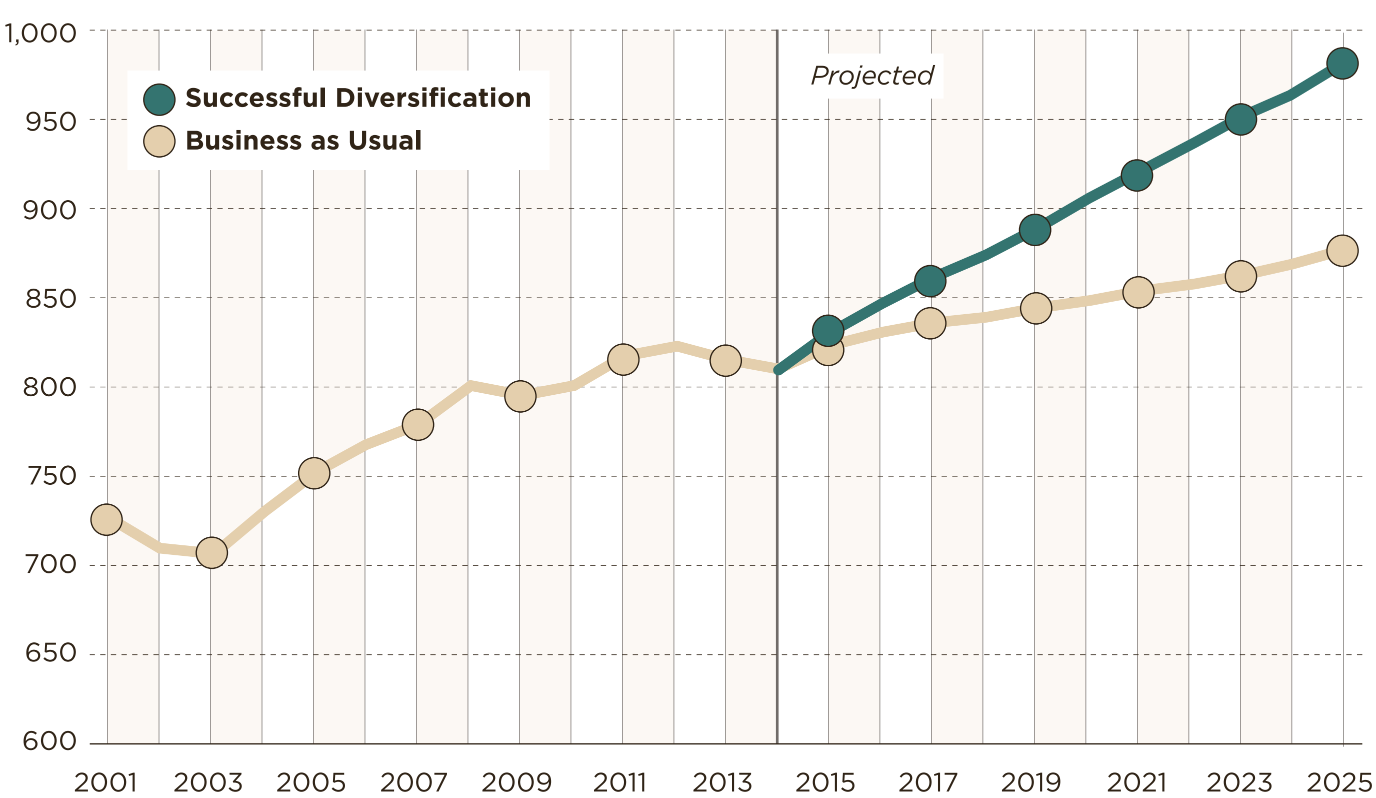
Growth Opportunities

Seven Advanced Industrial Clusters were identified as well positioned for economic growth over the coming decade based on these competitive advantages:



Successful Diversification V. Business As Usual

If we reduce our historic dependence on federal spending and successfully diversify our economy across the advanced industrial clusters that are well positioned to succeed here, the implications could be substantial.



Action Items

Recognizing the benefits to diversifying our regional economy, local leaders across a variety of sectors joined together to support the Roadmap, regularly convening over the course of 2015 to discuss and debate the research findings and the best course of action moving forward.

These high-caliber discussions culminated in the development of action items for public and private sector leaders to focus on over the next decade, in order to jump-start the needed shift from "company town" to global business center. The action items include: addressing our transportation and housing affordability issues, rebranding the region, and igniting an entrepreneurial culture across the region.

ROADMAP PARTICIPANTS

- The 2030 Group
- George Mason University
- Adventist HealthCare
- Northern Virginia Chamber of Commerce
- Montgomery County Chamber of Commerce
- Federal City Council
- Metropolitan Council of Governments
- ULI Washington
- MITRE
- Tech Council of Maryland
- Greater Washington Board of Trade
- Washington Regional Association of Grantmakers
- Washington Airports Task Force

ROADMAP RESEARCH TEAM

- Center for Regional Analysis, George Mason University
- Inforum, University of Maryland
- Metropolitan Policy Center, American University

GLOBAL FOCUS

During the next five years, 86 percent of global economic growth is projected to occur outside the United States, according to a November 2015 report from the Global Cities Initiative, a joint project of JPMorgan Chase and the Brookings Institute. Launched in 2012, the Global Cities Initiative aims to help U.S. metropolitan areas reorient their economies toward greater engagement in world markets.

The Global Cities Initiative study highlighted Greater Washington's unique assets, including its solid base of advanced industries and the expanding presence of foreign-owned firms. It also flagged areas such as exports and scientific impact, where Greater Washington lags behind comparable regions in connecting to global opportunity.

Exports make up a relatively small share of Greater Washington's economy. While the DC area boasted $27 billion in exports and 220,000 related jobs in 2014, those numbers represented only 6 percent of its total GDP, second smallest among its peer regions and 95th among the 100 largest U.S. metro areas. Greater Washington also sells relatively little of its economic output abroad, with its foreign firms under-contributing to exports.

Greater Washington's university system, despite its high academic quality, underperforms on measures of scientific research impact compared to equivalent regions, exhibiting a relatively weak scientific impact. Compared to other markets, Greater Washington's companies and research institutions innovate less in commercially valuable technologies and patents.

Many of Greater Washington's weaknesses stem from the outsized influence of the federal government on the regional economy, which may have held back the private-sector innovation and public-private collaboration that other regions have found critical to effective global engagement.

A coalition of regional business, government and higher education leaders from the DC region was accepted in the Global Cities Initiative in February of 2016. The Greater Washington Board of Trade, Metropolitan Council of Governments, and Consortium of Universities of the Washington Metropolitan Area will work next year to create a unified regional export plan.

As the Global Cities Initiative report noted, now may be the time for Greater Washington to adopt a more coordinated and purposeful stance to identify and capture global opportunities.

TRANSPORTATION

Our region's transportation issues have become a transportation crisis. The numerous and dire Metro issues and reports that the Memorial Bridge could crumble in the next five years are only a sample of the countless ways our current infrastructure is failing.

Transportation is a fundamental building block of a competitive economy, and bold action is needed to ensure that our region is pursuing the level of mobility and connectivity required to be globally competitive.

Greater Washington must have a transportation infrastructure in place that supports both business growth and workforce mobility, in order to provide residents with safe, reliable transportation options that increase quality of life.

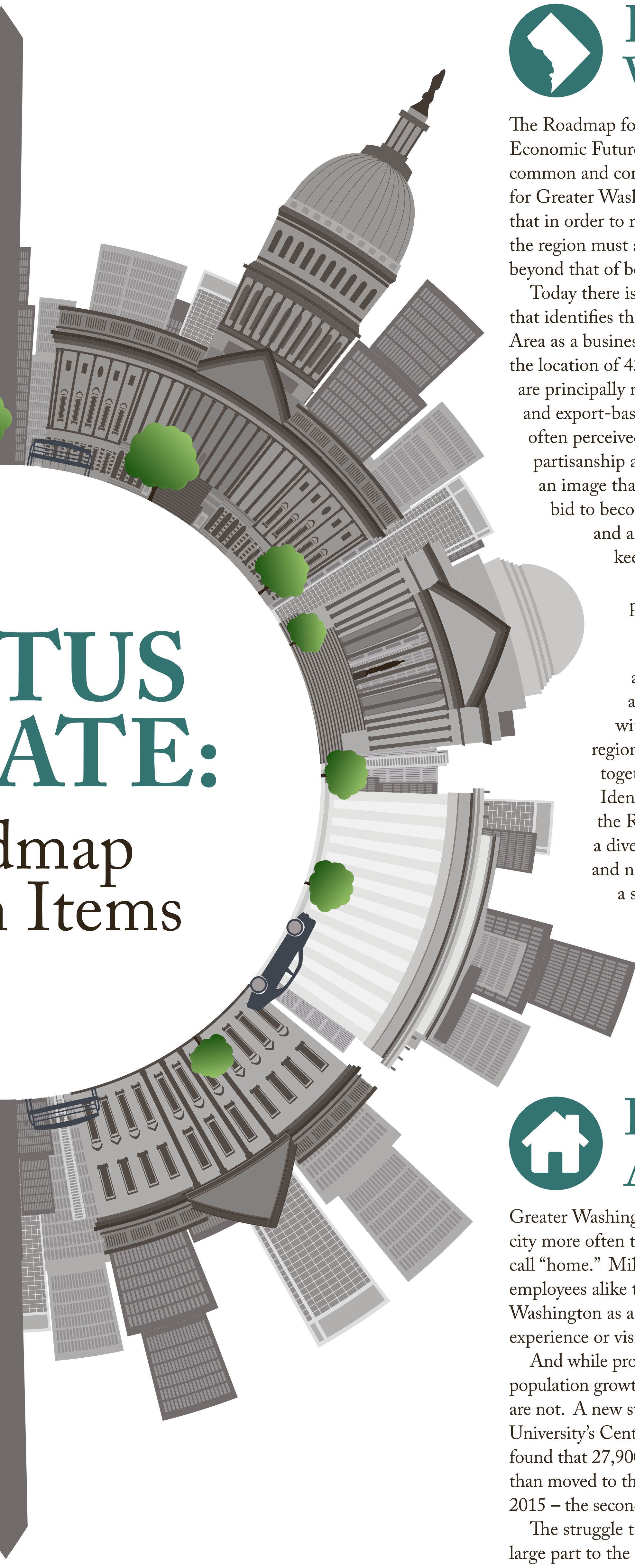
Current residents believe transportation is the greatest challenge facing the region, according to a recent Greater Washington Transportation Survey commissioned by the Suburban Maryland Transportation Alliance and the Northern Virginia Transportation Alliance. The poll showed that a majority of residents across the District, Maryland, and Virginia support a slew of transportation projects including:

- Adding Express Lanes on the American Legion Bridge (59 percent);
- Widening portions of the Capital Beltway in Maryland (71 percent);
- Widening portions of Interstate 66 (70 percent);
- Widening and redesigning Interstate 270 (70 percent);
- Building the Purple Line (67 percent);
- Constructing a new Potomac River bridge crossing north of the American Legion Bridge (59 percent).

In addition, 86 percent of residents surveyed favor investing in both roads and transit, rather than one or the other. This finding reveals that many across the region support a multi-tiered approach when it comes to addressing our transportation challenges.

Improving connectivity regionally and strengthening our infrastructure connections globally could facilitate increased global trade and investment in Greater Washington.

It is imperative that regional leaders take action to address our transportation issues expeditiously; they are crucial to the safety, security, and economic development of our region. But these issues should be addressed in a comprehensive and proactive manner. Greater Washington cannot afford to be shortsighted and must look at the region's transportation infrastructure as a whole, rather than going from crisis to crisis.



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REBRANDING WASHINGTON

The Roadmap for the Washington Region's Economic Future affirms one of the most common and consistent recommendations for Greater Washington's economic health – that in order to remain globally competitive, the region must advance its regional identity beyond that of being "the Federal city."

Today there is rarely a business report that identifies the Washington Metropolitan Area as a business center, despite it being the location of 43 Fortune 500 firms that are principally non-federally dependent and export-based. Instead, the region is often perceived to be a place of gridlock, partisanship and political dysfunction — an image that hindered the area's strong bid to become host the 2024 Olympics and affects its ability to attract and keep talent.

Recognizing that external perceptions of Washington are tied to negative concepts of the federal government, and that current residents and businesses do not identify with a unique regional brand, regional leaders have come together to support the Regional Identity Campaign, as they did the Roadmap. Over the next year, a diverse consortium of business and nonprofit leaders, along with a seasoned consultant and local citizens, will work to change the perception of this region, based on our authentic attributes.

> **The "government town" perception lingers — and hurts. There is no brand, no team. It's every jurisdiction for itself. And it's not working. Some local leaders say the time has come to build an organization that will develop a strong regional identity and then sell it to the corporate world both nationally and globally.**
>
> **— Washington Business Journal, Michael Neibauer Oct 23, 2015**

The key to the initiative lies in building awareness of the DC area beyond governmental boundaries, and positioning the region based on positive aspects such as its cultural diversity, skilled workforce, high quality of life, and uniquely attractive business ecosystem.

The current timeline calls for completion of the regional brand platform by October 2016 and development and implementation of the campaign in the first quarter of 2017.

HOUSING AFFORDABILITY

Greater Washington is known as a transient city more often than a place that people call "home." Millennials and government employees alike tend to see Greater Washington as a place to build their work experience or visit, but not to live.

And while projections for the region's population growth are strong, retention rates are not. A new study from George Mason University's Center for Regional Analysis found that 27,900 more people moved away than moved to the Greater Washington area in 2015 – the second year in a row for this trend.

The struggle to retain residents is due in large part to the region's high cost of living, and in particular the expense of raising a family here. In fact, the Economic Policy Institute recently ranked the DC metro area as the most expensive place in the country for a two-parent, two-child family to live.

If Greater Washington is going to attract and retain the talented, highly educated workforce so essential to the growth of our private sector industries and businesses, action must be taken to address the region's cost of living, particularly housing affordability.

In the coming year, the Greater Washington Housing Leaders Group— a collaboration of diverse public and private sector leaders focused on identifying solutions for housing affordability — will pursue analysis, best practices, and innovative approaches to preserve and create greater housing affordability for the Washington Area. These could include engaging key stakeholders, developing new financial tools, and identifying the elements needed for a regional compact.

INNOVATION in the Greater Washington Region

Months of research and analysis have uncovered proof that the Greater Washington Region is a hotbed of innovation and small business creation — more than other parts of the country that actually hold a reputation for being innovative.

The Roadmap Innovation Initiative, completed by Jonathan Aberman and a multidisciplinary team over the past six months, is a comprehensive review of the region's ability to create entrepreneurial, innovation-based businesses, and shows how leaders can better harness what the region has to offer to create more profitable businesses that attract a valuable workforce.

The report clears up misconceptions and reveals that there is an impressive "Greater Washington Model of Entrepreneurship" distinct from other regions in the U.S. It identifies ways for regional leaders to leverage our unique entrepreneurial ecosystem to strengthen our regional economy, global competitiveness, and innovation outputs.

ROADMAP INNOVATION INITIATIVE TAKEAWAYS

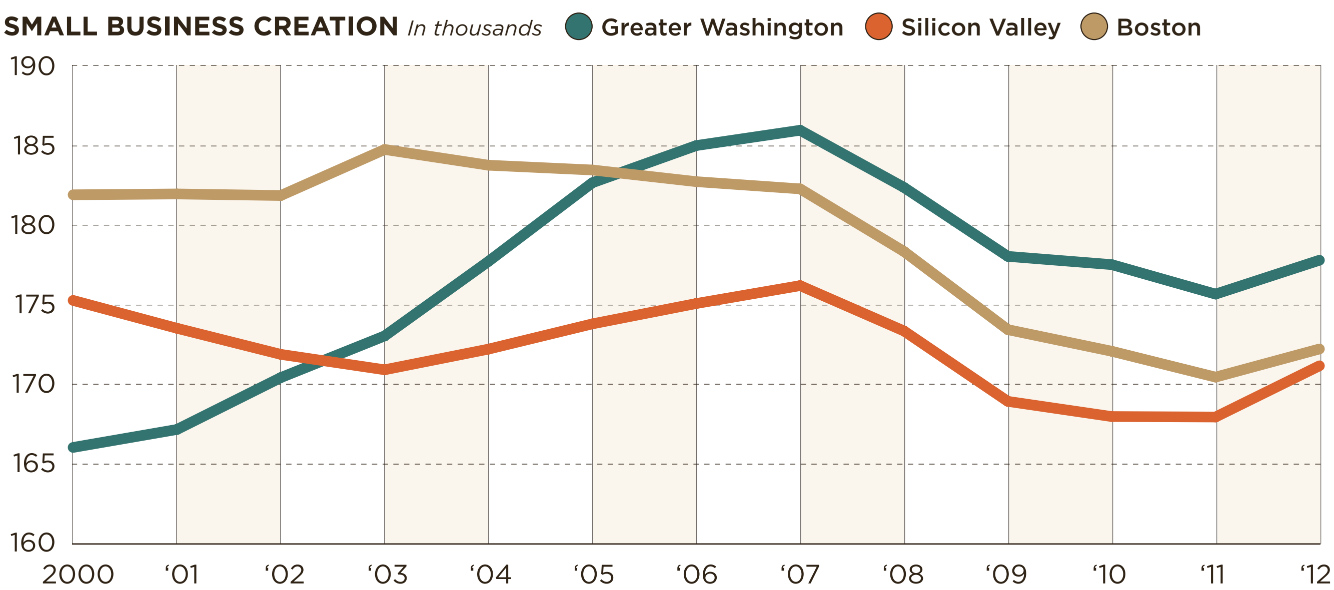
Our Region is Entrepreneurial

A strong indicator of a region's innovation potential is its ability to grow small businesses. Since 2004, the Greater Washington Region's pace of new business formation has exceeded other regions generally regarded as U.S. innovation hubs, such as Boston and Silicon Valley.

Over the last 20 years, the Greater Washington Region consistently has had more companies on the Inc. 500 list of the nation's fastest-growing entrepreneurial businesses than any other region, including Boston or Silicon Valley.

The region also has a vibrant merger and acquisition market. During the last 20 years, 11,896 completed business sales involved companies in the Greater Washington Region with an aggregate transaction value of $1.6 trillion.

SMALL BUSINESS CREATION *In thousands*



Source: Small Business Administration

Our Region's Role as a Primary Partner for National Security is at Risk

In the last year, the Department of Defense, the Department of Homeland Security, the State Department and the Army have each opened offices in California to seek new innovations from private businesses, particularly entrepreneurial innovation businesses. The Department of Defense opened an office in Boston with a similar mission. To date, no similar effort in our region has been initiated.

This is a disturbing trend, especially because the Greater Washington Model of Entrepreneurship often relies on federal funding or customers at some point in business growth. It is also a significant threat to the larger businesses in the region that serve national security customers.

Many of Our Most Successful New Businesses Leave the Region

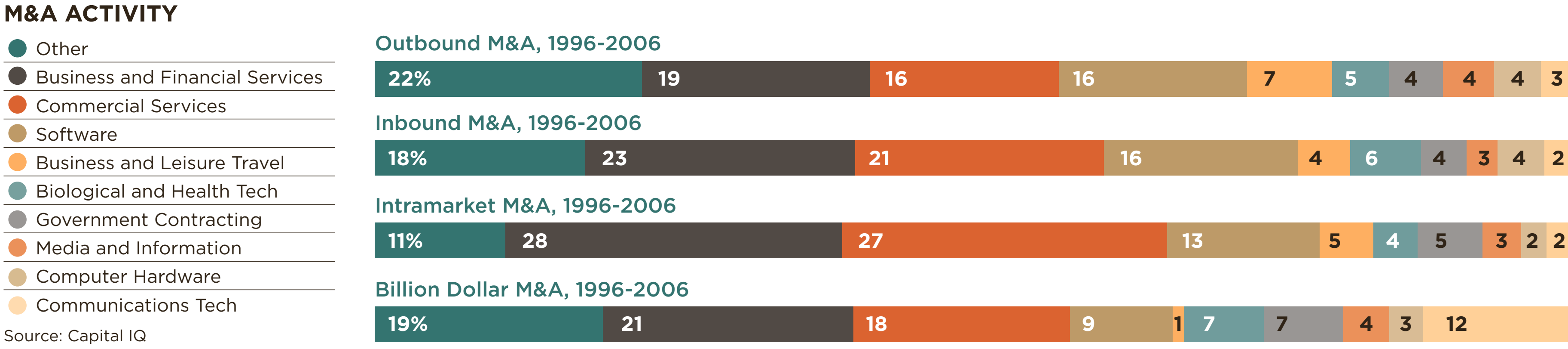
While we are good at growing entrepreneurial businesses in this region, we are not as good at keeping them here.

Over the past 20 years, 105 of the region's leading businesses were sold for more than $1 billion. The good news: This region can and has grown many successful start-ups. The bad news: only 16 of those 105 billion-dollar deals were done in a way that kept the companies here in the region. More broadly, of the more than 6,000 successful business sales over the last 20 years, three-quarters were to out-of-region purchasers.

When established, non-local companies buy up the region's successful new businesses, they often shift operations to different cities – removing from the area not only potentially profitable businesses, but also their talent and management.

As a result, dollars that could flow into the region may end up following the talent to another region, hurting our entrepreneurial ecosystem in both the short and long term.

M&A ACTIVITY



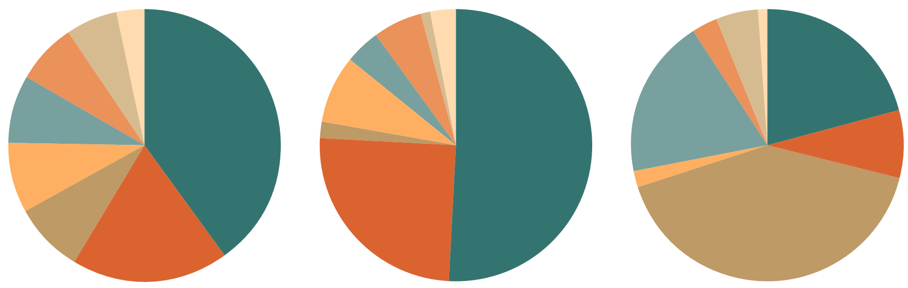
Source: Capital IQ

Accelerators and Incubators Need the Business Community's Engagement to Succeed

The region boasts a wide range of business accelerators and incubators. National rankings of such programs measure success by examining subsequent business funding or exits — and for that reason, our accelerators and incubators rarely make the lists. If success is to be measured in this way, our region must act to create conditions for our accelerators and incubators to better compare to other cities.

Currently, our regional business community is not buying enough local technology companies. The Roadmap Innovation Initiative found that software and biotech businesses are bought by out-of-region purchasers at roughly the same rate as we are purchasing similar companies situated out of region. For the region's entrepreneurial ecosystem to flourish in the future, our business community must buy local more often.

VENTURE CAPITAL FUNDING BY INDUSTRY



Industry	National, 2015	DC Metro, 2015	DC Metro, 1999
Software	40.1%	51%	21%
Biological and Health Technology	18.7	25	8
Communications Technology	8.3	2	41
Commercial Services	8.2	8	2
Media and Information	8.1	4	19
Other	7.2	6	3
Business and Financial Services	6.2	1	5
Computer Hardware	3.2	3	1

Source: PricewaterhouseCoopers

While Important, Venture Capital Does Not Drive our Region's Innovation Economy

Many view venture capital as a leading indicator of a region's suitability for growing entrepreneurial innovation businesses, but it is a lagging indicator for this region.

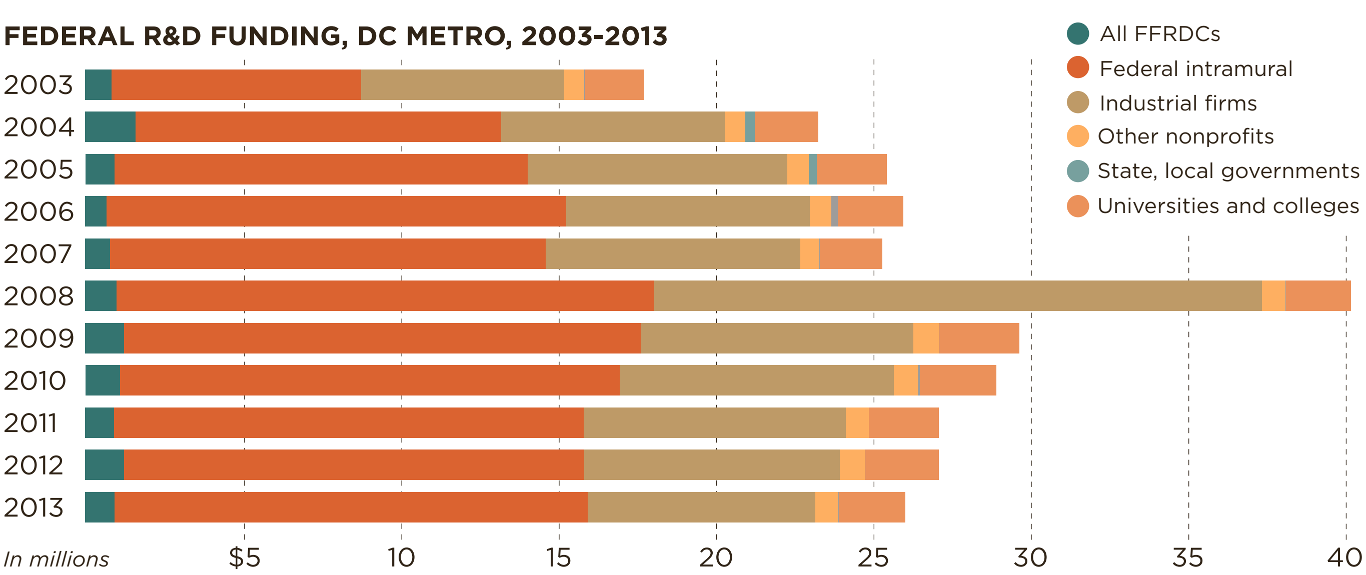
In 2015, in our region, the federal government spent more on information technology ($30 billion) and research and development ($26 billon) than all venture capital invested ($1.4 billon). This explains in part why so many entrepreneurial businesses grow thanks to their proximity to Washington DC, rather than venture capital.

The Greater Washington Model of Entrepreneurship

Many of our region's most successful entrepreneurs turn their proximity to the national capital into a competitive advantage by identifying regulatory opportunities, using the large pool of federal funding available for innovation, or benefitting from the clustering of unique customers.

Examples of this model: AOL and its popularization of the Internet, which was fostered by federal efforts; Medimmune, which grew out of federal research and development; and more recently, Cvent, an event coordination business benefitting from the large concentration of networking events occurring in the Greater Washington Region.

FEDERAL R&D FUNDING, DC METRO, 2003-2013



Source: National Science Foundation

Our Region Needs to Improve at Technology Commercialization

Innovations that form new industries or that are truly unique are often derived from federally-funded research and development.

There are 108 federal labs located in the Greater Washington Region, as well as prominent federally-funded research and development labs (FFRDCS). Almost 60% of regional federal R&D funding goes to local businesses.

If we want new innovation businesses and the funds to seed more tech start-ups, regional leaders must devote effort to local industry, FFRDCs, and federal labs, where great ideas are residing untapped.

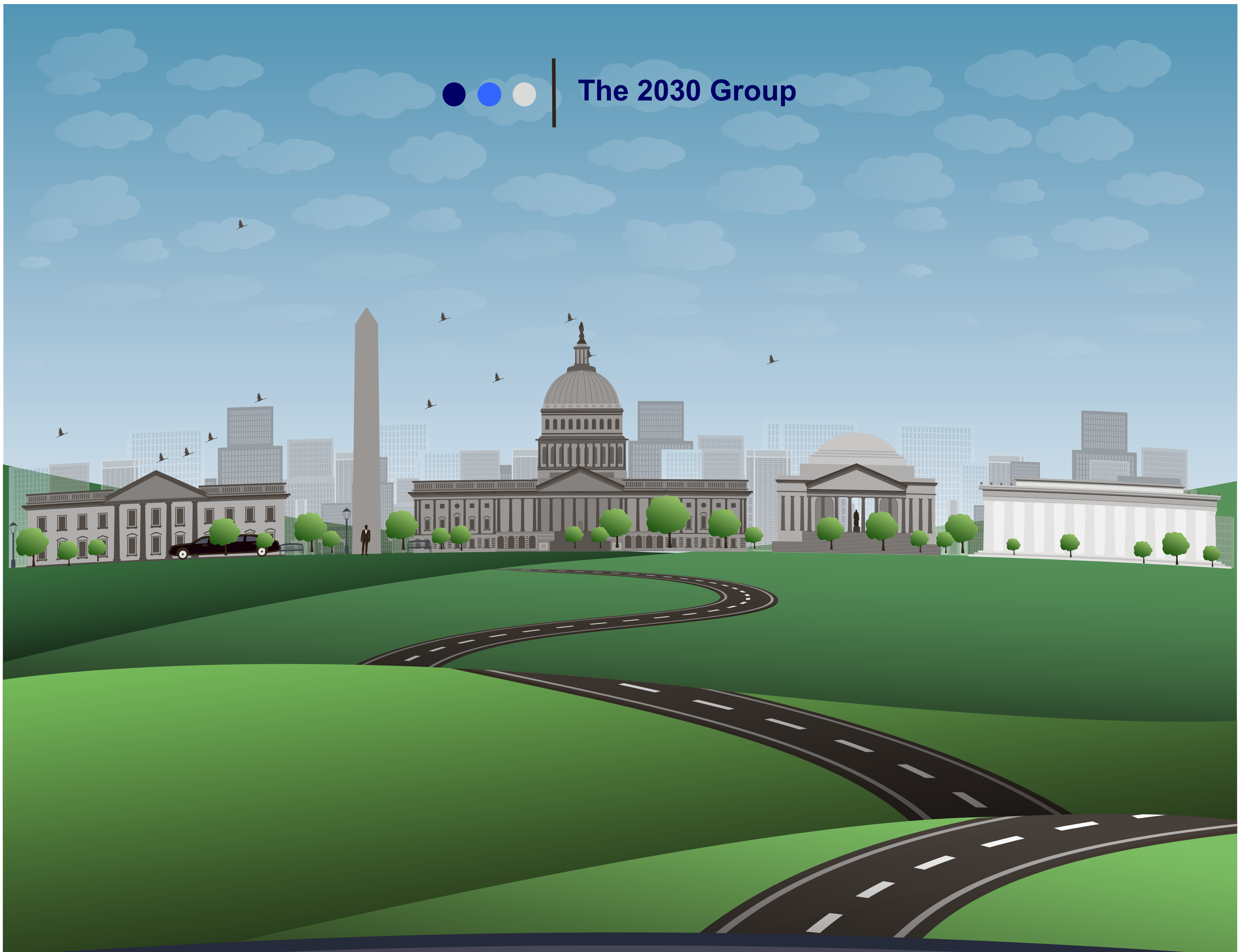
RECOMMENDATIONS

In order for the "Greater Washington Model of Entrepreneurship" to reach its potential, regional leaders should consider:

- Strengthening connections between our large companies and new innovation businesses, particularly in cybersecurity, government contracting, and precision medicine/ biotechnology sectors.
- Shifting the region's current focus on technology transfer from universities to industry, federal labs, and FFRDCs.
- Establishing an objective regional agency or consortium to advocate for and foster the connection of entrepreneurial, technology innovation businesses with larger companies in the region. Such an organization could match experienced local entrepreneurs to technologies for commercialization, thereby helping to address this current regional weakness.
- Increasing regional collaboration and business engagement around technology initiatives and activities. Establishing a more collaborative entrepreneurial ecosystem across the region will help attract and retain talent and businesses, and establish Greater Washington as an innovation leader.
- Creating a long-term innovation road map, so that our region can lead subsequent waves of new technology adoption, as it did in the 1990s.
- Integrating entrepreneurship and technology into our region's universities and secondary education classrooms, to prepare our current and future workforce with the skills necessary to thrive in an increasingly technological world.

REPORT AUTHOR

Jonathan Aberman is a business owner and founder of Tandem NSI, which connects innovators to government agencies. He lectures at the University of Maryland's Robert H. Smith School of Business and hosts a weekly talk show on SiriusXM.



CONCLUSION

The key to the economic future of the Greater Washington Region lies in collaboration—the process of working together to identify and achieve shared goals. In the past 18 months Dr. Stephen Fuller, the 2030 Group, and many other regional organizations and individuals have stepped up to do just that, dedicating considerable time and energy toward the advancement and success of this unique region.

The Roadmap for the Washington Region's Future Economy identified several strategic action areas including housing, transportation, entrepreneurial innovation, global presence, and rebranding Greater Washington's image. Although each has a separate focus, all of these action items are joined together in a concerted team effort: moving forward means advancing on each front.

Much progress has been made by the working groups that were established to address each initiative at the start of the year. A continued commitment will be required to move these action items forward and to reach our common goal—providing current and future residents with a high quality of life and building a strong regional economy well positioned to thrive on a global scale in the decades to come.

As an old African proverb says, "If you want to go fast, go alone. If you want to go far, go together." While Greater Washington needs to reposition its regional economy expeditiously and move the action items forward, regional leaders must act together for a long-term impact. Only through coordination and collaboration can our region maximize its potential.

Let's go forward together!

www.2030roadmap.com