

THE FIVE-YEAR

ECONOMIC DEVELOPMENT STRATEGY

FOR THE DISTRICT OF COLUMBIA



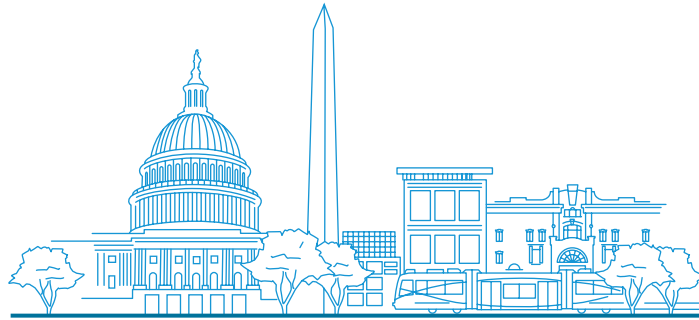
Government of the District of Columbia
Vincent C. Gray, Mayor





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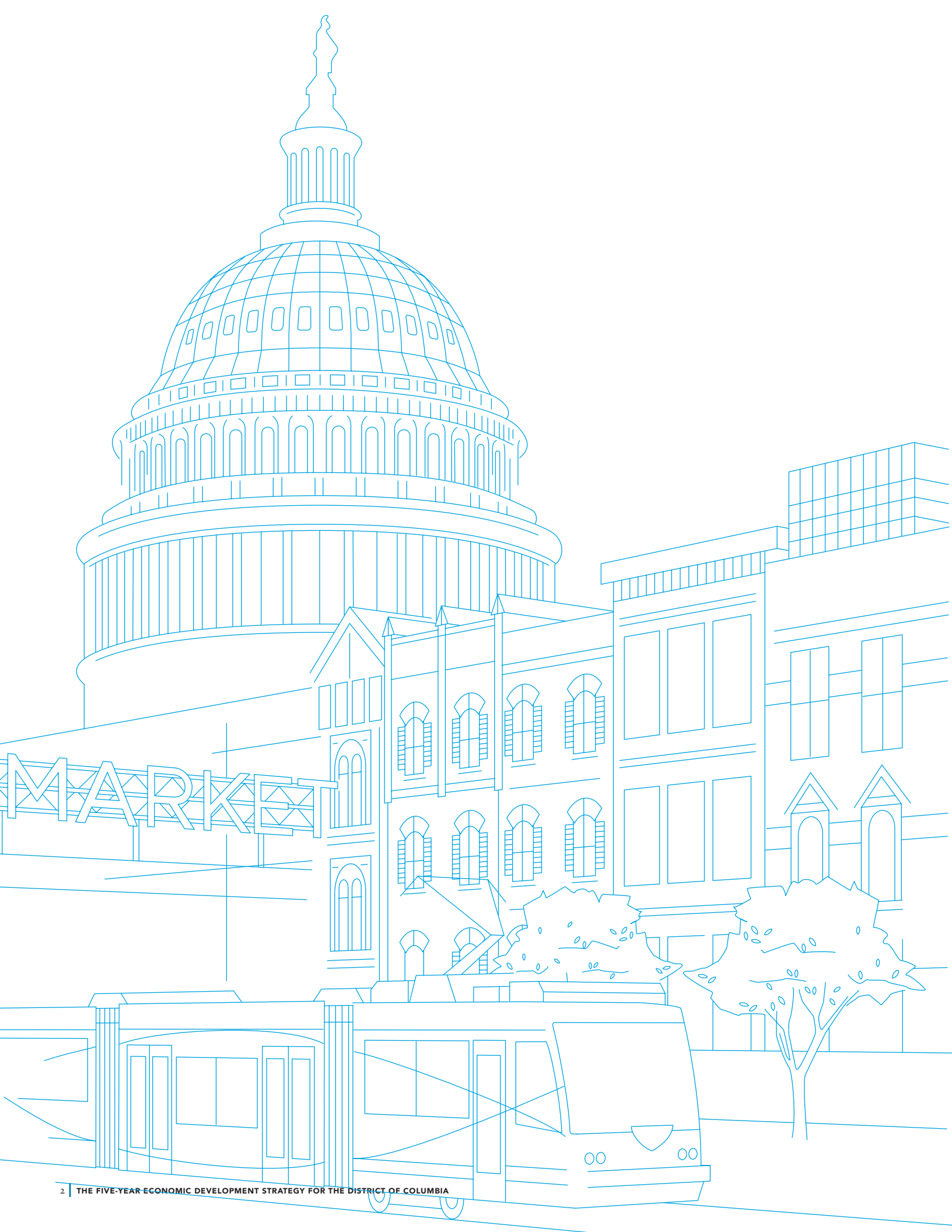


**THE FIVE-YEAR ECONOMIC DEVELOPMENT
STRATEGY FOR THE DISTRICT OF COLUMBIA**



November 14, 2012

Office of Mayor Vincent C. Gray
The District of Columbia





Letter from the Mayor

DEAR DISTRICT RESIDENTS:

I am pleased to present *The Five-Year Economic Development Strategy for the District of Columbia*. Not only is this the first sector-based economic development roadmap for the city, but it is a product of unprecedented collaboration with the private sector and local universities.

Before I became mayor, I spoke often about the need for a transformative economic development strategy for Washington, DC. With the help of local government officials, business and civic leaders, nonprofit organizations, and education and medical institutions, my administration is delivering such a plan. Over the last six months, with leadership from business schools at American, George Washington, Georgetown and Howard universities, we listened to hundreds of leaders in seven targeted sectors to understand how we can grow our city's business base and create jobs for our residents. This strategy represents the culmination of that inclusive effort.

A top priority of my administration has been to diversify the District's economy to better absorb downturns and to ensure abundant employment opportunities for our residents. The economic landscape of the nation has shifted, yet we have continued to forge tremendous progress in the District. Our unemployment rate has fallen from 11.3 in June 2011 to 8.7 percent in September 2012. Our population is growing at a far faster pace than virtually any US state. And our office vacancy rate is the lowest in the nation. No wonder the District is recognized as one of the nation's top cities in which to live, work, vacation and do business.

By implementing this five-year economic strategy, we will push that momentum even higher: **creating 100,000 jobs and generating \$1 billion in new tax revenue over the next five years to provide DC residents with the best services possible.**

My vision for "One City"—a prosperous, equitable and sustainable DC for all residents—is encapsulated in this new strategic direction. The District's future relies on our ability to grow and diversify our economy. We want flourishing technology, hospitality and retail sectors, even as we continue to serve our federal tenants and professional services firms. We want to give our small businesses every chance for success and prepare our workforce for the employment opportunities ahead. This strategic plan will make the District, already marked by potential found nowhere else in the nation, even stronger and healthier.

**My vision for "ONE CITY"—
a prosperous, equitable and
sustainable DC for all residents—
is encapsulated in this new
strategic direction.**

The Five-Year Economic Development Strategy for the District of Columbia articulates the bold visions that have been voiced by public, business and civic leaders. I want to thank and acknowledge the efforts of the public, private and academic communities involved in its development and, especially, commend the dedication of our local universities. My administration will work in partnership with these stakeholders in the coming months to implement the initiatives and bring this strategy to life.

VINCENT C. GRAY
MAYOR

Letter of Transmittal from Deans Guthrie and Thomas

DEAR RESIDENTS OF WASHINGTON, DC:

In the spring of 2012, Mayor Vincent C. Gray and Victor Hoskins, the Deputy Mayor for Planning and Economic Development, engaged the business schools of The George Washington University, Georgetown University, Howard University and American University to take a leadership role in developing a strategic plan for the nation's capital. We were humbled and honored. For six months, the deans of the District's business schools and 16 of the city's MBA students conducted a study of strategic economic opportunities in the District and its region.

This process truly has been a collaborative effort. While we served as co-chairs of the Strategy Executive Committee, the work brought together the talents of the entire committee, the project's Strategy Advisory Group and the business school students and staff that kept this complex project on course. This report reflects their dedicated work.

We hope this document will serve as a testament to the commitment of the institutions of higher education in the District.

We hope this document will serve as a testament to the commitment of the institutions of higher education in the District. We believe in the purpose, the possibility and the process of change in the community we call home.

This document provides sector analyses, findings from nearly 200 interviews and the results of a new business analytics approach. We are proud to present these findings and initiatives to Mayor Vincent Gray and Deputy Mayor Victor Hoskins.

Respectfully submitted,



DAVID A. THOMAS
Dean

Georgetown University
McDonough School of Business

Co-Chair, Strategy Executive Committee



DOUG GUTHRIE
Dean

The George Washington University
School of Business

Co-Chair, Strategy Executive Committee

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SECTION A
**THE NEED FOR A STRATEGIC
DIRECTION**

The Need for a Strategic Direction

When Mayor Vincent C. Gray took office in January 2011, the nation was struggling through the worst economic crisis since the Great Depression. With a double-digit unemployment rate, the District of Columbia's economy was significantly impacted. DC has bounced back, gaining an average 1,000 jobs per month over the last 15 months to bring unemployment down from 11.3 percent in June 2011 to 8.7 percent in September 2012.¹ During the next five years, the District will generate thousands of additional jobs through a project pipeline that includes in excess of \$17 billion in development value.

The population of Washington, DC, is rising at a faster rate—2.7 percent between 2010 and 2011—than any state in the nation.² Tourists are arriving in growing numbers; a record-breaking 17.9 million visited in 2011.³ The District was recently listed as one of the top five cities in the United States for technology startups⁴ and one of the three biggest global real estate investment markets.⁵ By all measures, DC's recovery in the last two years has been strong. But the city's economy is changing, with the federal sector and other traditional anchors under pressure while technology and emerging sectors rapidly expand. To continue creating jobs and building its tax base, the District needs a coherent strategy that recognizes both how far it has come and how much room there is to grow.

Continued growth, in part, will require the District to leverage its unique assets and trends:

- Its position as a hub for knowledge, information generation and innovation, and as an employment and talent magnet, with lively neighborhoods that attract businesses and workers.
- An unparalleled array of international assets, including embassies and consulates that contribute to the city's economic and cultural life.
- A creative economy made up of artists, cultural nonprofits and creative businesses that produce cultural goods and services, generating jobs, revenue and quality of life.
- More than 100,000 college and university students, 23 universities and several hundred government and private sector research institutions.
- A growing technology base featuring startups and tech companies that already are changing DC's traditional business profile. As these firms take root, they create a snowball

effect that makes the District increasingly attractive to the young talent driving emerging sectors like technology.

- Its recognized leadership in urban sustainability. DC boasts one of the nation's greatest concentrations of green buildings and the second highest percentage of jobs in green goods and services.⁶ It has also had a threefold increase in the use of renewable energy since 2004 and has benefited from significant investments in walkable spaces, bike lanes, parks and other green infrastructure.

The Five-Year Economic Development Strategy is the first document from the District to lay out a clear roadmap for sustained, sector-driven economic development. This plan contains the visions, strategies and initiatives that will transform the District **by creating 100,000 new jobs and generating \$1 billion in new tax revenue to support city services over the next five years.**

Bold Visions for DC: Diversifying the Economy and Preparing the Workforce

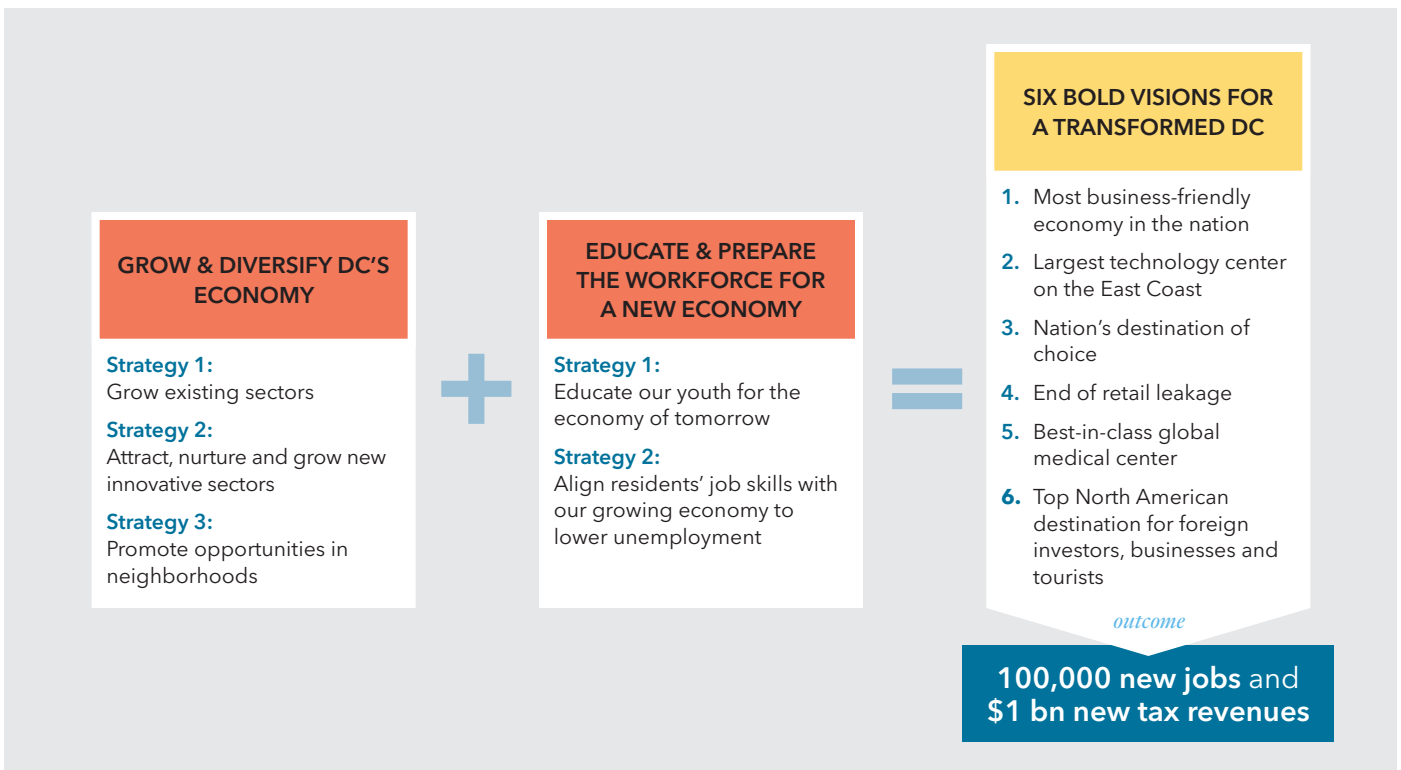
The District anchors an impressive convergence of intellectual capital, a resource that was mobilized for *The Five-Year Economic Development Strategy*. Four local graduate schools of business collaborated on the analysis behind the strategy, providing select teams of MBA candidates to research the District's seven core economic sectors and conduct in-depth interviews with business, academic and civic leaders. These interviews, along with sector research, contributed data, insights and ideas that were synthesized into strategic initiatives. Many of these initiatives were analyzed using the Economic Impact Model, a new business analysis tool that allowed competing projects to be evaluated and prioritized.

Findings from research and stakeholder interviews confirmed the need to grow and diversify the District's economy while preparing the workforce for new employment opportunities. These two guiding principles build on the goals in the "One City Action Plan," the Gray administration's visionary program to create a prosperous, equitable and sustainable city. Economic growth, diversification and a prepared workforce are the strategic drivers behind six bold visions for DC.



By expanding and diversifying its economy, DC can fully capture the potential of existing sectors at the same time that it nurtures emerging sectors. A more robust economy will reduce dependence on the federal government and focus on sectors with growth potential, providing resilience during economic downturns. Expanded employment is also crucial, especially opportunities with low barriers to entry so that all residents can contribute to the workforce. To ensure that employment needs are matched

with qualified employees, worker preparation becomes a critical component. Economic growth also provides greater fiscal stability. The increased revenues that come from putting surplus land back on the tax rolls, combined with greater numbers of employed residents and higher consumer spending by workers, add to the District's tax base and its ability to invest in neighborhoods and revitalization.



Growth and diversification, along with continued investments in the education and preparation of the city's workforce, will enable DC to make transformative economic changes.

The strategic initiatives described in *The Five-Year Economic Development Strategy* ultimately support the District's quest over the next five years to:

1 Establish the most business-friendly economy in the nation

- Invest in services that simplify the process for launching and operating a business in the District
- Maintain a well-prepared workforce that meets the needs and demands of area employers across major sectors

2 Create the largest technology center on the East Coast

- Double the number of technology jobs in DC within five years
- Double the amount of capital invested in DC companies within five years
- Attract the best academic institutions to contribute to an innovation ecosystem

3 Become the nation's destination of choice

- Invest in and build a nationally recognized infrastructure system
- Attract and retain talent by leveraging the convenience and excitement of living in DC
- Rival marketing efforts of the nation's top destinations in promoting tourism
- Become renowned for delivering the highest standards in hospitality and service

4 End retail leakage

- Meet the retail needs of the District's neighborhoods
- Attract the optimal types of retailers for job creation and tax-base expansion
- Market real estate opportunities to retailers in order to develop retail-dense areas in the city

5 Build a best-in-class global medical center

- Establish a medical hub that brings together area hospitals and research institutions
- Target redevelopment sites for medical and university research and facility development
- Leverage anchor medical institutions as impetus for growing the nearby local economy (rivaling the impact of the hospital cluster in Houston)


6 Become the top North American destination for foreign investors, businesses and tourists

- Enable 200 DC businesses to become active in the foreign market within five years
- Attract at least \$500 million in foreign investment within five years
- Double the number of Chinese tourists within five years


100,000 New Jobs and \$1 Billion in Tax Revenue: Attainable Outcomes

Realization of these **six bold visions** will generate **100,000 new jobs** and **\$1 billion in new tax revenue** over the next five years. For context, 100,000 new employment opportunities is more than triple the current number of unemployed District residents.⁷ An additional \$1 billion in new tax revenue represents a 17 percent increase of the District's current revenue, allowing for additional investments in health care, public safety, education, infrastructure and other vital public services.


Creating 100,000 new jobs will require the District to grow employment at an average annual rate of 2.5 percent over the next five years. For context, the city's median annual growth rate since 1950 has been about 0.85 percent.⁸ While certainly ambitious, this goal is attainable with targeted investment and improved government services that expand each of the sectors targeted in *The Five-Year Economic Development Strategy*.

 **Real Estate and Construction:** Employment in this sector is already the highest in 22 years, and it is poised to grow more as major projects such as Saint Elizabeths, McMillan and Southwest Waterfront break ground.⁹ An estimated 55,000 jobs will come from this sector.

 **Technology:** The technology sector has experienced a 50 percent job growth rate in the last 10 years.¹⁰ With greater private and public investment, effective marketing and support for nascent entrepreneurs, the District can double employment in the next five years, creating 20,000 new jobs.

 **Higher Education and Health Care:** Development of a medical hub at the McMillan Reservoir site alone will add 5,000 new jobs to the higher education and health care sector in the next five years.

 **Retail:** Eliminating the estimated \$1 billion in annual retail leakage can create 2,500 new jobs in the city.¹¹

 **Professional Services, Hospitality, and Federal Government and Federal Contractors:** The District's upcoming development projects provide a strong base for office and hotel growth. Expanding the city's business attraction and marketing efforts can attract the tenants necessary to fill new buildings, creating an estimated 17,500 new jobs.

Based on analysis using the District's Economic Impact Model, 100,000 new jobs would yield tax revenues in excess of \$1 billion over the next five years.

Taking Steps Toward the Future

The District government and the private sector have always worked diligently to strengthen and invigorate DC's economy. The Gray administration has made economic development and job creation for DC residents its top priorities since January 2011, and *The Five-Year Economic Development Strategy* builds on numerous projects that have been in motion for some time. More than \$8 billion in city-sponsored projects are under construction in 2012 and range from the transformative development of Saint Elizabeths in Ward 8 to the premier CityCenterDC project in the heart of downtown. The District has planned additional projects worth \$8.7 billion in development value over the next five years that will spark economic growth and job creation.

In recent years, the District has successfully planned and developed new initiatives that showcase coordinated public-private sector efforts to rebuild the city and rejuvenate its economic and cultural landscape. Current efforts—noted throughout this document—demonstrate the dedication and commitment of the public and private sectors in serving the economic interests of Washington, DC. The Gray administration's notable milestones include:

- Launching of \$2 billion worth of long-stalled development projects, creating 4,600 construction and 7,600 temporary jobs
- Placing more than 5,000 DC residents in jobs at 800 companies through initiatives like "One City One Hire"
- Establishing the DC-China Center in Shanghai to promote international trade and investment
- Enacting legislation that allowed for the construction of a new DC headquarters for LivingSocial (one of the District's leading technology firms)
- Creating a five-person business development team within the Mayor's Office that is responsible for attracting Fortify.vc to the District and for launching the HUBDC initiative to help local businesses get federal contracts
- Attracting more than 1 million square feet of retail, including national retailers
- Completing Saint Elizabeths and Walter Reed master plans (Saint Elizabeths will be breaking ground in early 2013 and solicitation for Walter Reed's master developer will be submitted by the end of 2012)
- Construction of approximately 1,428 units of affordable housing since January 2011, with an additional 1,655 units under construction

Fostering a Regulatory Environment for Business to Prosper

The regulatory environment plays a critical role in supporting the business community and the overall economy in Washington, DC. Strategic initiatives cannot be implemented without a fair, simple and accessible regulatory system. While *The Five-Year Economic Development Strategy* does not address the specifics of regulatory reform, Mayor Gray will be forming a Business Regulatory Task Force (originally described in the "One City Action Plan") in the coming months to review and streamline business regulations, provide clearer regulatory direction and guidance and speed up the delivery of licensing and regulatory services.

A Sector-Led Approach

The Five-Year Economic Development Strategy focuses on seven major sectors: federal government and federal contractors, professional services, technology, hospitality, retail, higher education and health care, and real estate and construction. These sectors include traditional anchors, such as the federal government and legal services, which now face tremendous pressure to reduce costs. Neighboring jurisdictions are actively recruiting cost-concerned businesses to move across borders, depriving the District of tax revenue and employment opportunities. Without growth in these sectors, the District must diversify in order to generate jobs and expand its tax base. Fortunately, the District's superior quality of life, dynamic neighborhoods and growing population are poised to drive expansion in emerging sectors such as retail, technology and hospitality. *The Five-Year Economic Development Strategy* contains tactical initiatives focused on strengthening both traditional and emerging economic sectors.

A.1
**WASHINGTON, DC, ECONOMIC SECTORS
 & ASSOCIATED JOBS**

Industry	Estimated District Jobs	% of Total District Jobs	Opportunity
Federal Government and Contractors	209,700	28%	Largest employment sector in the District
Professional Services	146,500	20%	Second-largest employment sector in the District
Higher Education & Health Care	163,300	22%	Includes two of the four fastest-growing occupations*
Hospitality	63,500	9%	Visitors to DC have increased 20% in last five years
Technology	21,310	3%	50% employment growth in the last decade
Retail	19,000	3%	Estimated \$1 billion in retail spending lost to VA and MD
Real Estate & Construction	24,400	3%	Opportunities for lower-skilled workers through First Source
Total	647,710	88%	

Source: Estimated from DC Economic and Revenue Trends, DC Office of the Chief Financial Officer (OCFO).
 * Home health aides and registered nurses

Going Forward: Shared Responsibility and Collaboration

The District's economic fundamentals are strong, but there is much more to do. Not every resident or neighborhood has shared in the benefits of DC's hearty growth, and neighborhoods often compete for the same opportunities. A comprehensive approach to economic development is necessary to move the city forward.

The Five-Year Economic Development Strategy is a blueprint structured to support key sectors, expand employment and attract new investment in the District—and to do so against the backdrop of a particularly competitive regional market. No other major city in the nation is surrounded by two states eager to attract its employers.

This new vision for the District calls for shared responsibility across public, private, institutional and nonprofit sectors.

Industry associations, such as the Hotel Association of Washington, DC, the Restaurant Association Metropolitan Washington and the District of Columbia Hospital Association, are some of the critical partners for implementing *The Five-Year Economic Development Strategy*. In addition, economic development organizations in the District, including the Washington, DC Economic Partnership, the Greater Washington Board of Trade, the DC Chamber of Commerce, members of the DC BID Council, Destination DC and EventsDC, will be important collaborators going forward.

Civic groups such as the Federal City Council and the DC Workforce Investment Council as well as the US General Services Administration will serve as vital agents in supporting the implementation of the Strategy's initiatives. A myriad number of private companies will play an important function as well.

Finally the Consortium of Universities of the Washington Metropolitan Area—most notably, The George Washington University, Georgetown University, Howard University, American University, Catholic University of America and the DC community college—are the key stakeholders in the academic community whose support can realize the goals of *The Five-Year Economic Development Strategy*.

Whether implementing big visions, like a technology center at Saint Elizabeths, or tactical initiatives, such as promoting available retail space in emerging corridors, all of the District's many stakeholders must work together to bring about 100,000 new jobs and \$1 billion in additional tax revenue.



SECTION B
INSIGHTS AND FINDINGS

SECTION B
INSIGHTS and FINDINGS








Insights and Findings

The initiatives outlined in *The Five-Year Economic Development Strategy* come out of the analyses of seven core economic sectors and interviews with 185 stakeholders. The interviews with DC’s civic, business and institutional leaders form the foundation for the strategy.

diversification and job growth, and they pointed to overarching themes that shape the initiatives. This section provides major findings from the 185 stakeholder interviews. (Background research on the seven core sectors and more detailed explanations of each finding are found in Section D.)

While the specific challenges and opportunities vary from sector to sector, the interview findings reinforced the need for economic

B.1
KEY STAKEHOLDERS INTERVIEWED

Industry	Federal Government	DC Government	Business & Trade Association Leaders	Nonprofit & Civic Leaders	Academic Experts	Total
 FEDERAL GOVERNMENT and FEDERAL GOVERNMENT CONTRACTORS	6	3	6	2	2	19
 PROFESSIONAL SERVICES	-	2	23	4	1	30
 HIGHER EDUCATION and HEALTH CARE	-	6	-	6	7	19
 HOSPITALITY	1	1	22	10	3	37
 TECHNOLOGY	-	-	12	-	4	16
 RETAIL	-	2	12	5	1	20
 REAL ESTATE and CONSTRUCTION	-	4	17	4	2	27
CROSS-CUTTING ISSUES	-	7	1	7	2	17
TOTAL	7	25	93	38	22	185

* Home health aides and registered nurses
 Source: Estimated from DC Economic and Revenue Trends, DC Office of the Chief Financial Officer (OCFO).

B.2

Findings highlight need for:

ECONOMIC GROWTH & DIVERSIFICATION

FEDERAL GOVERNMENT PRESENCE	EMERGING MARKETS & NEIGHBORHOODS	COST & SPACE CONSTRAINTS	PROCESS IMPROVEMENTS
<p>1 Federal procurement spending has driven the region’s growth over the past 20 years.</p>	<p>1 Existing contracting preference programs provide a mechanism to increase federal procurement dollars flowing to DC small businesses and help build the local economy.</p>	<p>1 In response to the recession and other global trends, professional services firms are changing their business models to find greater cost savings.</p>	<p>1 Hospitals, universities and the District would benefit from better communication regarding development projects.</p>
<p>2 Federal government leasing has a high impact on DC’s office space market.</p>	<p>2 Expansion of the Central Employment Area brings federal tenants to emerging areas.</p>	<p>2 High rents, disjointed retail blocks and mismatched co-tenancies are key weaknesses for the District’s retail sector.</p>	<p>2 Developers and retailers would like to see more regulatory coordination between District agencies.</p>
<p>3 Entry-level federal employees struggle with the cost of DC housing. They often end up living outside the District.</p>	<p>3 There is growing trend to develop more residential units in DC.</p>	<p>3 Difficulty in finding affordable office space within the tech sector is a significant challenge.</p>	<p>3 Developers and construction companies recognize the need for First Source and Certified Business Enterprise requirements, but feel regulations are hard to satisfy.</p>
<p>4 Professional services firms are driven by the growth of their client base. For DC this means federal government and global companies.</p>	<p>4 Retail sector in emerging areas still has room for growth.</p>	<p>4 The District is constrained by both a small land area and height limits.</p>	<p>4 The process of setting up a business in DC is perceived to be time-consuming and burdensome.</p>
<p>5 Real estate and construction companies recognize the federal government’s ability to spark development in traditionally underutilized areas.</p>	<p>5 Anchor institutions like universities and hospitals can have a profound effect on local employment through their procurement practices.</p>		<p>5 Small hospitality businesses do not have the time and resources to keep abreast of incentives and regulatory changes.</p>

Findings highlight need for:

ECONOMIC GROWTH & DIVERSIFICATION

TECHNOLOGY SECTOR GROWTH	BRANDING & PROMOTION	REGIONAL COMPETITION	INTEREST IN URBAN CENTERS
<p>1 There are divergent views regarding venture financing for DC tech firms. Some stated there are adequate funds while others claimed the District’s investor community needs to be more active. Entrepreneurs also stated that DC investors ask for larger equity stake in companies than West Coast investors.</p>	<p>1 There is a need for more large-scale events with high economic potential during low-visitation periods.</p>	<p>1 The District has higher capital gains tax rates than Virginia and Maryland. This impedes growth in the technology industry and encourages successful tech company founders and investors to move to neighboring states and channel their funds to firms outside the District.</p>	<p>1 Dense, walkable neighborhoods and mixed-use development centered on mass transit are increasingly important for retail growth.</p>
<p>2 Opportunities to better commercialize research exist.</p>	<p>2 Destination DC has fewer resources than tourist bureaus in competing cities.</p>	<p>2 The region’s political leaders compete to attract businesses to their jurisdictions.</p>	<p>2 Consumers in the District are showing more interest in local mom-and-pop stores.</p>
<p>3 The Saint Elizabeths campus has potential to become a tech center.</p>	<p>3 Hospitality establishments appreciate increased visibility from visits by DC officials and celebrities.</p>	<p>3 Intense regional competition threatens DC’s position as a prized location for business.</p>	<p>3 City centers are gaining popularity among retailers and consumers. The District is a big beneficiary of this trend as retailers shift from suburban neighborhoods.</p>
<p>4 DC is not known nationally as a tech hub, and has no marketing or public relations campaign to position the city as such.</p>	<p>4 DC’s brand as the federal city overshadows its creative economy and world-class hospitality establishments.</p>		<p>4 Retailers are concerned about parking access for shoppers.</p>
	<p>5 International tourists outspend domestic ones. There is an opportunity to attract tourists from emerging-market countries.</p>		
	<p>6 District hospitals have individual strengths but joint marketing efforts are minimal.</p>		

B.4

Findings highlight need to:

EDUCATE & PREPARE THE WORKFORCE

TALENT POOL	SKILLS DEVELOPMENT	ACADEMIC COMMUNITY
<p>1 Contractors want proximity to federal clients and access to the area's highly educated talent pool.</p>	<p>1 The federal government faces a serious skills gap in the coming years.</p>	<p>1 Incubator launches and co-working space for startups could be provided through universities.</p>
<p>2 Colleges and universities provide jobs and other significant economic benefits to the District.</p>	<p>2 Many District residents seeking hospitality jobs lack customer-service skills, and hospitality training programs do not meet the demand.</p>	<p>2 Greater engagement between the tech community, local universities, the DC community college and District students is needed.</p>
<p>3 Few bridges exist between tech entrepreneurs and DC's high-net-worth individuals who have seldom made tech investments in the past.</p>		<p>3 Blanket student enrollment caps limit both undergraduate and graduate student populations in DC.</p>










SECTION C

STRATEGIC INITIATIVES

STRATEGIC INITIATIVES

Sector Icon Key:

- FEDERAL GOVERNMENT *and* FEDERAL GOVERNMENT CONTRACTORS 
- PROFESSIONAL SERVICES 
- TECHNOLOGY 
- HOSPITALITY 
- RETAIL 
- REAL ESTATE *and* CONSTRUCTION 
- HIGHER EDUCATION *and* HEALTH CARE 

Going Forward: Strategic Initiatives

Six bold visions and supporting goals were crafted based on the findings from key stakeholder interviews, background research and analyses. Turning the bold visions into reality will result in **100,000 new jobs and generation of an additional \$1 billion in tax revenue to support optimal city services.** In the next five years DC can transform itself by establishing the most business-friendly economy in the nation, creating the largest technology center on the East Coast, becoming the nation’s destination of choice, ending retail leakage, building a best-in-class global medical center and becoming the top North American destination for foreign

investors, businesses and tourists. A set of **tactical strategic initiatives** described in this section supports each of the six bold visions and their goals.

Detailed and specific initiatives are necessary for the successful implementation of *The Five-Year Economic Development Strategy*. It is important to note that while some initiatives outlined in the following pages are execution-ready, others require pending resources. The resources and assets of both the public and private sectors are essential in implementing these initiatives.

1 Most business-friendly economy in the nation

- Invest in services that simplify the process for launching and operating a business in the District
- Maintain a well-prepared workforce that meets the needs and demands of employers across major sectors

2 Largest technology center on the East Coast

- Double the number of tech jobs in DC within five years
- Double the amount of capital invested in DC tech companies within five years
- Attract the best academic institutions to contribute to an innovation ecosystem

3 Nation’s destination of choice

- Invest in and build a nationally recognized infrastructure system
- Attract and retain talent by leveraging the convenience and excitement of living in DC
- Rival marketing efforts of the nation’s top destinations in promoting tourism
- Become renowned for delivering the highest standards in hospitality and service

4 End of retail leakage

- Meet the retail needs of the District’s neighborhoods
- Attract the optimal types of retailers for job creation and tax-base expansion
- Market real estate opportunities in the District to retailers in order to develop retail-dense areas in the city

5 Best-in-class global medical center

- Establish a medical hub that brings together area hospitals and research institutions
- Target redevelopment sites for medical and university research and facility development
- Leverage anchor medical institutions as impetus for growing the nearby local economy

6 Top North American destination for foreign investors, businesses and tourists

- Enabling 200 DC businesses to become active in foreign markets within five years
- Attracting at least \$500 million in foreign investment within five years
- Doubling the number of Chinese tourists within five years

100,000 new jobs and \$1 billion new tax revenue

1 Establish the Most Business-Friendly Economy in the Nation

Attracting businesses and investors to the District is a priority in the next five years. DC has an opportunity to reinvent itself as the most business-friendly city in the nation, a vision it can accomplish through two strategies:

- Invest in services that simplify the process for launching and operating a business in the District
- Maintain a well-prepared workforce that meets the needs and demands of employers across major sectors

Laws, regulations and services in the District can be streamlined and clarified to increase the simplicity and speed of doing business in the city. A widespread reputation for being business-friendly will enable DC to attract investment, develop its workforce and expand its tax base to deliver optimal services for its residents.

The Five-Year Economic Development Strategy lays out tactical strategic initiatives grounded in the “One City Action Plan,” sector research and findings from key stakeholder interviews.

CURRENT DISTRICT EFFORTS

Launch of One City One Hire: This employer-driven hiring initiative was launched by the DC Department of Employment Services to improve its efficacy in the screening and preparation process for matching District residents to jobs. “One City One Hire” uses tax incentives, wage subsidies, pre-employment training, work-readiness preparation and other tools to close the gap between a job seeker’s skills and an advertised opportunity. As of October 2012, more than 5,000 District residents had been hired by some 800 businesses. Through programs like this one, the Gray administration has cut city-wide unemployment to 8.7 percent in September 2012, the lowest level in three years.¹

Establishment of Workforce Intermediary: The District passed legislation in 2011 to fund creation of an intermediary to act as a broker among job seekers, employers and training providers. The Mayor and DC Council funded the Workforce Intermediary with \$1.6 million in FY13. The Workforce Investment Council is overseeing its launch.

Creation of Dedicated Business Development Team: With increased investment, the business development team within the Office of the Deputy Mayor for Planning and Economic Development (DMPED) grew from one person in 2010 to five people in 2012. In addition to direct staff, DMPED’s director of business development oversees the DC-China Center and sits on the executive committee of the Washington, DC Economic Partnership (WDCEP). The business development team is in close contact with leadership at the DC Department of Small and Local Business Development (DSLBD), the DC Chamber, Events DC, Destination DC and local business improvement districts. This structure, which results in coordinated business development efforts, avoids the

silos-based approach to economic development that hindered the District when competing for jobs in the past with neighboring jurisdictions.

MOVING FORWARD: STRATEGIC INITIATIVES



Market DC as a place to do business at major national conferences like CoreNet and SXSW.

States and cities across the country advertise their development projects to attract investors. CoreNet, SXSW and other conferences offer valuable opportunities for the District to connect with major development firms, businesses and technology companies. In 2012 DMPED sent its first team of representatives to the CoreNet Global Summit to recruit corporate tenants. The WDCEP is exploring District participation at the annual, technology-focused SXSW conference in Austin, Texas. A strategic presence at these gatherings will raise the District’s national profile and attract businesses that might not otherwise consider DC.



Relax building height restrictions in underutilized, non-core areas of the District.

Less restrictive height allowances could encourage office and residential development in areas near the Anacostia River, creating jobs and expanding the tax base. Additional research is needed to estimate the impact on job creation, affordable housing and economic growth if the height limit is changed in these areas.



Help small businesses obtain federal contracts through HUBZone and 8(a) certification.

The Department of Small and Local Business Development will help the District’s small businesses understand the federal process to qualify as a HUB Zone or 8(a) certified business. Businesses have an advantage when competing for millions of dollars in federal procurement contracts that otherwise leave the city.



Establish ambassador service programs, modeled on the one within the DC Department of Consumer and Regulatory Affairs (DCRA), to help developers expeditiously obtain building permits.

Businesses receiving permits from the DC Department of Transportation (DDOT), the DC Department of the Environment (DDOE), DC Water, DC Department of Health (DOH) and other agencies will benefit from an ambassador service program that streamlines regulatory processes. The service will establish concrete qualifications for businesses that wish to use it.



Establish a regular mechanism to foster communication between the federal government and private sector real estate leaders regarding office space to be vacated.

The District would benefit from efficient marketing and reallocation of properties vacated by federal agencies during consolidations. Given the limited space available in the District, it has become a priority to establish a clear line of communication between the federal government and the private sector regarding vacated federal properties. Potential public-private partnerships that include the DC government and federal entities like the National Park Service and General Services Administration (GSA) can help create mutual value in federal park land or other federal assets.



Encourage proximity clauses in federal contracts.

Federal procurement contracts with proximity clauses that require vendors to be located within a specified distance of an agency would make District businesses more competitive when bidding for federal work. Proximity clauses for agencies at Saint Elizabeths, the new headquarters for the US Department of Homeland Security, would encourage development of nearby contractor offices and a security/cybersecurity cluster in the area. Proximity clauses in US Navy procurement contracts have helped Capitol Riverfront attract satellite offices of major federal contractors and headquarters for smaller firms.



Launch a shuttle to serve DC-based contractors who need frequent access to the Pentagon, Saint Elizabeths or Bolling Air Force Base.

A privately funded shuttle service to the Pentagon, Saint Elizabeths and Bolling Air Force Base could make it easier to access the three locations and increase DC's appeal as a business location, especially for contractors that need access to the Pentagon. It also will create shuttle-driver jobs for DC residents and reduce traffic.



Expand the District's Central Employment Area (CEA) to emerging areas where federal offices could spark development.

Expansion of the GSA-delineated CEA into emerging office markets such as Walter Reed would encourage the federal government to locate employees in those neighborhoods and serve as a catalyst for development. In 2012, the GSA approved Mayor Gray's request to expand the CEA to encompass the East Campus of Saint Elizabeths and the Capitol Riverfront neighborhood.



Bring federal real estate staff to emerging business areas of the city to showcase amenities and development opportunities.

To encourage federal real estate officials to look beyond traditional locations for offices and operations, regular tours of emerging business areas will be conducted by DMPED and partners like the WDCEP and Business Improvement Districts (BIDs). The tours will inform federal staff about new amenities and development opportunities.



Place all relevant job openings for universities and hospitals on the DC Department of Employment Services (DOES) website.

Local universities and hospitals—and their vendors—can post job openings on the DOES website. DOES staff can publicize these openings to DC residents as well as identify particular candidates who meet the job requirements, thereby reducing the cost of employee searches for human resources departments.



Encourage attendees at District conventions to invest long term in the city.

Conventions provide the District with a prime platform for marketing the city to businesses and potential investors. Marketing materials and information showcasing the benefits of doing business in DC will be provided at conventions. DestinationDC is the leading organization for managing and marketing the city as a destination for conventions, tourism and special events.



Actively market the District nationally as a compelling place to do business.

With a growing economy and expanding residential population, the District offers tremendous market opportunities to businesses across sectors. And deep reforms at agencies like DCRA have significantly simplified processes for obtaining business licenses to operate within the city. DMPED will work with partners like WDCEP to ensure that national and international media are aware of these trends.



Celebrate businesses that employ District residents, especially through "One City One Hire."

Businesses that participate in the "One City One Hire" initiative will receive mayoral recognition in the media for their contributions to the District's economy and workforce.



Inform brokers, accountants and lawyers about DC tax law, incentives and business services.

Brokers, accountants and lawyers are important intermediary advisers to District businesses on issues like tax law, incentives and business services. They play pivotal roles in the location decisions of many businesses. For that reason, it is vital that they have access to comprehensive and up-to-date information on relevant tax laws, incentives and business services.



Proactively identify and recruit businesses with expiring leases that can benefit from locating in DC.

The District will identify and recruit businesses with expiring office leases, opening the way for them to take advantage of available office space, incentives and business services in DC.



Establish an early review process for environmental regulations.

The Gray administration will bring the real estate and construction community into the environmental regulatory process. Before regulations are finalized and enacted, input from this community will be solicited and incorporated.



Create a robust team within DSLBD to monitor compliance by Certified Business Enterprises (CBEs) and CBE-related projects.

The goals of the team will be to ensure that CBEs meet at least the minimum requirements of their certifications and that they comply with guidelines in the CBE Participation Agreements. DSLBD has already begun the process to create five additional positions to restore the compliance and enforcement program within the agency.



Partner with OCFO to adjust the policy of counting successful tax increment financing (TIF) projects against the debt cap.

The District currently counts all TIF projects against the debt cap, even though successful projects present negligible risk to the District's finances. The DC Office of the Chief Financial Officer (OCFO) can explore ways that other cities and states calculate economic risk from TIF projects that are performing well, potentially providing fiscal capacity for new economic development projects.

C.1
TIF PROJECTS PAID OFF AHEAD OF SCHEDULE

Project	Year	Subsidy \$mm	Performance
Spy Museum	2001	\$6.9	Paid in 2007 instead of 2014
Gallery Place	2002	\$73.6	Returned \$15,175,861 to city above debt payments
Embassy Suites	2003	\$11.0	Paid in 2011 instead of 2016
DC USA	2004	\$40.0	Payment estimated in 2015 instead of 2026
Capitol Hill Towers	2006	\$11.5	\$2.4 million remaining, matures in 2029

Source: Office of the Chief Financial Officer

2 Create the Largest Technology Center on the East Coast

The technology sector will play a central role in diversifying the District's economy. DC has tremendous assets to leverage, with its neighborhoods, transit options and vibrant night-life providing natural magnets for the young professionals who are the lifeblood of technology companies. Today, the District is home to more than 250 startups, with \$979 million of capital invested in 146 tech companies.² The National Venture Capital Association ranks Washington, DC, as fifth in the nation based on dollars invested in tech companies. Within five years the District can surpass Boston and New York to become the East Coast's technology leader.

Three strategies support this vision:

- Doubling the number of technology jobs in DC (an additional 20,000 jobs) within five years
- Doubling the amount of capital invested in DC tech companies within five years
- Attracting the best academic institutions to contribute to an innovation ecosystem

CURRENT DISTRICT EFFORTS

In addition to new strategic initiatives, recent efforts by public and private entities to develop the technology sector have put DC on course to foster technology and innovation. This year the District took several steps toward creating a technology hub.

Enactment of the Social E-Commerce Job Creation Incentive Act of 2012: This incentive act enabled the District to retain the headquarters of LivingSocial, DC's flagship technology company. LivingSocial currently employs more than 1,000 individuals in DC, of which half are District residents. Its consolidation will create 1,700 jobs.

Arrival of Fortify.vc: The District provided a \$100,000 incentive to attract the venture capital firm from Sterling,

Virginia, and to open a tech startup accelerator. The accelerator fast tracks the growth of companies that have received investments. The District's investment also secured Digital Intelligence, a prominent technology conference previously hosted near Dulles Airport.

Hiring of a Tech Sector Specialist: The Gray administration created the first mayoral position solely dedicated to supporting the technology sector.

Partnership with newBrandAnalytics: After receiving \$26 million in investment from a local venture capital firm, newBrandAnalytics chose to grow in the District rather than move to Silicon Valley. The District government has worked with the company to pilot an online platform that allows city residents to assign grades to DC government agencies.

MOVING FORWARD: STRATEGIC INITIATIVES



Create a collaborative space for technology firms, universities and hospitals by building an innovation hub at Saint Elizabeths.

An innovation hub at Saint Elizabeths will not only create a shared campus environment for academic institutions and technology firms, but will bring internship and training opportunities to residents in the historically underserved neighborhoods east of the Anacostia River. The hub at Saint Elizabeths will encourage technology companies and research and education institutions to leverage each other's resources and assets.

A tech campus will also stimulate formation of a technology cluster, attracting foreign direct investment and multinational firms to the tech zone. That, in turn, will further technology density and innovation in the region. A federal technology-focused tenant can also be encouraged to relocate to the area. Efforts to create a technology center on the Saint Elizabeths campus have commenced. DMPED is actively soliciting and recruiting large, international-profile anchor institutions and technology companies. The solicitation process for universities will also be initiated in the coming months.



Encourage angel investment by lowering the capital gains tax rate for investments in local tech companies.

By decreasing the capital gains rates for local tech investments, the District could foment new investment and encourage people to move to or stay in DC. A lower capital gains tax rate can also stimulate angel investors to fund other District-based enterprises. For comparison, Virginia currently levies no capital gains tax on investments in early-stage companies.

In 2012, the Gray administration introduced the Technology Sector Enhancement Act, which proposed establishment of a 3 percent capital gains rate for technology investments, down from 8.95 percent. The DC Council has requested that the Tax

Revision Commission consider the economic impact of this proposal.



Leverage accelerators and informal networks to grow angel investor communities.

By encouraging the development of angel investor communities, the District nurtures a dynamic environment to attract startup capital. Organizations like StartupDC are building and growing the District's angel investor community. StartupDC launched K Street Capital to connect startups with high-value individuals. Accelerators in DC, such as Fort.vc, Acceleprise and Endeavor, are also attracting investment dollars. Continued collaborations with the District's accelerators and startups will broaden the angel investment environment.



Develop a program to provide affordable office space to early-stage tech entrepreneurs.

Affordable workspace is important to attracting and retaining technology firms engaged in innovation. The Hive, Canvas and Affinity Lab are just some of the groups already responding to the needs of local tech entrepreneurs. The District will identify ways to support and encourage additional efforts by the private sector to creatively and collaboratively open up workspace for local entrepreneurs.

Economic Impact of Technology Companies in the District

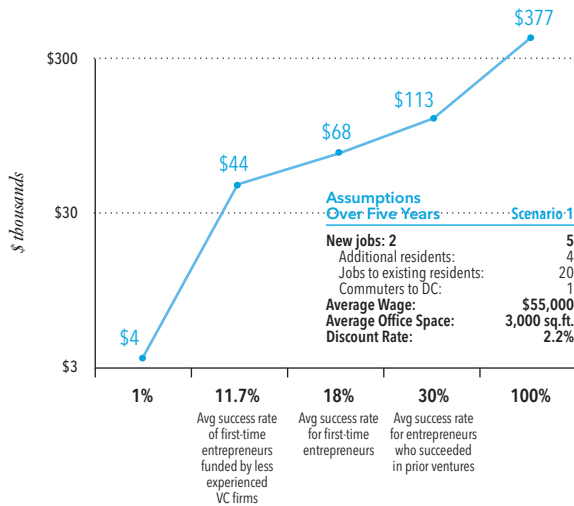
Technology firms face varying probabilities of success, depending on factors such as the founding team's experience and the level of venture funding. These success rates are accounted for in the Economic Impact Model's (EIM) output, which pinpoints for the District the break-even grant or investment amount that corresponds to specific probabilities of success.

The impact analyses generated models that evaluated the net present value (NPV) of technology companies in DC by considering factors such as the number of jobs created and additional tax revenue. Based on this assessed value of technology companies and accounting for different probabilities of success, the EIM identified break-even levels for District investments.

The following graphs depict the output of three EIM models under three scenarios. Scenario 1 is based on a small technology startup that grows from five to 25 employees, during a five-year period. Scenario 2 is based on a large consumer Internet company that adds 1,000 local jobs over a five-year period. Scenario 3 is based on a large multinational innovation facility that adds 500 new employees over five years. The tables included with each graph summarize the assumptions specific to each particular scenario.

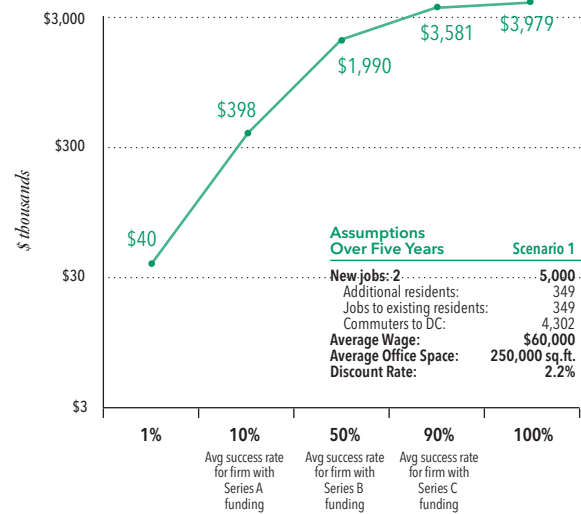
C.2
Scenario 1

SMALL TECHNOLOGY FIRM THAT GROWS FROM FIVE TO 25 EMPLOYEES OVER FIVE YEARS



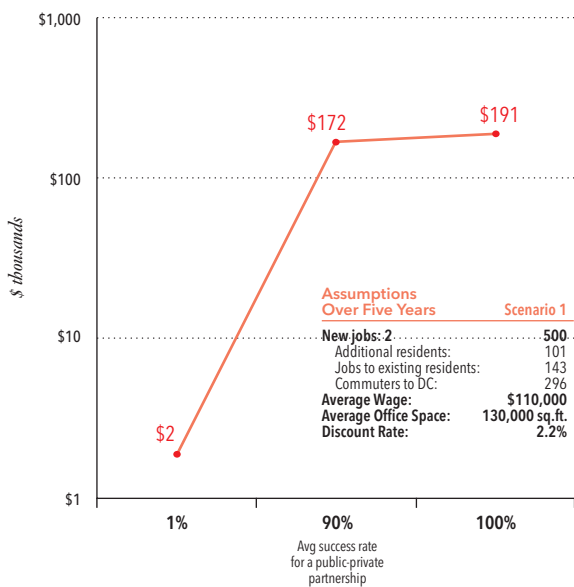
C.3
Scenario 2

LARGE INTERNET FIRM THAT ADDS 1,000 LOCAL JOBS OVER FIVE YEARS



C.4
Scenario 3

LARGE MULTINATIONAL THAT SETS UP AN INNOVATION FACILITY WITH 500 NEW EMPLOYEES OVER FIVE YEARS



Connect tech entrepreneurs with established corporate leaders who can guide the sector toward high-value innovations and potentially purchase services.

By developing deeper connections between tech entrepreneurs and established corporate leaders in core sectors like professional services and hospitality, the District can help entrepreneurs focus on initiatives that will have value for potential users and acquirers. The result would be more successful startups and more acquisitions of local companies by local companies—which would then inject new money into the District’s entrepreneurial community.



Launch a marketing campaign to showcase the District as a national tech hub to attract talent.

To encourage the expansion of the District’s technology sector and to attract talent, the city will partner with the technology community to develop and implement a marketing campaign. Marketing efforts will emphasize quality of life, the District’s vibrant startup community and the city’s successful transformation into a center of innovation and technology development.



Inform technology entrepreneurs, nonprofits and universities about philanthropic and federal grant opportunities.

The District will identify channels for communicating new and relevant tech-related grant opportunities to area entrepreneurs, nonprofits and universities.



Support local entrepreneurs with meeting space and mentorship opportunities.

Startups and small businesses in the area need meeting facilities. These shared spaces offer opportunities to house mentorship programs or similar educational programs.

For example, the Washington, DC, Economic Partnership, in collaboration with the Massachusetts Institute of Technology, is launching the Venture Mentoring Service for area small businesses. The program rotates mentors based on the specific stage and needs of the companies. An affordable state-of-the-art office facility will also be provided for startups in an effort to encourage tech innovation in the District.



Support investment in tech transfer and hard-skills education at local universities.

Universities can serve as catalysts for entrepreneurship and talent development. Their contributions can run the range from cutting-edge tech curriculum to mentoring and internship programs to the creation of university-run tech incubators. The District will encourage university initiatives and curriculum geared towards tech transfer and hard-skills education for students.



Create a DC-sponsored venture capital program.

A DC-sponsored venture capital program would provide early-stage dollars necessary to nurture new businesses. As a result, business acceleration strategies will be pushed forward to encourage startups with seed money they might not otherwise be able to find in the private sector. The District government is currently assessing the legality and potential structure of a city-sponsored venture capital program.



Connect District youth, DC Public Schools and the DC Community College with local tech companies.

Educating and preparing District youth for technology jobs is critical in the development of a technology sector. The District has already been working towards connecting youth to technology companies, especially through the Summer Youth Employment Program (SYEP). Limbic Systems and Edvotek, are among a new group of technology firms that participated in SYEP for the first time in 2011.

3 Become the Nation's Destination of Choice

Washington, DC, has undergone tremendous revitalization in the last 15 years as a result of the billions of dollars invested throughout the city. These efforts have helped transform and rejuvenate the nation's capital, bringing the District national recognition as a top destination in the United States and earning it accolades, including ranking highly for families, young professionals and businesses. It was also the nation's top city for quality of life for women in 2012, according to *Forbes* magazine.

Three strategies support the District's transformation into a destination of choice for both residence and travel:

- Invest in and build a nationally recognized infrastructure system
- Attract and retain talent by leveraging the convenience and excitement of living in DC
- Rival marketing efforts of the nation's top destinations in promoting tourism
- Become renowned for delivering the highest standards in hospitality and service

CURRENT DISTRICT EFFORTS

Redevelopment of Union Station: The Union Station Redevelopment Corporation has assembled funding from the District government, Amtrak and private developers to revitalize the historic rail station.

Allocation of Funding to Destination DC: Destination DC markets the city as a premier destination for conventions, tourism and special events. In FY13, Destination DC received an additional infusion of \$3 million from hotel tax revenues to market the city to visitors.

MOVING FORWARD: STRATEGIC INITIATIVES



Simplify the application process for hosting special events in DC.

Special events and conventions are important promotion channels for the District. That makes it vital for the city to have an events-friendly environment to continue attracting visitors and engaging local residents.

The existing application process to host special events in DC is unclear and cumbersome. The policies regarding security provisions for events held in the District are also inconsistently applied. Applicants must communicate with different DC agencies to obtain approvals. Appointing a dedicated events specialist to facilitate the approval will bring ease, clarity and convenience to the process. An events specialist can also provide strategic guidance on the best time of year and the ideal location for hosting a particular event. Cities like San Francisco and Chicago already have designated resources devoted to guiding applicants through their events approval process.



Create a fund to help creative economy organizations establish a presence along emerging corridors.

Creative economy organizations like the Atlas Theater have demonstrated the central role they can play in revitalizing corridors such as H Street, NW. Newly generated foot traffic can be especially attractive to restaurateurs and retailers, who often follow in their stead.

The District can bring new energy to emerging corridors throughout the city by attracting theater, music, fashion, design and other creative economy organizations. In order to encourage such activity, the District will establish a fund to offset relocation and buildout costs.



Organize a campaign showcasing well-known officials and celebrities patronizing their favorite DC places.

The District can leverage its current online presence and social media outlets to launch a campaign to attract more people to DC venues. This campaign can be easily incorporated into our media channels to highlight local eateries, shops and sites. In addition to DC officials, national figures such as the President of the United States and the Nationals baseball team can also be valuable sources of star power that will compel local residents to visit the same venues.



Increase resources allocated to marketing and promoting the District.

The \$3 million in increased funding for Destination DC in FY13 marks the first time that money from the General Fund has been allocated to the organization to attract visitors. Despite this, DC still falls behind places like Orlando and Las Vegas in its level of dedicated resources for marketing and promotion.



Create District-wide Wi-Fi system.

A Wi-Fi enabled District will greatly benefit all DC residents and businesses. Not only will District-wide Wi-Fi strengthen and open education and work opportunities, it will attract businesses and talent to the city.



Gain commitments from major employers to collaborate with the Workforce Intermediary.

The Workforce Intermediary can work with major employers in the real estate and construction, hospitality and retail sectors to fill upcoming hiring needs with trained District residents. A successful Workforce Intermediary will ensure that the local labor force will be an engine for, not an impediment to, growth.



Develop a hospitality program at the DC Community College.

By providing hospitality training across varying functions of the industry, the District can create a more skilled and robust talent pool for the hospitality sector. A hospitality program at the DC Community College could allow students to take courses in five critical areas: marketing, finance, revenue management, food service and service excellence.



Establish a culinary incubator that provides business and job training opportunities for DC residents.

A District culinary incubator could provide a launching pad for aspiring chefs, caterers, and food entrepreneurs by providing them with needed refrigerator, freezer, and kitchen space as well as a venue at which to sell their products. An incubator could have even deeper impact by offering technical assistance to entrepreneurs and training for unemployed residents interested in the hospitality sector. The District is currently exploring plans for a shared commercial kitchen space that can serve as an incubator at Saint Elizabeths East in Ward 8.



Launch a forum for the Metropolitan Police Department (MPD) and developers to discuss and mitigate potential crime issues from development projects.

Development trends favor walkable entertainment areas with concentrations of alcohol-serving establishments. In order for these areas to thrive, crime rates must be low. The District needs input in the development-approval process from the MPD, which ultimately is responsible for policing entertainment "hotspots" and other mixed-use developments. Ensuring that our neighborhoods are safe is necessary to promote the District as a place to live and visit.



Repurpose vacant or underutilized properties for use by local artists and other members of the creative economy.

Designating creative uses for District-owned facilities and spaces can help transform previously desolate facilities and neighborhoods. Arts groups have demonstrated a storied history of revitalizing neighborhoods and District communities, such as the 14th Street Corridor and H Street, NE. The District-supported relocation of the H Street Playhouse—now Anacostia Playhouse—to Ward 8 taps the enormous potential for cultural activity in the Anacostia neighborhood.



Create an infrastructure investment fund.

An infrastructure investment fund overseen by an appointed advisory group can serve as an innovative method of investing in the critical infrastructure assets in the District. Similar to the newly established Chicago Infrastructure Trust, a DC infrastructure fund can leverage public and private sources to fund infrastructure improvement and expansion efforts.



Build an academic village for university students in an accessible area of the city.

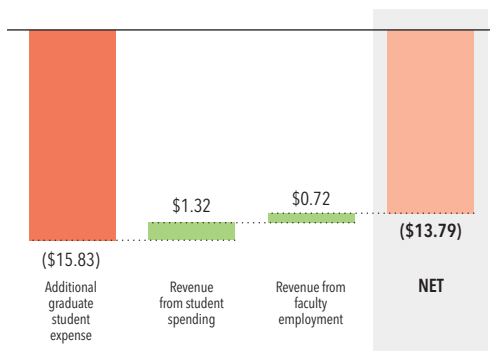
An academic village that includes multiple colleges and universities will add value to the District that is greater than the sum of its parts. Beyond the synergistic environment provided to colleges and universities, an academic village can help the District attract and retain talent. The facility would provide shared space for student and faculty housing, lecture halls and seminar rooms as well as amenities such as food services and fitness centers. Commitments from the private sector and universities are necessary in order to establish a visionary and innovative center.

ECONOMIC IMPACT OF INCREASING THE NUMBER OF GRADUATE STUDENTS IN THE DISTRICT

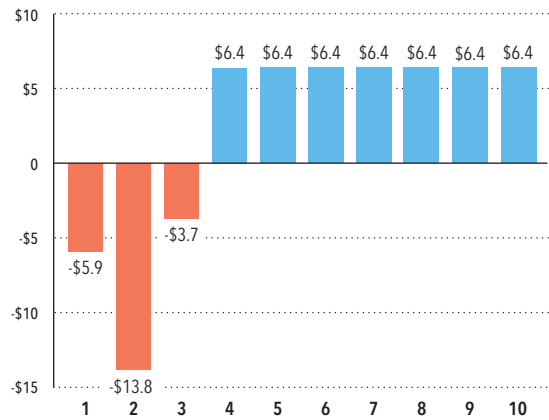
Enrollment caps present a hurdle for the District's universities, but there would be significant financial gain to the District if DC institutions of higher education were able to fully enroll graduate students.

The EIM generated models that evaluated the fiscal impact and cashflow components of full graduate enrollment.

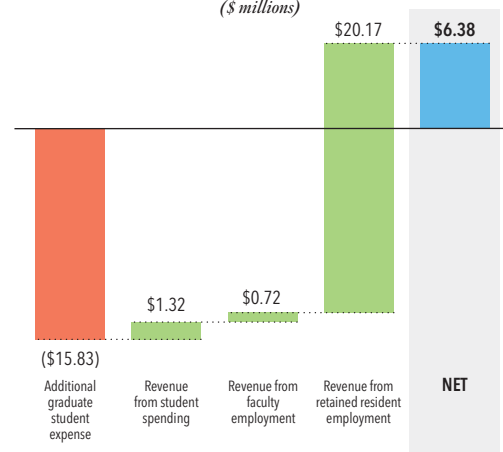
C.5
CASHFLOW COMPONENTS OF FULL GRADUATE ENROLLMENT: YEAR 2
(\$ millions)



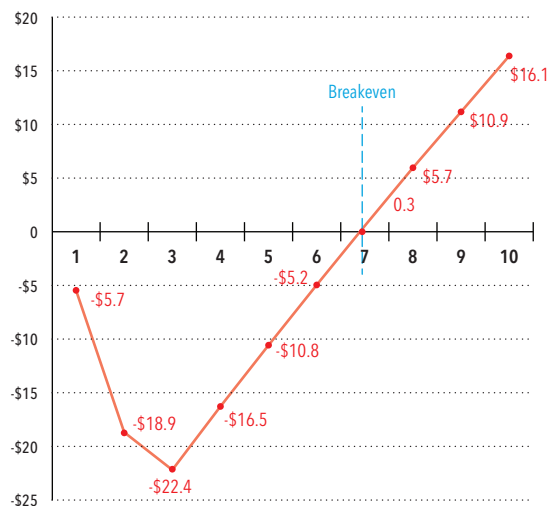
C.6
FISCAL IMPACT OF FULL GRADUATE ENROLLMENT
(\$ millions)

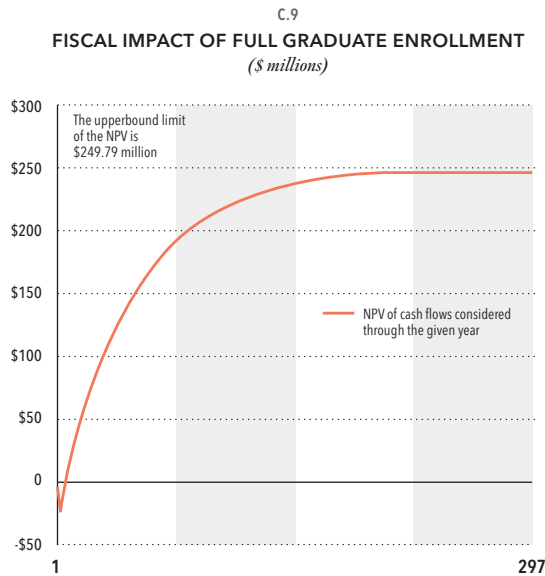


C.7
CASHFLOW COMPONENTS AT FULL GRADUATE ENROLLMENT: YEAR 4
(\$ millions)



C.8
FISCAL IMPACT OF FULL GRADUATE ENROLLMENT
(\$ millions)





Participation in the International Council of Shopping Centers Convention (ICSC): ICSC is the largest trade organization for the retail industry. This year a District delegation that included Mayor Gray, Deputy Mayor Hoskins, DCRA, DOES and the WDCEP participated in the ICSC convention to cultivate relationships with retailers and recruit businesses in the District.

MOVING FORWARD: STRATEGIC INITIATIVES



Conduct a retail demand analysis to determine the amount of retail leakage for the city and for neighborhoods.

A 2008 study conducted by Social Compact estimated that the District experiences \$1 billion in annual retail leakage. The foregone dollars could have generated significant tax revenue and jobs for the District. The first step toward ending retail leakage would be an updated neighborhood-based study to measure buying capacity and retail dollars that DC residents spend outside the District.



Bring retailers and brokers to DC's emerging retail areas that may be unfamiliar.

To encourage retailers and brokers to look beyond traditional shopping neighborhoods, regular city-organized tours of emerging areas can compel retailers and brokers to development opportunities and introduce retail into neighborhoods that most need it. WDCEP has spearheaded efforts to bring retailers and brokers to such neighborhoods. In FY2012, WDCEP hosted retail tours of Georgia Avenue, Rhode Island Avenue and neighborhoods east of the Anacostia River.



Promote DC as a premier destination for retailers at national conferences like ICSC.

With 1 million square feet of retail space under construction, the District has become a booming market for retailers. Promoting DC to national and international retailers is critical to expanding the District's retail sector. DC is already a national leader at the annual ICSC retail conference in Las Vegas, and WDCEP is leading efforts to expand the city's presence at ICSC conferences in New York City and in the Mid-Atlantic, as well.



Adopt zoning that eliminates non-retail uses of the retail streetscape, especially on corner locations of a retail corridor.

Non-retail streetscape interspersed with active retail establishments tend to discourage pedestrians because it may signal the end of a retail corridor, particularly in corner locations. By zoning corner bays on streets for retail uses, the District can help increase continuity in retail corridors and improve the retail streetscape and experience.

4 End Retail Leakage

Historically, the District has lost hundreds of millions of dollars to the suburbs through retail leakage that occurs when residents shop outside the city. This leakage takes a significant toll on the city through foregone tax revenue and job opportunities. However, the tides are changing as the city's growing population attracts new attention from retailers and the Gray administration works with national retailers that are ready to enter the local market. Ending retail leakage requires that the District:

- Meet the retail needs of its neighborhoods
- Attract the optimal types of retailers for job creation and tax-base expansion
- Market real estate opportunities to retailers in order to develop retail-dense areas in DC

CURRENT DISTRICT EFFORTS

With active city support, the District's retail market has become one of the most robust in the nation. Current city efforts include:

Construction of more than 1 million square feet of new retail space: Major retail projects like CityCenterDC, Skyland Town Center and The Shops at Dakota Crossing are underway to create attractive urban retail spaces. The District has also brought in national retailers like Walmart, Costco and Lowes to meet the needs of District residents.

Supermarket Tax Exemption: In 2000, the District recognized that certain neighborhoods lacked access to affordable, convenient groceries and fresh produce. In an effort to combat this problem, the District passed the Supermarket Tax Exemption Act of 2000, which aims to draw supermarkets to these underserved locations by waiving certain taxes and license fees. More than a dozen supermarkets currently receive benefit from the program while several more are in the process of applying for exemptions.

5 Build Best-in-Class Global Medical Center

With 16 hospitals and more than 10 major universities and colleges, the District is well positioned to become an internationally recognized global medical center. The combined higher education and health care sector is the District's second largest by employment after the federal government. Large anchor institutions within higher education and health care have great potential to spur business development in surrounding neighborhoods. Focusing on the expansion and clustering opportunities within this sector can create the necessary momentum for collaboration, innovation and breakthrough research. In order to build a best-in-class global medical center in the District, the city will prioritize the following goals:

- Establish a medical hub that brings together area hospitals and research institutions
- Target redevelopment sites for medical and university research and facility development
- Leverage anchor medical institutions as impetus for growing the nearby local economy

MOVING FORWARD: STRATEGIC INITIATIVES



Develop the McMillan Reservoir site as a medical office hub.

The 25-acre former McMillan Reservoir Sand Filtration site is an ideal area to develop a medical hub that can rival the medical cluster in Houston. Not only will this site provide a focal point for our medical institutions, but it also delivers much-needed expansion space for area hospitals.

DMPED, in partnership with Trammell Crow Company, a leading real estate developer, will host a McMillan Forum in the coming months to bring together hospitals and medical institutions to gather input and feedback on the development of the McMillan site as a medical hub.



Initiate regular communication among the Deputy Mayor of Planning and Economic Development (DMPED), universities, hospitals and local developers to keep them abreast of each other's new projects.

Universities and medical institutions in the District are continually challenged by the limited expansion options within the city. In response, some universities and hospitals have moved or taken their administrative functions outside of the District. DC will work with these institutions and local developers to identify opportunities for them to expand in the District, close to their central facilities.

DMPED has begun the process of communicating development opportunities to several area universities and hospitals. Projects such as Saint Elizabeths and McMillan have been discussed as potential opportunities for obtaining additional space. Looking ahead, continued collaboration with the

Consortium of Universities of the Washington Metropolitan Area and the medical institutions will foster expansion.



Begin a process to assist small businesses in obtaining procurement contracts at hospitals and universities.

Hospitals and universities are among the largest purchasers of goods in the District. DMPED and DSLBD will partner to investigate procurement contract opportunities on behalf of local small businesses. The concept has been introduced to some universities and hospitals and DSLBD is looking into the feasibility of a small business procurement program.

6 Become Top North American Destination for Foreign Investors, Businesses and Tourists

The District of Columbia is a distinctively international city that has drawn in foreign government entities, businesses, institutions and investors. It is home to the World Bank, the International Monetary Fund, global companies and 176 embassies. Several of its universities have developed programs overseas for many years. However, the city has only recently begun to leverage its unique position to actively attract international businesses, investments and tourists.

The influx of international visitors in recent years reflects the District's attractive economy and amenities as well as global trends. In 2011, the nation's capital welcomed 17.9 million visitors, topping the previous record of 17.4 million in 2000. Arrivals of international visitors reached 1.8 million last year, an annual increase of 4.1 percent. Chinese visitors took the top spot with an estimated 210,000 tourists.³ The average Chinese tourist spends \$716 per stay in the District compared to \$551 for overall overseas visitors. In 2011, Chinese tourists spent more than \$150 million in DC, according to Destination DC.

The District has become an increasingly popular destination for foreign capital. In 2011, CityCenterDC received \$700 million in investment from Qatar.⁴ This is just one example of the District's ability to attract foreign capital. In the last year, \$40 million in EB5 funds (immigration investor program) was raised to support the CityMarket at O Street project.⁵ In light of these emerging trends and opportunities, it is natural for the District to focus on attracting foreign investment and tourists.

In June 2012, the Mayor completed his first visit abroad to China, where he met with dozens of business leaders interested in investing in DC. Since the Mayor's China trip, the District has hosted numerous Chinese delegations and business leaders in Washington to further explore business, development and investment opportunities. The Gray administration will also capitalize on engagement with countries like Brazil, and South Africa as potential export markets.

Establishment of the District as the top North American destination for foreign investors, businesses and tourists is supported by three major strategies:

- Enable 200 DC businesses to become active in foreign markets within five years
- Attract at least \$500 million in foreign investment within five years
- Double the number of Chinese tourists within five years

CURRENT DISTRICT EFFORTS

The Gray administration has taken a proactive role promoting business with foreign countries. The city achieved two major milestones in 2012: establishment of the DC-China Center and launch of the ExportDC program. Although the District's international business strategy is a new one, it is already one of the most robust among American cities.

Establishment of the DC-China Center: The DC-China Center opened in Shanghai in July 2012. It is a fully staffed center in the heart of Shanghai's business district. The center will serve as a critical resource for DC businesses and universities looking to expand into the Chinese market, as well as a tool for Chinese businesses and investors exploring opportunities in the District. With the opening of the DC-China Center, the District joins only a handful of US cities and states with business centers in China.

Launch of ExportDC: DSLBD launched ExportDC in January 2012 to increase the number of DC small businesses that export goods and services, creating jobs and tax revenue for the District. Trade missions to Southeast Asia, South Africa, China and Brazil have already been organized in 2012.

MOVING FORWARD: STRATEGIC INITIATIVES



Develop and market the District as an attractive location for foreign direct investment (FDI).

Because of its international reputation and strong economy, the District is uniquely positioned to attract FDI into real estate. Such financing can allow major projects to break ground, creating jobs and catalyzing development. DMPED and its partners will actively market District projects to potential FDI investors. The DC-China Center and ExportDC will also help guide investment opportunities to the District as well.



Focus on attracting foreign technology firms for FDI.

The expansion of the technology sector in the city can be a great base to attract FDI. With DC Tech Incentives, the city already has an appealing benefits package for technology firms located in the city. Foreign technology firms are a vital

component to the city's goal of attracting FDI. The District can leverage the DC-China Center to identify possible Chinese companies looking to invest in the United States.



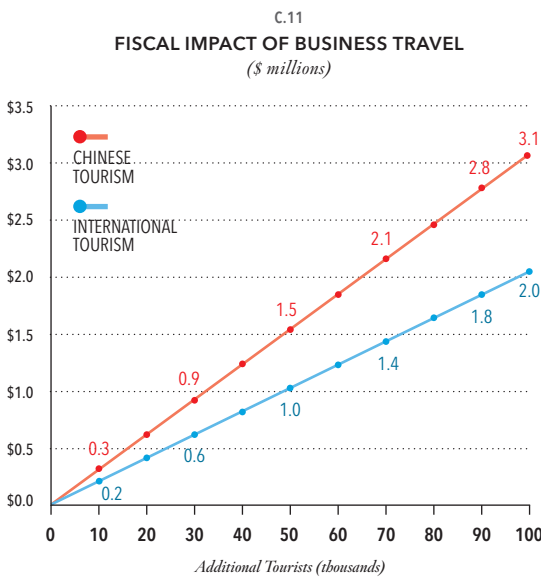
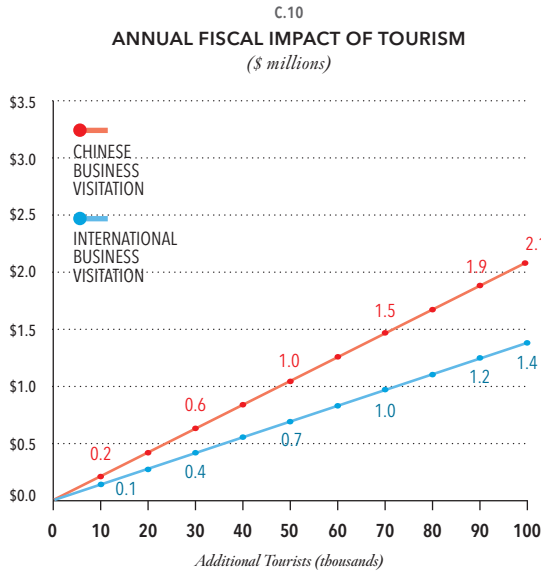
Leverage the DC-China Center to support small businesses entering the Chinese market.

The DC-China Center offers a variety of services, ranging from providing joint venture and alliance partner contacts to market entry strategy analysis. The Center's local knowledge and connections are also valuable resources that will help DC small businesses succeed in China. These services give District businesses a strong advantage in navigating the complex Chinese business environment.



Market DC to tourists in targeted international markets, especially China.

Last year a record number of Chinese tourists, close to 1.1 million, visited the United States. On average Chinese tourists outspend their international counterparts by \$2,000 per person per trip. As the nation's capital, the District aims to attract Chinese tourists and identify channels to market the city aggressively. Targeted Chinese regions will include those with a large and growing middle class and strong spending potential.



C.13
CHINESE TOURISM MARKET VALUATION ESTIMATES

Total Tourists 2011	Segment	% of Market	Arrivals	Marginal Value	Market Segment Valuation
210,000	Friends & Family	37.1	77,910	\$20.76	\$1,617,412
	Business	30.0	63,000	\$30.71	\$1,934,730
	Convention	6.5	13,650	\$30.71	\$419,192
	Tourists	26.4	55,440	\$20.76	\$1,150,934
Totals / Averages		100.0	210,000	\$24.39	\$5,121,900

C.14
INTERNATIONAL TOURISM MARKET VALUATION

Total Tourists 2011	Segment	% of Market	Arrivals	Marginal Value	Market Segment Valuation
2,175,000	Friends & Family	43.1	937,425	\$13.84	\$12,973,962
	Business	22.6	491,550	\$20.47	\$10,062,029
	Convention	9.6	208,800	\$20.47	\$4,274,136
	Tourists	24.7	537,225	\$13.84	\$7,435,194
Totals / Averages		100.0	2,175,000	\$15.97	\$34,745,3210

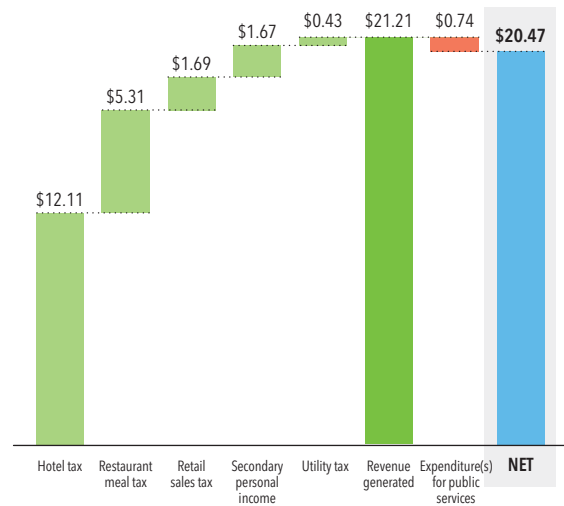
C.12
MARGINAL FISCAL IMPACT PER VISITOR

International Tourist	Chinese Tourist	International Business Visitor	Chinese Business Visitor
\$13.48	\$20.76	\$20.47	\$30.71

ASSUMPTIONS:

- An econometric model was used to determine the marginal fiscal impact of a tourist or business visitor based on assumptions of average spending by such travelers when visiting the District
- Adjustments for the fiscal impact of Chinese tourists were made to reflect spending habits in comparison to other international tourists using data from Destination DC
- The estimated fiscal impact of both business and convention visitors is assumed to be the same; likewise the impact for that of tourists and travelers visiting friends and family
- The research for the District's rebranding and advertising campaign should focus on international tourists, particularly Chinese travelers, because a Chinese tourist's marginal value is higher than that of tourists from other countries

C.15
BREAKDOWN OF TOURIST SPENDING (\$ PER PERSON)
(\$ per person)



C.16
SUMMARY OF INITIATIVES

1

VISION:
Establish the most business-friendly economy in the nation**GOALS:**

- 1 Invest in services that simplify the process for launching and operating a business in the District**
- 2 Maintain a well-prepared workforce that meets the needs and demands of employers across the major sectors**

- Market DC as a place to do business at major national conferences like CoreNet and SXSW.
- Relax building height restrictions in underutilized, non-core areas of the District.
- Help small businesses obtain federal contracts through HUBZone and 8(a) certification.
- Establish ambassador service programs, modeled on the program within the DC Department of Consumer and Regulatory Affairs (DCRA), to help developers expeditiously obtain building permits.
- Establish a regular mechanism to foster communication between the federal government and private sector real estate leaders regarding office space to be vacated.
- Encourage proximity clauses in federal contracts.
- Launch a shuttle to serve DC-based contractors who need frequent access to the Pentagon, Saint Elizabeths or Bolling Air Force Base.
- Expand the District's Central Employment Area (CEA) to emerging areas where federal offices could spark development.
- Bring federal real estate staff to emerging business areas of the city to showcase amenities and development opportunities.
- Place all relevant job openings for universities and hospitals on the DC Department of Employment Services (DOES) website.
- Encourage attendees at District conventions to invest long term in the city.
- Actively market the District nationally as a compelling place to do business.
- Celebrate businesses that employ District residents, especially through "One City One Hire."
- Inform brokers, accountants and lawyers about DC tax law, incentives and business services.
- Proactively identify and recruit businesses with expiring leases that can benefit from locating in DC.
- Establish an early review process for environmental regulations.
- Create a robust team within DSLBD to monitor compliance by Certified Business Enterprises (CBEs) and CBE-related projects.
- Partner with OCFO to adjust the policy of counting successful tax increment financing (TIF) projects against the debt cap.

2

VISION:
Create the largest technology center on the East Coast

GOALS:

- 1 Double the number of tech jobs in DC within five years**
- 2 Double the amount of capital invested in DC tech companies within five years**
- 3 Attract the best academic institutions to contribute to an innovation ecosystem**

- Create a collaborative space for technology firms, universities and hospitals to build an innovation hub at Saint Elizabeths.
- Encourage angel investment by lowering the capital gains tax rate for investments in local tech companies.
- Leverage accelerators and informal networks to grow angel investor communities.
- Develop a program to provide affordable office space to early-stage tech entrepreneurs.
- Connect tech entrepreneurs with established corporate leaders who can guide the tech sector toward high-value innovations and potentially purchase services.
- Launch a marketing campaign to showcase the District as a national tech hub to attract talent.
- Inform technology entrepreneurs, nonprofits and universities about philanthropic and federal grant opportunities.
- Support local entrepreneurs with meeting space and mentorship opportunities.
- Create a DC-sponsored venture capital program.
- Connect District youth, DC Public Schools and the DC Community College with local tech companies.

3

VISION:
Become the nation's destination of choice

GOALS:

- 1 Invest in and build a nationally recognized infrastructure system**
- 2 Attract and retain talent by leveraging the convenience and excitement of living in DC**
- 3 Rival marketing efforts of the nation's top destinations in promoting tourism**
- 4 Become renowned for delivering the highest standards in hospitality and service**

- Simplify the application process for hosting special events in DC.
- Create a fund to help creative economy organizations establish a presence along emerging corridors.
- Organize a campaign showcasing well-known officials and celebrities patronizing their favorite DC places.
- Increase resources allocated to marketing and promoting the District.
- Create District-wide Wi-Fi system.
- Gain commitments from major employers to collaborate with the Workforce Intermediary.
- Develop a hospitality program at the DC Community College
- Establish a culinary incubator that provides business and job training opportunities for DC residents.
- Launch a forum for the Metropolitan Police Department (MPD) and developers to discuss and mitigate potential crime issues from development projects.
- Repurpose vacant or underutilized properties for use by local artists and other members of the creative economy.
- Create an infrastructure investment fund.
- Build an academic village for university students in an accessible area of the city.

4

VISION:
End retail leakage**GOALS:**

- 1 Meet the retail needs of the District's neighborhoods
- 2 Attract the optimal types of retailers for job creation and tax base expansion
- 3 Market real estate opportunities in the District to retailers in order to develop retail-dense areas in the city

- Conduct a retail demand analysis to determine the amount of retail leakage for the city and for neighborhoods.
- Bring retailers and brokers to DC's emerging retail areas that may be unfamiliar.
- Promote DC as a premiere destination for retailers at national conferences like ICSC.
- Adopt zoning that eliminates non-retail uses of the retail streetscape, especially on corner locations of a retail corridor.

5

VISION:
Build a best-in-class global medical center**GOALS:**

- 1 Establish a medical hub that brings together area hospitals and research institutions
- 2 Target redevelopment sites for medical and university research and facility development
- 3 Leverage anchor medical institutions as impetus for growing nearby local economy

- Develop the McMillan Reservoir site as a medical office hub.
- Initiate regular communication among the Deputy Mayor of Planning and Economic Development (DMPED), universities, hospitals and local developers to keep them abreast of each other's new projects.
- Begin a process to assist small businesses in obtaining procurement contracts at hospitals and universities.

6

VISION:
Become the top North American destination for foreign investors, businesses and tourists**GOALS:**

- 1 Enable 200 DC businesses to become active in foreign markets within five years
- 2 Attract at least \$500 million in foreign investment within five years
- 3 Double the number of Chinese tourists within five years

- Develop and market the District as an attractive location for foreign direct investment (FDI).
- Focus on attracting foreign technology firms for FDI.
- Leverage the DC-China Center to support small businesses entering the Chinese market
- Market DC to tourists in targeted international markets, especially China.



SECTION D
**A VIBRANT ECONOMY:
SECTOR ANALYSES**

SECTION D

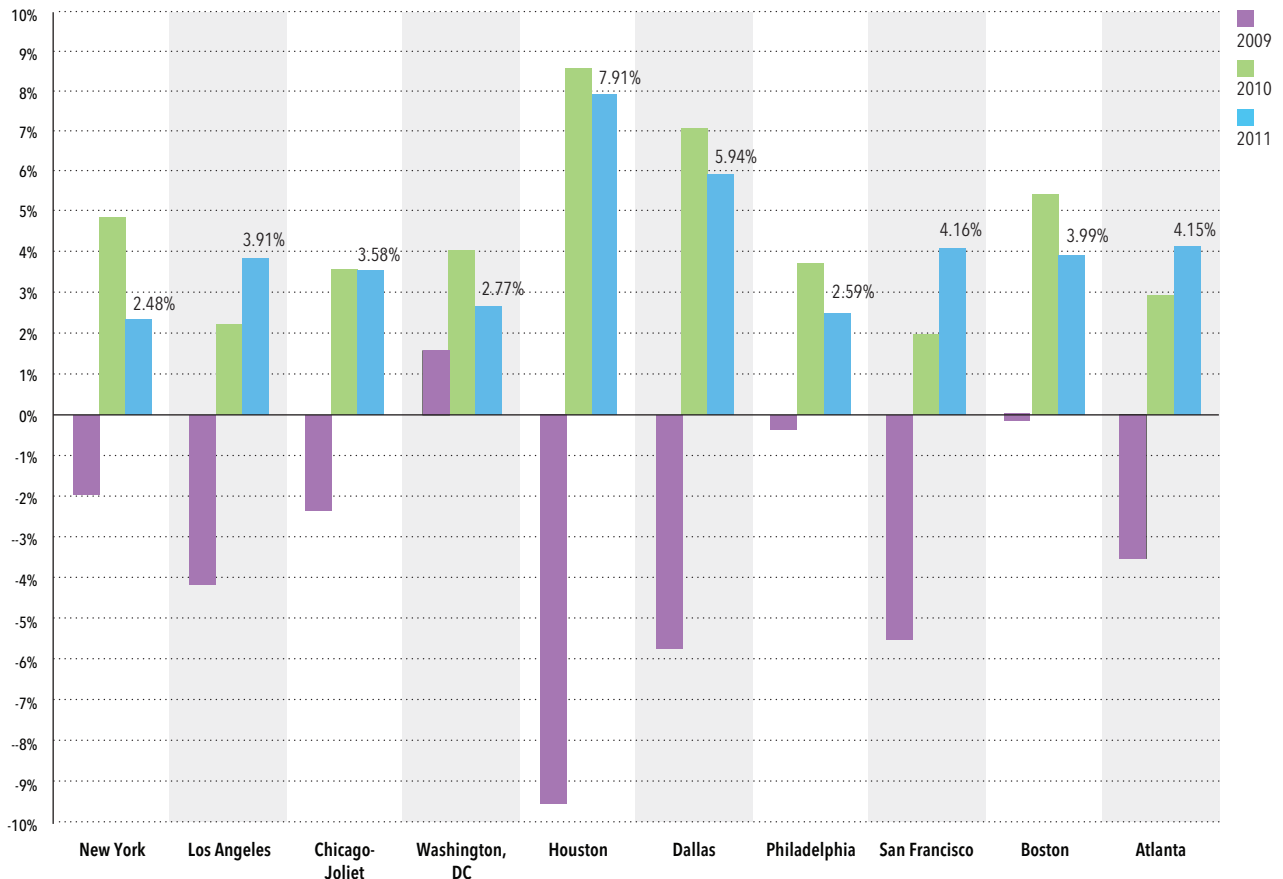
A VIBRANT ECONOMY: SECTOR ANALYSES

Washington, DC: At a Crossroads

Recent economic development initiatives in the District have been enormously successful, transforming DC’s skyline and neighborhoods and producing a city that is better able to weather regional and national economic downturns. In fact, Washington’s thriving economy has been a critical part of the region’s economic success story. The Washington Metropolitan Area (WMA) includes the District as well as Northern Virginia, parts of Southern Maryland and Jefferson County in West Virginia.

The region has shown consistent growth in Gross Metropolitan Product (GMP) over the last three years, even during 2009 when other regions saw a contraction. This positive yield reinforces the fact that DC is a low-risk locale for entrepreneurs and companies seeking investment opportunities (*Exhibit D.1*).

D.1
GROSS DOMESTIC PRODUCT OF US METRO AREAS
(% change in GDP)



Source: usmayors.org. Gross Domestic Product of U.S. Metro Areas (US\$, Billions).

Nationally, economic growth declined to just 1.5 percent in 2011 after growing by 3.1 percent in 2010. The deceleration was mainly attributable to only modest growth in manufacturing, finance and insurance, and retail trade. Meanwhile, the WMA's gross domestic product (GDP) has increased 21.6 percent since the first quarter of 2004 (*Exhibit D.2*).¹

The recession and the housing bubble took a toll on the District's GDP over the last five years, but it has regained its footing and, in some cases, accelerated beyond pre-2008 levels, according to the US Bureau of Economic Analysis (BEA).

In the District, GDP has climbed steadily over the last five years despite the recession. DC's GDP was \$91.8 billion in 2007, \$96.8 billion in 2008, \$98.3 billion in 2009, \$103.5 billion in 2010 and \$107.6 billion in 2011, according to the BEA. The top three sectors contributing to the District's GDP growth were government, legal services and real estate.

Approximately one-third of the District's GDP came from government output, including local and federal civilian and military. The total government GDP for the District was \$30.3 billion in 2007, rising to \$37.6 billion in 2011.

Professional legal services accounted for nearly 10 percent of the District's GDP. In 2007 it was \$9.6 billion of total GDP, growing to \$10.5 billion in 2008, then shrinking to \$10.3 billion in 2009 and rising again to \$10.9 billion in 2010. Final figures for 2011 were not available at the time this report was published. Real estate, which includes rental and leasing, accounted for \$7.9 billion of DC's GDP in 2007. That number rose to \$8.3 billion in 2008 and then dropped to \$7.7 billion in 2010 and in 2011 according to the BEA.

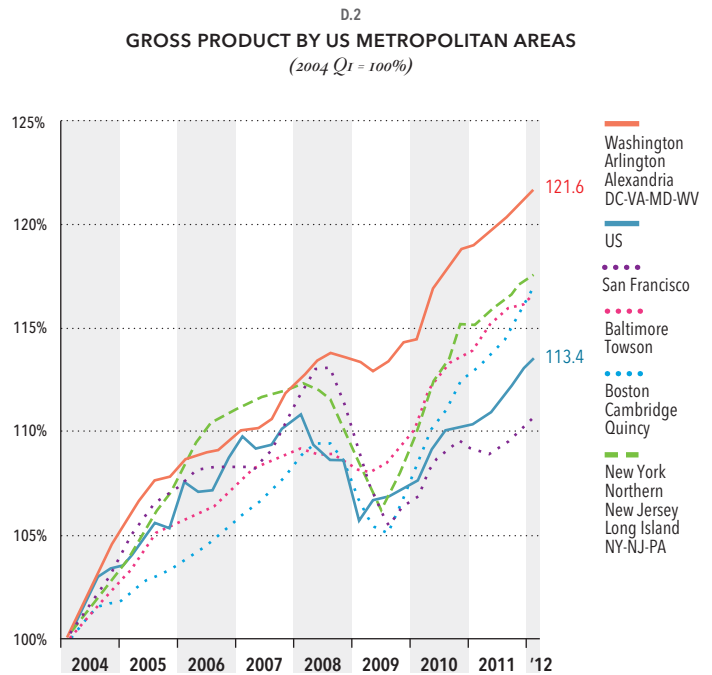
Per capita GDP for the District of Columbia in 2011 was \$148,291 compared with the national average of \$42,070.

Employment and Population

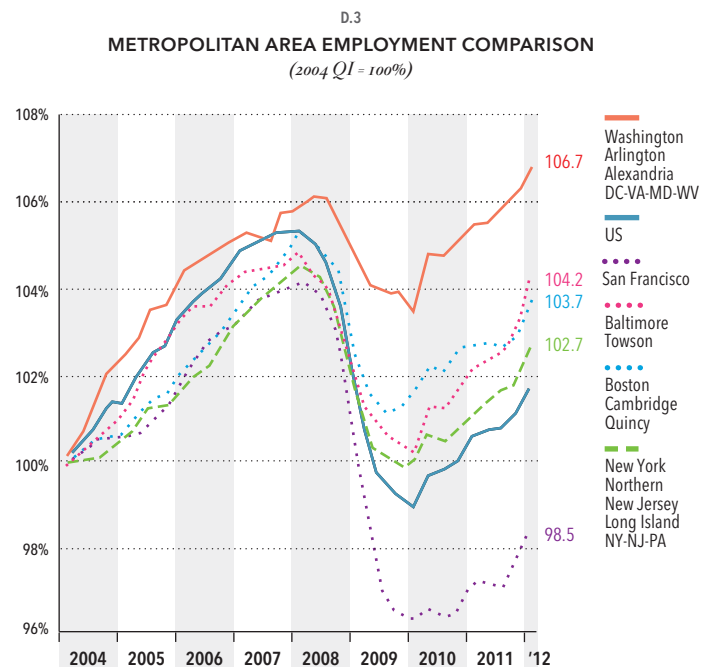
Long-term employment trends point to good news for the WMA. As of the first quarter of 2012, employment in the region had grown 6.7 percent from what it was in the first quarter of 2004. While the entire nation saw employment shrink significantly in 2008 and 2009 in response to the recession, the WMA experienced a much shallower decrease and is now on a course toward substantial growth (*Exhibit D-3*).

In the District, full-time and part-time employment grew steadily between 2007 and 2010, according to the BEA. In 2007 total employment in the District was 803,456 and then rose to 810,340 in 2008. By 2009 total employment had inched up to 812,538 and then jumped significantly to 825,469 in 2010. At the same time, the District's population rose from 574,404 in 2007 to 604,912 in 2010.

The District's population, long in decline, has rebounded strongly over the past decade to 617,996 in 2011. According to US Census figures, the city is gaining an estimated 1,000 residents per month, with much of the growth driven by young



Source: Brookings Institution



Source: Brookings Institution

professionals. Remarkably, the city grew faster than any state in the country from 2000 to 2012.

But even with its economic and employment successes, the region has not avoided the recession, and that has been especially true in the District, which has always struggled to reverse chronic unemployment in certain wards.

In June 2011 the unemployment rate for the District of Columbia stood at 11.3 percent, compared with the national unemployment rate of 9.1 percent and the regional rate of 6.2 percent. Some wards in the District reached unemployment levels that were more than twice the regional and national averages (*Exhibit D.4*).²

The unemployment rate, however, has begun to signal a potential turnaround. Between June 2011 and September 2012, the District’s jobless rate fell from 11.3 percent to 8.7 percent.

Of the nine categories of employment that the US Bureau of Labor Statistics (BLS) identifies, the District experienced job growth or held steady in all but three between 2011 and 2012. Some categories, such as leisure and hospitality and construction, have experienced significant job growth over the past year, rising 7.3 percent and 9.1 percent, respectively.

The District government continues to focus on increasing employment opportunities. “One City One Hire,” a recently launched employment program overseen by the DC Department of Employment Services, connects qualified, unemployed DC residents with jobs and provides employers who commit to hire unemployed District residents with placement, screening and training support. “One City One Hire” helps employers identify qualified job seekers to fill open positions and also provides District residents with the needed training and services to adequately prepare for available employment opportunities.

The District has faced unique challenges in reversing its unemployment rate. Despite a higher overall unemployment rate than similar cities or the US average, DC has pulled out of the recession much more swiftly than many other cities and its employment growth potential remains high (*Exhibit D.5*).

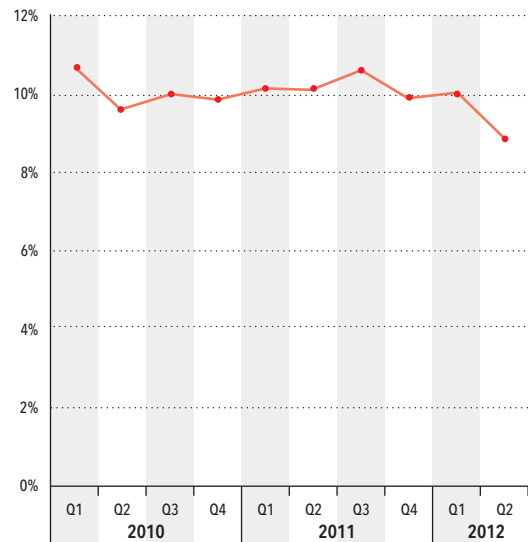
Income

In the United States, national income grew at an average of 3.7 percent in 2010 and 5.1 percent in 2011, according to the BEA. That was a substantial reversal from 2009 when personal income declined by 4.3 percent. In the District, personal income declined by 1.3 percent in 2009 but grew at 5.7 percent and 5.6 percent in 2010 and 2011, respectively.³

In 2007 the per capita US personal income was \$39,506. It grew to \$40,947 in 2008 and hit \$41,663 in 2011. In the District, per capita personal income dipped slightly in 2009 but, for the most part, it has grown steadily from 2007 to 2011. In 2007 the average per capita income in the District was \$65,329; by 2010 it was \$70,710. In 2011 it had grown to \$73,105 (*Exhibit D.6*).⁴

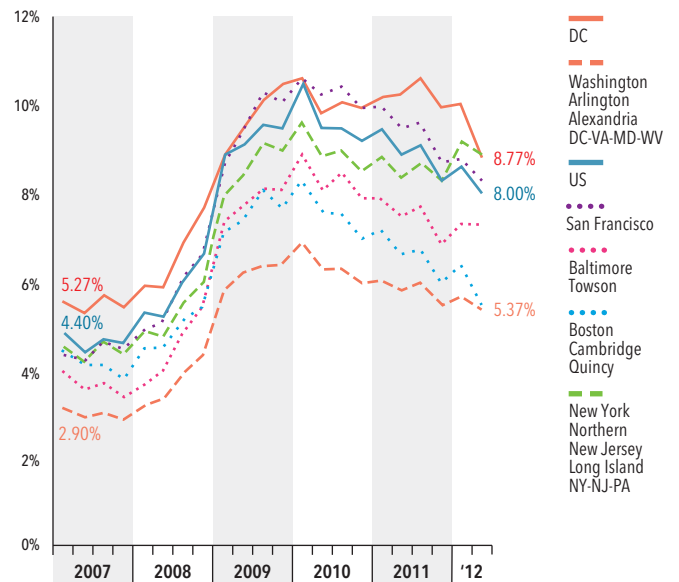
Although the District—like other metropolitan areas—has been affected by the recession, it has managed to rebound fairly

D.4
WASHINGTON DC'S UNEMPLOYMENT RATE OVER TIME



Source: US Bureau of Labor Statistics.

D.5
METROPOLITAN AREA UNEMPLOYMENT COMPARISON WITH THE DISTRICT



Source: Bureau of Labor Statistics.

substantially compared with its regional counterparts. BEA data show that between 2007 and 2010, the last year information is available for all areas, the District managed to make up its personal income losses and then robustly exceed 2007 and 2008 levels.

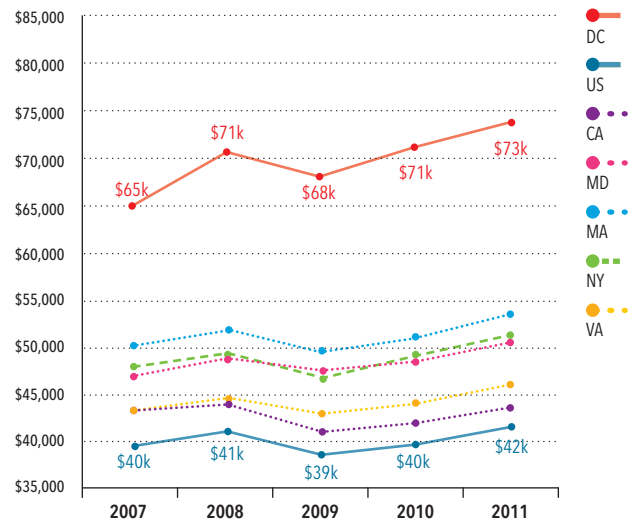
In a comparison of metropolitan per capita personal income rates, Maryland's per capita income was \$46,839 in 2007 and then climbed to \$48,864 in 2008. After a drop in 2009, it regained some of its standing at \$51,038 as of 2011. For Virginia, per capita personal income peaked at \$44,691 in 2008, dropped in 2009 and then inched back up to \$45,920 in 2011. West Virginia managed to regain its peak and surpass it, starting at \$29,497 in 2007, and then moving to \$31,286 in 2008, dipping in 2009 and then hitting \$33,513 in 2011.⁵

International Standing

Washington is an international city, in part because of its highly regarded global financial institutions, such as the World Bank and the International Monetary Fund, and also because of its 176 embassies. This international component has been a key factor in elevating the city to world-class status, despite its relatively small population and landmass, especially when compared to other world capitals.

The Washington region also boasts a growing economy that places it firmly in the ranks of the top metropolitan areas of the world. The Economist Intelligence Unit ranked 120 of the world's leading cities using data that measured economic strength as well as physical and human capital. Washington ranked eighth overall (*Exhibit D.7*).

D.6
PER CAPITA PERSONAL INCOME



Source: US Bureau of Economic Analysis.

D.7
WASHINGTON IN COMPARISON TO OTHER WORLD CITIES

The District performed admirably in a comparison of global cities on a number of key metrics, such as physical capital, human capital and economic strength.

It also made a good showing when measured on more esoteric factors, including character, institutional effectiveness and environmental and natural hazards.

Washington, DC			
	Rank / 120	Score / 100	Average (120 Cities)
Overall Score	24	43.4	37.1
Economic Strength	24	43.4	37.1
Physical Capita	20	93.8	74.9
Financial Maturity	10	83.3	47.8
Institutional Effectiveness	10	85.8	61.2
Social and Cultural Character	22	85.0	60.6
Human Capital	9	77.6	63.9
Environmental and Natural Hazards	59	66.7	66.9
Global Appeal	11	32.7	13.2

Source: The Economist (<http://www.ctigroup.com/citi/citiforcities/pdfs/rankingsbycategory.pdf>)

SECTION D • CHAPTER 1

FEDERAL GOVERNMENT
and
FEDERAL GOVERNMENT CONTRACTORS





FEDERAL GOVERNMENT *and* FEDERAL GOVERNMENT CONTRACTORS

A Natural Partnership

If there is a single sector that most defines the District of Columbia’s economic character and its place in the region and the nation, it is the federal sector. As the nation’s capital, DC is a federal city, and its complex economic and policy touch points with the national government have created both successes and distinctive challenges.

The District’s deep economic ties to the federal government bring both benefits and costs. Stable federal employment can provide an anchor during recessions, much like it has in the last few years, buttressing the city’s office market and cushioning sectors like retail that are sensitive to residents’ disposable income. On the other hand, the District’s economy is especially vulnerable to the economic costs of political gridlock. The threat of sequestration from the automatic budget cuts contained within the Budget Control Act of 2011 is distressing.

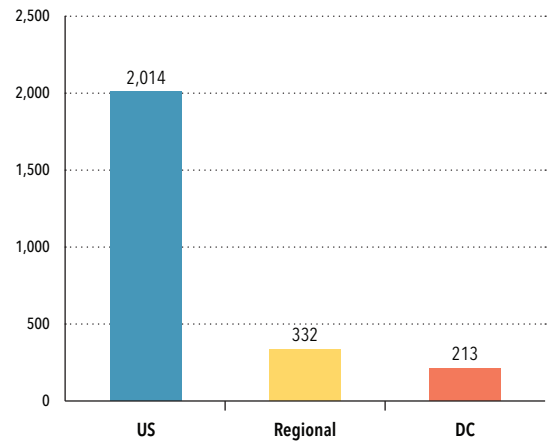
Sequestration could result in the loss of up to 127,000 federal jobs in DC over the next decade.¹ Those include 35,000 direct jobs, 34,000 federal contracting and subcontracting jobs, and 58,000 indirect jobs that will be lost as a result of the declining sector payroll.² Even if cuts are not implemented as specified in the Budget Control Act, spending and employment reductions are anticipated. Several bills currently in the US House of Representatives seek to limit federal employment growth. One of these, the Federal Workforce Reduction Act of 2011 (H.R. 677) calls for a federal hiring freeze each year in which a budget deficit is projected and sets up a formula requiring that any appointments come from a federal hiring pool that gains only 0.5 positions for each full-time position vacated.³ A desire to mitigate these dangers has been a motivation for Mayor Gray’s goal of diversifying the District’s economy.

Employment

Some 332,000 civilian federal employees work within the Washington Metropolitan Area (WMA). Of those, 213,000—or 10 percent of the total federal civilian workforce—are employed in the District of Columbia (*Exhibit D.1-1*).

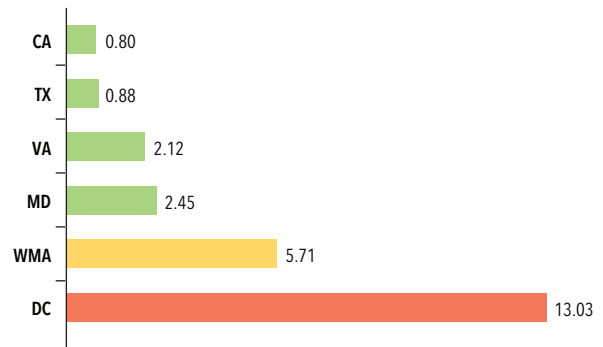
Federal jobs represent 30 percent of all employment in the District—twice that of the WMA, five times the rate of Maryland or Virginia and more than 13 times the US average of 2.3 percent (*Exhibit D.1-2*). California and Texas have the highest numbers of federal civilian jobs outside the WMA, but those states are less

D.1-1
FEDERAL AGENCY EMPLOYMENT (2012)
(thousands of employees)



Source: State and Area Employment, Hours, and Earnings. US Department of Labor, Bureau of Labor Statistics. Retrieved on May 16, 2012 from <http://data.bls.gov/cgi-bin/dsiv>

D.1-2
LOCATION QUOTIENT FOR FEDERAL EMPLOYEES IN THE UNITED STATES



Source: Quarterly Census of Employment & Wages. US Department of Labor, Bureau of Labor Statistics. Retrieved on July 9, 2012 from <http://data.bls.gov/pdq/querytool.jsp?survey=en>



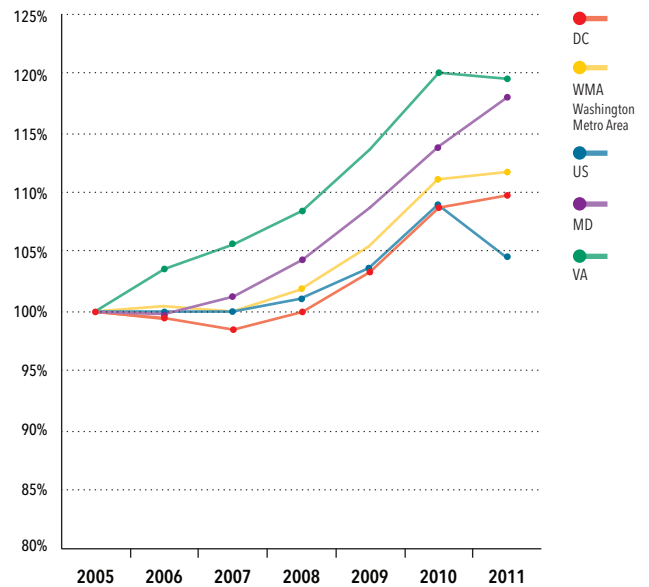
dependent on federal jobs than the average state or the District of Columbia.

Federal employment has grown steadily in the region since 2007. Despite a decline in the government workforce in 2011, federal employment in DC and the WMA continued to grow. Within the region, that employment growth in Virginia and Maryland has consistently outpaced growth in DC (*Exhibit D.1-3*).

While 30 percent of all DC jobs are federal positions, only 21.1 percent of those jobholders live in the District (*Exhibit D.1-4*). This illustrates a unique challenge that has historically plagued the District. Residents in nearby Maryland and Virginia can readily take advantage of the myriad benefits that come with living next to the nation's capital. However, with nearly 10 percent of federal employees living outside the District, the lost income revenue from these individuals is not easily replaced through other sources.

Regional federal employment is spread throughout a number of agencies and departments, touching DC, Maryland and Virginia (*Exhibit D.1-5*).

D.1-3
FEDERAL SECTOR EMPLOYMENT GROWTH (2005-2011)
(2005 = 100%)



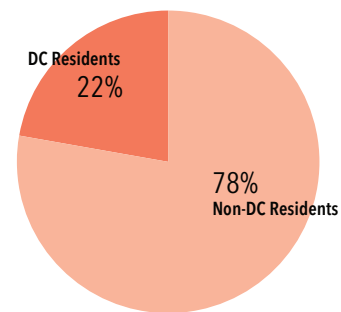
Source: State and Area Employment, Hours, and Earnings. US Department of Labor, Bureau of Labor Statistics. Retrieved on May 16, 2012 from <http://data.bls.gov/cgi-bin/dsxy>

D.1-5
TOP REGIONAL FEDERAL GOVERNMENT PLAYERS BY CIVILIAN EMPLOYEES

DISTRICT OF COLUMBIA		
1	Department of Homeland Security	18,819
2	Department of Justice	18,710
3	Department of the Navy	10,374
4	Department of State	10,337
5	Department of Treasury	9,476
MARYLAND		
1	Department of Health & Human Services	37,985
2	Department of the Army	18,954
3	Department of the Navy	15,625
4	Social Security Administration	11,829
5	Department of Commerce	11,570
VIRGINIA		
1	Department of the Navy	43,414
2	Department of Defense	23,151
3	Department of the Army	21,030
4	Department of Homeland Security	13,068
5	Department of Commerce	9,684

Source: OPM Data, March 2012.

D.1-4
DISTRIBUTION OF FEDERAL EMPLOYEES IN DC BY RESIDENCE
(100% = 213,000 employees)



Source: Revised Revenue Estimate, February 2012. DC Office of the Chief Financial Officer. http://www.cfo.dc.gov/cfo/lib/cfo/february_2012_revenue_estimate_presentation_022912.pdf

Key Trends

The District’s economic growth is strongly affected by the federal government’s position as a major landholder. As the largest owner and lessee of office space in DC, the federal government dominates the real estate market—with 34 percent of the District’s total commercial square footage. The federal government owns 33 million square feet of space and leases an additional 22 million square feet, accounting for 46 percent of all office space leased in DC (*Exhibits D.1-6 and D.1-7*), according to the General Services Administration (GSA). Any property that is leased by the federal government is still subject to property tax, whereas owned property is not. DC Chief Financial Officer Natwar Gandhi has estimated that some \$823 million in annual real property tax is foregone since federally owned property is tax exempt.

A recent congressional proposal is calling for more efficient use of federal buildings. The bill, passed in the House and now awaiting action in the Senate, aims to decrease the federal budget deficit “by realigning, consolidating, selling, disposing, and improving the efficiency of federal buildings and other civilian real property, and for other purposes.”⁴ In addition, a memo issued by Acting Director of the Office of Management and Budget Jeffrey Zients put a freeze on the federal inventory of leased space. Agencies have been directed to save \$3 billion in fiscal year 2012 by disposing of excess property and consolidating leased space.

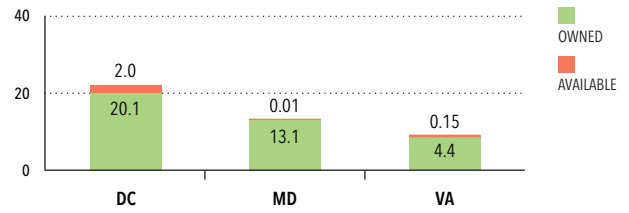
Impact of Budget Reduction

The top 20 federal contractors in the United States handled \$91.9 billion in government work in 2011. Of the \$19.5 billion in contracts targeting DC, only 18.6 percent of federal spending on these contracts is allocated to DC contractors. The majority of the spending went to contractors in Virginia. Nine of the top 20 government contractors call the WMA home, but none are headquartered in the District, according to USASpending.gov.

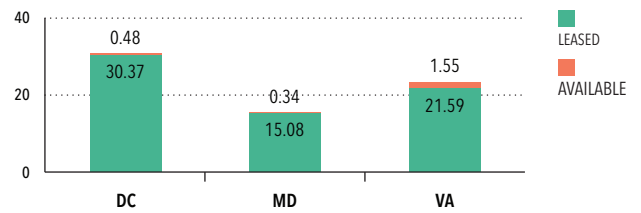
DC’s share of federal contracts has remained relatively flat and proposed cuts in federal spending create constraints that make growth for DC federal contractors difficult. Maryland has started to see a decline in its share of federal contracts while Virginia has seen significant growth.

The federal government spent \$536.7 billion on procurement contracts in 2011, of which \$67.7 billion went to contracts in DC, Maryland and Virginia. The US Department of Defense accounted for 66 percent of this spending (*Exhibit D.1-8*). The top five contract recipients captured 17 percent of the federal spending in the region (*Exhibit D.1-9*), according to USASpending.gov.

D.1-6
GSA-OWNED SPACE BY STATE, INCLUDING AVAILABLE SPACE
(millions of square feet)



D.1-7
GSA-LEASED SPACE
(millions of square feet)



Source: Selected State: DC, General Services Administration, Inventory of Owned Properties, 2012. Retrieved on May 21, 2012 from <http://3www.iolp.gsa.gov/iolp/>

D.1-8
FEDERAL AGENCIES WITH THE HIGHEST CONTRACT SPENDING IN FISCAL 2011

Department	DC, MD & VA Contract Spending
Defense	\$44.633 billion
Health & Human Services	\$4.638 billion
Homeland Security	\$2.868 billion
General Services Administration	\$2.114 billion
Transportation	\$1.959 billion

D.1-9
TOP RECIPIENTS OF FEDERAL CONTRACTS IN GREATER WASHINGTON AREA, FISCAL 2011

Firm	Value of Contracts in DC, MD & VA	Regional Employees	Headquarters
Northrup Grumman	\$2.9 billion	20,700	Los Angeles, CA / Falls Church, VA
Lockheed Martin	\$2.5 billion	23,000	Bethesda, MD
Booz Allen Hamilton Holding	\$2.4 billion	14,000	McLean, VA
Hewlett-Packard	\$2.0 billion	N/A	Palo Alto, CA
Caci International	\$1.9 billion	5,965	Arlington, VA

Source: USASpending.gov. Retrieved on May 31, 2012.



Consolidation

The threat of sequestration as well as the federal government's consolidation efforts will greatly impact the District's employment and revenue prospects. As the anchor institution in DC, the federal government has historically been the driver of the local economy. The federal government has produced vast ancillary benefits for the District, including employment opportunities and a network of contractors and service firms. Although diversification of the District's economy will produce a healthier and more balanced economic ecosystem, the federal government remains an important attraction for businesses, residents and tourists.

The District government recognizes that issues like sequestration and consolidation can create opportunities for the District to become a stronger competitive force. In response to the changing landscape of the federal government's presence in DC and the WMA, Mayor Gray funded a business development specialist position within the Deputy Mayor's Office for Planning and Economic Development (DMPED) devoted to retaining the federal government within city lines. Many federal agencies are already located outside the District so the federal government's consolidation efforts will only prompt more competition from Maryland and Virginia to house government agencies and offices.

In the last two years DMPED has hosted tours tailored to the space needs and requirements of the GSA. These tours inform the GSA of attractive office space for the federal government that meets its stated specifications around cost, LEED certification and various other considerations. The GSA tours signal a new direction: The District government is focused on increasing competitive efforts to retain and attract federal government business. Currently the District is working with the GSA on major development projects, mainly Saint Elizabeths and Walter Reed, to bring in federal government activity. Efforts from the administration have also successfully extended Central Employment Area designation to places within the District, including Saint Elizabeths and the entire Capital Riverfront Business Improvement District (CRBID).

HUBDC, an initiative launched by the DC government and the Small Business Administration (SBA) in February of this year, marks another critical milestone that reflects the District's increased attention to making the city a strong competitor for the federal government's business. HUBDC helps DC's small businesses participating in SBA's Historically Underutilized Business Zone (HUBZone) program to obtain federal government procurement contracts through preferential access. The federal government has articulated its goal of awarding 3 percent of all federal prime contracting dollars to HUBZone-certified small businesses. In fiscal year 2011, HUBZone business in the District received \$321 million in federal prime contracts, about \$78 million of which was HUBZone set-asides.



FINDINGS FROM KEY STAKEHOLDER INTERVIEWS

1 Federal procurement spending has driven the region's growth over the past 20 years.

- The WMA benefits from more annual procurement than any region in the nation.
- The GSA is the largest civilian procurer. It has seen exponential growth in spending since 1990.
- Procurement growth has created economic sectors, such as the tech corridor in Virginia that is driven by US Department of Defense purchases and the bio-medical/research cluster in Maryland.
- The District and the federal government could jointly develop a new cyber/national security cluster at Saint Elizabeths.
- There is an opportunity to get procurement contract recipients into the space vacated as a result of the federal government's move to consolidate its workforce within federal buildings. Those contractors would enjoy proximity to federal client headquarters and procurement decision-makers.
- Procurement spending will be flat or decline over the next several years. Management support services will see a steep decline due to federal in-sourcing.

2 Existing contracting preference programs provide a mechanism to increase federal procurement dollars flowing to DC small businesses and help build the local economy.

- Interview subjects from the federal and DC governments, as well as small business, indicated that the HUBZone program at the former Saint Elizabeths was a big success.
- There are opportunities to leverage existing contracting preference programs such as 8(a), HUBZone and minority/women/service-disabled veteran-owned businesses. The HUBZone program covers much of DC; it requires businesses to locate in economically disadvantaged areas and hire residents there.
- The Office of the Mayor and the DC Department of Small and Local Business Development have successfully partnered with the US Department of the Treasury and the US Department of Homeland Security to launch HUBDC, which helps federal agencies exceed their HUB procurement spending goals by working with newly certified DC businesses.
- In order to meet contractually required utilization metrics, large companies with big federal contracts are looking for sub-contractors that are HUBZone-certified businesses.
- Small businesses need guidance in breaking into the complex and intimidating process of federal contracting, in becoming certified under contracting preference

programs and in competing against big players for their first federal contracts.

- Many federal agencies are not meeting their small business procurement goals. The executive branch has made these goals a priority. That means spending in goal categories is likely to increase.

3 Contractors want proximity to federal clients and access to the area's highly educated talent pool.

- Companies want to be "in Washington," although this means the WMA, not the District of Columbia. The cost of doing business in areas surrounding the District is significantly lower than in DC.
- One federal contractor described DC as a place for client meetings, entertainment and cultural activities but not a place to work. However, business development in the region benefits DC as many people come into the city and spend money at restaurants and on entertainment.
- Another trend is for companies to locate near their workforce in order to avoid the expense of relocating employees and to reduce commute times. This is bringing businesses to the WMA.
- An argument in favor of locating in DC is that the quality of the talent and reduced employee turnover can offset the increased cost of space.
- Headquarters' proximity to customers is most important to small- and mid-sized contractors. Larger contractors have the resources to maintain satellite offices near clients when needed.

4 Federal agencies desire increased communication with the District government and federal contractors.

- Officials from multiple federal agencies noted that their relationships with the DC government were positive but could be strengthened through formal channels.
- The Office of Management and Budget released two memos on "myth busting" perceptions of what engagement and communication are legally allowed between contractors and government agencies prior to requests for proposal and bidding processes. Increased communication like this drives better procurement outcomes.
- Regular communication can favorably influence federal decisions and expedite large development projects.



5 Federal government leasing has a high impact on DC's office space market.

- The DC economy is starting to feel the pressure from spending constraints put on federal agencies.
- In fiscal 2013, the DC federal office leasing market will see a slowdown due to consolidation into federal government-owned facilities. Several short-term leases will be signed by the GSA to synchronize lease expirations for agencies with multiple locations for consolidation.
- The compression of federal agencies will result in agencies moving into less expensive, owned space when their current leases expire. This will bring agencies from outlying areas into the District.
- The federal footprint will be further reduced by federal agencies that rely on teleworking and hoteling (mobile workers using by-reservation office space) up to four days out of the week.

6 Expansion of the Central Employment Area (CEA) brings federal tenants to emerging areas.

- The GSA uses the CEA as the common delineated search area for finding space in the District; this can be leveraged to further economic development.
- DC government officials have the ability to deem areas where government occupancy is advantageous for the District as part of the CEA.
- Agencies may vacate all existing space and move into new locations as landlords are more inclined to renovate office space to the needs of the tenant with the signing of a new lease.
- The GSA takes pride in being a leader in development and has shown willingness to be an anchor tenant to take advantage of less costly land.
- The L'Enfant Plaza and Federal Triangle sections of DC, home to office buildings, are seen as examples of development design that does not accommodate the current market because they are largely devoid of amenities and street-front retail. Neighborhood revitalization is needed to create vibrant and stable neighborhoods and to rebuild retail corridors.

7 Entry-level federal employees struggle with the cost of DC housing. They often end up living outside the District.

- There is a captive audience of young people entering federal employment without roots in the area. They see DC as an attractive place to live.
- Provided there are affordable housing options, the Metro's Green Line corridor will be an excellent area for those working at Saint Elizabeths.

- Many enlisted members of the US Coast Guard's workforce will be located at Saint Elizabeths. They rotate posts every two to three years and will need affordable rental housing.
- An interview revealed that only 5 percent of the employees at the US Department of Homeland Security headquarters live within the District.
- Existing DC homebuyer incentive programs are not well known.

8 The federal government faces a serious skills gap in the coming years.

- Several federal contractors have already started to feel the effects of the federal government's budget-cutting decision to move more work in-house. Firms are losing contracts. In some cases, they are also losing workers to the federal government.
- The federal government is experiencing a massive demographic and skills gaps in its workforce. There are currently four times as many government workers over age 50 as there are under age 30. The government is having difficulty attracting employees to fill these gaps.
- Despite a hiring freeze, the need for particular skill sets is growing. They include: cyber security, business process re-engineering, cloud computing, data center consolidation, health IT, mid-level human resource specialists and military special operations. These employment shortfalls will have to be filled by retraining existing federal workers.
- Many federal employees who are at the mid to peak level of their careers are choosing to move to the private sector.
- Employee transitioning, from the public sector to the private sector and vice versa, can be challenging. Private sector workers moving into federal jobs have difficulty adjusting to the work culture of the public sector.
- Even though the shifting workforce allows for the sharing of critical institutional knowledge, the proportion of technically skilled federal employees has not kept pace with that of the private sector.
- DC and the federal government undervalue the opportunities available to work with area universities to provide increased workforce development opportunities and to address labor market trends.

PROFESSIONAL SERVICES





PROFESSIONAL SERVICES

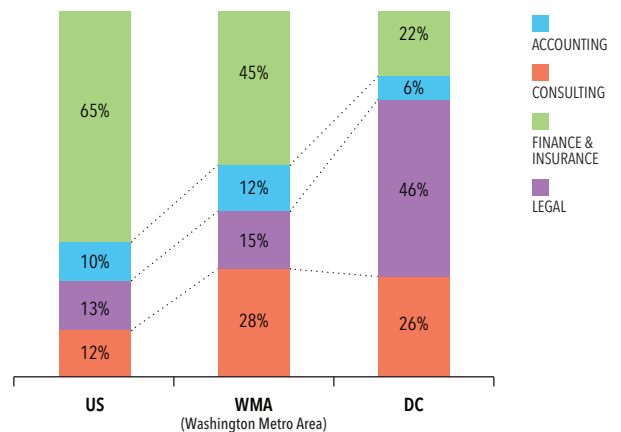
A Prestigious Draw

The Professional Services sector is one of the District's largest and most economically important. While only one in 50 American employees works in the sector, the District boasts a ratio of one in nine (*Exhibit D.2-1*). Four professional services subsectors provide work for 66,000 District residents:

- **Accounting:** This subsector includes providers of accounting services such as financial statement preparation, budgeting, payroll and systems development. It accounts for 6 percent of the professional services sector employment in DC.
- **Consulting:** Companies in this subsector provide professional advice and assistance and staff augmentation. Consulting accounts for 26 percent of DC's professional services jobs.
- **Finance and Insurance:** Firms in this industry do financial transactions, facilitate financial transactions or the pooling or capitalization of risk through insurance. This area is highly competitive in the District. No single firm controls more than 20 percent of the market. Finance and insurance service providers account for 22 percent of professional service jobs.
- **Legal Services:** Legal service providers dominate the sector with 46 percent of the professional services sector employment in DC.

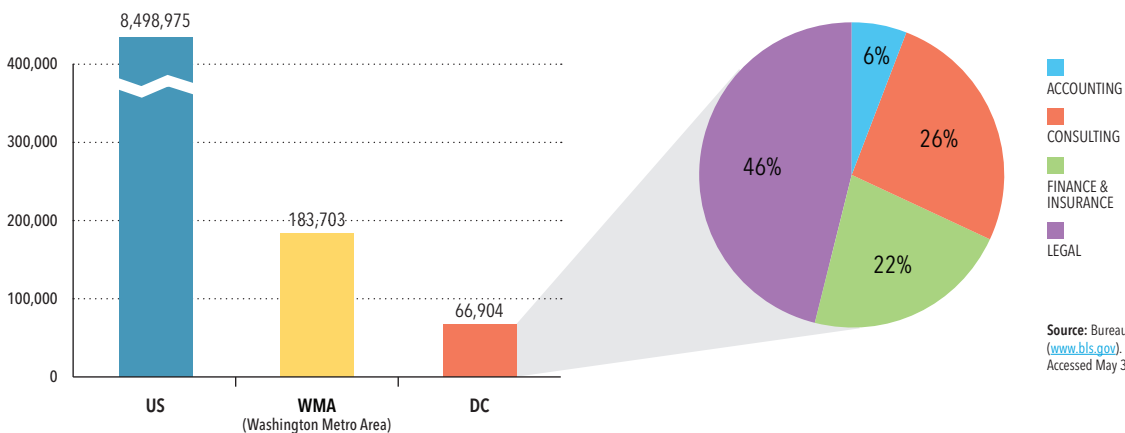
Nationally, finance firms and insurance service providers dominate the professional services sector, but in the District law and consulting firms are the most prominent forces in the sector (*Exhibit D.2-2*). This is largely due to the presence of the federal government as well as large organizations and nonprofits in the District. These law and consulting firms are also drawn to the prestige of being located in DC.

D.2-2
COMPOSITION OF PROFESSIONAL SERVICES EMPLOYMENT (2010)



Source: Bureau of Labor Statistics (www.bls.gov). Accessed May 31, 2012.

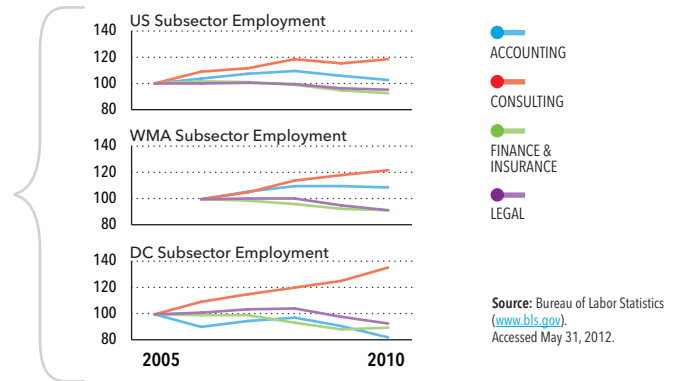
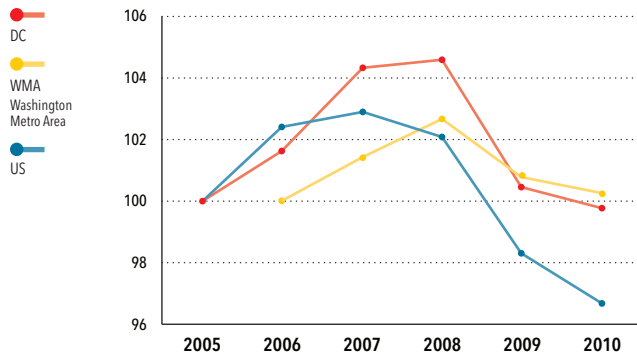
D.2-1
PROFESSIONAL SERVICES SECTOR SIZE AND BREAKOUT: EMPLOYMENT (2010)



Source: Bureau of Labor Statistics (www.bls.gov). Accessed May 31, 2012.



D.2-3
PROFESSIONAL SERVICES SECTOR GROWTH: EMPLOYMENT (2005-2010)
(2005 = 100%)



Accounting companies are much more concentrated in the Washington Metro Area (WMA) than inside the District. Since they can provide the majority of their services remotely, the lower costs of outlying areas may be attractive to these firms. There are a number of important financial service firms in the District, but this sector is under-represented when compared with the region and the nation.

Employment

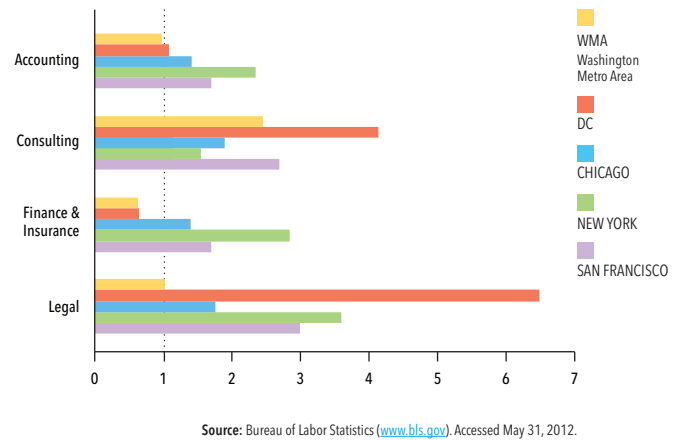
Heavy job losses in the financial and legal subsectors during the recession were offset by gains in consulting. This trend was also observed at the national and regional level, although it was most pronounced in the District given the intense clustering of consulting firms. In the last few years, DC has also seen accounting firms move outside the city into Maryland and Virginia in an effort to trim costs. As a result, the District has lost jobs in the accounting subsector while the region has experienced an overall gain, according to the Bureau of Labor Statistics (BLS) (*Exhibit D.2-3*).

Employment in the financial subsector fared the worst because of its direct exposure to the financial crisis. It posted deep losses in 2008 and 2009. Nationally it also suffered into 2010, although there was slight recovery that year in the WMA and the District. The legal subsector fared only slightly better. Its employment nationally and regionally was flat until 2007. In the District, it saw only modest gains: 0.5 percent over three years, the BLS reported.

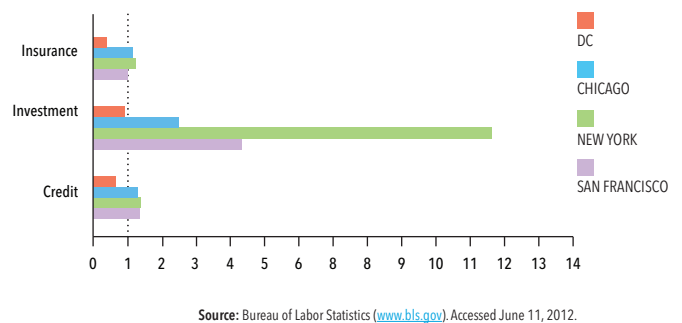
The location quotient, a ratio that compares the concentration of employment with that of a larger area, shows the District's strength in the legal and consulting sectors. While DC's accounting sector is about on par with the national average, its financial and insurance sector is quite small relative to the national average and to other major cities (*Exhibit D.2-4*).

There are also finance and insurance subsector discrepancies between the District and the rest of the country. Other major cities post results similar to the national averages for insurance and credit intermediaries. The District's results are much lower. Washington, DC, also has a smaller investment industry than other major cities. As important sectors like technology expand in the District, investment capital will also increase and can usher in the entrance of banks and other financial institutions (*Exhibit D.2-5*).

D.2-4
COMPARISON OF SECTOR LOCATION QUOTIENTS OF SELECT MAJOR CITIES
(national average = 1.0)



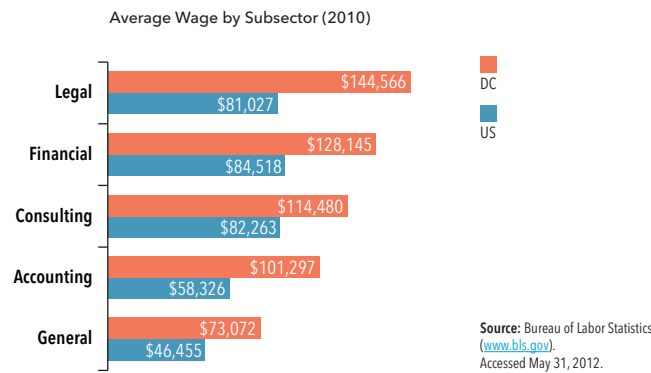
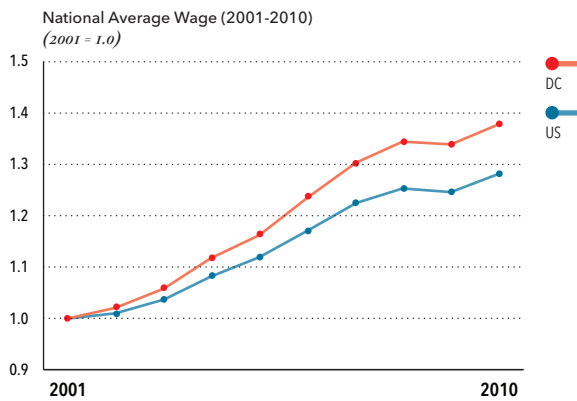
D.2-5
COMPARISON OF LOCATION QUOTIENTS OF DC WITH WASHINGTON METRO AREA
(national average = 1.0)





D.2-6

COMPARISON OF AVERAGE ANNUAL WAGE BY SECTOR AND SUBSECTOR FOR THE NATION AND THE DISTRICT



District wages in the professional services arena are higher than the national average. Even among financial services jobs, of which there are disproportionately fewer in the District, employees, on average, are much better compensated than elsewhere in the nation (*Exhibit D.2-6*).

Between 2001 and 2010, wages for professional services nationally increased by roughly 30 percent, despite setbacks in 2008 and 2009. During the same period compensation rose almost 40 percent in the District (*Exhibit D.2-7*).

An analysis of total measured wage contribution within the District delivers mixed results. In the first half of the decade, while employment remained stable, average wage gains pushed up the wage contribution by each subsector. The consulting subsector fared the best, with steady increases in both employment and wages. From 2001 to 2010, the subsector's contribution in terms of total wages grew by more than 230 percent (*Exhibit D.2-8*).

Early gains in professional services wages did not last, however. Increases in the accounting, financial and legal subsectors were offset by employment losses and, in some cases, wage decreases between 2007 and 2009. The ultimate result was modest gains for the decade.

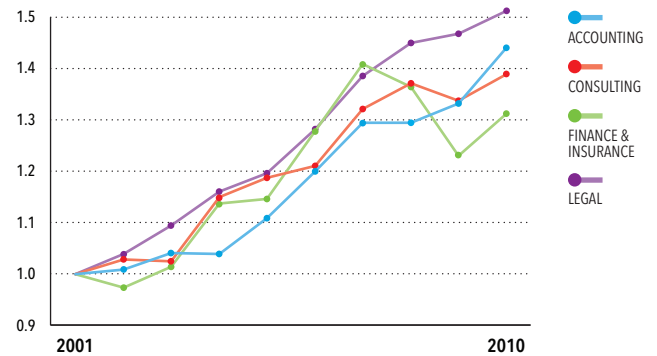
Key Players

The District currently hosts a large number of major firms in the professional services sector. Within legal services, 92 percent of major firms are represented and 14 percent of top law firms are headquartered in the District (*Exhibit D.2-9*).

Similarly, most top consulting firms, as measured by revenue as well as prestige, have a presence in the District. The city's consulting community is mainly large firms geared toward federal government business, although there are also smaller firms and startups.

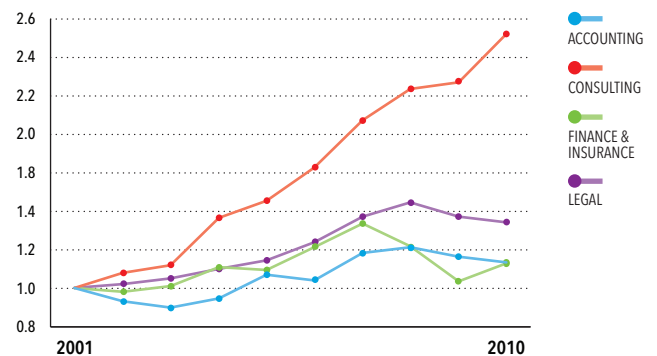
The accounting sector has representation from the so-called Big Four accounting firms as well as a number of small to mid-sized firms. The majority of these firms, however, are located in the WMA rather than within the District proper (*Exhibit D.2-10*).

D.2-7
AVERAGE ANNUAL WAGE BY SUBSECTOR, WASHINGTON, DC (2001-2010)
(2001 = 1.0)



Source: Bureau of Labor Statistics (www.bls.gov). Accessed May 31, 2012.

D.2-8
DC WAGE CONTRIBUTION BY SUBSECTOR (2001-2010)
(2001 = 1.0)



Source: Bureau of Labor Statistics (www.bls.gov). Accessed May 31, 2012.



Key Trends

Two important trends in the professional services sector are technology and cost cutting. Firms are now consolidating and revising their business models. During the recent economic downturn, the strength of the District's economy mitigated much of the effect of the recession. Professional services firms with offices outside the District revamped their businesses to cope.

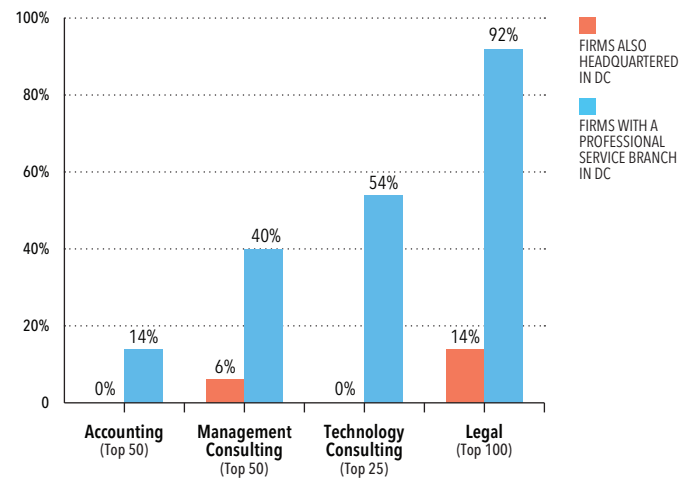
For example, law firms have been exploring new ways to handle billing and to streamline back office operations. Law firms are also reducing their staffs and hiring fewer recent law school graduates. The District's multistate bar policy, under which one only needs to pass the multistate bar exam in order to practice in DC, gives Washington a competitive advantage over its neighbors. The District is also a prestigious location for law firms so, while the subsector may decrease in size, there is little threat that legal firms will leave entirely.

The District is home to only a handful of banks, and that market is highly fragmented, with no one bank controlling more than 20 percent. Still, most banks see the District as a potential growth market. Financial service firms fall into several categories: retail or commercial banks chartered in the District, retail or commercial banks chartered outside the District, funds (hedge funds, venture capital fund, and private equity funds), wealth manager and investment banks.

Retail or commercial banks based outside the District are less affected by the District's laws, regulations and economy. They generally adjust their operations on a national or international scale, rather than a municipal scale. However, many of these banks are expanding operations in the District due to its resilience during the recession. At the same time, there are many funds in the District and they appear to be expanding regionally. This group is less tied to the District economy and, therefore, is less concerned about office location.

Information technology has allowed professional services firms to operate differently, and their most valuable assets are those related to their human capital. With a global market to serve, professional service firms try to match the geographic footprint of their clients. This has prompted a consolidation by firms at the top, as measured in terms of revenue. The same driving forces have led to a shift toward specialization. Large firms assign internal divisions to specific functions, often relocating all non-client operations to low-cost locations. Information technology has also allowed small firms to enter the global market with specialized services

D.2-9
TOP PROFESSIONAL SERVICE FIRMS WITH
PHYSICAL PRESENCE IN DISTRICT
(percent)



Sources: Vault's top 50 accounting firms. Vault's top 50 management consulting firms, Vault's top 25 technology consulting firms. Banking Report's top 150 financial institutions. Vault's top 100 law firms. Accessed June 6, 2012.

Note: Financial and insurance institutions are excluded due to lack of disclosure as to their primary revenue source being commercial as opposed to retail services

D.2-10
PROFESSIONAL SERVICES PROVIDERS IN THE DISTRICT

ACCOUNTING	FINANCIAL
Beers and Cutler PLLC	Bank of America
Deloitte Touche Tohmatsu	Bank of Georgetown
Ernst & Young	BB&T
KPMG	Cardinal Bank
Pricewaterhouse Coopers	FBR
Tate & Tryon	Industrial Bank
Thomas Harvey LLP	PNC
CONSULTING	
Accenture	Corporate Executive Board
Booz Allen Hamilton	Ernst & Young
Boston Consulting Group	HP Enterprise Systems
Capgemini	IBM
CGI	McKinsey & Co.
Cognizant	Roland Berger Strategy Consultants
Computer Science Corporation	Xerox
LEGAL	
Akin Gump Strauss Hauer & Feld	Howrey
Arnold & Porter	Pillsbury Winthrop Shaw Pittman
Covington & Burling	Roxx, Dixon & Bell
Crowell & Moring	Stephens & Johnson
Dickstein Shapiro Morin Oshinsky	Venable
Dow, Lohnes & Albertson	Wiley Rein & Fielding
Finnegan, Henderson, Farabow, Garrett & Dunner	Wilmer Cutler Pickering Hale & Dorr



FINDINGS FROM KEY STAKEHOLDER INTERVIEWS

1 Professional services firms are driven by the growth of their client base. For DC-based firms, this frequently means national and global companies, as well as federal institutions.

- The global economic contraction slowed growth in all professional services subsectors and led to industry consolidation and efforts to centralize operations, reduce back-office costs and expand into new lines of business.
- Professional services firms locate in the District because of the presence of strategically important institutions and decision makers. The prestige of working in the nation's capital was also cited. The federal government's move to 'right size' and impending cutbacks promise to be problematic to the sector.
- There are clusters of firms in DC that support a specific clientele, such as accounting firms for nonprofits and associations.

2 In response to the recession and other global trends, professional services firms are changing their business models to find greater cost savings.

- Law firms are moving back-office operations to low-cost locations such as Tennessee, Kansas or offshore.
- Certain consulting firms have shifted significant portions of their workforce from high-cost areas, such as the District, while retaining smaller offices near major clients.
- Some consulting firms are employing strategic decentralization. The practice dramatically reduces a firm's real estate footprint by locating small offices near key clients or clusters of personnel and then encouraging remote (teleworking) or "hoteling" (reservation-based unassigned seating in an office environment). The strategy puts a greater reliance on using workspace in clients' facilities.

3 Intense regional competition threatens the District of Columbia's position as a prized location for business.

- The Virginia Bar Association is moving to extend reciprocity to surrounding jurisdictions and remove Virginia residency requirements. However, while smaller firms may choose to move their operations, major law firms have indicated that they will retain a sizeable presence in DC. They are unwilling to leave their prestigious addresses in the District.
- Many firms choose their locations based on the federal institutions they will serve. DC attracts firms focused on civilian agencies. Virginia, meanwhile, attracts defense-oriented companies while Maryland attracts health care and cybersecurity firms.
- Most large DC law firms have already opened offices in Northern Virginia to handle intellectual property,

technology and tax practices. A number of professional services firms have located near the National Institutes of Health, the Pentagon or other strategically important institutions.

- Formation of a cluster of accounting firms in Tysons Corner has drawn a sizeable portion of the region's accounting talent into Northern Virginia.

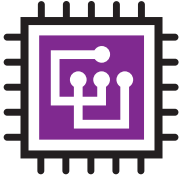
4 The region's political leadership competes to attract businesses to their jurisdictions.

- Virginia holds a strong competitive edge due to its lower tax burden, particularly its individual income tax and corporate income tax. It is drawing both businesses and high-income residents.
- Both Virginia and Maryland have discretionary funds available to the governor for economic development purposes. The District does not.

SECTION D • CHAPTER 3

TECHNOLOGY





TECHNOLOGY

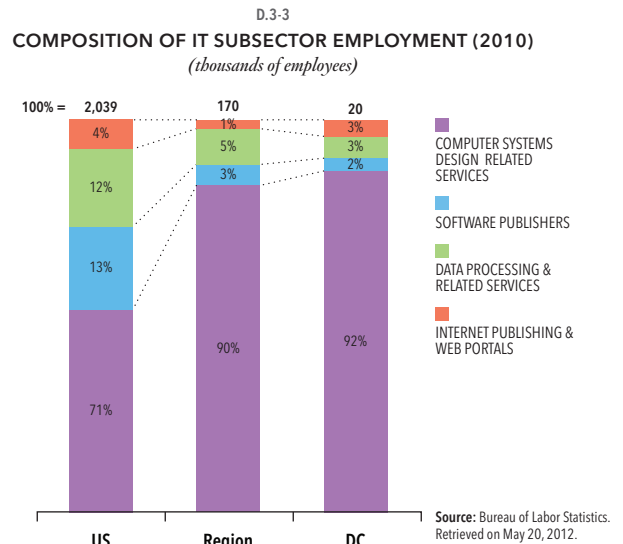
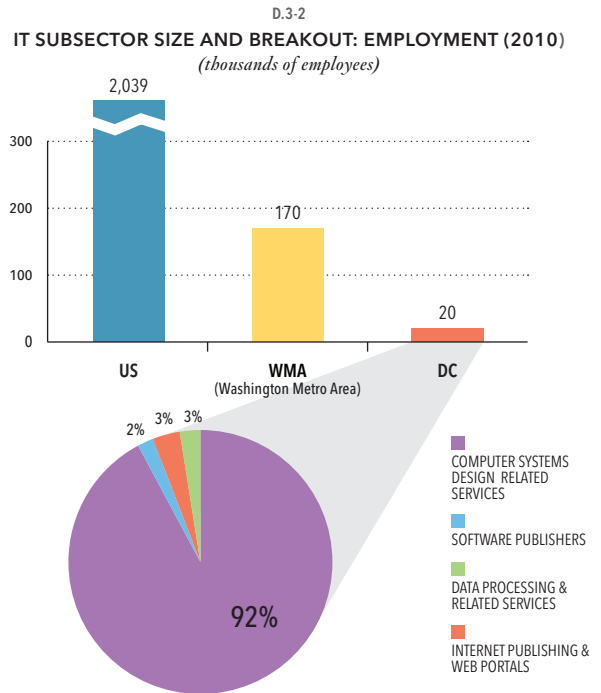
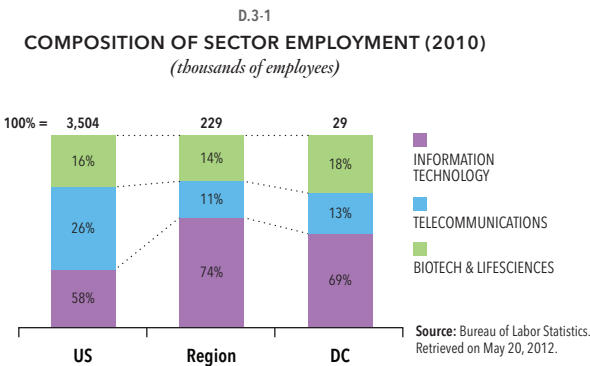
Positioning DC to Be a High-Tech Magnet

The District's technology industry has seen steady job growth since 2007, and its economic potential has yet to be fully realized. In the last decade the number of tech jobs in DC has increased by 50 percent. Despite this success DC continues to face both subtle and obvious barriers in the development of its tech industry, most notably as a result of its proximity to Virginia and Maryland, which lobby heavily to attract and retain technology firms within their borders.

The technology industry has been classified into three subsectors:

- Computer software, data, and Internet (information technology)
- Telecommunications
- Research and development in biotech and life sciences (biotech and life sciences)

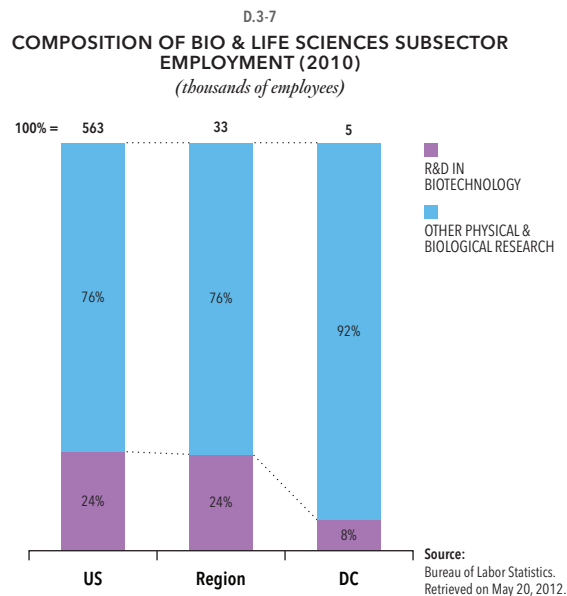
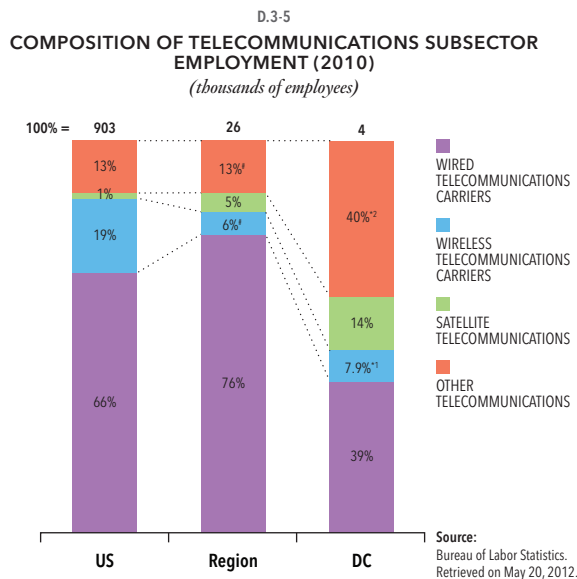
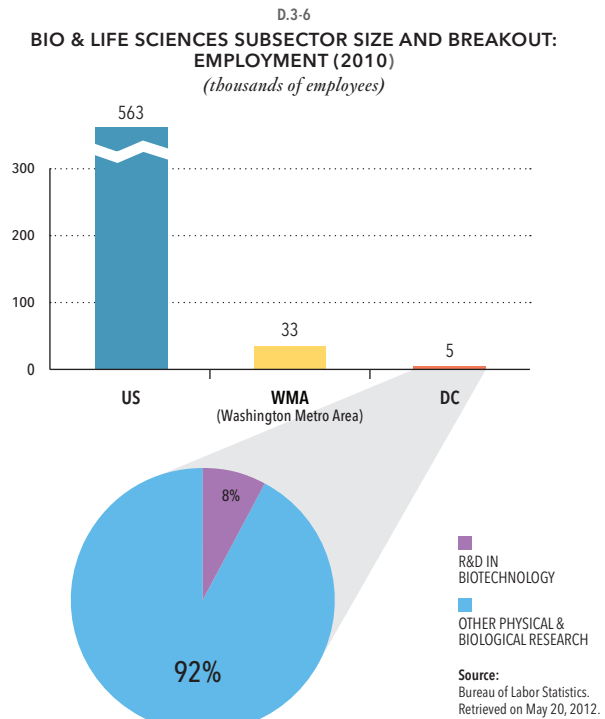
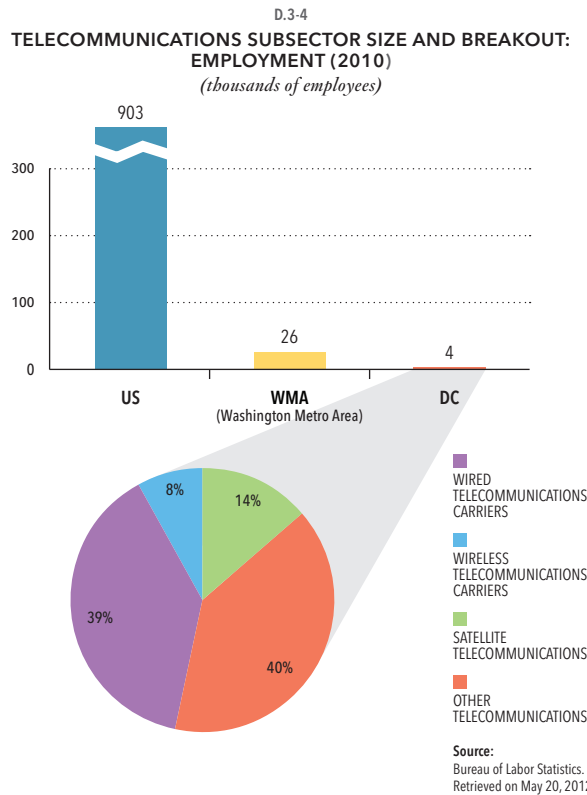
DC employs about 13 percent of the total technology workforce in the Washington Metropolitan Area (WMA), equivalent to 29,000 people (*Exhibit D.3-1*). The District has a greater concentration of jobs in the information technology (IT) sector relative to the other subsectors. IT positions account for 70 percent of all jobs within the technology industry and have been growing at a rapid pace. About 92 percent of the District's IT jobs are linked to computer-systems design and related services, according to the U.S. Bureau of Labor Statistics (BLS) (*Exhibits D.3-2 and D.3-3*). This is significantly higher than the national average of 71 percent. The District's IT jobs are primarily with the federal government.





Wired telecommunications accounts for most of the District's employment in the telecommunications sector (*Exhibits D.3-4 and D.3-5*). However, these numbers may be skewed because many major firms in both the wired and wireless telecommunication subsectors are classified under the wired telecommunications category. DC's proximity to government policymakers and regulators, including the Federal Communications Commission, may account for the number of jobs in the other telecommunications subsector in DC.

Physical, life and biological research provides most of the jobs within the biotech, physical and biological (life) sciences sector (*Exhibits D.3-6 and D.3-7*). Though the percentage of jobs in this subsector in the WMA is consistent with the national average, the percentage of jobs within DC is significantly lower. The National Institutes of Health's (NIH) Maryland campus and the concentration of biotech firms near the NIH facility are certainly contributing factors to the region's disproportionate percentage of jobs in this subsector.



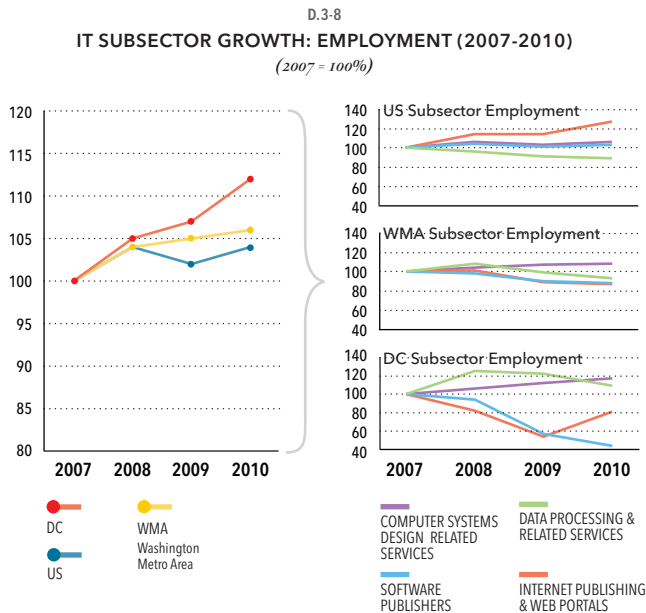
¹Based on summation of county numbers as MSA statistics are not available.
¹ Data not available for 2010. For consistency, assumed employment numbers are same as in 2006.
² Data not available for 2010. For consistency, assumed employment numbers are same as in 2008.



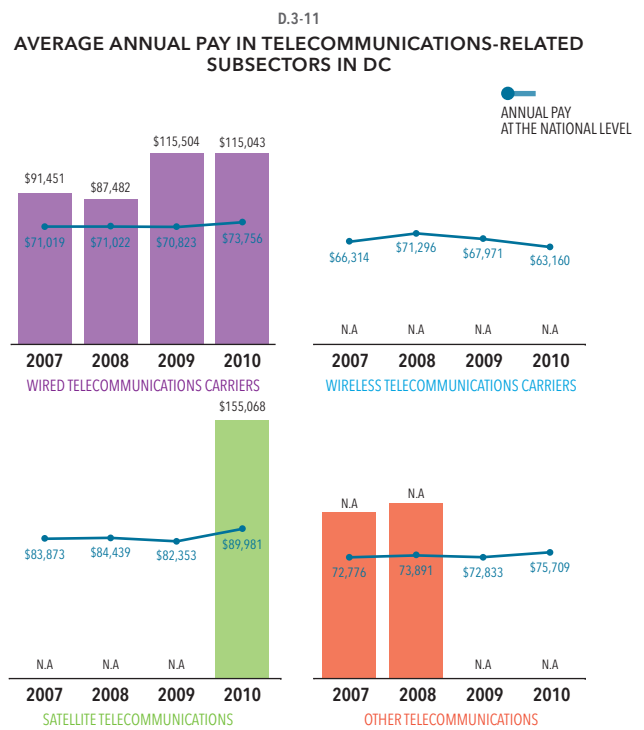
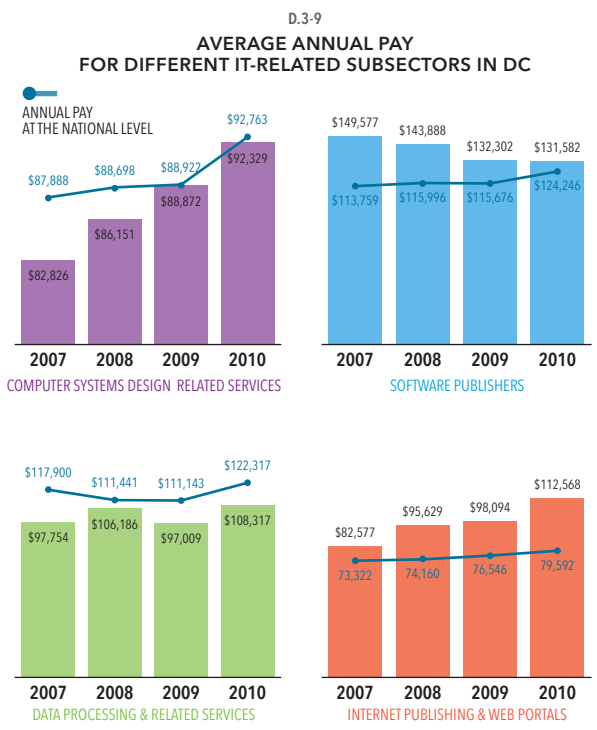
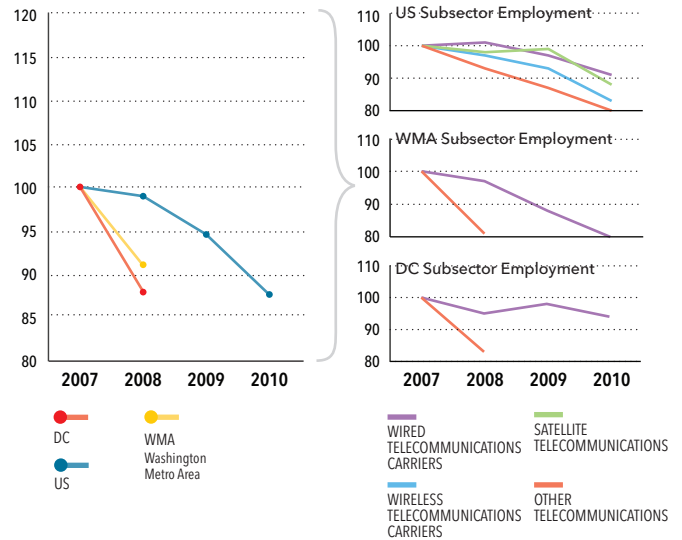
Employment

The IT subsector has been leading the growth in the technology sector, adding the greatest number of companies and jobs in the District. The District's software firms grew by 12 percent between 2007 and 2010, compared with a lower 6 percent growth for the region and 4 percent for the nation during the same time period (Exhibit D.3-8). The average annual salary for DC employees in the IT sector has also been increasing since 2007 (Exhibit D.3-9), rising to approximately \$94,176 in 2010, in line with the national average.

Employment in wired telecommunications appears to be stable in DC relative to the declining national trend (Exhibit D.3-10). Data is not available for most other subsectors in the telecommunications sector. BLS data suggests that the average annual salary in the wired telecommunications subsector in DC is approximately 56 percent higher than the national average (Exhibit D.3-11).



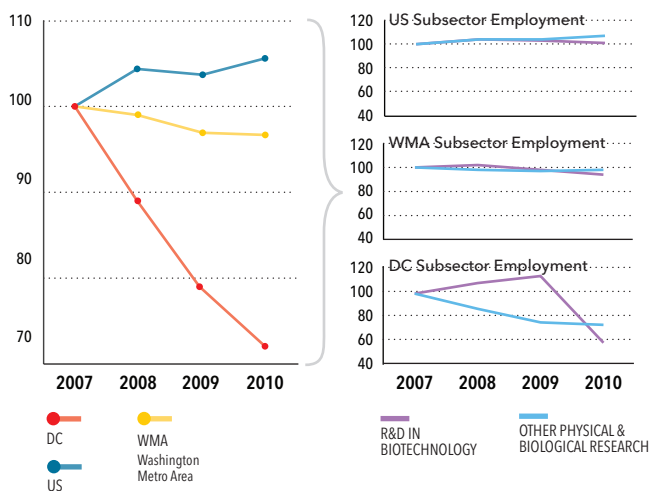
D.3-10
TELECOMMUNICATIONS SUBSECTOR GROWTH: EMPLOYMENT (2007-2010)
(2007 = 100%)





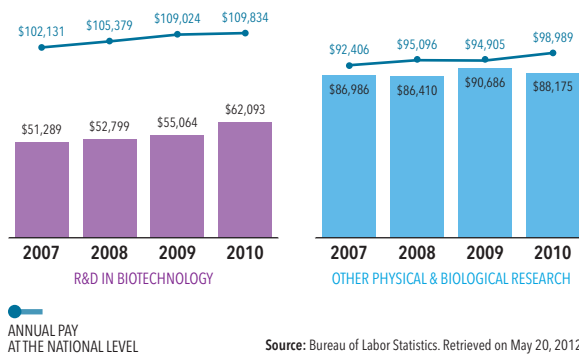
The number of jobs in the biotech and life sciences sector has been steadily declining in DC since 2007 (Exhibit D.3-12). Yet despite the significant decline in DC, the robust regional numbers have largely offset DC, allowing the region to maintain competitive with the national average. The entire sector commands an average salary of \$64,089, according to the BLS, which is approximately 35 percent less than the national average (Exhibit D.3-13). The average pay within the biotech and life sciences sector is considerably lower than the IT sector. DC's average income levels in the biotech and life sciences subsector have not been growing at the same pace as in the IT subsector.

D.3-12
BIO & LIFE SCIENCES SUBSECTOR GROWTH: EMPLOYMENT (2007-2010)
(2007 = 100%)



Source: Bureau of Labor Statistics. Retrieved on May 20, 2012.

D.3-13
AVERAGE ANNUAL PAY IN BIO- & LIFE SCIENCES-RELATED SUBSECTORS IN DC



Source: Bureau of Labor Statistics. Retrieved on May 20, 2012.

Key Trends

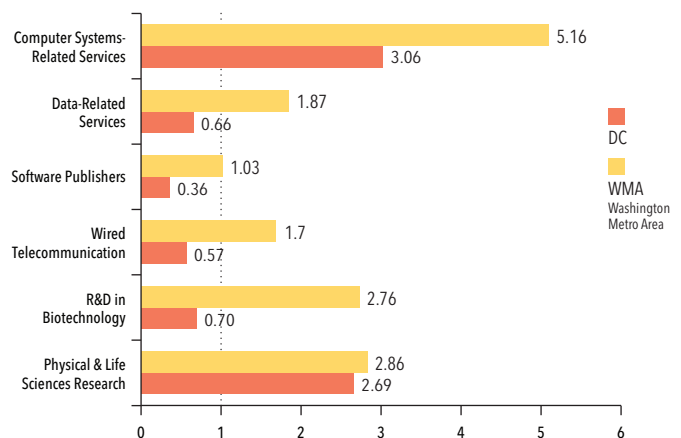
Information Technology: Big data and analytics, customizable cloud computing, mobile computing and social networking reflect recent trends in the information technology industry. The WMA is home to a number of companies leveraging the strengths of federal contracts related to big data and analytics and computer security. Meanwhile, there are many ambitious entrepreneurs working to capitalize on other trends like social media.

Telecommunications: The shift from wired to wireless, voice to data and the introduction of smart phones, voice over IP, service bundling and value-add services are critical developments in telecommunications. A convergence in the industry has seen many telecommunications firms acquire entities that operate in this field. However, there is no clear evidence whether this sector will contribute to significant economic growth in the District.

Biotech and Life Sciences: Cutting-edge works of human genome sequencing, enhanced health and longevity, as well as genetic data privacy issues, come together to shape the biotech and life sciences arena. The activity in this sector in the greater Washington region can mainly be attributed to the presence of the NIH in Maryland and, to some extent, to research at DC universities.

The location quotient compares the regional share of economic activity in a particular industry with the national share of economic activity in the same industry. The results reveal the degree of regional specialization. Despite the advantages of being an urban area with a highly educated workforce, DC's location quotient numbers are consistently lower across all the sectors in the technology industry than those of the overall WMA. Even more, the location quotients are rapidly falling in a few of the technology subsectors, notably software publishing, biotech research and life sciences research (Exhibit D.3-14).

D.3-14
COMPARISON OF LOCATION QUOTIENTS OF DC & WMA
(national average = 1.0)





Incentivizing Innovation: DC As a New Technology Hub

DC's competitive advantages relative to other states lie in its proximity to the federal government as well as major organizations and nonprofits. Access to subject-matter experts and the opportunity to build relationships within these valuable institutions are unique value propositions to startups and technology firms. In order to understand the needs of major clients like the federal government, proximity is vital. This is a competitive advantage that the District can continue to leverage in attracting talent and innovation to the city. Competition for tech firms from Maryland and Virginia is fierce. Both states reap the benefits of proximity to the nation's capital but are able to boast lower costs of living and doing business.

The DC Tech Incentives Program (enacted this year) offers numerous incentives to reduce the cost of doing business for high-tech companies in the District. Some of the incentives offered include a five-year freeze on assessed value of real property and reduction in the corporate income tax rate from 9.975 percent to 6 percent and elimination of the corporate income tax rate for five years if the business is located in a High Technology Development Zone. Part of the DC Tech Incentive Program also contained special legislation for LivingSocial, the District's largest and most prominent tech startup. The incentive package allowed the District to secure LivingSocial's consolidated corporate headquarters within the city.

In conjunction with such tech-friendly policies, other important milestones are also changing the landscape of innovation and technology in the District. The tech community has hosted several large events to attract startups and investors to the District. In the last year events like DC Entrepreneurship Week, Entrepoolooza, Social Media Week, Digital Capital Week and TechBuzz have helped put DC on the map for entrepreneurs and venture capitalists.

The District's portfolio of technology firms is growing. Currently the largest technology companies in the city include BlackBoard, Cogent Communications, LivingSocial and Synteractive. Federal agencies like the US Department of Defense (DOD), the National Security Agency (NSA) and the Central Intelligence Agency (CIA) also employ a significant number of people within the technology sector.

Several notable venture capital firms are located in the city, including Revolution, The Carlyle Group, Grotech, Paladin Capital Group, Venturehouse Group and Core Capital Partners. The District government also successfully incentivized Fortify.vc, a venture capital firm in Virginia, to locate its headquarters to DC. LivingSocial, HelloWallet, EverFi Inc. and SnagFilms are a few of the startups in the District that have recently attracted large investments. DC is also home to numerous business incubators and technology accelerators, including Acceleprise, The Fort.vc, Endeavor DC and Affinity Labs.

Government relations is an integral part of DC's technology landscape. In 2011, Google spent \$9.7 million in lobbying the government, followed by Microsoft at \$7.3 million and Oracle at \$6.9 million, according to OpenSecrets.org. These firms have

established offices in DC, but they are not large employers in the District.

Verizon Communications Inc., Harris Corp., Cogent Communications Group, Paetec Holdings Corp. and Allied Telecom Group dominate employment in the metropolitan area's telecommunications sector, the *Washington Business Journal* reports. *Washington Business Journal* identifies MedImmune, Human Genome Sciences Inc., Qiagen NV, BioReliance Corp. and ATCC as the largest employers in the area's biotechnology industry. They are all located in Maryland or Virginia.



FINDINGS FROM KEY STAKEHOLDER INTERVIEWS

1 The process of setting up a business in DC is perceived to be time-consuming and burdensome.

- Firms getting started in the District must coordinate with multiple governmental departments, including the DC Department of Consumer and Regulatory Affairs (DCRA), the Office of the Chief Financial Officer (OCFO) and the Office of Tax and Revenue (OTR).
- Although the overall process may only take one or two days to complete, it is an entrepreneur's first interaction with the District and currently leaves a negative first impression.

2 There are divergent views regarding venture financing for DC tech firms. Some stated there are adequate funds while others claimed the District's investor community needs to be more active. Entrepreneurs also stated that DC investors asked for larger equity stake in companies than West Coast investors.

- There was no consensus among those interviewed as to whether the District has sufficient financing sources—and whether those sources have the desire, incentive or knowledge to invest in earlier-stage technology companies. Investors interviewed said there is no shortage of funding in DC for startups with sound business models.
- The number of DC venture capital firms willing and able to make investments is limited, leaving a gap between an entrepreneur's ability to obtain an initial \$500,000 investment from high-net-worth angel investors and accelerators and the entrepreneur's ability to subsequently obtain a \$3 million investment to build the company.
- Individuals interviewed expressed concern about how much of a firm's equity an entrepreneur must relinquish to attract local funding. Ceding substantial equity during early rounds of financing makes it increasingly difficult for local technology entrepreneurs to raise capital during subsequent rounds of financing.

3 Few bridges exist between technology entrepreneurs and DC's high-net-worth individuals, who have seldom made tech investments in the past.

- Washington, DC, has a high concentration of wealthy individuals from whom entrepreneurs could solicit financing. However, there is little connection between these two communities.
- The angel investor community in the District has historically invested in the real estate and hospitality sectors rather than technology enterprises. The investor community's lack of familiarity with the technology sector stands as a challenge to obtaining financing from local sources.
- Several of those interviewed discussed the need for DC-based startups to relocate to the West Coast for

financing. However, others offered examples like newBrandAnalytics, a company that chose to stay in DC after receiving \$26 million of investment from local venture firm NEA.

4 The District has higher capital gains tax rates than Virginia and Maryland. This impedes growth in the technology industry and encourages successful tech company founders and investors to move to neighboring states and channel their funds to firms outside the District.

- The higher capital gains rate in DC (8.95 percent), relative to Virginia (0 percent for tech investments) and Maryland (5.5 percent), was seen as an impediment to investment in the technology industry.
- District residents move to states with more favorable tax rates in order to avoid the high-tax obligation that comes with liquidity events. Individuals with significant wealth and serial entrepreneurs are more inclined to invest in startups near their residences. The outflow of residents decreases the probability that subsequent investments will be made in DC-based tech startups.

5 Difficulty of finding affordable office space within the technology sector is a significant challenge.

- Technology entrepreneurs in the District said the positive "network effects" of locating a startup company within a technology cluster often outweigh the other significant costs of doing business, such as a less favorable taxation and regulatory environment.
- Enabling technology companies to cluster in relative proximity to other technology companies, entrepreneurs, universities and funding sources will foster innovation and provide benefits for entrepreneurs.
- If a new technology cluster develops outside of DC in the greater Washington metro area, technology companies may choose to relocate to that region. Relocation is even more likely if the desirable "network effects" of a technology cluster would come with a more attractive tax and regulatory environment than in the District.

6 Incubator launches and co-working space for startups could be provided through universities.

- Universities are well-positioned to create and deliver programming that ensures an incubator is more than just a co-working space, a concern that multiple interviewees raised in connection with some incubators in the District.
- Universities in DC have expressed interest in starting university-run incubators. However, they have met obstacles in obtaining sufficient space to house these programs.



7 Greater engagement between the technology community and local universities and students is needed.

- District universities are not seen as catalysts for entrepreneurship and talent development. Computer science and engineering programs are not perceived as robust in the tech community, and universities like The George Washington University and Georgetown University are only beginning to provide support for student entrepreneurs.
- DC university students lack opportunities and assistance in obtaining internships and full-time positions with technology startups.
- Universities and entrepreneurs in DC do not have good information about technology grant opportunities.

8 The Saint Elizabeths campus has potential to become a tech center.

- Several cities have offered substantial grants to universities to stimulate technology innovation. For example, New York City enabled the development of Cornell NYC Tech (Technion-Cornell Innovation Institute) on Roosevelt Island through government grants and effective use of city-owned land. A similar initiative at the Saint Elizabeths campus may offer a unique setting for technology learning and development

9 Opportunities to better commercialize research exist.

- In theory, DC and neighboring locations could take advantage of research unfolding in federal agencies such as the NIH, NSA and US Department of Defense. In practice, the federal government does not encourage commercialization of discoveries—for reasons that range from conflicts of interest to concerns about security. However, startups have taken advantage of the presence of federal organizations in the past.
- The larger concentration of biotechnology firms in neighboring Maryland is a significant challenge for DC's biotechnology sector. Biotechnology firms that are growing tend to relocate outside the District because of DC's expensive real estate and inability to provide ready-to-occupy space.

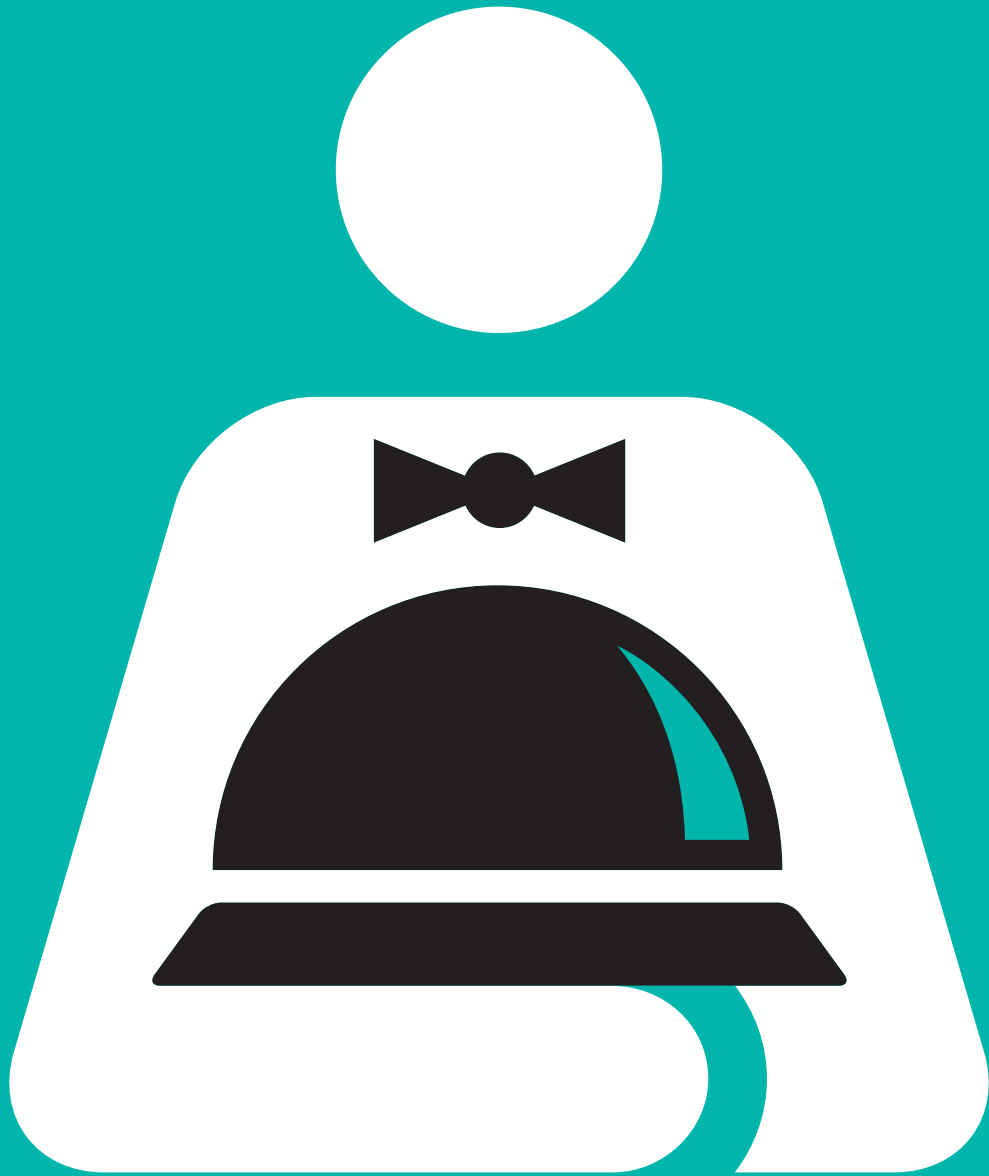
10 DC is not known nationally as a technology hub, and it has no marketing or public relations campaign to position the city in this manner. Furthermore, current business regulations and incentive programs are not effectively communicated to local businesses.

- There is no effective campaign or marketing effort to promote the District as an attractive city for large technology companies, and the population outside the

region is largely unaware of what technology companies are located here.

- Interviewees consistently stated that the DC government needs to better communicate existing and future technology incentive programs. Much of technology community is not aware of or does not know how to obtain current incentives. For example, DC's Certified Capital Company (DC CAPCO) Program is neither well known nor understood by the tech community. And some within the tech community are unclear as to what constitutes a Qualified High Technology Company (QHTC), which is for the DC Tech Incentives program.
- "Technology Days," during which the government showcases its technology and interacts with entrepreneurs, venture capitalists and other enthusiasts, lacks visibility.

HOSPITALITY





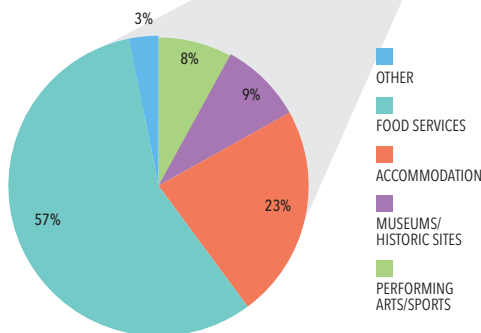
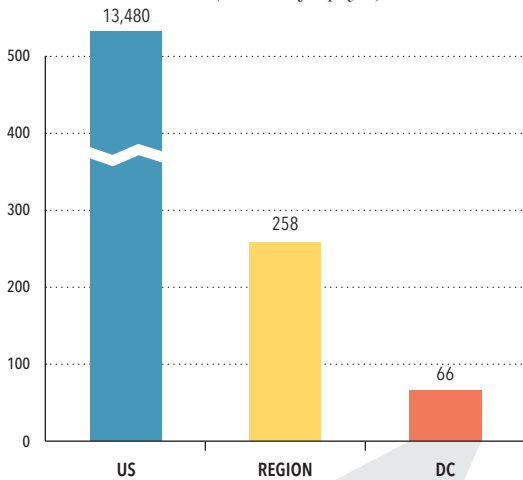
HOSPITALITY

DC Opens its Doors to the World

The District of Columbia has evolved into a world-class cultural city with countless dining, entertainment and educational experiences for visitors. Students flock to the District on field trips. Families and international visitors vacation in the nation’s capital. Theater aficionados immerse themselves in the city’s burgeoning theatrical offerings. Business leaders travel to DC to interact with their federal counterparts. Embassies are magnets for diplomatic business. *Forbes Magazine* recently voted Washington, DC, “America’s Coolest City to Live” because of its cultural offerings and its status as home to one of the most active arts and cultural communities in the United States.

All these characteristics contribute to a revitalized hospitality sector that is a major engine for new jobs and has elevated the city’s reputation as a prime destination for top-of-the-line entertainment and culinary experiences. The District’s hospitality industry has seen an upward trajectory over the last 40-plus years as urban renewal and crime reduction altered perceptions of safety. Today, the sector serves its traditional market—groups and individuals drawn to the District because of its association with the federal government—as well as other visitors, vacationers and residents. Within the industry there are four subsectors that are especially powerful sources of employment for District residents: museums and historical sites, performing arts and spectator sports, accommodation and food services. This report focuses on those areas.

D.4-1
HOSPITALITY SECTOR SIZE AND BREAKOUT: EMPLOYMENT (2010)
(thousands of employees)

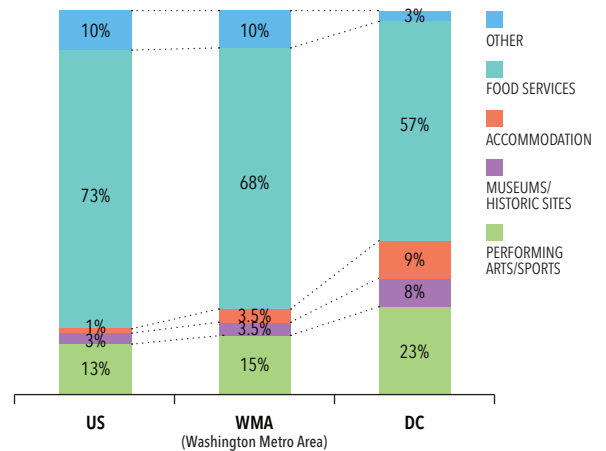


Source: US Bureau of Labor Statistics, 2010 Quarterly Census of Employment and Wages.

Employment

Hospitality industry employment is growing faster in the District than in the rest of the country. One distinctive element of the DC’s hospitality industry is the number of federal job positions provided by the Smithsonian Institution. Because of this, both public and private employment was taken into consideration in examining DC hospitality sector jobs, which roughly numbered 66,000 in 2010 (*Exhibit D.4-1*). Some 80 percent of these are concentrated in accommodation and food services (*Exhibit D.4-2*).

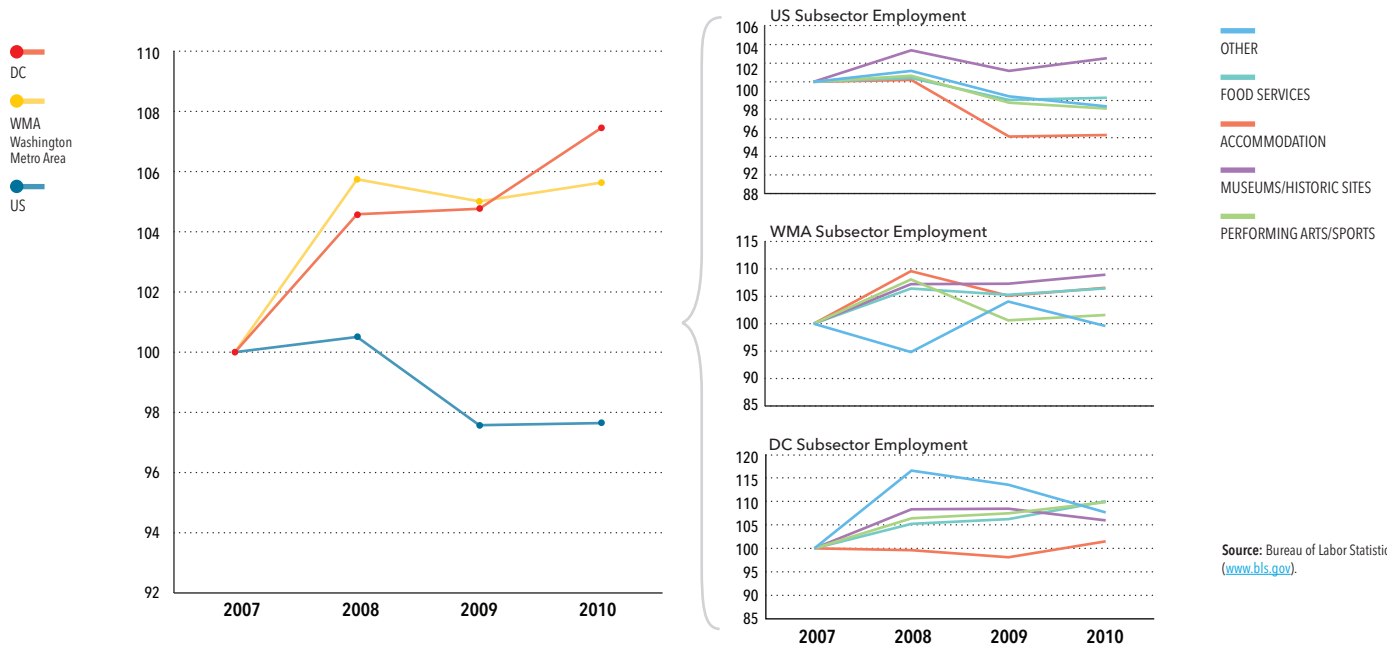
D.4-2
COMPOSITION OF HOSPITALITY SECTOR EMPLOYMENT (2010)



Source: Bureau of Labor Statistics (www.bls.gov). Accessed May 31, 2012.



D.2-3
HOSPITALITY SECTOR GROWTH: EMPLOYMENT (2007-2010)
(2007 = 100%)

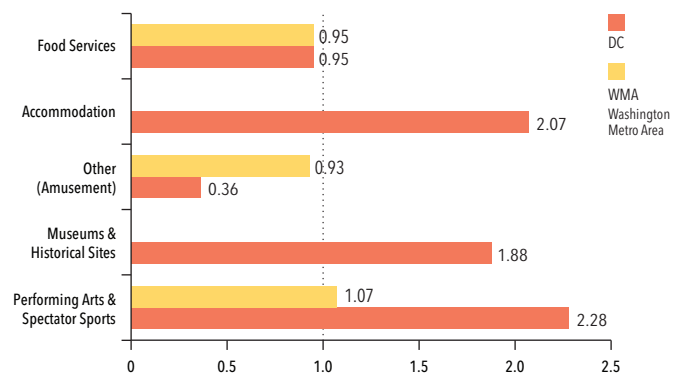


The District's overall employment in the sector has increased since 2007. The hotel industry lost jobs following the recession in 2008, but it recovered in 2010. District employment in the rest of the industry appears largely unaffected by the recession. Of hospitality's four most important subsectors, museums and historical sites' employment is the only one on the decline in DC. This runs counter to trends in the nation as a whole, which saw job growth in the subsector (*Exhibit D.4-3*).

The District is currently adding jobs in the categories of food services, performing arts and spectator sports and accommodation. Employment for performing arts and spectator sports has increased in the District while dropping off in the rest of the country. The location quotients show that employment in accommodation, museums and historical sites, and performing arts and spectator sports is higher in the DC than in the rest of the country (*Exhibit D.4-4*).

The industry outlook is promising. The number of private sector hospitality jobs in the District is expected to grow to 69,368 by 2018, an 8 percent increase from 2008, according to the DC Department of Employment Services. At the same time, Destination DC estimates an additional 1 million annual visitors are projected by 2014. The National Restaurant Association predicts that DC's employment in the food services industry alone will increase 6.7 percent by 2022.

D.4-4
COMPARISON OF LOCATION QUOTIENTS BY DC
(national average = 1.0)



Source: Bureau of Labor Statistics



Key Players

In the fourth quarter of 2011, Lodging Econometrics reported that there were 29,456 hotel rooms in Washington, DC, the majority in upscale and luxury properties. The largest hotels in DC, as measured by number of rooms, are the Washington Marriott Wardman Park with 1,314, the Washington Hilton with 1,070 and the Grand Hyatt Washington with 888 rooms, according to the *Washington Business Journal*.

The District's most-visited museums and historical sites, all federally funded, include the National Air and Space Museum, which had roughly 8.3 million visitors in 2010 for an 18.5 percent increase from 2009; the Museum of Natural History with 6.8 million visitors in 2010, an 8.1 percent decrease from 2009; and the Lincoln Memorial with 6 million visitors in 2010, up 14.8 percent from 2009, according to the *Washington Business Journal*.

According to the National Restaurant Association, there were 2,035 eating and drinking establishments in the District in 2010. A number of restaurant groups are headquartered in DC. Additionally, patrons are looking for healthier dining options, prompting an increase in Washingtonians' fast-casual dining options.

Approximately 113 performing arts organizations call the District home. In 2008, the Helen Hayes Awards ranked Washington, DC, as the second most prolific theater community in the country. Among the largest performing arts spaces are the Kennedy Center with 6,679 seats, the DAR Constitution Hall with 2,332 seats and the Warner Theater with 1,847 seats, according to the *State of Downtown 2011*.

The District's three largest professional sports franchises, based on 2010 revenues, are Monumental Sports and Entertainment (which owns the Washington Wizards, Washington Capitals and Washington Mystics), the Washington Nationals and DC United. Lodging Econometrics reported.

Key Trends

Tourism, which drives the District's hospitality sector, has seen growing numbers of domestic and international visitors in recent years. Arrivals in 2011 surpassed levels reached before the events of 9/11 impacted the sector. In 2000, some 17.4 million tourists visited the nation's capital; in 2011, the figure was 17.9 million visitors, according to Destination DC. Growth in the number of international visitors has been the most consistent: From 2009 to 2010, international tourism increased by 13 percent. The District was the seventh most popular US destination for international travelers in 2010.

International travelers account for 10 percent of the District's visitors, but are responsible for 25 percent of expenditures, according to Destination DC, the lead organization managing and marketing Washington, DC. Spending by both domestic and international tourists was \$6 billion in 2011, an increase of 6.2 percent from a year earlier, Destination DC reported.

In 2011, DC hotels saw \$1.56 billion in revenue, trailing only New York, which had \$4.21 billion, and San Francisco with \$1.62

billion. Just 11 District hotels (1,929 rooms) were sold or transferred in 2011, compared with 23 of the area's suburban hotels (3,866 rooms), and DC had no hotels categorized as "in distress," while there were 11 in the suburban area, according to Lodging Econometrics. (Suburban refers to Arlington, Dulles Airport Area, Maryland South and East, Fairfax/Tysons Corner, Alexandria, Frederick/Rockville, Suburban Virginia, 1-95 Fredericksburg and Bethesda/College Park.)

Hotel and restaurant taxes provide hospitality revenue. The District's hotel sales tax rate is 14.45 percent, of which 4.45 percent is earmarked for the Convention Center Fund, according to the Office of the Chief Financial Officer. Part of the Convention Center Fund is forwarded to Destination DC to manage and market the District as a business and leisure destination. According to Destination DC, the hospitality sector in 2010 generated combined local and federal tax revenue of \$953.8 million, a 6.2 percent increase from 2009. Of the total, \$622 million went to the District government.

For fiscal year 2013, Destination DC received direct funding for the first time from the local government, and that \$3 million is designated for; that \$3 million designated for marketing initiatives increased its budget to \$16.8 million, the *Washington Business Journal* reported. Even with the additional \$3 million, Destination DC's budget is much smaller than that of convention and visitors bureaus in competing cities such as Orlando, which boasts a \$49.8 million budget, and New York with a \$35.2 million budget.

Two crosscutting trends affect all subsectors of the hospitality industry: more technology and less planning. Patrons of the hospitality sector have become increasingly independent, relying more on smartphones and other technology and less on people and paper to provide information about the District. At the same time, they do less advance booking. The District currently has fewer conferences on the books than it did at this time last year, in part due to the recovering national economy and competition from other cities. Also, companies are not booking their meetings and events in the District as far in advance as they once did.

Technology's role in these trends cannot be understated. Visitors use third-party websites to find and compare hotels. Museums employ technology to guide visitors through exhibits. Sports teams turn to technology to enhance their stadiums. And online companies like LivingSocial, a DC-based website offering daily discounts for local restaurants and attractions, have changed the entertainment landscape.



FINDINGS FROM KEY STAKEHOLDER INTERVIEWS

- 1** There is a need for more large-scale events with high economic potential during low visitation periods.
- Hotel rates in the District are higher than in the rest of the Washington Metro Area. This deters visitors from hosting events that require accommodation in the District.
 - There are fewer conferences on the Washington Convention Center's books this year than during the same period last year (13 vs. 22 in 2011).
 - Many of DC's peak tourist activities coincide. For example, convention season and congressional sessions occur at the same time, creating congestion in and demand for the hospitality sector. Meanwhile, August is a traditionally slow month for the sector.

2 Destination DC has fewer resources when compared with convention and tourist bureaus in competing cities.

- Among the cities with bigger convention and visitor bureau budgets are Las Vegas with a \$226.3 million budget, Orlando with \$49.8 million, New York City with \$35.2 million, San Francisco with \$26.2 million and Philadelphia with \$26 million.
- Every \$1 invested to promote tourism yields \$3 in tax revenue for the District.
- The \$3 million allocated by the DC Council for Destination DC's marketing efforts restricts the type of marketing media that can be used.

3 Small hospitality businesses do not have the time or resources to keep abreast of incentives and changes in the regulatory environment.

- Many businesses were unaware of the "One City One Hire" program and the incentives associated with hiring locally.
- The first time that many businesses discover changes in the regulatory environment is when they are being fined for non-compliance.
- The DC Department of Consumer and Regulatory Affairs and the Small Business Resource Center offer free classes to assist with the permitting and certification process as well as with upgrading Certified Business Enterprise (CBE) applications. However, small businesses are not always aware of these resources.

4 Many District residents seeking hospitality jobs lack customer service skills. Hospitality training programs that provide technical skills are unable to meet the demand and there are few hospitality programs in the District at the post-secondary level.

- Restaurants are understaffed and cannot hire enough people. There is a large gap between finding the right talent and keeping it.
- Those interviewed estimated that the number of District residents employed by the DC hotel subsector is 30 percent. This indicates an opportunity to train more residents for the industry.
- Currently 25 percent of the employees in the accommodation subsector are 59 years or older. There is an opportunity to train a large number of residents when that group retires.
- Success rates of training programs increase when they involve the private and public sector, establish clear leadership and direction and involve instructors who are experienced professionals in the hospitality industry and have similar backgrounds as their students.
- The labor peace agreement in the new labor contract requires that union employees be paid more and receive pensions, health care and other benefits so they are not dependent on city subsidies to sustain themselves and their families.
- Both Hospitality High School and Carlos Rosario Public Charter School, which provide students with technical skills in the hospitality industry, are unable to accept the number of students who wish to enroll.
- DC does not have a long history with management training programs—most hospitality managers have been homegrown—making it a difficult place to find managers for hospitality establishments.

5 Hospitality establishments appreciate increased visibility from the participation of DC officials and celebrities at community events.

- Restaurants and performing arts groups believe that visits to their establishments by members of the Mayor's administration would highlight and bring more business to the sector.
- Civic pride is bolstered when residents have the opportunity to engage with local leaders in a social setting.
- Those interviewed who are involved in conferences and special events noted that a welcome by the mayor would be an extra lure for conferences to come to the District.



6 DC's brand as the federal capital overshadows its creative economy and world-class hospitality establishments.

- DC will always be first identified as the nation's capital, but there is an opportunity to underpin the federal government's mall, monuments and museums offerings with cultural elements that are unique to the District.
- Only 3 percent to 5 percent of Arena Stage patrons are from outside the DC area, which implies visitors do not take advantage of the theater scene in DC.
- DC has become a showcase for the culinary arts thanks to restaurants opened by celebrity chefs.
- DC's luxury hotel market is thriving; brands want to be in the District in greater numbers.
- The District's sports teams are winning and, as a result, growing their fan bases.

7 International tourists spend more than domestic tourists. There is an opportunity to attract new tourists from rapidly growing, emerging-market countries.

- There was a nearly 93 percent increase in Chinese tourists to DC in 2011 compared with a year earlier, according to Destination DC. The District's share of Chinese tourism in the United States grew by 5.7 percent in 2011.
- The District recently opened its first foreign-trade office, a DC-China Center in Shanghai, to cultivate business and trade relationships. It could serve as a platform for encouraging business and leisure travel to DC.
- Travel patterns for international visitors to the District are not uniform. Tourists from Europe and South America, for example, tend to travel independently and to explore DC's neighborhoods while Asian tourists travel in groups and are more likely to stay close to the traditional attractions on the National Mall.

RETAIL





RETAIL

Leveraging Geographic & Cultural Advantages

The District of Columbia, a vibrant international city with a strong base of creative industries, research institutions, and government and business innovation, has the building blocks for retail: walkable neighborhoods, disposable income, millions of tourists, top-notch public transit and vibrant cultural institutions. is currently ranked as the healthiest retail market in the United States. However, many DC neighborhoods lack the prerequisites for attracting and sustaining retail businesses. Moreover, some existing retail stores do not offer products and services that are in demand by District residents and tourists. Consequently, there is an estimated retail leakage—meaning that residents buy goods outside the District—of \$1 billion annually.¹

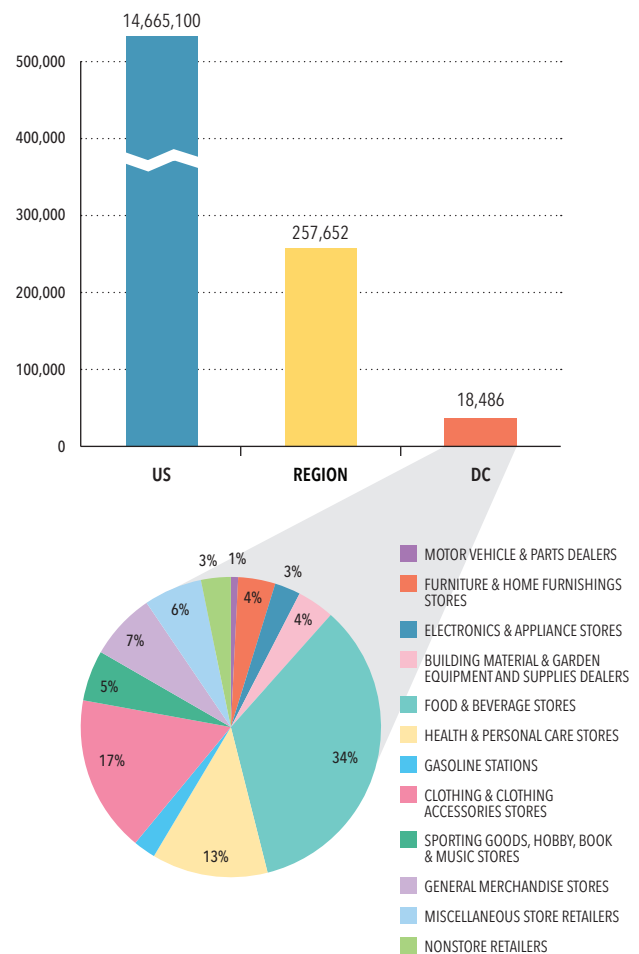
The retail trade sector is made up of the following 12 subsectors:

- Motor vehicle and parts dealers
- Furniture and home furnishings (including interior decorating services)
- Electronics and appliance
- Building material and garden equipment and supplies
- Food and beverage
- Health and personal care
- Gasoline stations
- Clothing and clothing accessories
- Sporting goods, hobby, book, and music stores
- General merchandise (big-box discounters like Target and Walmart)
- Miscellaneous store retailers (specialty retailers like florists and pet and pet supply)
- Non-store retailers (television infomercials, direct-response advertising, catalogs, door-to-door solicitations, in-home demonstrations and vending machines)

Employment

With only 8.6 square feet per capita of shopping center space (compared to 23.3 square feet nationally), DC has been susceptible to retail leakage. Its residents have consistently purchased goods outside the District in favor of retailers in Maryland and

D.5-1
RETAIL SECTOR SIZE IN DC BY EMPLOYMENT (2011)



Source: US and DC data from Bureau of Labor Statistics, regional data from US Census Bureau.
Notes: US and DC data is based on 2011 annual average preliminary statistics, regional data is based on 2011 Q2 annual average preliminary statistics. Data cover only private sector. In calculation of regional employment, Virginia 2011 Q1 data is assumed to be same in 2011 Q2.

Virginia. This retail leakage costs the city an estimated \$1 billion annually, equating a loss of 2,500 jobs and \$60 million of District tax revenue. However, with a daytime population of more than 1 million and the 17.3 million visitors who travel to DC annually, there is great room for rapid growth in retail.²

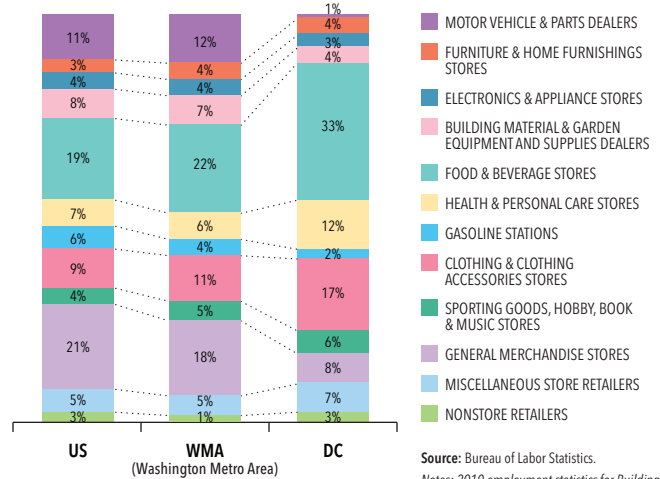
The retail sector is a vital source of entry-level and lower-skilled positions in the District. Currently the food and beverage subsector creates a third of all retail jobs in the city, with clothing and accessories stores accounting for another 17 percent, followed by health and personal care stores at 12 percent (Exhibit D.5-1).

Compared with the United States as a whole and the region, the District's retail sector has a greater concentration of food and beverage stores, health and personal care stores, and clothing and accessories stores—and fewer general merchandise stores, motor vehicle and parts dealers, and building material and garden equipment stores (Exhibit D.5-2).

The retail sector in the District saw a slight decrease in jobs in 2009 due to the overall economic downturn. However, employment quickly returned to pre-crisis levels, underscoring the sector's resilience and setting it apart from national tendencies. DC is clearly differentiating itself from general trend in the retail sector and making big progress (Exhibit D.5-3).

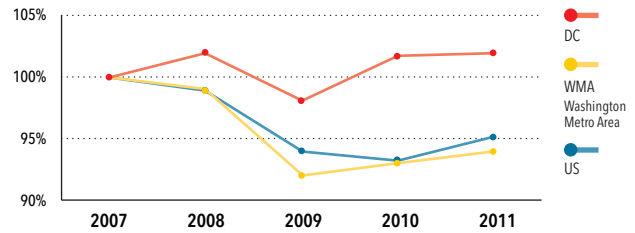
Across the United States, all retail subsectors except general merchandise stores and non-store retailers have seen employment declines since 2007. Job generation by retail subsectors in the District appears stronger than that of the region and the United States as a whole—with the exception of the subsector of sporting goods, hobby, book and music stores as well as the subsector of motor vehicle and parts dealers. In particular, growth among non-store retailers is remarkable. General merchandise stores in the District are small compared with general merchandise stores elsewhere in the region, but their growth rate is much faster (Exhibit D.5-4).

D-5.2
COMPARISON OF RETAIL EMPLOYMENT IN US, REGION AND DC



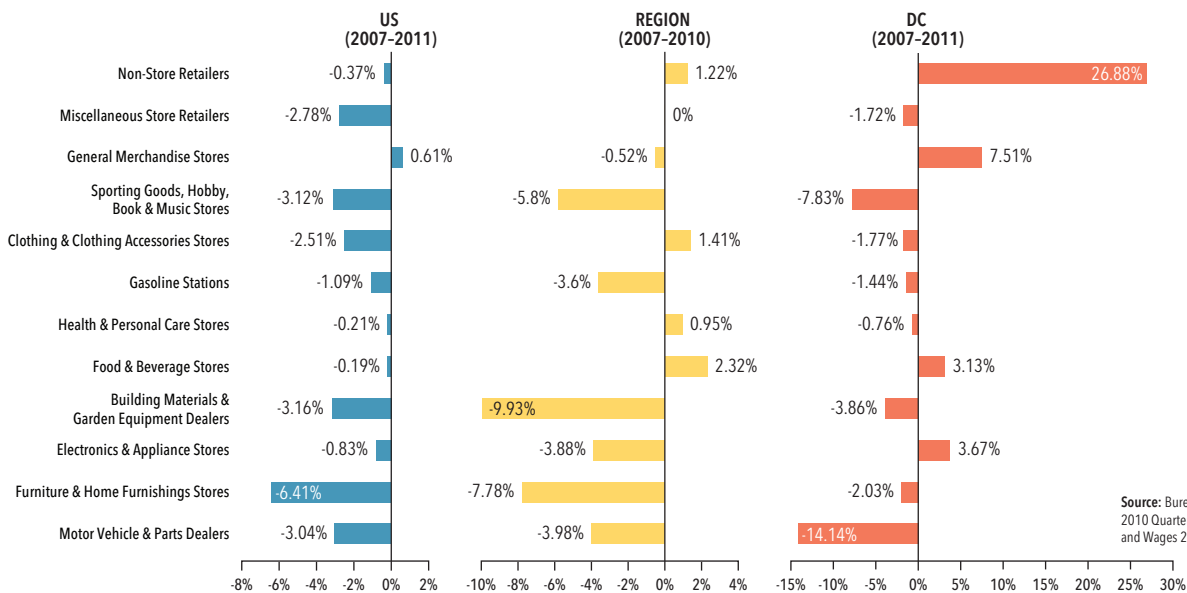
Source: Bureau of Labor Statistics.
Notes: 2010 employment statistics for Building Material Sector is calculated based on previous years.

D-5-3
RETAIL EMPLOYMENT GROWTH IN US, REGION & DC
(2007 = 100%)



Source: Bureau of Labor Statistics.
Note: US and DC data is based on 2011 annual average preliminary statistics, regional data is based on 2011 Q2 annual average preliminary statistics. Data cover only private sector. In calculation of regional employment, Virginia 2011 Q1 data is assumed to be same in 2011 Q2.

D.5-4
ANNUAL CHANGE IN RETAIL EMPLOYMENT BY SUBSECTORS



Source: Bureau of Labor Statistics, 2010 Quarterly Census of Employment and Wages 2007-2010.



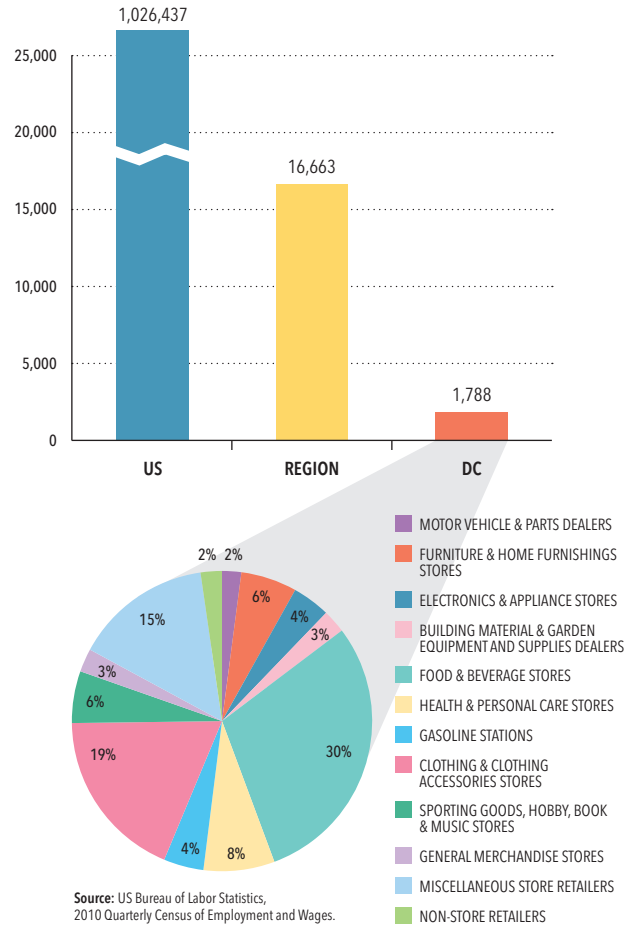
Further analysis suggests that the District’s biggest retail component—food and beverage stores—fares better than those in the region as a whole. Employment in the clothing and accessories subsector and among health and personal care stores seems to be losing ground.

Key Trends

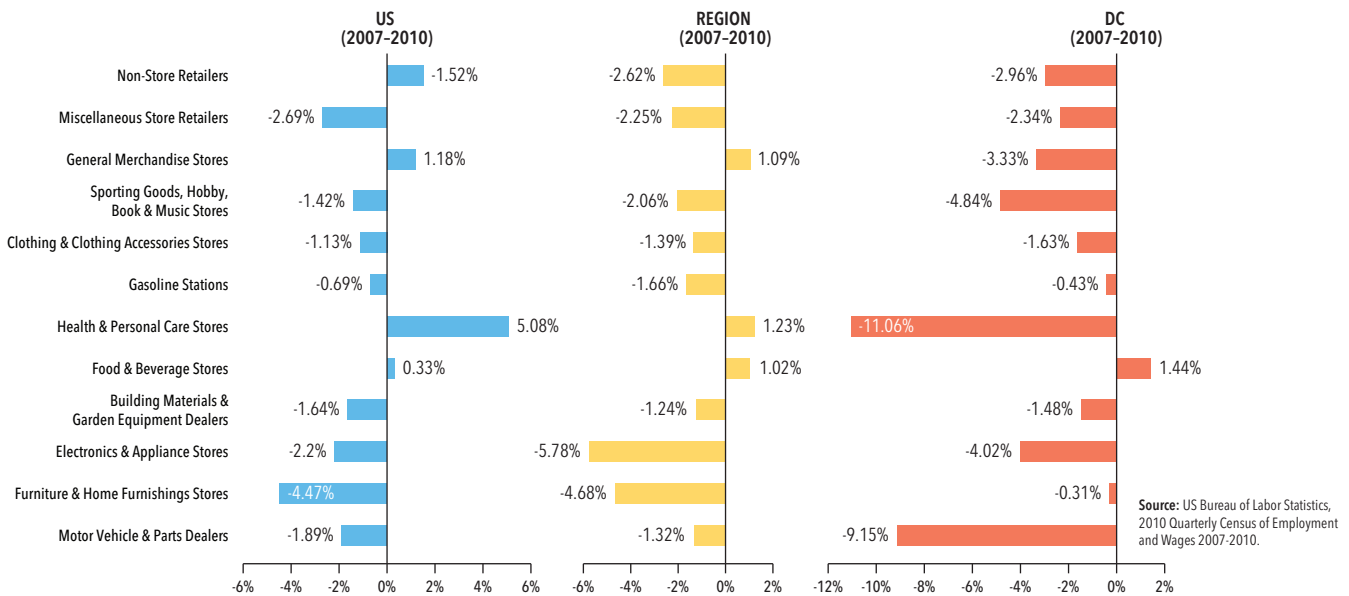
Since 2007, many retail establishments across the country and in the Washington Metropolitan Area (WMA) have closed due to the 2008 economic recession. Although DC has witnessed the entry of several retailers since that period, existing retailers in the District have consolidated their stores and shelved expansion plans. This has occurred across all subsectors, with the exception of health and personal care stores, general merchandise stores and food and beverage stores. Food and beverage is the only subsector that has expanded in DC since 2007. In fact, grocery-anchored shopping centers have maintained greater stability than other retail property types because people do not cut their food expenditures, even during a recession (*Exhibit D.5-6*).

The economic crisis hit suburban communities much harder than their urban counterparts. Urban site-seeking retailers, including big-box stores, are pursuing lower-risk growth opportunities in underserved urban areas. Blocked out of urban areas in the past because their stores were too large, big-box retailers now have two options: continue with large-format stores as renewed interest in urban locations coincides with municipalities’ worsening fiscal problems, or test small-format store options, take infill space and co-opt share from small local operators. Retailers are finding that shoppers react positively to these smaller stores. Target, for example, is now using smaller footprint locations in Boston, New York, Philadelphia, Baltimore and the District. Walmart has cut its store sizes for the District. Walmart Express stores are also significantly smaller than traditional Walmart Supercenters.

D.5-5
RETAIL SECTOR SIZE IN DC
BY NUMBER OF ESTABLISHMENTS



D.5-6
ANNUAL CHANGE IN RETAIL ESTABLISHMENTS BY SUBSECTORS





A focus on drivable suburbs has also been replaced with an interest in walkable urban cities, in part because of changes in consumer habits and in part because of decreases in urban crime rates. In 2012, The George Washington University School of Business (GWSB) report, *DC: The WALKUP Wake-Up Call*, described DC as a pioneer in walkable urban places that provide prized residential and retail experiences.

Through new store openings and brand expansion, US retailers are opening their arms to international shoppers like never before. Retailers not only look for growth in emerging markets, they look for innovation in multi-channel strategies, using mobile and data analytics to maintain or grow their market shares in developed markets.³

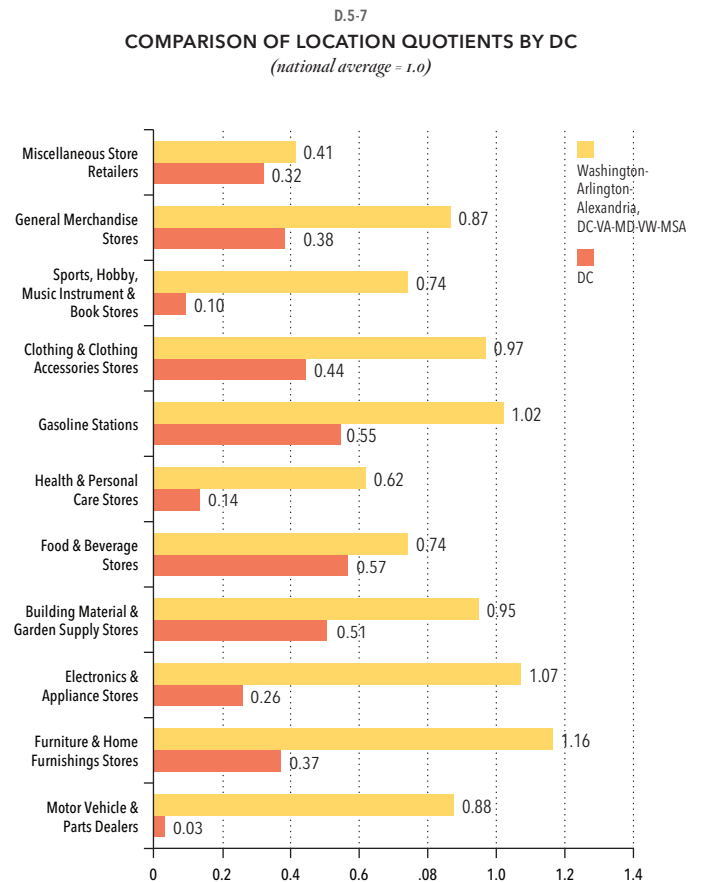
A new generation of smart and conscientious consumers has emerged. The new shopper researches purchases online and through mobile technology to cross-compare stores' inventories and prices on location. These shoppers are not afraid to spend, but they are savvy and expect the most value for their dollars. This group embraces a healthier lifestyle and has a tendency to shop for fresh and organic food.⁴

Shifting retail trends and consumer behavior highlight the potential for change in the retail sector. With its growing popularity as a place to work and reside, as well as a place to travel to, DC is well positioned to build on the changing winds of retail trends to capture new opportunities. The Gray administration has focused its recent efforts on strengthening the retail sector by expanding retail offerings and diversifying retailer presence throughout the city. As part of this effort, there has been increased focus on developing neighborhood retail and nurturing smaller, independent stores in addition to increasing big-box stores in the District. Currently there is more than 1 million square feet of retail space under construction in the District. Some of the biggest projects include:

- **CityCenterDC:** The District's premiere downtown community.
- **Skyland Town Center:** An 18-acre shopping center in Ward 7.
- **The Shops at Dakota Crossing:** 430,000 square feet of retail at Fort Lincoln that includes national retailers Costco, Shoppers Food Warehouse and Marshalls.
- **H Street Retail Priority Area Grant:** The Office of the Deputy Mayor for Planning and Economic Development (DMPED) is allocating \$1.25 million to support small business development, increase the tax base and create jobs for residents along the H Street corridor. The grant will help spur neighborhood retail on H Street and help local small businesses flourish.
- **Streetscape Loan Relief Fund:** DC Department of Small and Local Business Development (DSLBD) launched the fund in November 2011 to provide interest-free loans to small businesses to help minimize the impact of transformative streetscape projects. The Streetscape Loan is one example of enabling the District to build a diverse and vibrant economy comprised of small businesses and innovative startups, with less reliance on the federal government.

- **Great Streets Initiative:** DMPED is partnering with the DC Department of Transportation (DDOT) and the Office of Planning (OP) to manage this multi-year, multi-agency effort to develop nine under-invested District corridors into vibrant, distinct neighborhood centers that will be inviting "great streets." More than \$200 million is being invested in mixed-use development projects, storefront improvements, transportation upgrades, streetscape and transit improvements in these nine corridors.

Exhibit D.5-7 provides a breakdown of the District's retail sector, including comparison with the WMA. The findings suggest that the retail sector is underutilized in the District, including the dominant food and beverage stores, health and personal care stores and clothing and accessories stores.



Source: Bureau of Labor Statistics
Notes: Location quotient compares the regional share of economic activity in a particular industry to the national share of economic activity in the same industry. The result reveals the degree of regional specialization in each industry. The Washington Metro Area comprises of Washington-Arlington-Alexandria, DC-VA-MD-WV-MSA. Location quotients in the chart calculated setting all US industry as the base industry and US total as the base area.



FINDINGS FROM KEY STAKEHOLDER INTERVIEWS

1 City centers are gaining popularity among retailers and consumers. The District is a big beneficiary of this trend. Retailers are shifting from suburban neighborhoods. Growing density and healthy margins are significant attraction for retailers.

- Several people interviewed identified transit-oriented development as the center of economic growth and value creation, with the retail industry playing a significant role.
- Some of those interviewed said consumers' and companies' perception of the District are increasingly positive. Revitalized shopping areas, such as H Street NE, 14th Street and U Street, and a more cosmopolitan atmosphere were seen as attributes.
- Density is an important issue for retail players, according to those interviewed. The District's population density supports existing retail establishments, but additional residential density would greatly enhance their success.
- Some of those interviewed maintained that the consumer market and sales potential is adequate, given rent levels, and that the main driver of renewed interest in the District is the fact that stores far exceed their profit projections.

2 Dense, walkable neighborhoods and mixed-use development centered on mass transit (such as streetcars or Metro stations), rather than dependence on cars, are increasingly important if the retail sector is to grow.

- Most interviewees stated that the District has great potential to become a model for the future: a vibrant and walkable city.
- The majority said traffic congestion will become less relevant to the retail sector in the future, although some of those interviewed saw traffic as an important challenge.
- Most interviewees found that the Great Streets Program is achieving its goal and helping the retail sector to flourish. They said street cleanup and façade and tenant improvements contribute in a positive way to retail development in the District.
- Cleanliness and security, identified as management issues, serve as obstacles to development in certain high-potential areas of the District, according to some of those interviewed.

3 High rents, disjointed retail blocks and mismatched co-tenancies are key weaknesses for the District's retail sector.

- Some retailers were concerned with rents, which are higher than the national average. They predicted that rents will continue to increase. Most linked high rents, in part, to the District's building-height limit.

- Mismatched co-tenancy, in which stores next to one another cater to different segments of society, was also cited as a factor that discouraged retail activities. In particular, upscale stores want to sit next to other upscale stores rather than discount stores.

- Some interviewees worried about "dead" spots among retail blocks, saying that they prevented the development of a coherent retail environment. They pointed to streets where stores are interspersed with banks, gyms and other non-retail outlets.

4 Consumers in the District are showing more interest in local "mom-and-pop" store.

- Some of those interviewed said it is not national chains but, rather, small businesses that are seeking incentives—such as financing opportunities and technical expertise. Small retailers otherwise may have difficulty creating sustainable businesses and attracting capital during economic downturns.
- Most of those interviewed cited as success stories the emergence of mixed-use retail in which mom-and-pop stores coexist with big-box stores, such as in the Columbia Heights neighborhood.
- Some interviewees saw local mom-and-pop stores as a way for the city to create a unique identity. They also saw these small stores as a necessary part of the formula to increase foot traffic.

5 Retailers would like to see more regulatory coordination across agencies.

- Some of the interviewees cited a lack of guidance and inconsistencies regarding incentives and regulatory processes, calling the latter a significant barrier for small entrepreneurs.
- There is little coordination among regulatory agencies, making it difficult for business startups in the District, according to some of those interviewed.
- It is harder to do business in the District than other places in the region, some of the interviewees maintained, citing multiple layers of bureaucracy. One of the interviewees said that even if that is simply an issue of perception rather than reality, it is still affecting how and whether retailers operate in DC.



6 Retailers are concerned about parking access for shoppers.

- While interviewees felt that a lack of parking spaces defined the parking problem. Others argued that there were sufficient parking spots, but they were used inefficiently.
- Office and residential parking spaces could be better used for retail purposes on weekends and evenings, according to some of those interviewed.
- Although parking was seen as a requirement for destination retail, some interviewees made the distinction that for neighborhood retail, transit-oriented development is crucial.

7 The retail sector in emerging areas still has room for growth.

- Most of those interviewed thought east of the Anacostia River held huge opportunity for investors. To create a catalyst for the retail sector, however, they said developers and real estate brokers must be more engaged, and better coordination was needed with retailers. They said retailers are having difficulty working with developers and finding appropriate space in certain areas.
- Some interviewees thought the Supermarket Tax Exemption Act, which provides exemptions for qualified grocery stores and supermarkets in certain neighborhoods, has successfully mitigated imbalances among neighborhoods. Some favored mobile produce sales from trucks in underdeveloped neighborhoods.
- Large anchors, such as federal agencies, are needed to attract retailers to the area. One interviewee said that a freight village, in which a cluster of warehouses and distribution facilities is used to foment more efficient movement of goods in the city, would be a strong source of employment in less developed areas of the District while at the same time supporting the arrival of big-box stores.

SECTION D • CHAPTER 6

REAL ESTATE
and
CONSTRUCTION





REAL ESTATE *and* CONSTRUCTION

Still Room to Grow

The real estate and construction sector is the District of Columbia's top source of tax revenue. In 2011, this sector accounted for roughly 35 percent of total revenue, far exceeding any other source.¹ In fact, DC's real estate market is the second most active in the United States, trailing only Manhattan.

REAL ESTATE

DC's real estate was not affected by the financial crisis in the same way as were other parts of the country. In 2011, the DC region saw property sales of roughly \$7.2 billion, a 68 percent increase over 2010.² However, many of these transactions were linked to the federal and local governments, fueling concern over the impact of expected federal budget cuts on the District's real estate market. The federal government owns 37 percent of the land in DC, while the District owns 7 percent. Despite this, DC continues to appeal to investors, particularly institutional and private investors. They accounted for 47 percent and 25 percent, respectively, of DC real estate purchases in 2011 (*Exhibit D.6-1*). The District was also a sought-after market for international firms, which accounted for 12 percent of DC transactions in 2011.

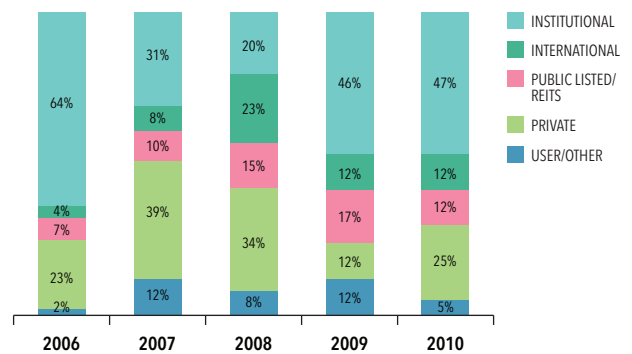
The major subsectors within real estate include:

- Lessors of Real Estate
- Offices of Real Estate Agents and Brokers
- Residential Property Managers
- Nonresidential Property Managers
- Offices of Real Estate Appraisers
- Other Real Estate Activities

Employment

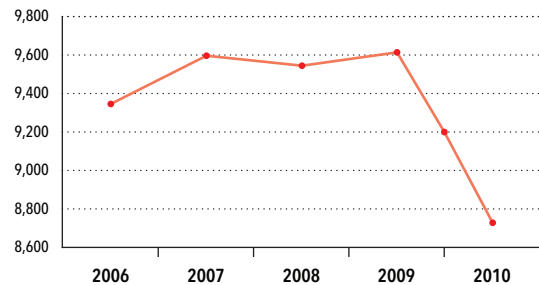
According to the Bureau of Labor Statistics (BLS), the real estate sector employed 8,719 DC residents in 2010, a 9.36 decline from the previous year. Jobs in the sector remained relatively flat from 2006 to 2009 (*Exhibit D.6-2*). The 2010 plummet appears related to a 34 percent drop in the number of lessors of real estate in the District that came in tandem with an overall real estate workforce decline from 2009 to 2010. Nationally, jobs in the sector fell 1.06 percent while regionally they dropped 2.57 percent (*Exhibit D.6-3*).³

D.6-1
COMPOSITION OF DC METRO OFFICE BUYERS



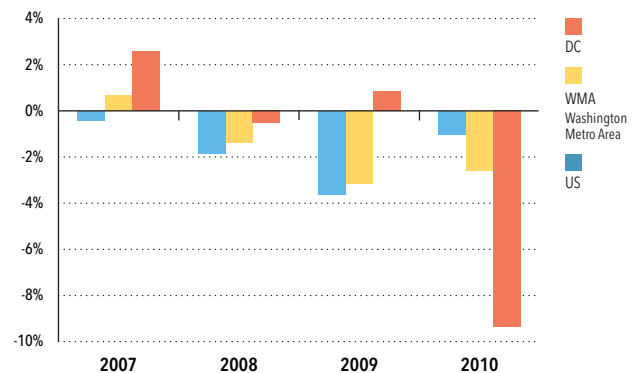
Source: Cassidy Turley, 2012 State of Capital Markets Washington, DC.

D.6-2
DC REAL ESTATE SECTOR JOBS



Source: Bureau of Labor Statistics

D.6-3
REAL ESTATE WORKFORCE TRENDS



Source: Bureau of Labor Statistics



As of 2010, the largest employment subsectors within the DC real estate industry were nonresidential and residential property managers, accounting for 36 percent and 25 percent, respectively, of the 8,721 real estate employees. The remaining subsectors—lessors of real estate, offices of real estate agents and other real estate activities—made up 22 percent, 14 percent and 4 percent, respectively. The District’s real estate employment profile remained relatively constant from 2006 to 2009; however, in 2010 there was a significant decrease in concentration among lessors of real estate and other real estate activities (*Exhibit D.6-4*).

The District has a disproportionate concentration of nonresidential property managers; they make up 17 percent of the total for the region. Conversely, the nation and the region have more lessors of real estate than the District. Nationally, 41 percent of the real estate job pool is made up of lessors of real estate; regionally the figure is 32 percent and, in the District, 22 percent (*Exhibit D.6-5*).

Key Players

The sector’s key players fall into two categories: private developers and architects. According to the *DC Development Report* by the Washington, DC Economic Partnership, the most active private developers in 2011 were JBG Companies, which completed 20 of DC’s 74 projects, William C Smith Co. with 15, PN Hoffman with 15, Jair Lynch Development Partners with 13 and Douglas Corporation with 11.

The report identifies the District’s most active architects as Shalom Baranes Associates with 33 completed projects of the District’s total of 138, Eric Colbert and Associates with 29, Hickok Cole Architects with 27, WDG Architecture with 25 and Bonstra|Haresign Architects with 24.

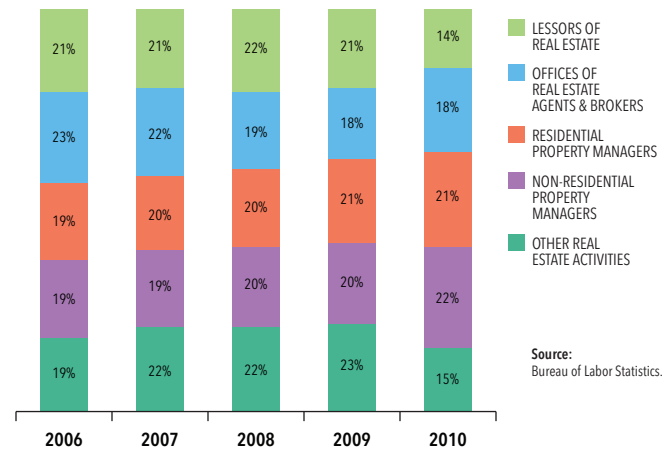
Key Trends

The Washington Metropolitan Area (WMA) is one of the most stable real estate markets in the United States, with vacancy rates below the national average. This is largely a result of the federal government’s presence. Another factor, however, is the Height of Buildings Act of 1910, which imposes a height limit on buildings and restricts vertical development.

DC’s commercial real estate profile primarily consists of office space, which accounts for roughly 89 percent of commercial real estate square footage. Class A and Class B space account for approximately 53 percent and 42 percent of DC’s office inventory, respectively.⁴ Class A properties are defined as high quality; well designed; using above-average materials, workmanship and finish; sought by investors and prestigious tenants; excellently maintained and very well managed, especially if more than 10 years old. Attractive and efficient, these buildings are the most desirable in their markets. Class B property is useful space without special attractions. It has functional layout and design, though it is not unique, and has average-to-good maintenance and management. Buildings in this class are typically 10 to 50 years old.

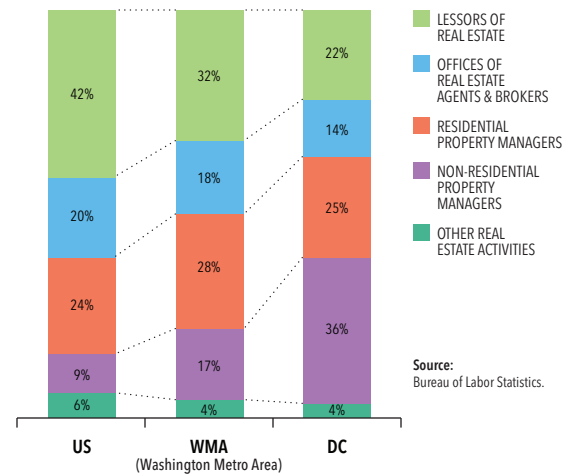
The remaining 11 percent of DC’s commercial inventory is made up of retail space (4.3 percent) and industrial space (6.7 percent);

D.6-4
DC REAL ESTATE EMPLOYMENT COMPOSITION BY YEAR



Source: Bureau of Labor Statistics.

D.6-5
COMPOSITION OF REAL ESTATE SECTOR EMPLOYMENT



Source: Bureau of Labor Statistics.

During the first quarter of 2012, the District’s office market experienced a negative net absorption of 248,000 square feet, its lowest level of demand since the fourth quarter of 2002. (Net absorption refers to the square feet leased in a specific geographic area over a fixed period of time, after deducting space vacated in the same area during the same time period.) The negative absorption can be traced to a shift toward more efficient use of space by tenants and to cutbacks and uncertainties surrounding the federal government. Vacancy levels in DC increased by 10 basis points to 10.4 percent.⁵

Still, the District’s office vacancy level outperforms those of Northern Virginia and Southern Maryland, which are experiencing levels of 14.8 percent and 15.6 percent, respectively. Average asking rents in DC remained relatively constant from the previous quarter at \$50.55 per square foot, significantly higher than those of Northern Virginia (\$30.73 per square foot) and suburban Maryland (\$26.04 per square foot).⁶ The largest new transactions in the first quarter of 2012 were the American Bar Association’s lease for 61,000 square feet at 1050 Connecticut Avenue NW, the



Nuclear Energy Institute’s 50,900 square feet at 1201 F St., NW and GMMB’s 46,300 square feet at 3050 K St., NW.⁷

According to the *Washington Area Retail Outlook* by Delta Associates, the WMA contains 55.9 million square feet of retail space, of which about 10 percent is located in the District. The DC retail market continues to be underserved with 8.6 square feet per capita of retail space, well below the national average of 23.4. Northern Virginia and suburban Maryland are above the national average, with 29.2 and 27.4 square feet per capita of retail space, respectively. The vacancy rate for shopping centers in DC fell to 4.6 percent in 2011, from 5.1 percent in 2010. That is lower than the WMA’s 5.5 percent average, according to the *Washington Area Retail Outlook*.

DC’s commercial real estate inventory also contains 8.6 million square feet, or 6.7 percent, zoned as industrial/warehouse space. The breakdown on this inventory is 87 percent warehouse and 13 percent flex space. Despite the District’s low concentration of industrial space, the industrial market is experiencing a high weighted average vacancy rate of 17.14 percent. Warehouse space is seeing an average vacancy rate of 18.9 percent—significantly higher than the rates in Alexandria/Arlington (9.2 percent) and suburban Maryland (12.7 percent). The average vacancy rate for flex in DC is 4.8 percent, lower than the 13.3 percent rate for Alexandria/Arlington and 17.2 percent for Maryland.⁸

Relatively high property taxes result in a competitive disadvantage for the District. DC’s 2012 commercial property tax rate is 1.882 percent of appraised value, with the first \$3 million of assessed value taxed at 1.65 percent. Alexandria and Rosslyn, by comparison, have commercial property tax rates of 0.998 percent and

1.183 percent of assessed value, while areas in Maryland, such as Bethesda and Silver Spring, have commercial property tax rates of 1.23 percent and 1.455 percent, respectively (*Exhibit D.6-6*).⁹

Although the District has enjoyed a stable real estate market, shifts in the office space market will require that the city diversify its office tenants beyond the current dominant mix of federal agencies and law firms. These traditional cornerstones of the District’s office space market will see major changes and reductions in size in the near future. The threat of sequestration along with General Services Administration (GSA) consolidation needs have already impacted the District’s development. Prior to budget constraints, GSA planned for its office renovations on E Street. Consolidation needs and budget reductions have cancelled those plans. In addition, GSA is now looking into numerous ways of increasing its efficiency through options such as telecommuting. Going forward, the federal government will continue to shrink down its space use in order to address spending cuts.

Law firms are also facing pressures to reduce their staff size and office operations. The legal service industry has been hit hard by the recession and current economic conditions. Their overwhelming presence in the District means that the industry’s reduction will greatly impact the office space market of the city. The two historic backbones of office tenants—federal government and law firms—are both undergoing immense changes and the District must prepare for a real estate market in the near future that looks different from its historic composition. Diversifying the economy by growing sectors such as hospitality, retail and technology will help mitigate the expected changes in the federal government and legal services industries.

D.6-6
PROPERTY TAX RATES
(fiscal year 2013)



*First \$3 million of assessed value is taxed at 1.65 percent

Source: State of Downtown 2011 Report



CONSTRUCTION

The construction sector consists of establishments primarily engaged in the construction of buildings as well as establishments that prepare sites for new construction and subdivide land for sale as building sites. Construction may include new work, additions, alterations or maintenance and repairs. Activities in the sector are generally managed at a fixed place of business although construction work may occur at multiple project sites.

Major subsectors within the construction sector include:

- Residential Building Construction
- Nonresidential Building Construction
- Heavy and Civil Engineering Construction
- Building Foundation and Exterior Contractors
- Building Equipment Contractors
- Other Specialty Contractors

Employment

Construction employment accounts for a small segment of jobs in DC. As of May 2011, there were 10,700 construction employees—less than 2 percent of the District’s total employment. Nonresidential Building Construction, Building Equipment Contractors, and Heavy and Civil Engineering Construction constitute a significant portion of those jobs (*Exhibit D.6-7*).

Some 24 percent of all construction jobs in the District involve nonresidential building, compared with 12 percent for the nation and the metropolitan area. Another 21 percent of DC construction jobs are in heavy construction and civil engineering, compared with 1 percent for the region and 15 percent for the nation. Heavy construction and civil engineering have served as buffers to job loss in DC. Their employment remained strong in the District from 2006 to 2010, while other subsectors struggled. The region and the nation as a whole experienced across-the-board construction employment loss during the same period.

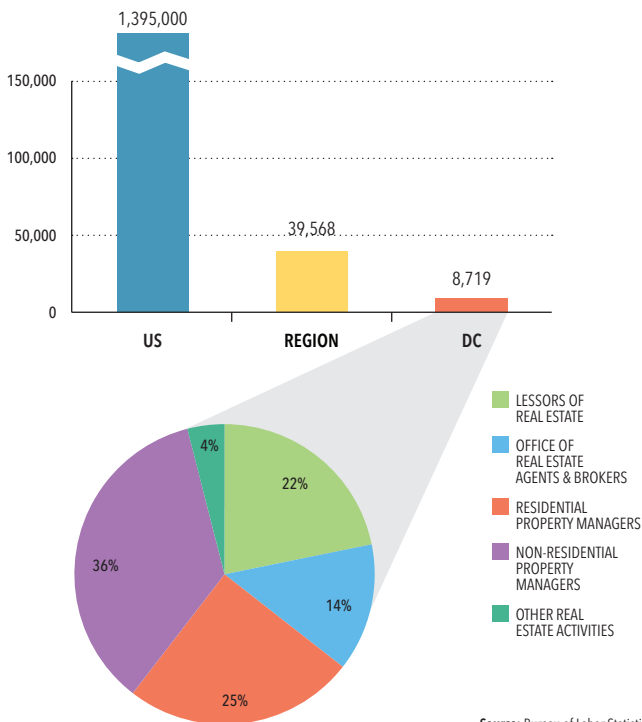
Key Players

The *Washington Business Journal Book of Lists 2012* identified the top 15 contractors in the DC metropolitan area as:

1. **Clark Group** (MD), **Revenue: \$2.35 billion**
2. **Gilbane Building Co.** (MD), **Revenue: \$639 million**
3. **Whiting-Turner Contracting** (MD), **Revenue: \$614 million**
4. **Turner Mid-Atlantic Group** (DC), **Revenue: \$562 million**
5. **Hitt Contracting** (VA), **Revenue: \$525 million**
6. **Balfour Beatty Construction** (VA), **Revenue: \$380 million**
7. **Forrester Construction** (VA), **Revenue: \$353 million**
8. **James G. Davis Construction** (MD), **Revenue: \$304 million**
9. **Grunley Construction** (MD), **Revenue: \$292 million**
10. **Coackley & Williams** (MD), **Revenue: \$244 million**
11. **Rand Construction Corp.** (DC), **Revenue: \$233 million**
12. **DPR Construction** (VA), **Revenue: \$180 million**
13. **Sigal Construction** (VA), **Revenue: \$179 million**
14. **LF Jennings** (MD), **Revenue: \$173 million**
15. **The Bozzuto Group** (MD), **Revenue: \$172 million**

Only two of them are located in DC: Turner Mid-Atlantic Group and Rand Construction Corp. Eight are in Maryland and five are in Virginia.

D.6-7
CONSTRUCTION EMPLOYMENT PROFILE



Source: Bureau of Labor Statistics



FINDINGS FROM KEY STAKEHOLDERS INTERVIEWS

1 Developers would like to see more coordination across the District agencies involved with regulations

- Developers seeking permits from the DC Department of Transportation (DDOT) or the DC Department of Environment (DDOE) often deal with many different representatives in the process, leading to delays.
- DDOT and DDOE release regulations that impose a burden on development.
- DDOE's regulations are especially cumbersome and unpredictable because there is no effort to involve developers on the front end of when the regulations are being created.
- While DDOT has tough regulations, it seeks input from key stakeholders, such as the DC Building Industry Association.

2 Developers and construction companies recognize the need for First Source and Certified Business Enterprise (CBE) requirements, but feel the regulations are hard to satisfy.

- Many developers cite a skill gap in the District as the barrier to meeting the 51 percent First Source hiring requirement. Others point to unclear definitions of a "local" hire and what it means to make a "best effort."
- As the monetary scope of a project increases, it becomes increasingly difficult to meet the CBE joint venture requirement calling for no less than a 20 percent equity stake, particularly for Local, Small and Disadvantaged Business Enterprises (LSDBEs).
- The DC Department of Small and Local Business Development (DSLBD) lacks the resources to monitor companies that do not adhere to CBE requirements.
- Some CBEs are left out of lucrative projects, resulting in a loss of potential tax revenue for DC.

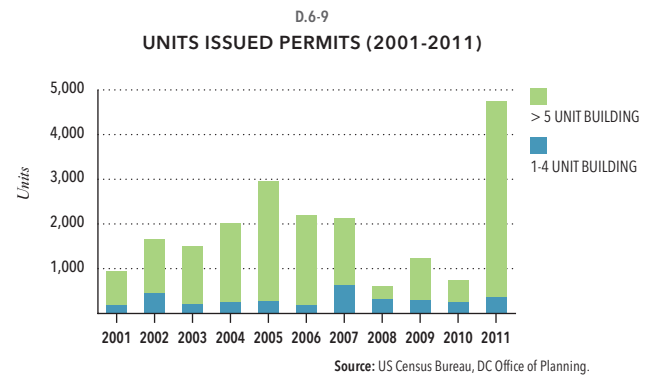
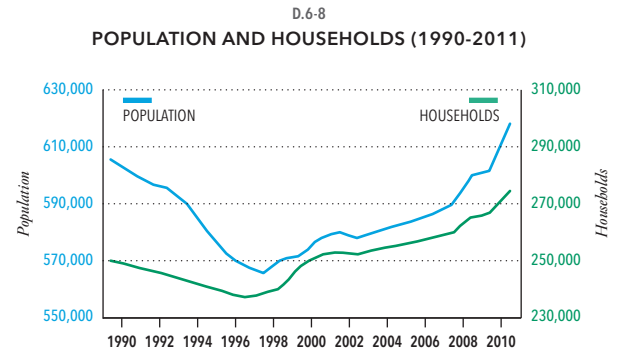
3 Real estate and construction companies recognize the ability of the federal government to spark development in traditionally underutilized areas.

- Many point to NoMa's development as an example due to the siting of the Bureau of Alcohol, Tobacco, Firearms and Explosives headquarters.
- Expected federal budget cuts increase urgency for the District to diversify its economy.

4 There is a growing trend to develop more residential units in DC.

- High rents for offices, which have left non-traditional private entities unable to enter the market, have combined with a population influx over the last five years (*Exhibit D.6-8*), leading developers to focus on residential units rather than office space.

- In fact, more permits for apartment buildings were issued in 2011 than in the last four years combined (*Exhibit D.6-9*).
- Many residential projects in the pipeline are due to come online in the short term. While this threatens to dampen the market, developers recognize that it will encourage more people to move into the District, thus acting as a net positive.



- The District's high taxes have a negative effect, especially relative to neighboring jurisdictions in Maryland and Virginia. Property taxes are especially high; local income taxes are also high. Higher tax rates often turn off private business from locating operations in DC, as they can obtain the same benefits from being in Arlington or Fairfax.

5 The District is constrained by both land and height.

- In the face of this reality, real estate and construction companies understand that creative options may be needed in order for further development to take place.
- The limits set forth by the Height Act are seen as traditionally beneficial to District development. However, there is also an acknowledgment that it may be time to consider possible relaxations, especially in noncore neighborhoods.
- Conversion and reuse of buildings have been put forth as viable options to ensure that vibrant development and construction continue in the District for years to come.

SECTION D • CHAPTER 7

HIGHER EDUCATION
and
HEALTH CARE





HIGHER EDUCATION *and* HEALTH CARE

Supporting DC Growth While Bringing New Opportunities

The Higher Education and Health Care (Eds & Meds) sector is one of the largest and most vital components of the District’s economy. It provides both white and blue-collar jobs for District residents and employs more than 115,000 individuals, making it the third largest sector by employment after the federal government and professional services.

With 16 million Americans in the health care field (13 percent of payroll employment), this sector accounts for the nation’s third-largest single-industry workforce. Health care costs represent 18 percent of GDP, with an average \$8,402 per capita spent on medical care each year, according to the Center on Education and the *Workforce Analysis* reports of the Office of Management and Budget.

Primary areas of interest for this sector are establishments that provide health care and limited social services related to health. These are services delivered by trained and experienced health care professionals with varying degrees of education. This report looked at ambulatory health care services, hospitals, and nursing and residential care facilities. Combined, they provide jobs to more than 52,000 practitioners who care for residents of DC, Maryland and Virginia.

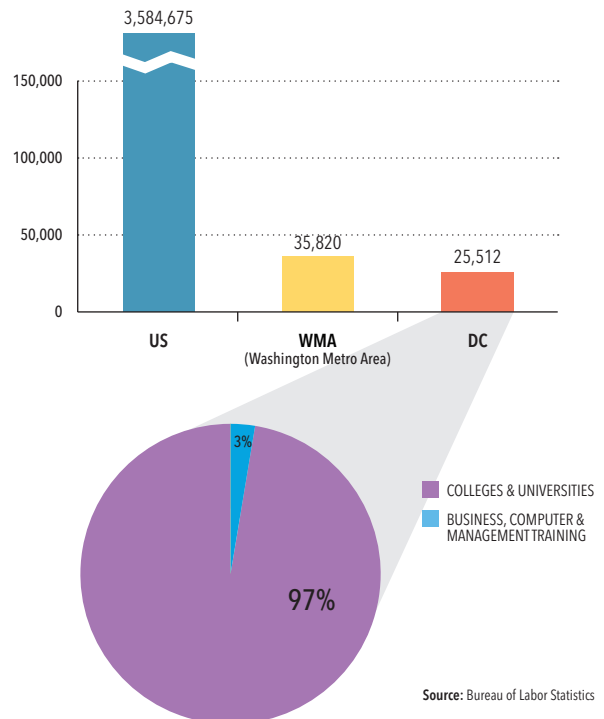
Nationally, employment in the education subsector is divided into three areas: 77 percent in colleges and universities, 20 percent in business, computer and management-training programs and 3 percent in junior colleges. The breakdown is somewhat different in the Washington Metro Area (WMA), where there are 14 institutions of higher education: 89 percent colleges and universities and 11 percent business, computer and management-training programs. Junior college employment is not significant.

Location in and near the nation’s capital is an important driver of out-of-state enrollment for WMA colleges and universities. Local populations, meanwhile, are the target of junior colleges and business, computer and management-training programs. Because nearly 50 percent of DC’s population age 25 and older has at least a bachelor’s degree (22 percent higher than the national average), the number of people seeking certifications and associate degrees is comparatively small.

HIGHER EDUCATION Employment

In the District, the higher education sector employs more than 25,500 professionals, with 11 colleges and universities accounting for the majority of those jobs (*Exhibit D.7-1*). Ten of these colleges and universities are private. Colleges and universities dominate employment at 97 percent, with business, computer and training programs supporting about 700 DC jobs, or nearly 3 percent of the sector’s employment (*Exhibit D.7-2*), according to the Bureau of Labor Statistics (BLS). DC’s one junior college, the DC community college, serves 3,000 students and has 130 employees.

D.7-1
HIGHER EDUCATION SUBSECTOR SIZE & BREAKOUT: EMPLOYMENT (2010)



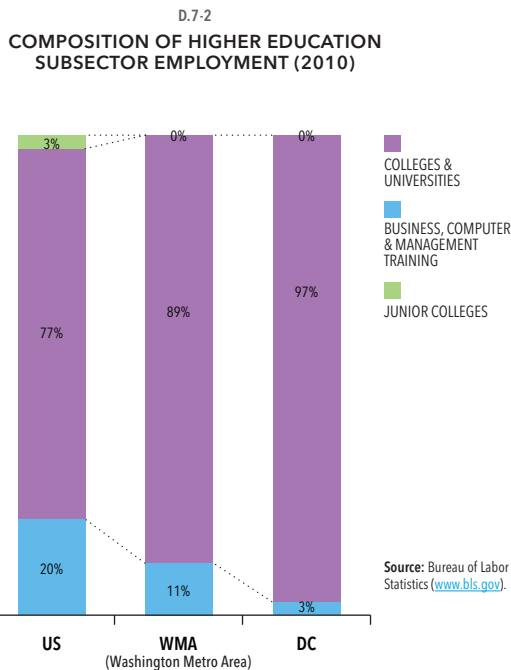


Since 2007, the overall job landscape in the higher education sector has been in flux, both in DC and the WMA. Higher education sector employment in the District fell 5.5 percent in 2008, rebounded by 2 percent in 2009 and then dropped 4 percent in 2010. Nationally, employment in higher education increased steadily, at just more than 1 percent annually for a 4.2 percent rise over four years (*Exhibit D.7-3*).

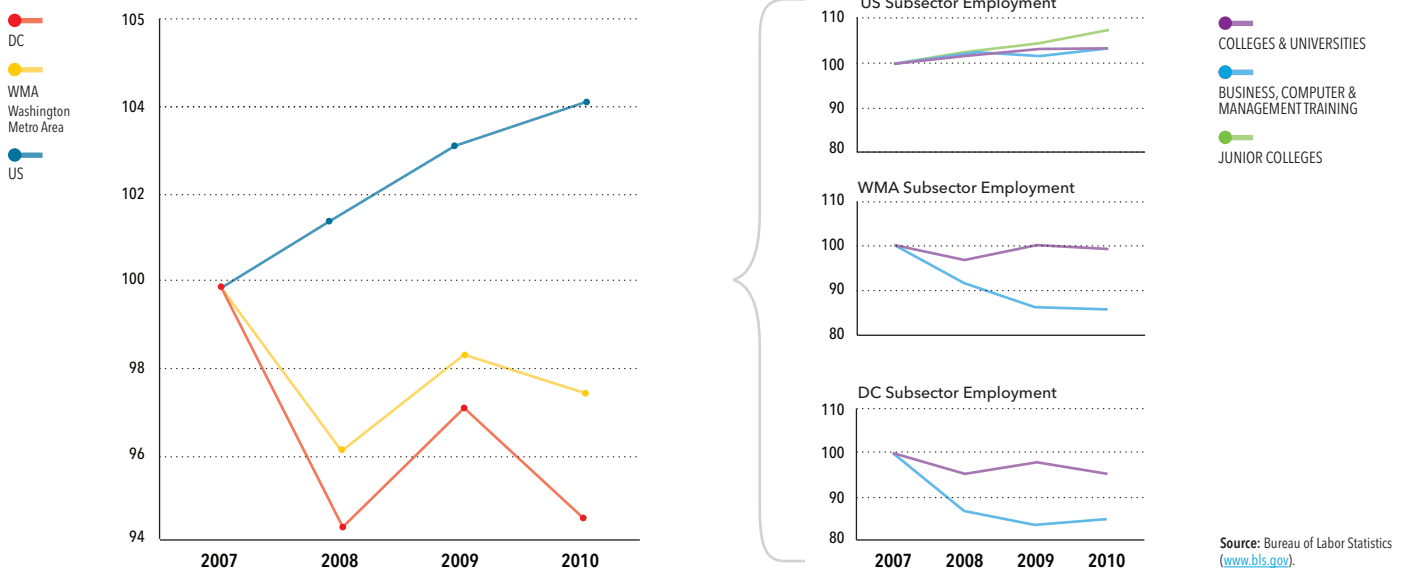
Nationally, from 2007 to 2010, junior college employment grew annually by 2 percent, 2.5 percent and 3 percent, according to the BLS. There was not enough data available to allow meaningful calculations of junior college employment in the WMA or DC.

When it came to colleges and universities across the United States, a steady 1.5 percent annual growth rate was posted during the same period. In the WMA and DC, by contrast, this subsector saw more fluctuations. Regionally, employment contracted 3 percent then rebounded back to 2007 levels before settling at 1 percent below the benchmarked year. Citywide, employment fell 5 percent in 2008, improved by 3 percent in 2009 but then dropped to 5 percent below 2007's rates. These declines in DC may be caused by the recession, which came with increases in tuition costs and decreases in student financial aid.

Business, computer and management-training programs in the United States saw a slow growth in employment from 2007 to 2010, fluctuating between 1.7 percent and 3.2 percent above average growth each year. In the WMA, this subsector contracted 9 percent in 2008 and fell another 5 percent in 2009 before closing 2010 at a level that was 14 percent below that of 2007. In DC, the decline was even steeper: 13 percent in 2008, 4 percent in 2009 and a slight rebound to close 2010 with 15 percent fewer jobs than in 2007. Again, the recession was the likely cause, particularly in light of reductions in government-funded programs. The relatively small number of DC jobs in this subsector may have magnified the effect of program closings.



D.7-3
EDUCATION SUBSECTOR GROWTH: EMPLOYMENT (2007-2010)
(2007 = 100%)





Key Players

The 2009 District of Columbia Economic Report, by the DC Department of Employment Services (DOES), notes that 11 of the top 20 non-governmental employers in DC were either universities and colleges or hospitals associated with an academic institution. The data, pulled from the BLS' Quarterly Census of Employment & Wages, showed the following employment rankings:

1. Georgetown University
2. The George Washington University
4. Children's National Medical Center
5. Howard University
6. MedStar Georgetown University Hospital
7. American University
9. The Catholic University of America
11. Howard University Hospital
12. Sibley Memorial Hospital (a joint venture with Johns Hopkins University)
13. The George Washington University Hospital
17. Gallaudet University

Key Trends

Location quotients are a measure of the percentage of employment within a sector in comparison to the total regional employment and the national average. They indicate a sector's concentration within a local labor force. Analysis of the DC and WMA, as compared with national data, shows a location quotient of 5.21—revealing how crucial the university and college subsector is to the District. The District's business, computer and management-training subsector is also double the national average. However in terms of raw employment and wage data, it makes up only a small percentage of this sector (*Exhibit D.7-4*).

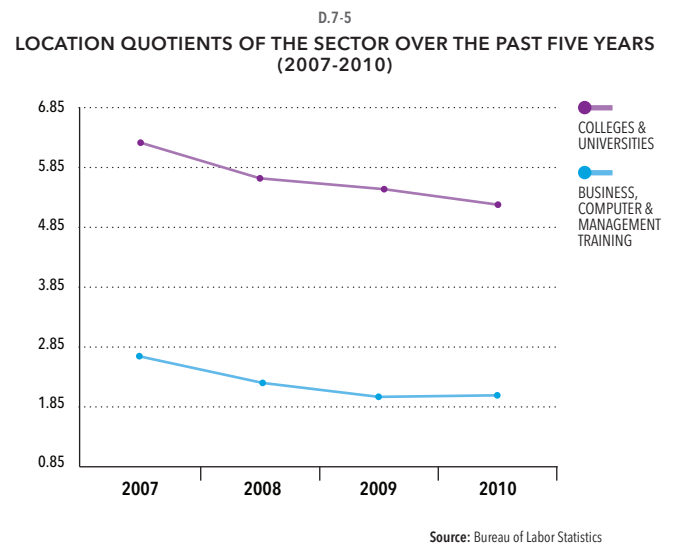
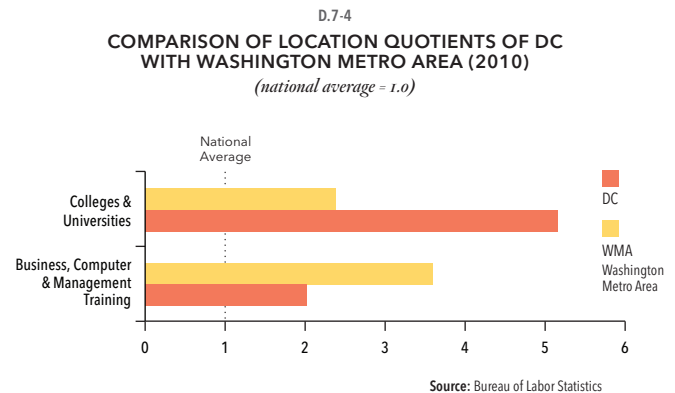
Within the WMA, the location quotient for universities and colleges, 2.41, is more than double the national average but still far below that of the District. However, the WMA has a significant concentration of business, computer and management-training programs available—more than triple the national average. (There was not enough data available for the junior colleges subsector to form accurate location quotient information.) From 2007 to 2010, the location quotient for business, computer and management-training programs has fallen slightly to 2.01, from 2.64. During that same period, universities and colleges saw a decline in their location quotient to 5.21 from 6.27, which is consistent with the national trend of lower levels of enrollment in this sector due to higher tuition costs and reduced operating funds to support staff (*Exhibit D.7-5*).

The biggest drivers of change in the education sector are technology integration and a lack of fiscal resources due to the national recession.

Technology integration: Many of the students now entering higher education programs are Gen X-ers and Millennials who are more technologically savvy than previous generations. These students are used to interactive media and, in order to best reach and teach them, academic institutions must tailor their offerings accordingly. Growing up in front of screens, be they TV, video or computers, has affected the way students gather information. Academic programs will need to offer more courses online and at convenient times for working individuals, specifically in the business, computer and management-training subsector.

Financial pressures: The national recession has hurt the higher education sector at the institutional and individual student level. Institutionally, there has been less funding available for junior colleges, universities and colleges, and business, computer and management-training programs. Both at the federal and state levels, higher education is often targeted for budget reductions sooner than more popular programs, such as K-12 education, health care programs and criminal justice spending. With limited financial aid available to cover the cost of tuition increases every year, many people cannot afford to enroll in these types of higher education programs.

Individually, many potential students either lost their jobs or were negatively affected by the recession, leaving them with less





disposable income to spend on higher education. For public and private universities and colleges to meet target enrollment levels, they must provide more scholarships and discounted tuition to students. Alumni are also impacted by the recession, reducing their philanthropy levels. According to the Society for College and University Planning, alumni participation in giving programs dropped by 10 percent and the size of those gifts was down almost 14 percent from the previous year.

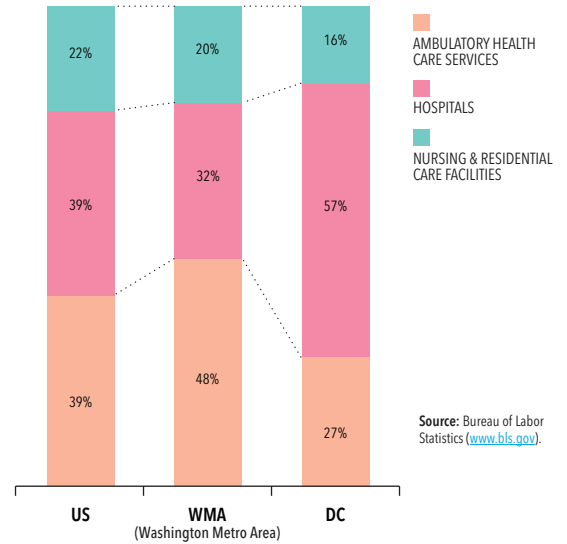
HEALTH CARE Employment

The composition of the health care workforce varies regionally. In the United States, 40 percent of employment is from hospitals, another 40 percent from ambulatory health care services and the remaining 20 percent from nursing and residential care facilities. Within the WMA, there is a larger percentage of ambulatory health care services (48 percent). Nursing and residential care facilities remain relatively constant while hospitals provide just more than 30 percent of employment (*Exhibit D.7-6*).

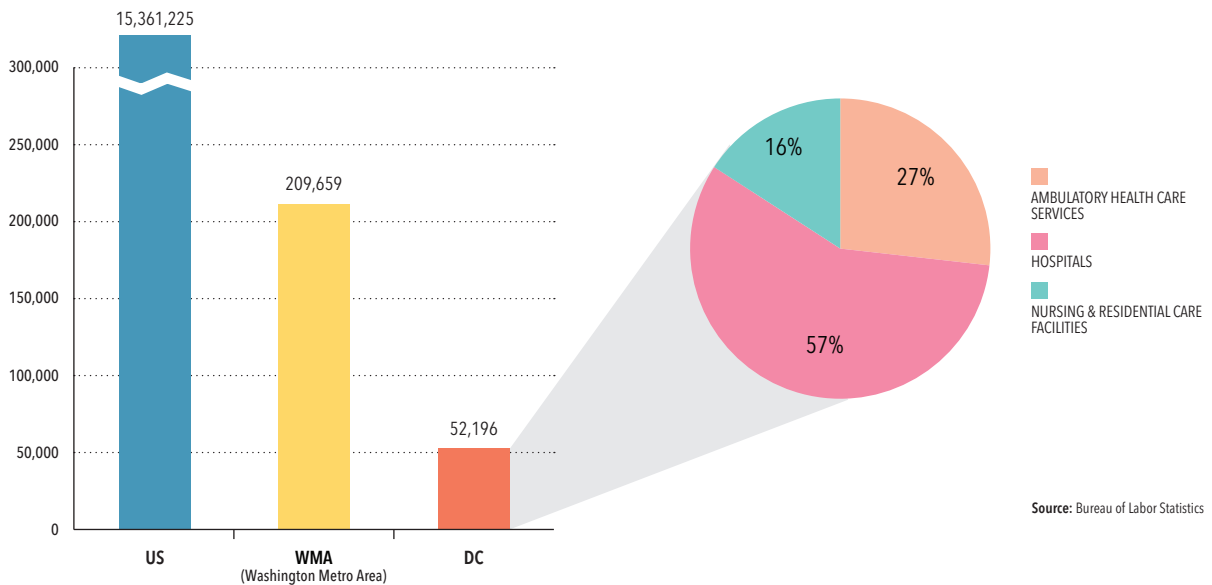
District hospitals account for a substantially larger portion of the sector's jobs (57 percent), while nursing and residential care facilities, as well as ambulatory health care services, are noticeably underrepresented at 16 percent and 27 percent, respectively. This is likely due to the high number of medical training institutions and the large number of DC residents who are either uninsured or underinsured and use hospitals and clinics rather than primary care doctors. Ambulatory health care providers and nursing and residential care providers can also take advantage of lower real estate costs and larger buildings in the surrounding metro area (*Exhibit D.7-7*).

Over the past five years, the number of health care jobs in the United States has risen steadily. BLS data for 2010 shows a 6 percent increase in the District from 2007, compared with 10 percent

D.7-6
**COMPOSITION OF HEALTH CARE
 SUBSECTOR EMPLOYMENT (2010)**



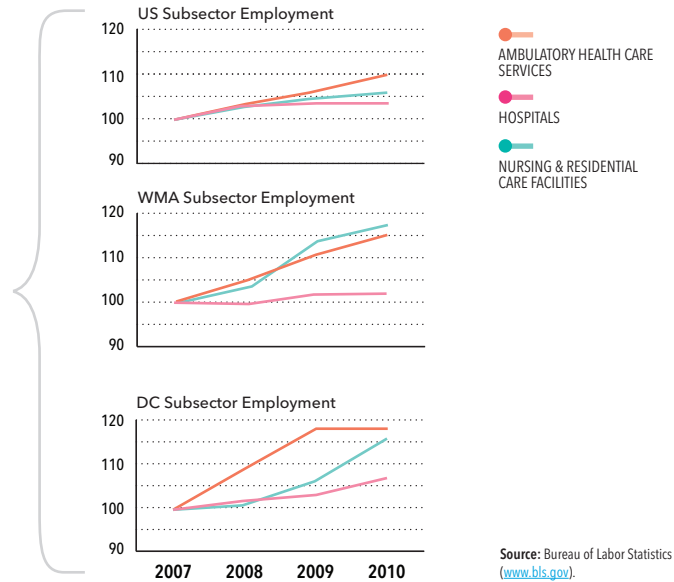
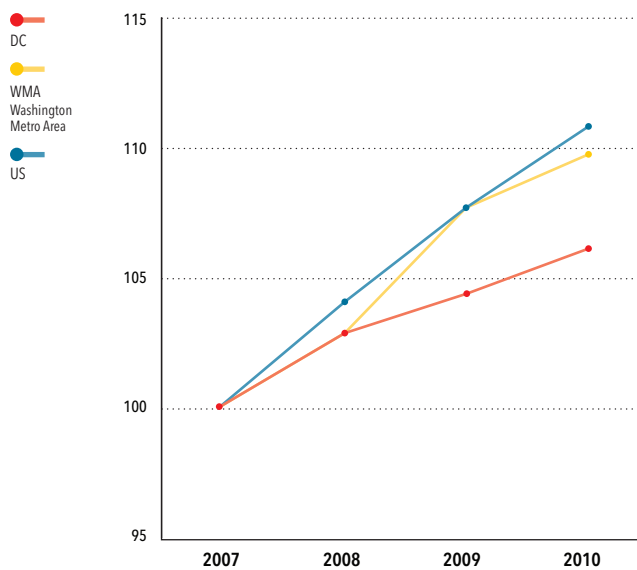
D.7-7
HEALTH CARE EMPLOYMENT (2010)





D.7.8

HEALTH CARE SUBSECTOR GROWTH: EMPLOYMENT (2007-2010)
(2007 = 100%)



in the metropolitan area and 11 percent nationwide (*Exhibit D.7-8*). Hospital employment, specifically, has been relatively flat nationwide, although DC saw 7 percent growth during the period. This lack of growth nationally is probably due to the cost of building new hospitals and the fact that many hospitals are already operating at a very high utilization rate.

Employment in ambulatory health care services rose 20 percent in the District and 15 percent regionally. There are two likely reasons for this: the number of well-insured patients in the Northwest section of the city can support many different types of physicians, and the number of uninsured patients throughout the District has declined due to passage of the Affordable Care Act. The decline may also be linked to the existence of the DC Healthcare Alliance, which insures residents who are ineligible for Medicaid.

Nursing and residential care facilities have seen a significant increase in jobs, up 16 percent in the District and 17 percent in the metropolitan area between 2007 and 2010. This growth is higher than the national rate of less than 6 percent. In the District, these high rates of growth may be due to the lower base numbers of existing facilities, according to the BLS. However, in the metropolitan area, this increase is significant because the base number of facilities is significantly higher.

Key Players

According to the *2009 District of Columbia Economic Report*, prepared by the DC Department of Employment Services, seven of DC's top 15 private sector employers are hospitals. The data, pulled from the BLS' Quarterly Census of Employment & Wages,

shows the following rankings vis-à-vis their roles as critical contributors to the local economy:

3. MedStar Washington Hospital Center
4. Children's National Medical Center
6. MedStar Georgetown University Hospital
10. Providence Hospitals
11. Howard University Hospital
12. Sibley Memorial Hospital
13. The George Washington University Hospital

Hospitals support nearly 30,000 jobs in the District, while ambulatory health care services provide nearly 14,000 and nursing and residential care facilities employ 4,800 staff members.

Key Trends

An analysis of the location quotient for the District and the WMA, in comparison with national data, shows a key strength in the District's hospital subsector, as seen by its location quotient of 1.27. This is offset by weakness in the WMA, where there is a 0.73 location quotient for this subsector. The other subsectors in DC, as well as the WMA, are below the national average, with the ambulatory health care services' location quotients of 0.55 and 0.81 in the District and WMA, respectively. Similarly, results for nursing and residential care facilities were 0.61 and 0.7, respectively (*Exhibit D.7-9*). This appears to be consistent with the findings that there is a shortage of physicians' offices and nursing and



residential care facilities in the District. This represents an area of potential growth. Since 2007, these location quotients have been consistent (*Exhibit D.7-10*).

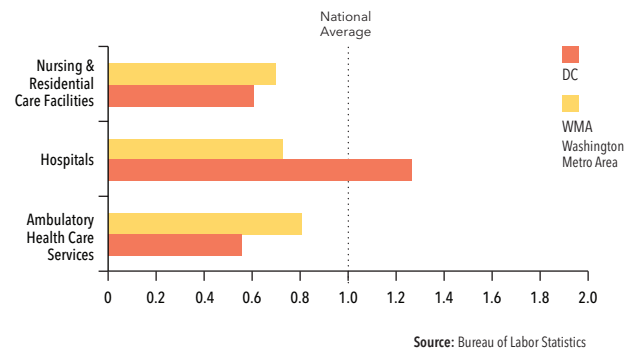
The main drivers of change in this sector are health policy reform and its requirements for integrating technology to improve business operations and its mandate to treat a growing number of Medicaid-and Medicare-eligible patients.

Health care policy: On June 28, 2012, the U.S. Supreme Court upheld key parts of the Affordable Care Act. The act will increase the number of patients who are eligible for Medicaid to 30 million by 2014 and entice more private insurance companies to cover a wider breadth of patients than before. This influx of patients will create demand for more health care professionals. Primary care physicians and internists will likely see an increase in demand because the act expands patients' access to basic health care services.

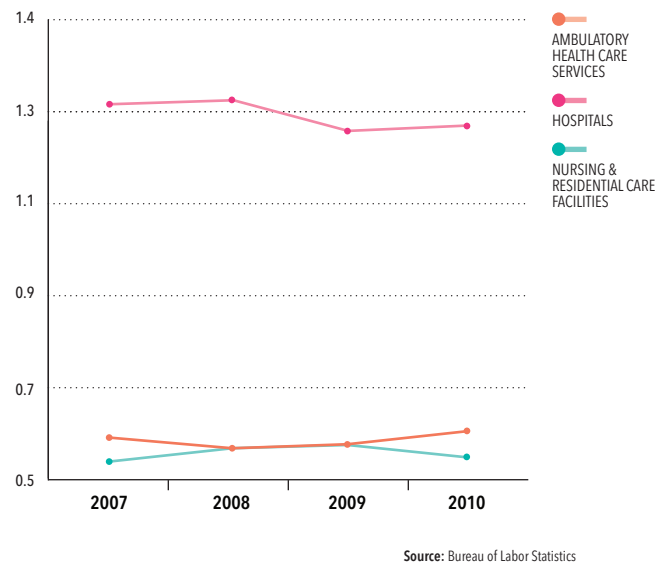
Electronic health records: The Affordable Care Act calls for the use of Electronic Health Records (EHR) to reduce paperwork, cut costs, curb avoidable medical errors and improve the overall quality of care provided by health care professionals. Implementation of these new rules requires an investment by hospitals, ambulatory health care service providers, and nursing and residential care facilities. Implementation will also drive more jobs into health care IT and consulting. In addition, significant employment growth is expected in IT design and implementation as well as training in EHR systems.

Aging baby boomers: Another driver of change is the baby boom generation. As this population group ages, certain health care services will be used more than others, such as physical therapists, ambulance services, care centers and both diagnostic and medical laboratories. An April 2011 Centers for Disease Control study found that "chronic disease ... accounts for about 75 percent of the \$2 trillion spent on medical care." The availability of life-extending treatments for many chronic ailments, such as heart disease, diabetes and pulmonary disease, has led to a jump in health care expenditures at outpatient care facilities.

D.7-9
COMPARISON OF LOCATION QUOTIENTS OF DC WITH WASHINGTON METRO AREA (2010)
(national average = 1.0)



D.7-10
LOCATION QUOTIENTS OF SUBSECTORS (2007-2010)





FINDINGS FROM KEY STAKEHOLDERS INTERVIEWS

- 1 DC colleges and universities provide jobs and other significant economic benefits to the District.**
 - Numerous interviewees mentioned the *Fuller Report*, a research paper that examined how the metropolitan area's consortium of universities affected local economies, in order to quantify the economic impact of universities and colleges on the city and region.
 - Universities and colleges provide needed physicians, nurses, aides and technicians to serve as hospital staff to oversee students' clinical training and to provide residents with health care services.
- 2 Blanket student enrollment caps limit both undergraduate and graduate student populations in DC.**
 - No such caps exist in Maryland or Virginia.
 - Undergraduate students, by their demographics and lifestyles, have a very different economic impact on neighborhoods than do graduate students.
 - Student enrollment caps prevent universities and colleges from developing new facilities and service offerings in the city. This forces them to expand in neighboring states.
- 3 District hospitals have individual strengths but marketing efforts are minimal.**
 - Although local hospitals offer centers of excellence for health care, many DC residents with private insurance choose to go to Johns Hopkins University health facilities in Maryland or elsewhere for treatment.
 - Of all the DC hospitals, Children's National Medical Center seems to have the strongest brand recognition nationally.
 - Although all District hospitals belong to the District of Columbia Hospital Association, they compete with each other for market share and are not maximizing the potential for collaboration
- 4 Hospitals, universities and the District would benefit from better communication regarding real estate development projects and other opportunities.**
 - Although the city is investing heavily in local development and construction, some of which is geared toward higher education and health care projects, many universities, colleges and hospitals are unaware of the nature of these projects and their future benefit to them.
 - The McMillan project is a mixed-use project with 800,000 square feet of medical office space based on local hospital needs. That said, many hospitals' administrative staff, did not know how the space was to be used.
- 5 Anchor institutions such as universities and hospitals in the District can have a profound effect on local employment through their procurement practices.**
 - Many DC universities, hospitals and health care facilities highlight corporate citizenship as a core value, but they are not required to procure goods or services from local businesses.
 - There is no central location to identify service opportunities at DC universities and hospitals.
 - The procurement practices and contracts for anchor institutions, specifically in health care, are often complex and have value chains throughout the country.



SECTION E
IMPLEMENTATION



An Implementation Plan Defined by Partnership

The Five-Year Economic Development Strategy has grown from the Gray administration's commitment to create a coordinated set of initiatives that reinforce the Mayor's "One City Action Plan." This strategy, the first of its kind for the District, provides a roadmap to generate new jobs and investment for decades to come.

It will not be easy—indeed, the initiatives outlined in this strategy will require investment and commitment from our local businesses, hospitals, universities and the District government. But the groundwork has been laid. By providing input and collaboration throughout the crafting of *The Five-Year Economic Development Strategy*, public, private and nonprofit partners have set the stage for bringing these initiatives to life.

COMMITMENT TO IMPLEMENTATION:

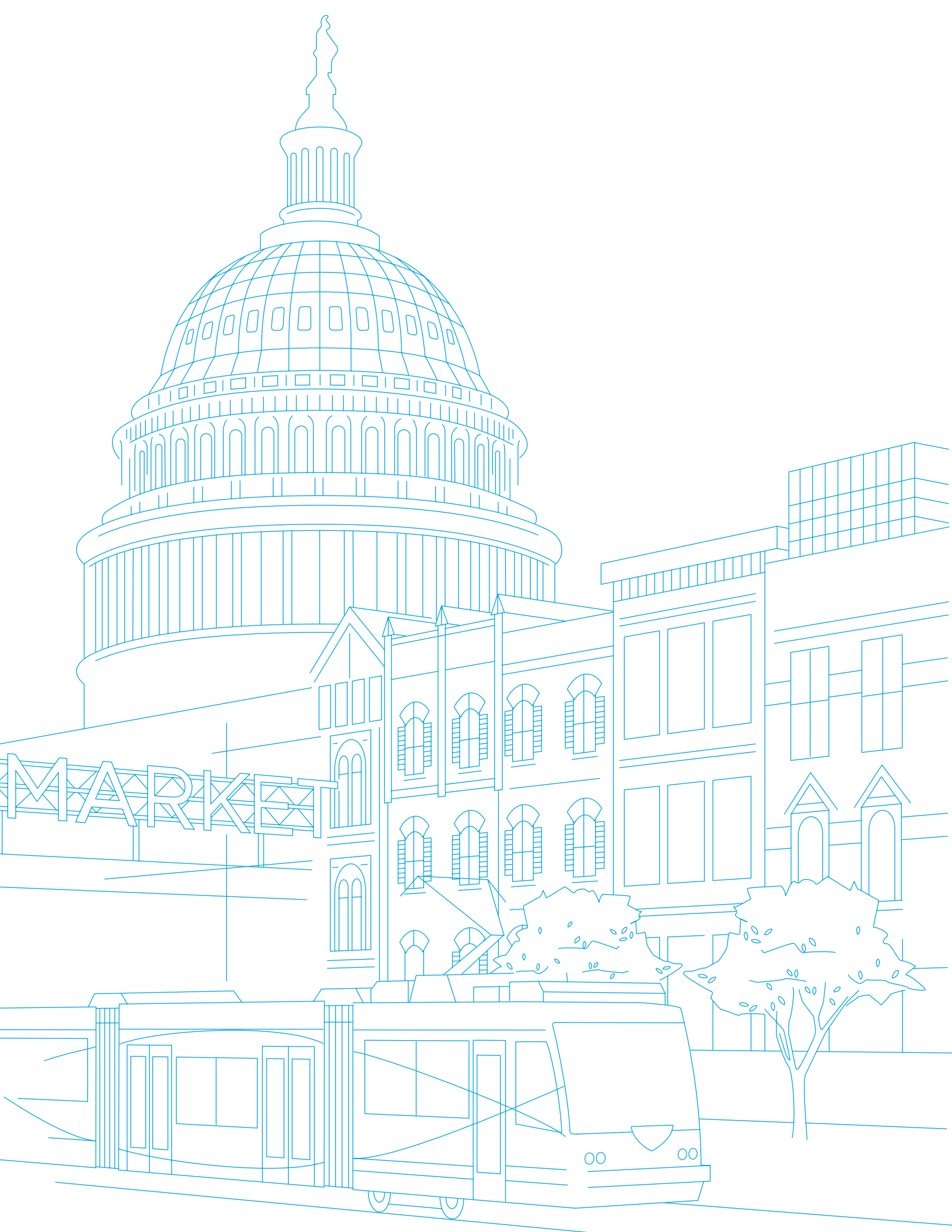
100,000 New Jobs and \$1 Billion in Tax Revenue for DC

In the next five years, successful implementation of *The Five-Year Economic Development Strategy* will generate 100,000 new jobs and \$1 billion in tax revenue to support District services. DC will also benefit from economic diversification into new sectors that can generate growth for many years to come.

Turning this bold vision into reality requires the ongoing dedication of the public and private sectors. In the months and years ahead, the District pledges to facilitate implementation of

the strategic initiatives in *The Five-Year Economic Development Strategy*. It has already set aside dedicated resources to oversee the implementation process and to monitor progress.

The Five-Year Economic Development Strategy comprises strategic initiatives distributed across the District's seven core sectors. These initiatives require varying time, partnerships and resources. The Gray administration will focus its immediate efforts on implementing initiatives that are currently most feasible. Looking ahead, District businesses, organizations, universities and hospitals will play a major role in implementation efforts. From start to finish, the strategy is a collaborative endeavor. The responsibility falls on all parts of society to achieve its vision of job creation and a thriving District economy.





SECTION F
APPENDIX

Project Methodology

Economic Impact Model: A Game-Changing Business Analytics Tool

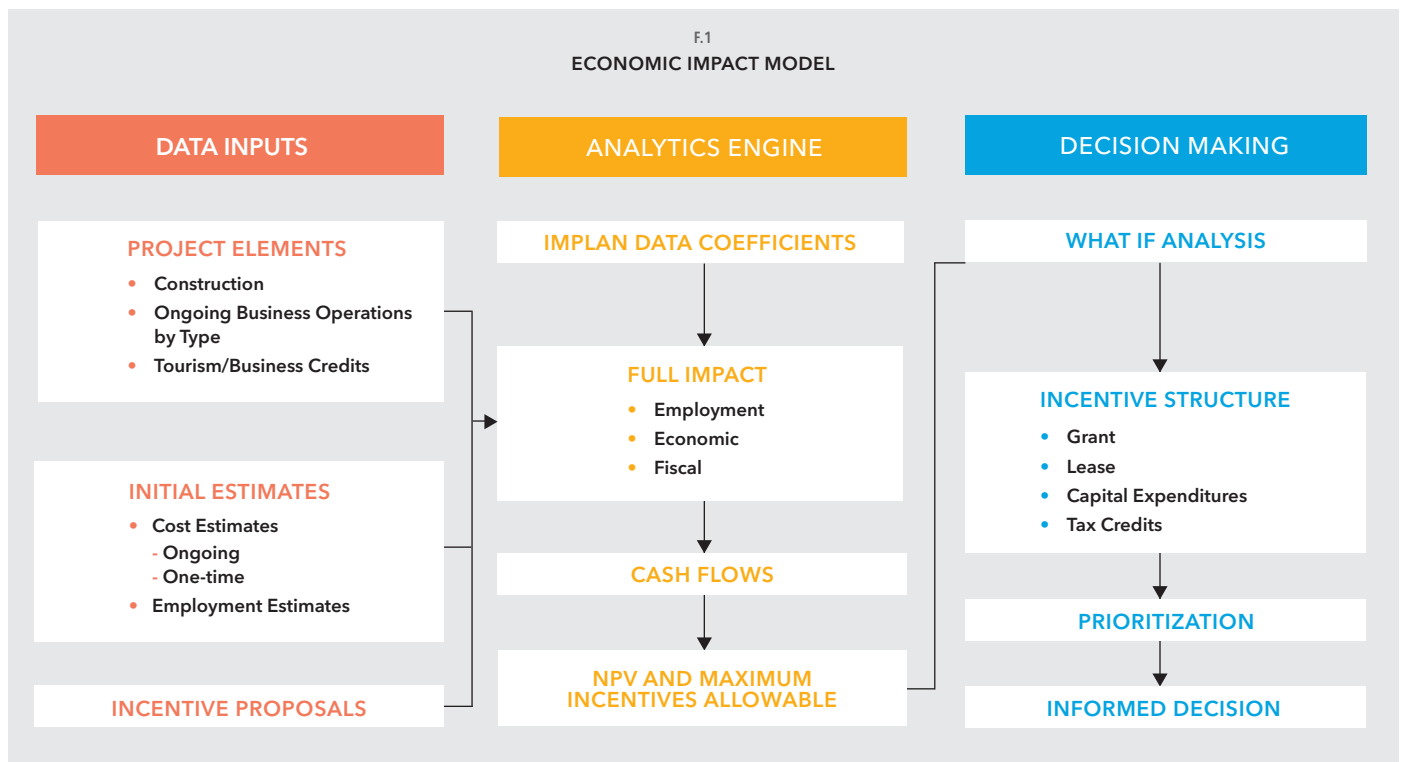
Many of the strategic initiatives have been analyzed for economic impact using a new Economic Impact Model (EIM), a business analysis tool that allows the District to evaluate and prioritize competing initiatives. The model incorporates a cost-benefit analysis that compares projected public revenues to the anticipated public service costs resulting from a project. It is a tool that will enable the District to rigorously assess economic impact stemming from various projects or initiatives.

As outlined in *Exhibit F.1*, the EIM takes a series of data inputs—nature of the initiative or project, initial estimate of the ongoing economic activity related to the initiative and requests for incentives associated with the initiative (if any)—and combines them with data from the IMPLAN model of local economic activity to calculate the full fiscal impact of the initiative on the District. The

fiscal impact includes both cash inflows (income tax from new jobs, sales tax, property tax, etc.) and costs such as public expenditures for infrastructure or public services. The resulting cash flows are then discounted to determine the Net Present Value (NPV), to the District of an initiative or project.

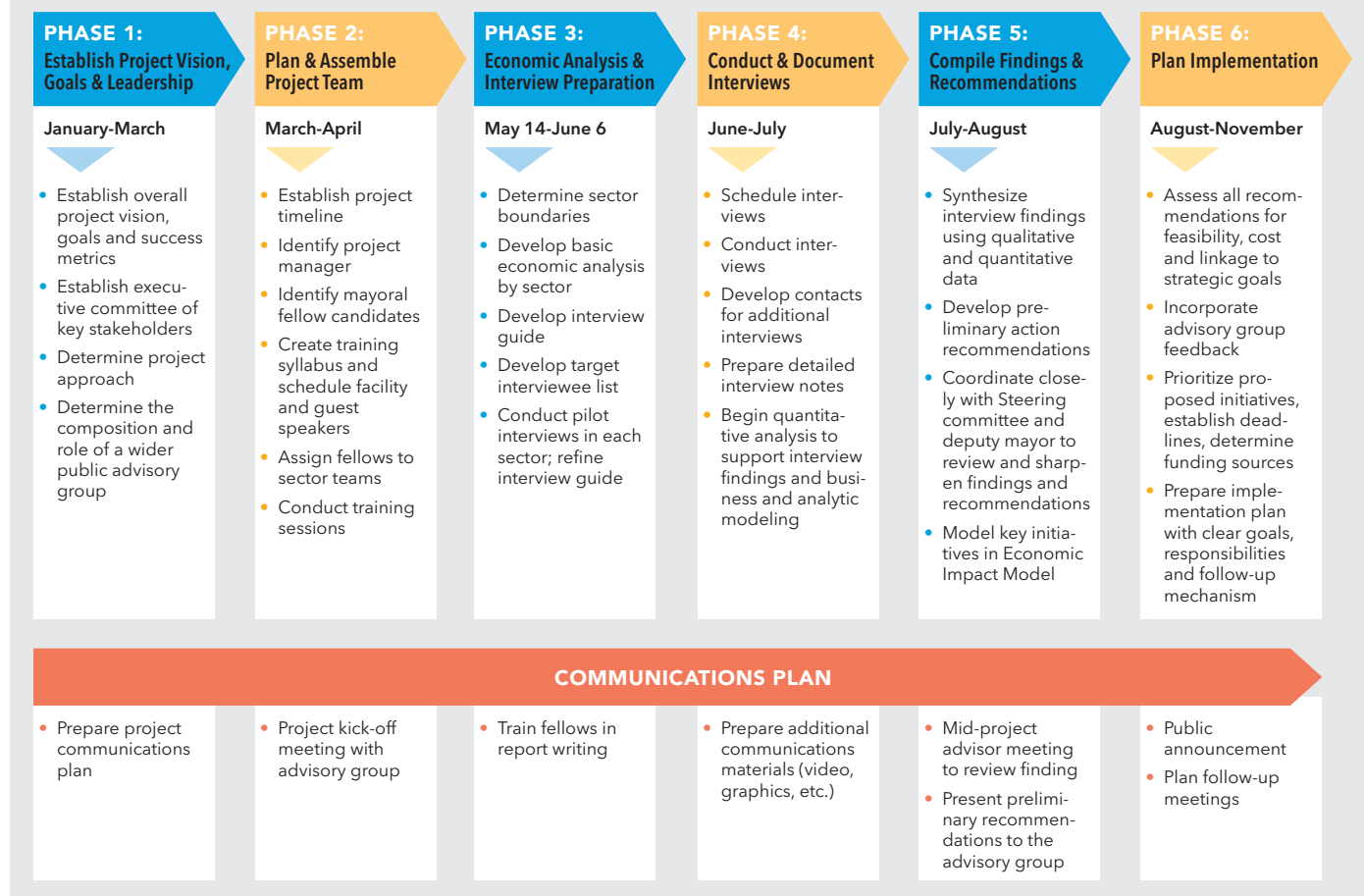
By comparing the relative NPV and payback periods of different projects, the District of Columbia can objectively prioritize projects and allocate incentive dollars. The EIM also furthers transparency by providing careful documentation of costs and benefits for each initiative.

Development of *The Five-Year Economic Development Strategy* consisted of six phases, as outlined in *Exhibit F-2*.



F.2

THE FIVE-YEAR ECONOMIC DEVELOPMENT STRATEGY PROJECT TIMELINE



PHASE 1: Establish Project Vision, Goals and Leadership

The Five-Year Economic Development Strategy was originally proposed as part of Mayor Vincent Gray's 2010 campaign platform. Following through on this initiative, Deputy Mayor for Planning and Economic Development Victor Hoskins considered several approaches to strategy development. Ultimately the deputy mayor determined that an approach proposed by Dean Doug Guthrie of The George Washington University School of Business (GWSB) would be cost effective and provide fresh insights into opportunities for economic development.

An executive committee was organized consisting of:

- **Victor Hoskins**
Deputy Mayor for Planning and Economic Development,
Office of the Mayor
- **Doug Guthrie**
Dean
The George Washington University School of Business
- **David Thomas**
Dean
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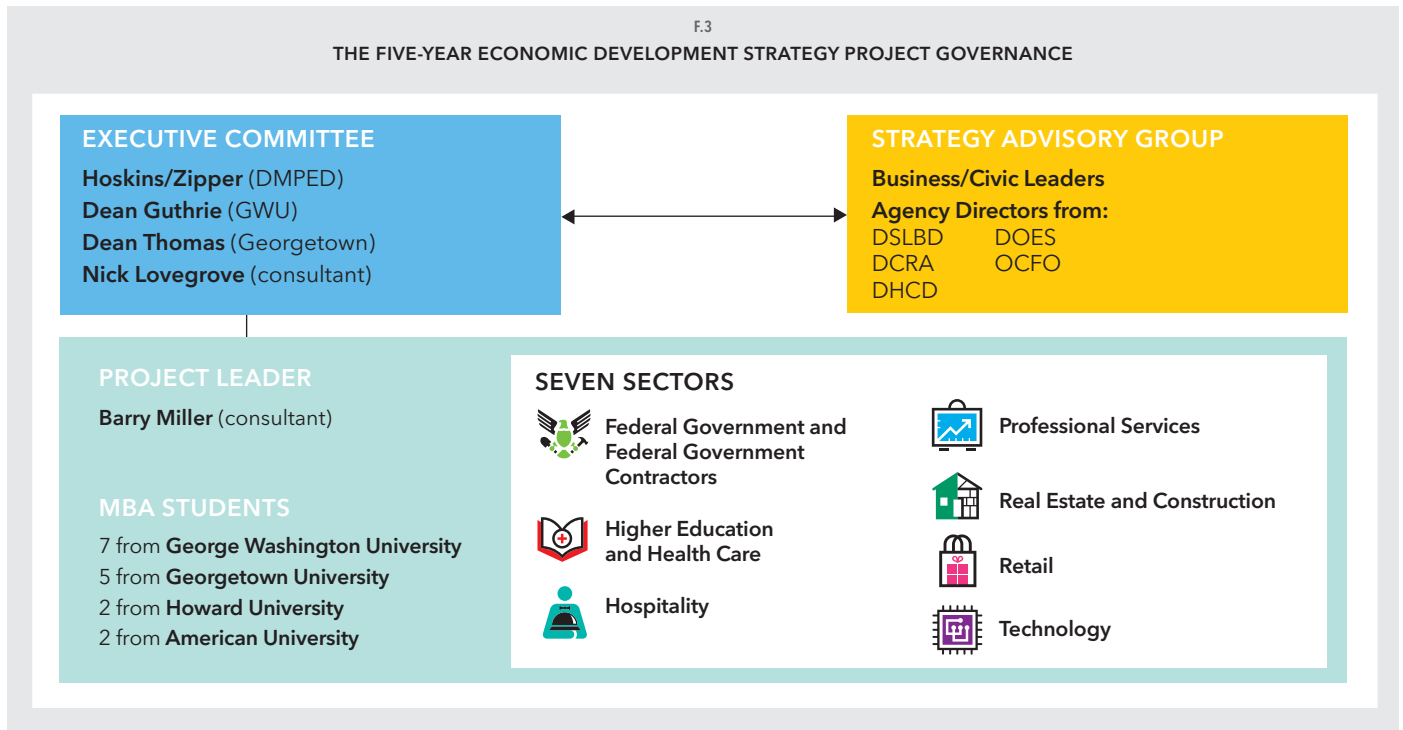
- **Nick Lovegrove**
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- **David Zipper**
Director of Business Development and Strategy
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Together with the Mayor's office the executive committee laid out the goals of the project as well as the general approach to be used. The stated goals of the project were to:

- Identify and communicate the Gray administration's economic development priorities;
- Obtain commitments from private sector leaders to spur growth;
- Develop a new EIM that will align District resources to obtain maximum economic benefit; and
- Launch a new era of collaboration between the District and its universities.

The executive committee determined that the economic development strategy would be approached by examining growth and employment opportunities in seven specific sectors of the Washington business community. The effort was to be carried out by a team of graduate business students working throughout the summer between their first and second years of business school. These students would be divided into teams; each team would be assigned to one sector. The teams would conduct a preliminary

quantitative analysis of their sector followed by in-depth interviews with private and public sector leaders. The teams' findings and recommendations would be compiled and forwarded to the deputy mayor for consideration. A final draft plan would then be reviewed by the Mayor and would be officially announced as *The Five-Year Economic Development Strategy*. The project governance is illustrated in *Exhibit F.3*.



Throughout the project, the executive committee held weekly meetings to track progress and anticipate next steps. In addition to the executive committee, a Strategy Advisory Group (SAG) consisting of 36 private and public sector leaders was convened to assist the executive committee and project staff. SAG members were interviewed by the project team and supported the team by providing data as well as additional industry contacts. The members of the strategic advisory group very generously contributed their time and energy to this project; their names are listed in the Appendix to this report.

PHASE 2: Plan and Assemble Project Team

The executive committee outlined an overall project timeline. This included each of the major phases of the project (planning, training, quantitative analysis, interviews, data synthesis, report preparation) and set a deadline for delivery of a final report to the Mayor.

Barry Miller, an independent management consultant and former consultant with McKinsey & Company, was recruited to serve as a full-time project manager. Candidates for mayoral fellowships were recruited by circulating a notice at the four major graduate schools of business in DC. Each fellowship candidate submitted a

resume, his or her GPA, as well as a cover letter stating their qualifications and fit with the project. Candidates were sought with a broad range of relevant skills:

- Economic analysis experience
- Strong analytical skills
- Excellent verbal and written communications
- Critical thinking
- Presentation skills
- Project management

A total of 57 candidates submitted resumes. Ultimately 16 were selected to be mayoral fellows: seven from GWSB, five from the Georgetown University McDonough School of Business, two from the Kogod School of Business at American University and two from the Howard University School of Business. One additional GWSB student served as a mayoral fellow working with the DC-China Center in Shanghai, and another GWSB student worked with the communication team to document the project.

Once the mayoral fellows were identified, they were assigned to sector teams. Team assignments were designed, inasmuch as possible, to mix quantitative and qualitative skills, to combine

students from different graduate business programs, and to reflect the students' sector preferences.

The project work began with a series of five weekly three-hour evening classes conducted while the mayoral fellows were still attending their regular classes (April 3, 2012 through May 1, 2012). The syllabus included lectures and workshops, given by a variety of faculty members and subject matter experts, addressing the skills necessary for the project:

- Project overview
- Qualitative and quantitative data gathering
- Introduction to sector economic analysis
- Review of the Economic Impact Model
- Introduction to quantitative data sources (Bureau of Labor Statistics, Bureau of Economic Analysis, Census data, etc.)
- Interviewing techniques

PHASE 3: Prepare for Economic Analysis and Interview

On May 14, 2012, the mayoral fellows began work on a full-time basis.

One of the initial tasks for each team was to carefully define the boundaries of its sector. Terms like “technology” and “professional services” had to be expanded and quantified. The teams used a master list of North American Industry Classification System (NAICS) codes to determine the specific business categories in their sectors and subsectors.

Teams then began developing a basic economic analysis of their sectors. The goal of the analysis was twofold: first, to provide the raw analytic material that would support findings and recommendations later in the process and, second, to help the fellows develop a deep understanding of the key business opportunities and challenges in their sector. The fellows used a wide variety of sources to conduct their research, including university library resources, online databases (especially BLS and US Census Bureau) and searches of the local business press. Their analyses ultimately incorporated four elements:

- Sector size and growth (measured in terms of employment, and where possible, economic activity);
- Comparison of sector density (Location Quotient) with national and regional averages;
- Identification of key players in the sector (“key” being based on size, growth rates, brand reputation and other criteria); and
- Identification of important global, national and local industry trends.

The analysis was continuously refined throughout the project.

A secondary goal of the industry analysis was to prepare the fellows to conduct interviews in their sectors in a thoughtful, intelligent way. The teams did their utmost to respect the fact that

interviewees were contributing their valuable time and sharing their thinking about how to improve the economic and, therefore, social climate in the District of Columbia.

The teams also prepared a standard interview guide or questionnaire to help frame their discussions during interviews. The interview guide covered a broad range of topics in order that the students could choose the most applicable questions to ask; typically interviews were conducted in a fairly free-flowing way depending on the interests and responses of each interviewee.

Using the business press and websites of leading civic organizations, teams also began to develop lists of potential interview candidates, although the main source of contacts for early interviews was the Office of the Deputy Mayor, the offices of the deans at GWU and Georgetown and the SAG. During the resulting first round of interviews, additional interview subjects were identified.

A series of pilot interviews, one from each sector, was conducted by the dean of GWSB and each of the sector teams.

PHASE 4: Conduct and Document Interviews

For the mayoral fellows, the interview process itself was the most intense (and most rewarding) part of the process. In total, 185 interviews were scheduled and conducted (*Exhibit F.4*).

F.4
SECTOR & FUNCTIONAL DISTRIBUTION OF INTERVIEWS

Sector Team	Fed. Gov't	DC Gov't	Business Leaders & Trade Association Leaders	Not-for-Profit & Civic Leaders	Academic Experts	Total
Federal Government & Contractors	6	3	6	2	2	19
Professional Services	-	2	23	4	1	30
Higher Education & Health Care	-	6	-	6	7	19
Hospitality	1	1	22	10	3	37
Technology	-	-	12	-	4	16
Retail	-	2	12	5	1	20
Real Estate & Construction	-	4	17	4	2	27
Cross-Cutting Issues	-	7	1	7	2	17
Total	7	25	93	38	22	185

Approximately 95 percent of the interviews were conducted in person, typically at the interviewee's office or establishment; the remaining discussions were held by telephone. Prior to conducting an interview, each team was expected to fully research the background of the interviewee and the relevant organization or business subsector. Following each interview the teams prepared detailed interview notes which, in addition to giving background information, highlighted the main issues and ideas raised in the interview and any ancillary issues.

During this phase, teams began to gather quantitative data (where available) regarding proposed economic development issues and ideas. Given the limited length of the project, they also conducted research into economic development models from other cities and jurisdictions.

Finally, each team began to assemble a document that became the raw material for the final report for its sector. The document included the sector analysis, a summary of the findings and ultimately the team's recommendations and quantitative analysis with the Economic Impact Model.

PHASE 5: Compile Findings and Recommendations

This phase began as the previous phase was winding down. Each team synthesized the key findings from its interviews relating to key industry issues, impediments to and opportunities for economic growth and a variety of other information about DC's business and regulatory climate, workforce development issues and international business opportunities.

During this phase, a meeting was held with the strategy advisory group to review the preliminary findings. SAG members contributed additional ideas and suggested interview candidates.

These findings became the basis for a series of recommendations prepared by each team. Recommendations spanned a wide spectrum of ideas, ranging from simple, easy-to-execute measures to "big ideas" that would require significant resources, time and management attention to achieve. The teams worked closely with the director of business development and strategy from the Office of the Deputy Mayor to assess and refine their recommendations.

In addition, the key initiatives in each sector were evaluated using the EIM. This phase concluded with a presentation of preliminary recommendations to the strategic advisory group. The strategy was released in November 2012.

PHASE 6: Plan Implementation

The Office of the Deputy Mayor is ultimately responsible for assessing the feasibility, cost, and linkage to strategic goals of each element of the *The Five-Year Economic Development Strategy*. This office will prioritize the proposed initiatives, establish deadlines and determine funding sources and responsibility for implementation, coordinating closely with the Office of the Mayor to insure that the strategy supports and enhances the Mayor's "One City Action Plan."

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