



**GREATER BALTIMORE  
INDUSTRY PROFILE**

# PROFESSIONAL, SCIENTIFIC & TECHNICAL SERVICES INDUSTRY

Greater Baltimore has become a super-cluster of both PST firms and workforce, thanks to the region's superb business climate, education assets, and entrepreneurship resources. Though Greater Baltimore finds itself on the smaller side of the 25 largest metros, its oversized concentration of PST activity makes it a major hub for technology, research, and engineering.

## THE BIG PICTURE

The professional, scientific and technical services sector employs 121,000 people in Greater Baltimore and represents some of the best paying jobs in the region. The Milken Institute ranked states on technology and science activity, and found Maryland to be the 3rd strongest state overall. Maryland was found to be particularly proficient in workforce, R&D, and technology concentration. Over the last ten years, Greater Baltimore's PST employment has grown nearly 17 percent, keeping pace with the national trend.

THE TOTAL EMPLOYMENT OF GREATER BALTIMORE PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES:

**121,000**  
— JANUARY 2017

Nearly 1 out of 10 jobs in Greater Baltimore exists within the professional scientific and technical services (PST) sector.

## 2016 STATE TECHNOLOGY AND SCIENCE INDEX

MILKEN INSTITUTE

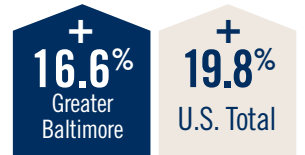
MARYLAND RANK

Technology and Science Workforce Composite Index	1
Technology Concentration and Dynamism Composite Index	1
<b>OVERALL RANKING</b>	<b>3</b>
Research and Development Inputs Composite Index	2
Human Capital Investment Composite Index	4
Risk Capital and Entrepreneurial Infrastructure Composite Index	8

## PST Employment Density: 25 Largest Metros

RANK		LQ
5	San Diego-Carlsbad	1.82
6	Houston-The Woodlands-Sugar Land	1.74
<b>7</b>	<b>Greater Baltimore</b>	<b>1.39</b>
8	Atlanta-Sandy Springs-Roswell	1.24
9	Charlotte-Concord-Gastonia	1.00

## 10 YEAR EMPLOYMENT CHANGE PST TOTAL



## STRONG SUBSECTOR ACTIVITY

Greater Baltimore is particularly strong in three of the prominent PST subsectors: engineering and architecture, computer systems design, and scientific research and development. These subsectors represent more than half of the total PST employment, and each is highly concentrated in the region compared to other metro areas.

Greater Baltimore and Washington D.C. are the only two metros within the top five for employment density of the primary PST subsectors: engineering and architecture, computer systems design, and scientific R&D.

## Engineering and Architecture Employment\*

Rank		Jobs per 1000
1	Houston-The Woodlands-Sugar Land	24
2	Denver-Aurora-Lakewood	21
<b>3</b>	<b>Greater Baltimore</b>	<b>18</b>
4	Washington-Arlington-Alexandria	17
5	San Diego-Carlsbad	16

January 2017 employment: 22,500

## ENGINEERING AND ARCHITECTURE EMPLOYMENT 10 YEAR EMPLOYMENT CHANGE



## Computer Systems Design Employment Density\*

RANK		JOBS PER 1000
1	Washington-Arlington-Alexandria	66
2	San Francisco-Oakland-Hayward	43
3	Boston-Cambridge-Newton	29
<b>4</b>	<b>Greater Baltimore</b>	<b>28</b>
5	Denver-Aurora-Lakewood	25

January 2017 employment: 33,700

## Scientific Research and Development Employment Density\*

RANK		JOBS PER 1000
1	San Diego-Carlsbad	26
2	Boston-Cambridge-Newton	20
3	San Francisco-Oakland-Hayward	19
4	Washington-Arlington-Alexandria	17
<b>5</b>	<b>Greater Baltimore</b>	<b>11</b>

January 2017 employment: 13,600

\* 25 largest Metros

## WORKFORCE

Education and workforce are substantial contributors to the success of PST in the region. Firms need high talent individuals, and a lot of them. Greater Baltimore has one of the highest rates of advanced degree holders, and the graduates of Greater Baltimore universities are highly concentrated in fields that relate directly to the region's strong PST subsector.

The Greater Baltimore workforce is specialized around PST occupations. The level of PST occupations is higher than the number of employees within the industry, meaning that the PST specializations of these individuals are being employed in other industries, bringing innovations and technologies to areas such as manufacturing and agriculture.



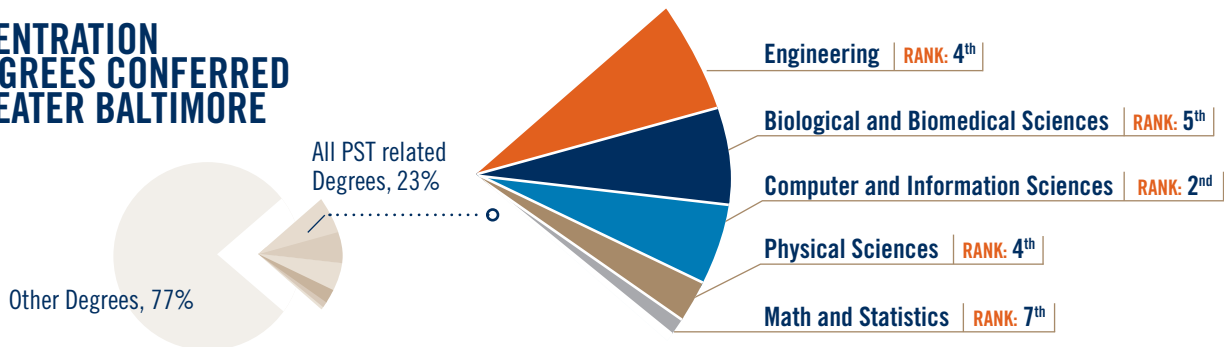
### PERCENT OF ADVANCED DEGREE HOLDERS (25 Largest MSAs)

RANK		PERCENT
1	Washington-Arlington-Alexandria	24.0%
2	Boston-Cambridge-Newton	20.8%
3	San Francisco-Oakland-Hayward	19.1%
4	<b>Greater Baltimore</b>	<b>16.9%</b>
5	New York-Newark-Jersey City	15.8%

## OCCUPATIONAL LOCATION QUOTIENTS AND RANK COMPARED WITH THE 25 LARGEST MSAs

GREATER BALTIMORE RANK	OCCUPATION	LQ
2 <sup>nd</sup>	Computer Network Support Specialists <small>(Computer Network Support Specialist LQ = 2.23x the national average employment density)</small>	2.23
3 <sup>rd</sup>	Computer and Information Research Scientists Computer Hardware Engineers	3.58 2.51
4 <sup>th</sup>	Computer Network Architects Information Security Analysts Network and Computer Systems Administrators Life Scientists(All)	2.15 1.44 1.87 1.98
5 <sup>th</sup>	Software Developers, Systems Software Web Developers	2.15 1.89
6 <sup>th</sup>	Mathematical Science Occupations (All) Electrical Engineers	1.52 1.49

## CONCENTRATION OF DEGREES CONFERRED IN GREATER BALTIMORE



## REGIONAL PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES



Booz | Allen | Hamilton



ELLIN & TUCKER  
CHARTERED

