

# Competing as an Innovation Community

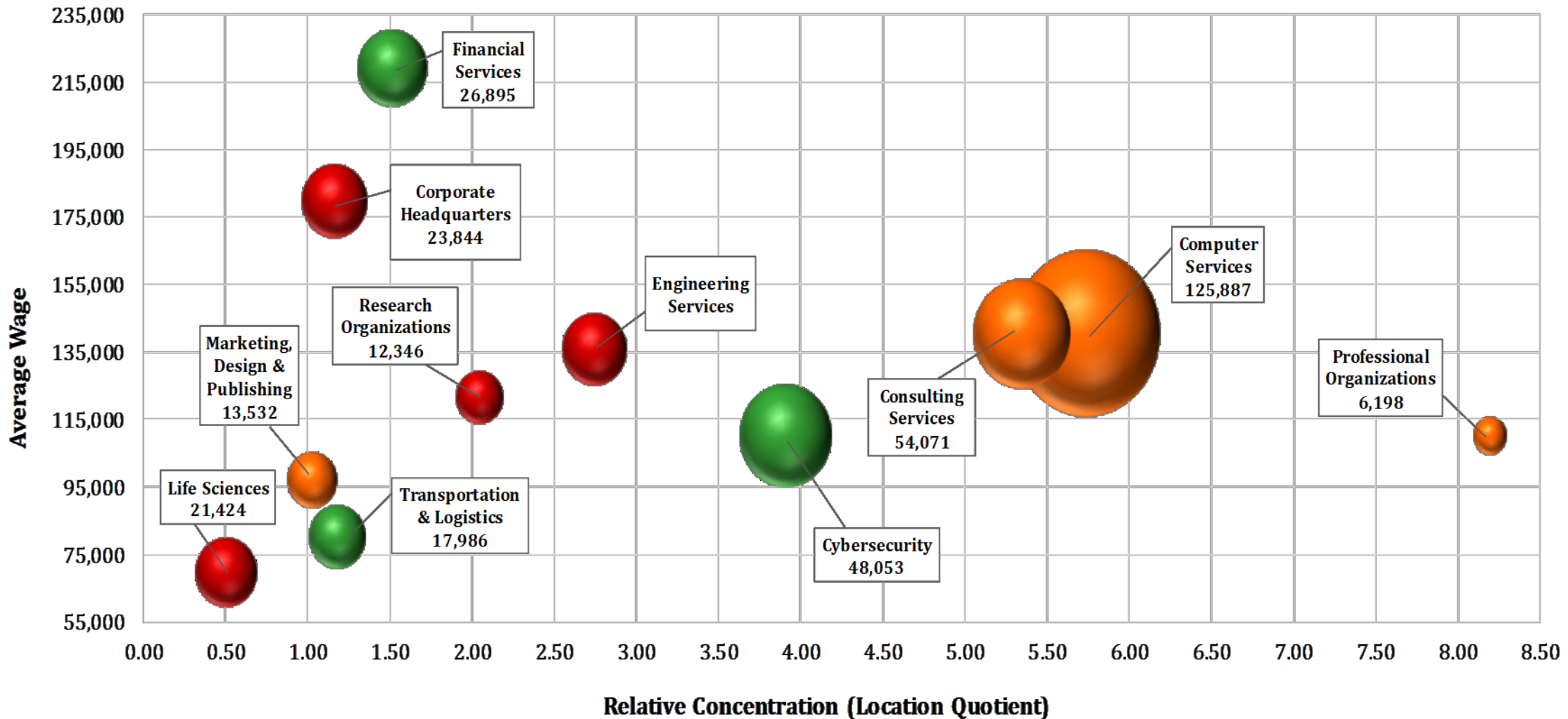
*Some things worth knowing*  
*Some things worth considering*

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Marymount University  
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George Mason University

# NOVA Industry Clusters July 2019

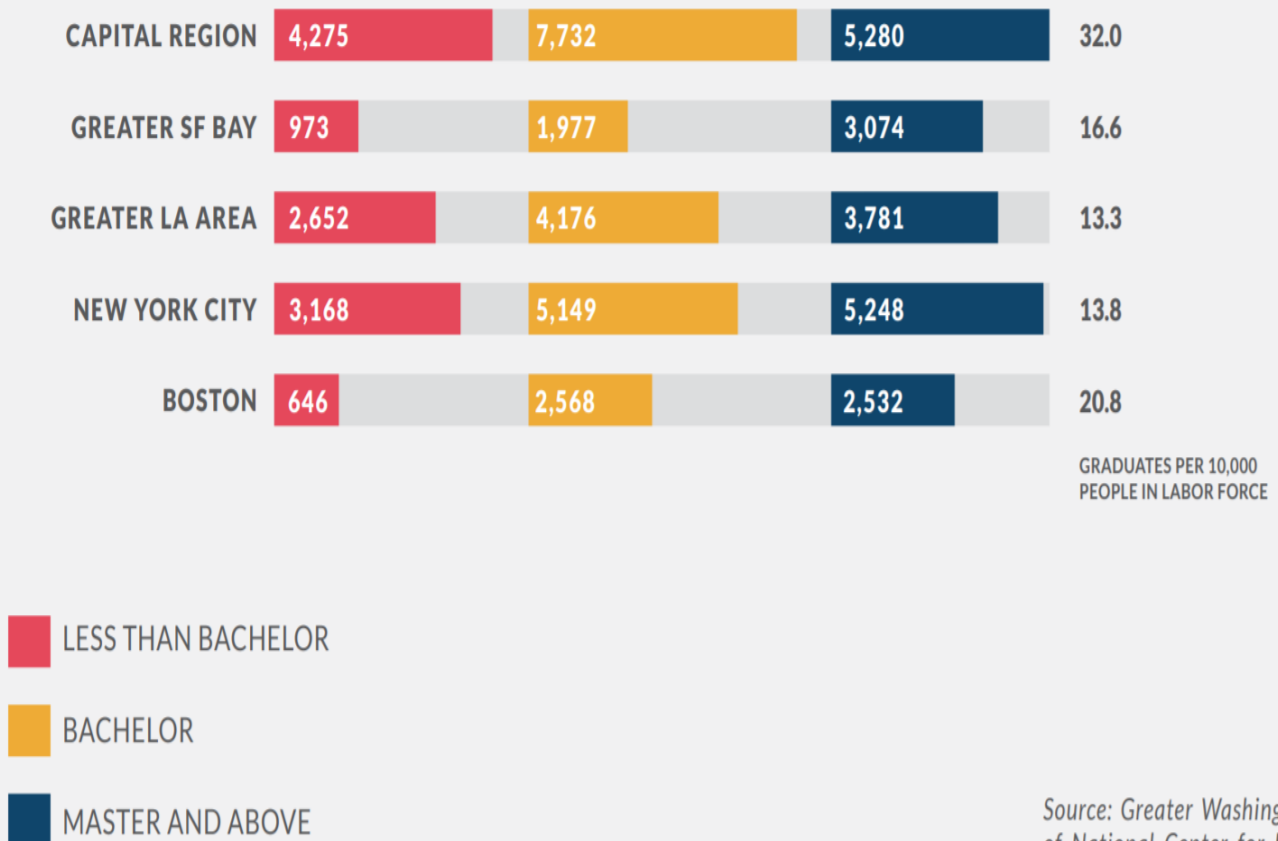


Sources:  
EMSI, US  
Cluster  
Mapping  
Project,  
Center for  
Regional  
Analysis

# Our Region Produces the Most Digital Graduates

We are training people  
with the skills to compete  
in the tech economy

## DIGITAL TECH-RELATED GRADUATES BY DEGREE AND REGION, 2016

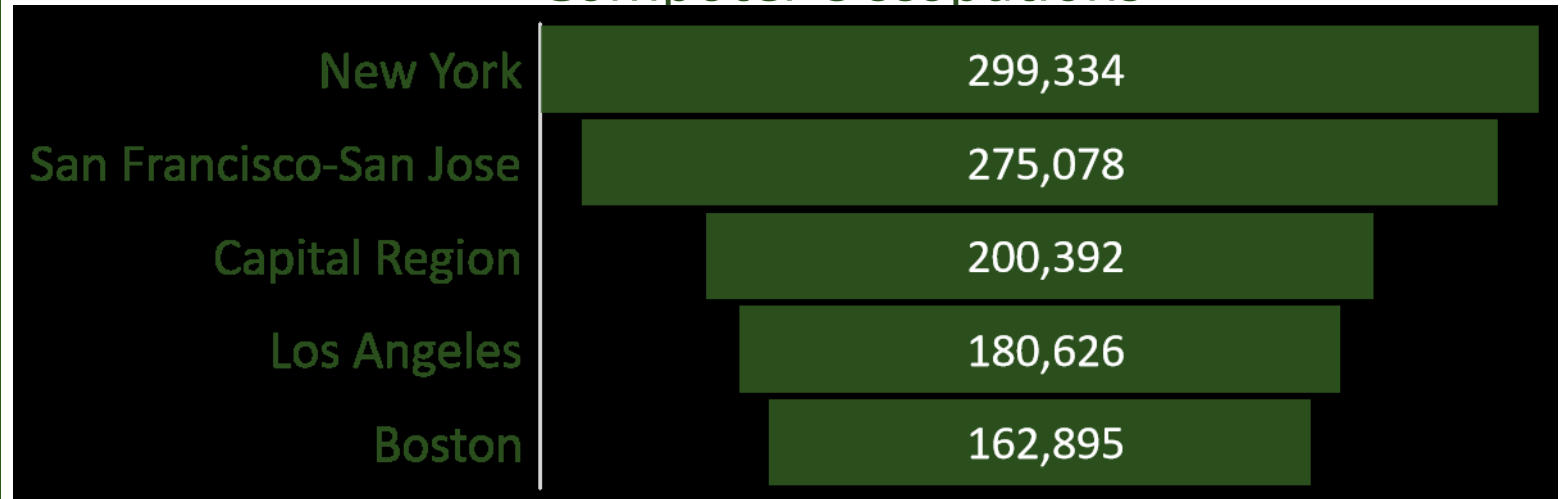


Source: Greater Washington Partnership Analysis  
of National Center for Education Statistics data

# Our Region Lags Behind in Digital Job Creation

Our region is not creating digital jobs at the same levels as competing regions

## Computer Occupations



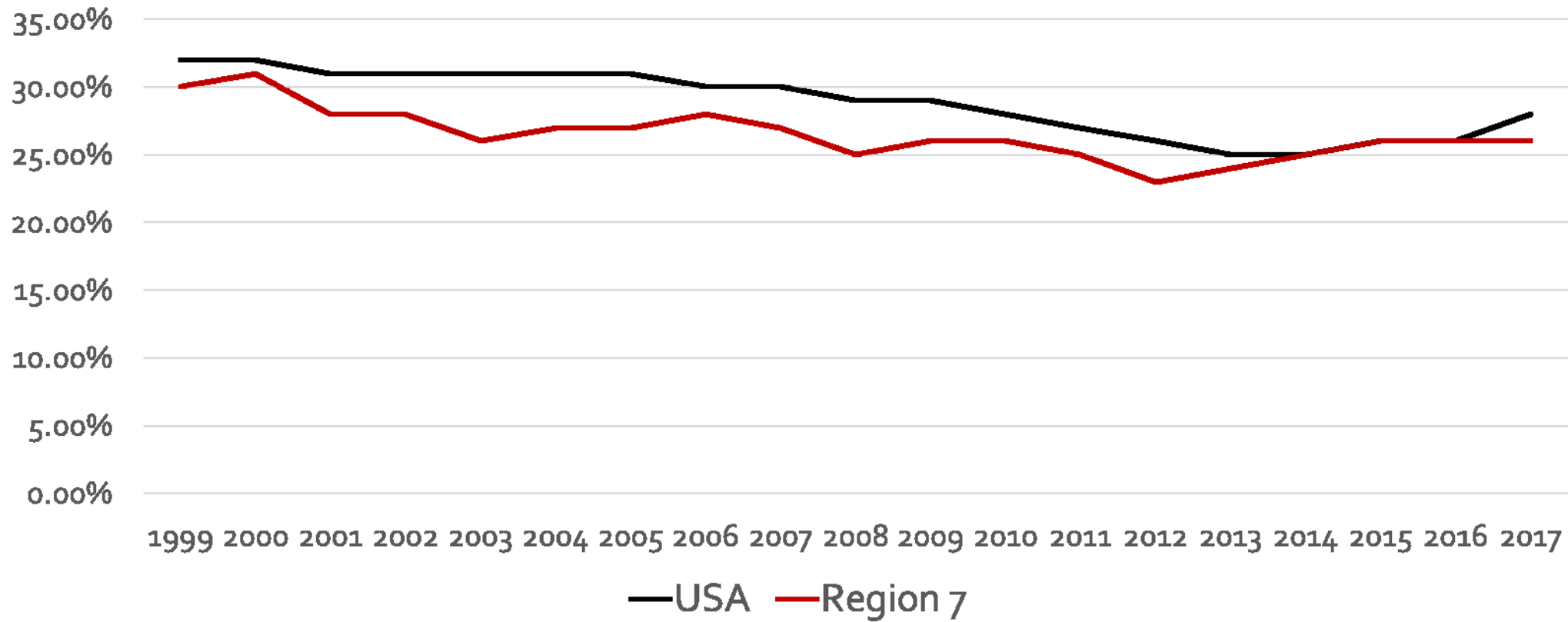
## 5 Year Job Change (3Q2019)



## Computer Occupations in Northern Virginia, July 2019

Position Title	2019 Jobs	2019 LQ	Median Earnings	Job CAGR 2012-2019	Projected Job CAGR 2019-2024 *	Current Position Openings *
Software Developers, Applications	25,078	3.11	\$113,949	4.7%	8.8%	4,489
Computer Systems Analysts	17,016	3.20	\$103,545	1.6%	4.6%	2,766
Software Developers, Systems Software	16,260	4.48	\$128,486	-2.1%	1.2%	2,426
Network and Computer Systems Admins	11,304	3.31	\$99,344	0.2%	2.0%	2,878
Information Security Analysts	10,284	9.74	\$112,559	4.9%	8.3%	2,852
Computer User Support Specialists	9,890	1.61	\$61,307	1.4%	3.8%	1,694
Computer Occupations, All Other	8,756	2.92	\$110,077	8.3%	9.5%	2,970
Computer Network Architects	6,452	4.45	\$126,227	-0.5%	3.6%	764
Computer Network Support Specialists	4,119	2.25	\$82,409	-0.9%	2.9%	312
Computer Programmers	3,907	1.78	\$98,563	-4.9%	-6.6%	1,031

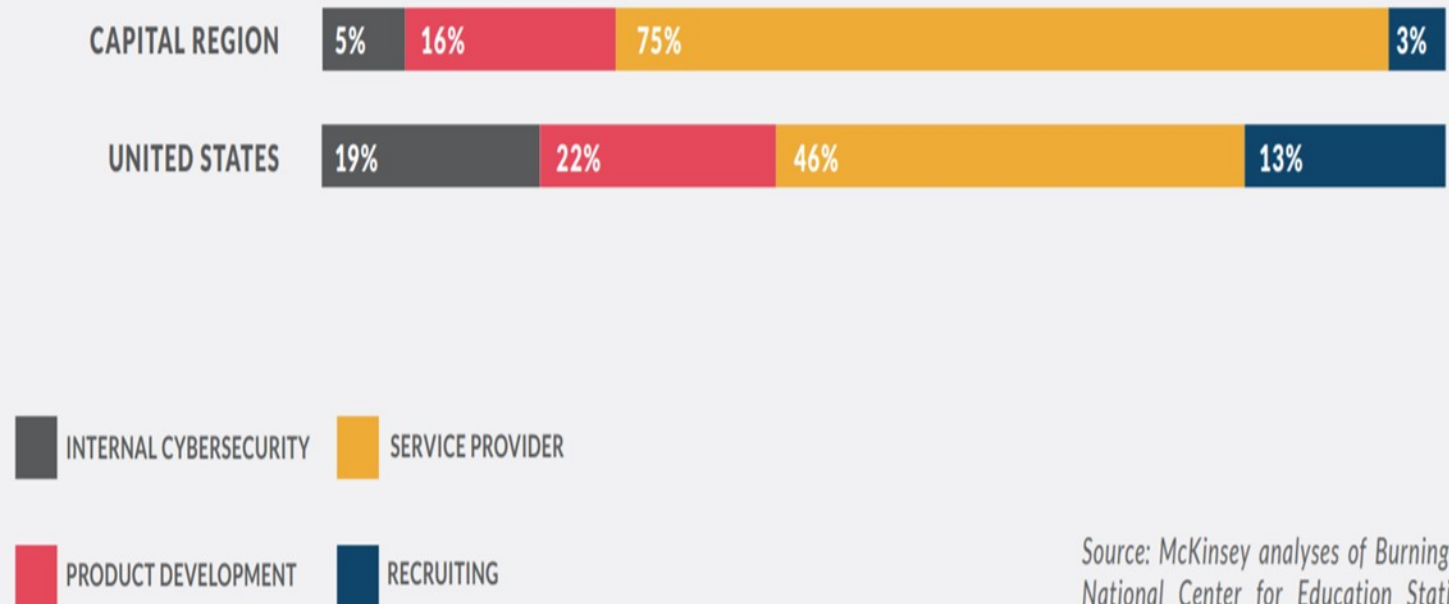
## Percent of Jobs Created by Young Firms



# Does Our Over Reliance on Services Harm Us?

Entrepreneurs and  
investors looking for “big  
wins” look elsewhere

## CYBERSECURITY JOB POSTINGS BY FUNCTION

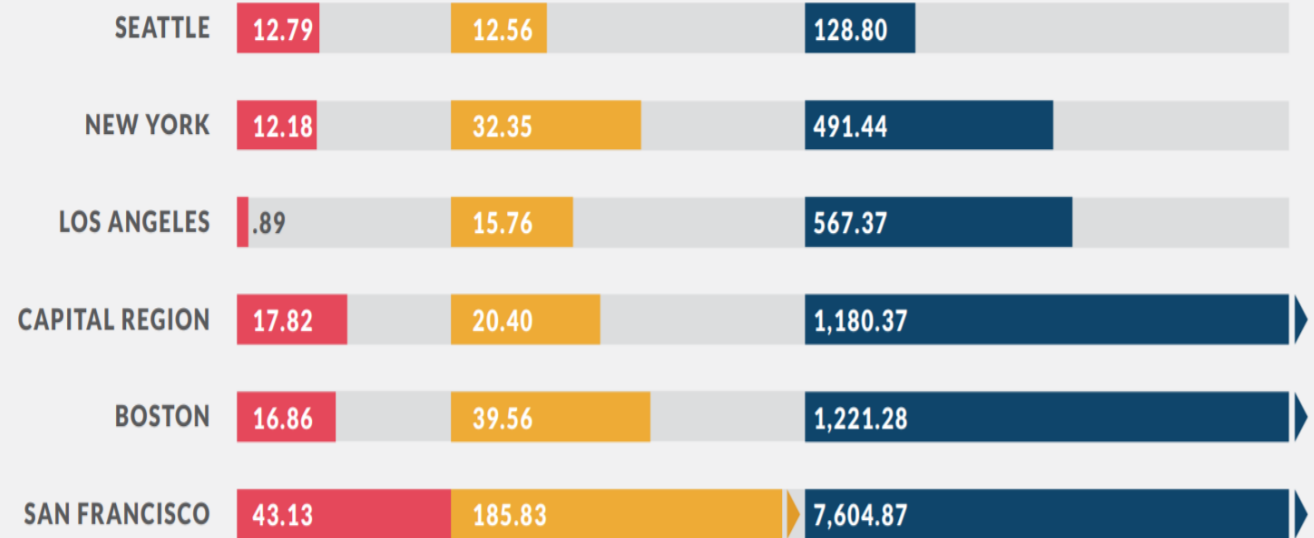


Source: McKinsey analyses of Burning Glass and  
National Center for Education Statistics data

# Follow the Money!

Venture funding is a lagging indicator, but it tells a story of a region that is not keeping up.

## TOTAL CAPITAL INVESTED IN CYBERSECURITY COMPANIES, 2010-2016



IN MILLIONS



Source: McKinsey analysis of  
PitchBook and Kaufman Index



# Follow the Workers!

Talent attraction and  
retention is just as  
important as  
development.

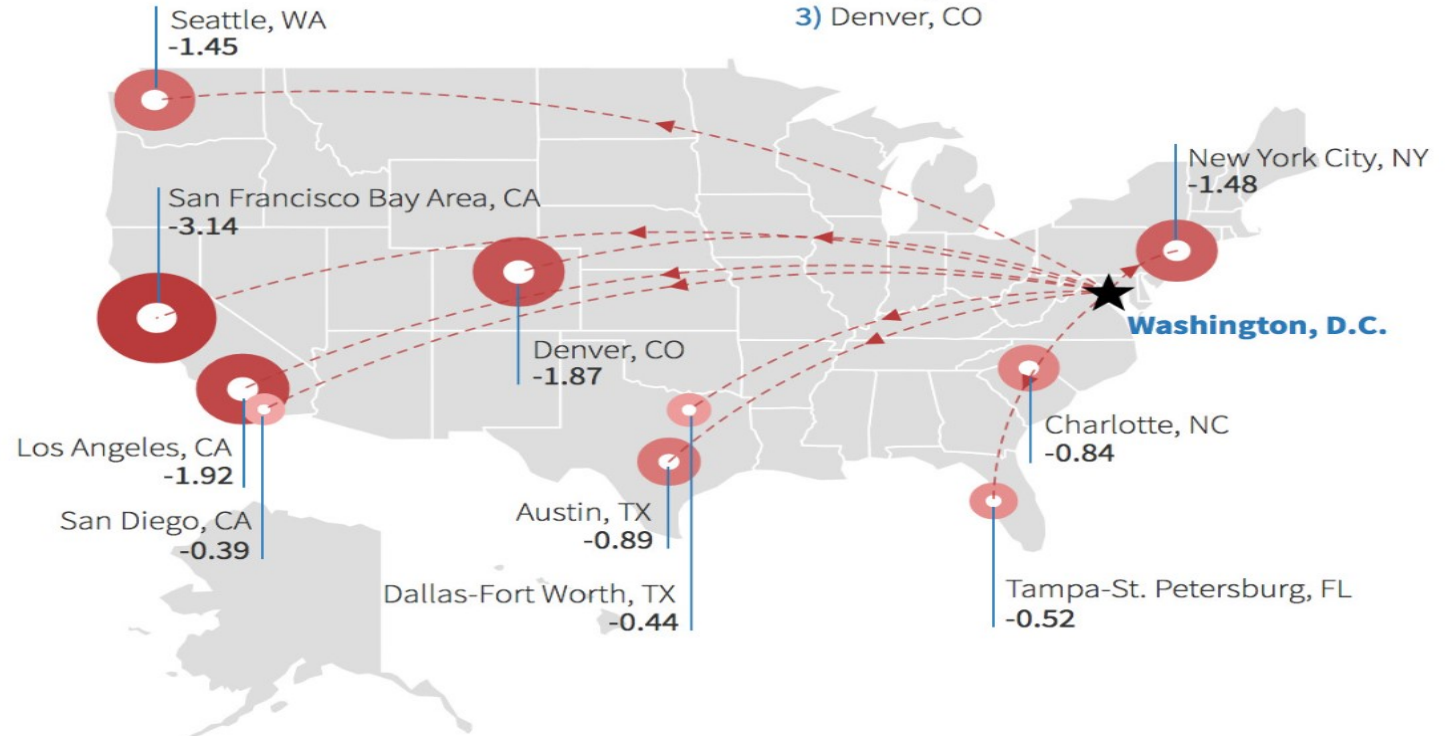
June 2019

## Cities that Washington, D.C. Has Lost the Most Workers To

Rate per 10,000 Members

### Top Three

- 1) San Francisco Bay Area, CA
- 2) Los Angeles, CA
- 3) Denver, CO



We define migration as a member changing their location on their LinkedIn profile. To develop the list of cities that Washington, D.C. lost the most workers to, we identified the cities the most LinkedIn members moved from Washington, D.C. to in the past 12 months. For every 10,000 LinkedIn members in Washington, D.C., 3.1 moved to San Francisco Bay Area in the past 12 months.

# Where Are We Most Interconnected?

Revolving door may work  
to our advantage in  
attracting talent to the  
region.

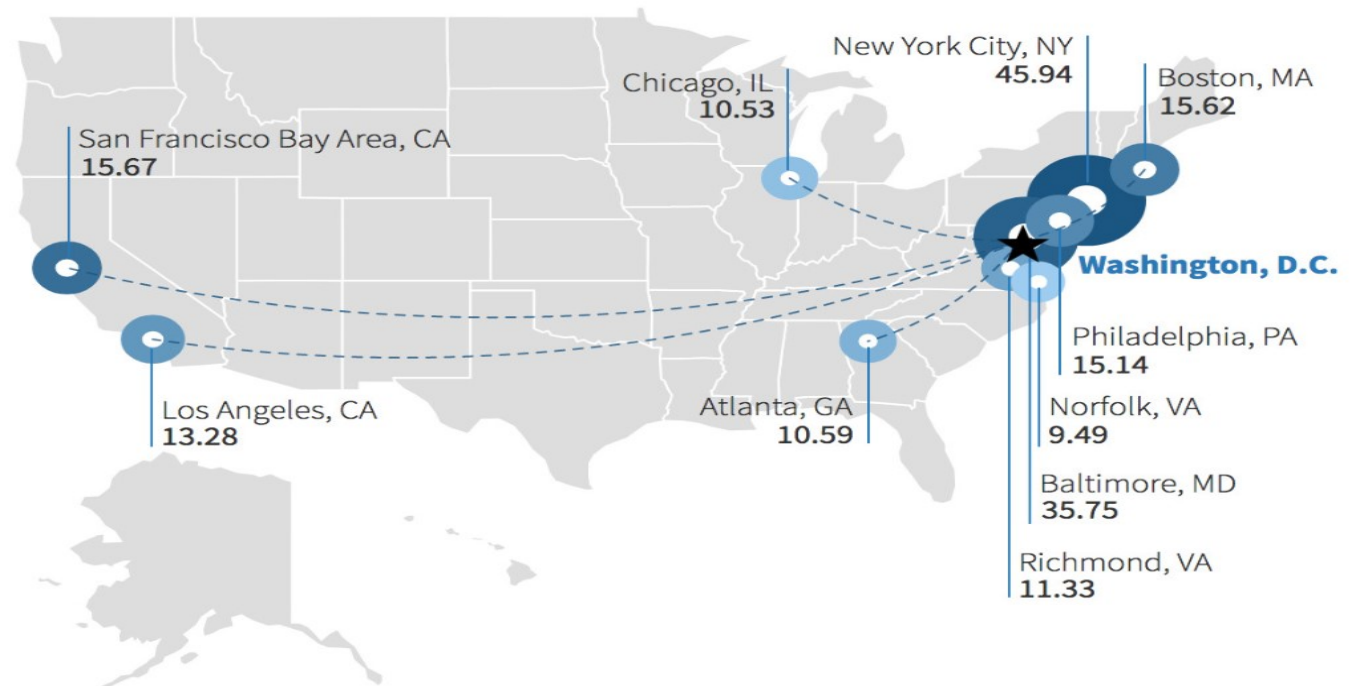
June 2019

## Cities with the Most Migration with Washington, D.C.

Rate per 10,000 Members

### Top Three

- 1) New York City, NY
- 2) Baltimore, MD
- 3) San Francisco Bay Area, CA



We define migration as a member changing their location on their LinkedIn profile. To develop the list of cities with the most migration with Washington, D.C. we identified the cities the most LinkedIn members moved to Washington, D.C. from in the past 12 months, and the cities the most LinkedIn members moved from Washington, D.C. to in the past 12 months. For every 10,000 LinkedIn members in Washington, D.C., 45.9 moved to or from New York City in the past 12 months.

# What Should We Do?

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Coordination and cooperation are essential in resourcing and effectiveness of efforts.

- Regional efforts to undertake vertical integration of labor market supply and demand.
- Teach local service innovators to become product innovators.
- Develop a shared regional vision on why this is a place where innovation occurs.
- Entry level housing (can't fix cost of land and materials, but regulatory costs can be addressed).
- Effectually activate universities in the business side of innovation.
- Resist the temptation to legislate innovation and the economy.
- Address characteristics important for Millennials – sorry Gen Xers!
- Focus on vertical integration of big and small businesses in the industries where we excel.
- Create tools to measure regional innovation attributes and progress against policy goals.

# Continue the Conversation



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