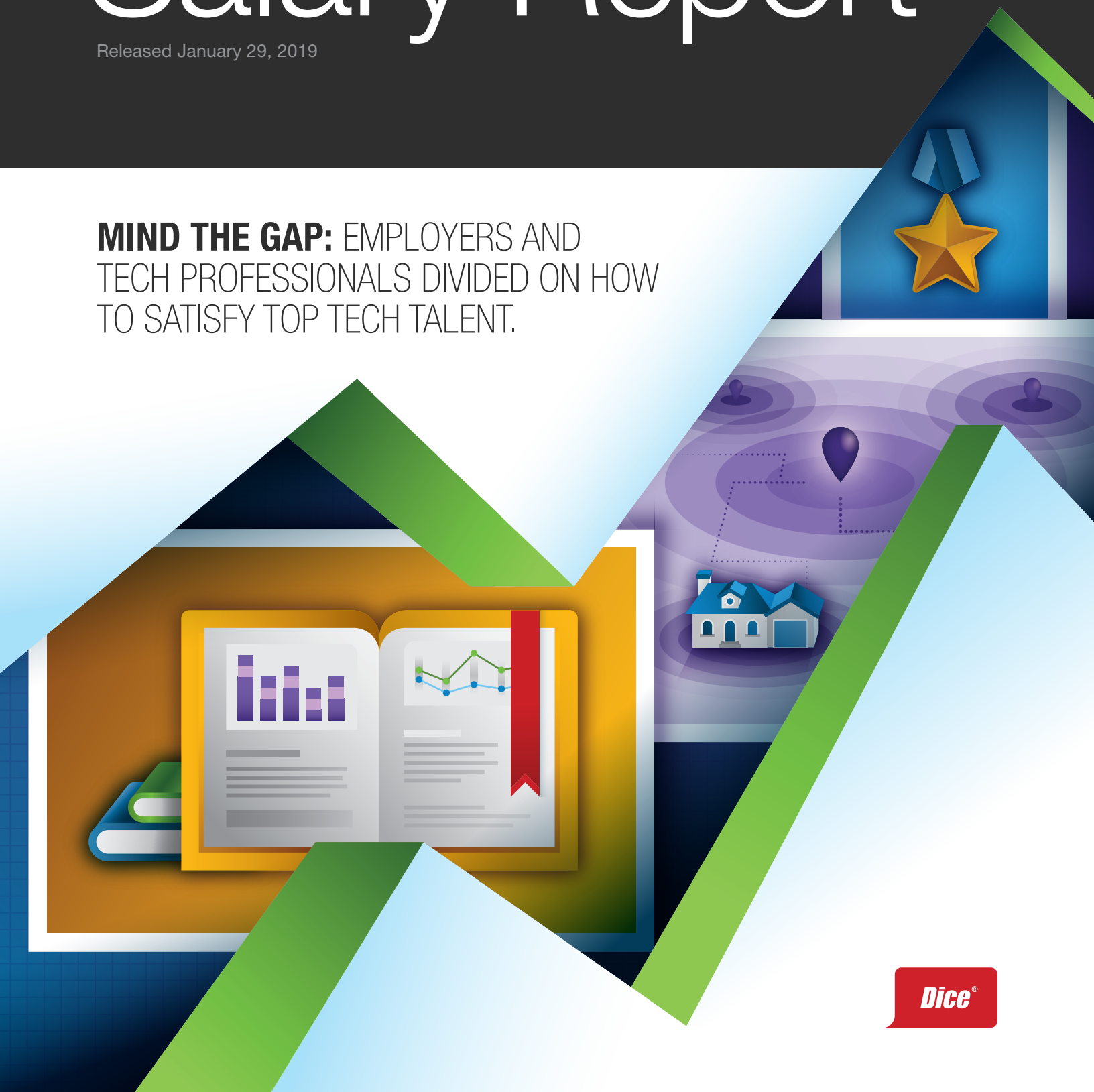
Dice 2019 Tech Salary Report

Released January 29, 2019

MIND THE GAP: EMPLOYERS AND TECH PROFESSIONALS DIVIDED ON HOW TO SATISFY TOP TECH TALENT.



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MIND THE GAP: EMPLOYERS AND TECH PROFESSIONALS DIVIDED ON HOW TO SATISFY TOP TECH TALENT

Dice's annual salary survey reveals non-salary options to improve recruitment efforts, increase retention and mitigate burnout.

Salaries for technology professionals in the United States were flat in 2018 with average annual salary of $93,244, a slight 0.6% increase from 2017. The Dice 2019 Tech Salary Report mirrors static wages in technology across the U.S., but finds compelling options beyond pay for employers looking to impress top tech talent and attract skilled candidates.

In 2018, as with previous years, when asked why they'd anticipate changing employers, the vast majority of tech professionals (68% in 2018) said they'd change employers to receive higher compensation. While this sentiment continues to trump other satisfaction factors for tech professionals, it is also clear that they are seeking more than that coveted paycheck.

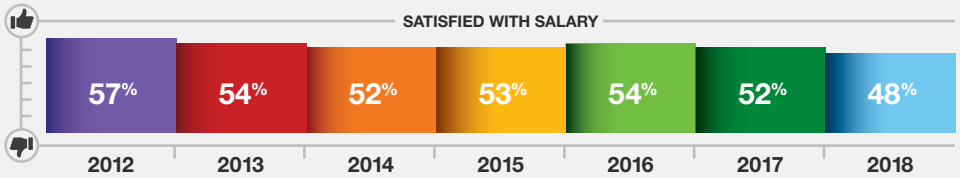
REASONS FOR CHANGING EMPLOYERS

OF THE 45% OF TECH PROFESSIONALS THAT ANTICIPATE CHANGING EMPLOYERS IN 2019, HERE'S WHY:

68%	Higher compensation	AVERAGE SALARY $80,925
47%	Better working conditions	AVERAGE SALARY $84,516
34%	More responsibility	AVERAGE SALARY $85,144
22%	Anticipate losing current position	AVERAGE SALARY $100,675
18%	Shorter commute	AVERAGE SALARY $83,751
13%	Relocation	AVERAGE SALARY $81,192

SALARY SATISFACTION

SALARY SATISFACTION HAS BEEN DECLINING.

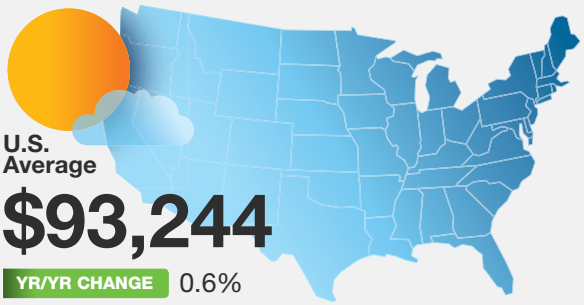


Confidence in finding a favorable new position in the next year has increased.

"Technology is an important driving force behind innovation and most every company will be a tech company at its core in the future. How we incentivize our tech talent will define our business success," shared Art Zeile, CEO of DHI Group, Inc., parent company to Dice. "As it stands now, tech pros see a gap in the benefits and perks they want and need, compared to what they receive with their current employer. This dissonance must be shored up in order for top tech employers to remain competitive in a demanding market."

47% of tech professionals said they'd change employers to seek better working conditions (non-compensation aspects like remote work, flex hours and culture), more responsibility (34%) and because they anticipate losing their current position (22%). The good news is, employers can mind the gap by offering non-salary options like training and education, flex and

SALARY BY EMPLOYMENT TYPE



U.S. Average

$93,244

YR/YR CHANGE 0.6%

Permanent (Working Directly for Company)	Contractor (Employed by Staffing Agency)	Contractor (Working Directly for Employer)
$93,013	$98,079	$94,011
YR/YR CHANGE N/A*	YR/YR CHANGE N/A*	YR/YR CHANGE N/A*

* Employment type categories were updated in the 2018 survey, therefore, yr/yr change is not available.

TOP JOB TITLES BY SALARY

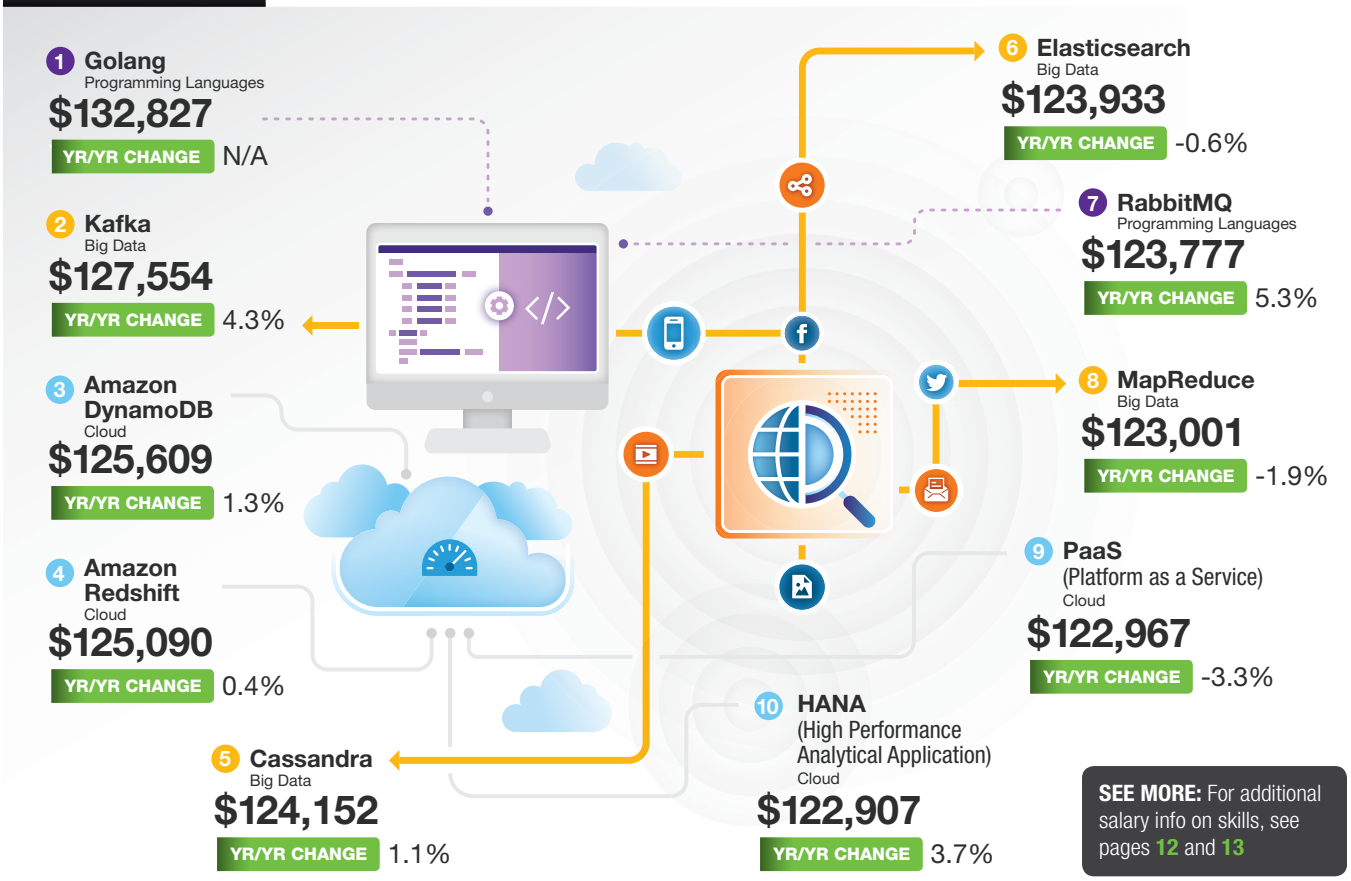
	JOB TITLE	2018	YR/YR CHANGE
1	Tech Management (CEO, CIO, CTO, VP, Dir.)	$ 142,063	3.9%
2	Systems Architect	$ 129,952	-3.8%
3	Tech Management (Strategist, Architect)	$ 127,121	8.0%
4	Product Manager	$ 114,174	-4.2%
5	DevOps Engineer	$ 111,683	N/A
6	Software Engineer	$ 110,989	5.1%
7	Hardware Engineer	$ 110,972	N/A
8	Project Manager	$ 110,925	-2.8%
9	Security Engineer	$ 110,716	N/A
10	Developer: Applications	$ 105,202	7.6%
11	Security Analyst	$ 103,597	N/A
12	Data Engineer	$ 103,596	N/A

	JOB TITLE	2018	YR/YR CHANGE
13	Database Administrator	$ 103,473	0.2%
14	QA Engineer	$ 96,762	5.2%
15	Data Scientist	$ 95,404	N/A
16	Business Analyst	$ 94,926	4.5%
17	Programmer/Analyst	$ 91,404	8.7%
18	Network Engineer	$ 88,280	2.6%
19	Web Developer/Programmer	$ 82,765	11.6%
20	Systems Administrator	$ 82,624	-0.5%
21	QA Tester	$ 71,552	-1.2%
22	Technical Support	$ 60,600	6.8%
23	Desktop Support Specialist	$ 53,346	1.9%
24	Help Desk	$ 45,709	5.5%
25	PC/Service Technician	$ 41,310	N/A

AVERAGE U.S. TECH SALARY 10-YEAR TREND

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
AVG. SALARY	AVG. SALARY	AVG. SALARY	AVG. SALARY	AVG. SALARY	AVG. SALARY	AVG. SALARY	AVG. SALARY	AVG. SALARY	AVG. SALARY
$78,845	$79,384	$81,327	$85,619	$87,526	$88,479	$93,328	$92,081	$92,712	$93,244
YR/YR CHANGE	YR/YR CHANGE	YR/YR CHANGE	YR/YR CHANGE	YR/YR CHANGE	YR/YR CHANGE	YR/YR CHANGE	YR/YR CHANGE	YR/YR CHANGE	YR/YR CHANGE
1.0%	0.7%	2.4%	5.3%	2.2%	1.1%	5.5%	-1.3%	0.7%	0.6%

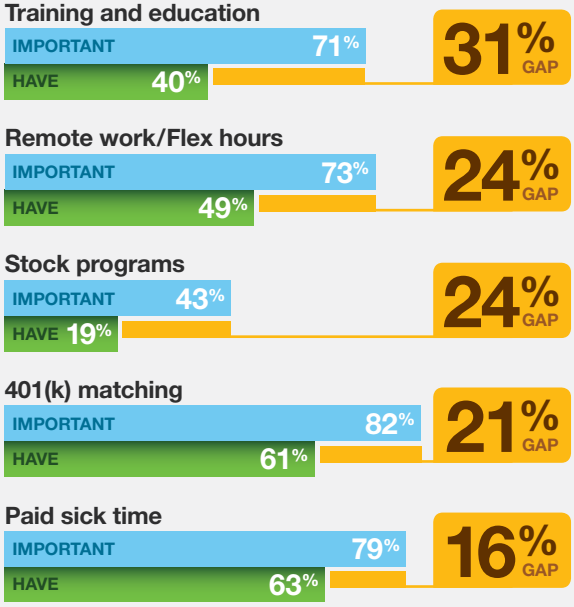
TOP 10 PAYING SKILLS



SEE MORE: For additional salary info on skills, see pages 12 and 13

MIND THE GAP

THE LARGEST DISPARITIES IN BENEFITS TECH PROS FIND IMPORTANT VS. THOSE THEY CURRENTLY HAVE.



remote options and burnout mitigation in order to recruit and retain the most coveted tech professionals.

Promote Training and Education

In 2018, 71% of tech professionals said that training and education are important to them, but only 40% currently have company-paid training and education – that's a 31% gap between what's desired and what's offered. This gap is further illustrated by the fact that far more tech professionals (45%) who are satisfied with their job receive training, while only 28% of those who are dissatisfied with their job receive training. "Offering skill-enhancing training keeps employees at the top of their game and could ease the minds of professionals wanting to feel motivated and invested," said Zeile.

Be Flexible on Remote and Flex Options

In addition to training and education, tech professionals overwhelmingly noted remote and flexible working options as important (73%). In contrast, only 49%

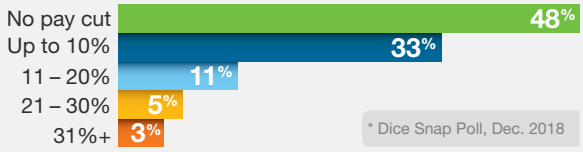
WORKING REMOTELY

HOW OFTEN WOULD YOU PREFER TO WORK REMOTELY VS. HOW OFTEN DO YOU CURRENTLY WORK REMOTELY?

	PREFER	CURRENTLY
Never	2%	23%
A few days a month	15%	26%
One day a week	19%	12%
Half of the time	20%	6%
More than half of the time, but not always	18%	6%
Always	21%	12%
Not sure/Not allowed at my company for my role	4%	17%

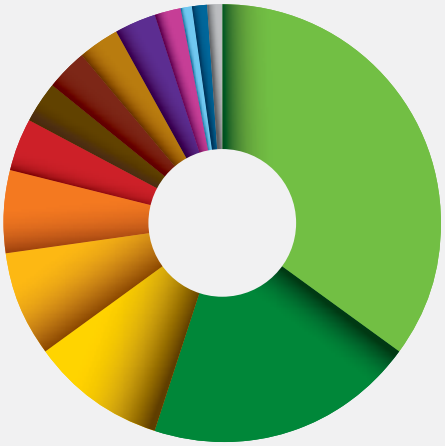
Percentages don't add up to 100% due to rounding

HOW MUCH OF A PAY CUT WOULD YOU TAKE TO WORK REMOTELY MORE OFTEN?*



* Dice Snap Poll, Dec. 2018

REASONS FOR SALARY INCREASE



35%	Merit raise	3%	Different client, contract or project
20%	Changed employers	3%	Increased bonus
10%	Internal promotion	3%	Higher commission or bill rate
8%	Cost of living	1%	Obtained certification or new skills
6%	Mandated company-wide increase	1%	More hours (overtime)
4%	Became employed (full time, first job, etc.)	1%	Counteroffer
3%	Changed work type (contractor vs. permanent)	2%	Other

currently have these options. This 24% gap is the second-largest between a desired benefit and what employers broadly are offering, which ties into overall employee satisfaction; 55% of people who said they're satisfied at their job have remote and flex options, whereas only 33% (who are said they're dissatisfied with their job) have the benefit.

In terms of how often professionals want to work remotely, while 98% of Dice respondents said they'd prefer to work remotely at least some of the time, only 62% are currently offered this option by their employer. Employers who provide remote and flex options, even part of the time, have a better opportunity to stand out from competitors vying for the same tech talent.

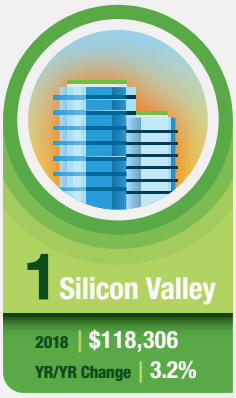
Mitigate Burnout

Lack of recognition (36%), workload (35%) and lack of challenge or monotony (28%) result in tech professional burnout. 81% of tech pros reported feeling burnt out in 2018, with a surprising 35% feeling the highest levels of burnout.

Those tech professionals who said they are dissatisfied with their jobs even more cite lack of recognition (39%) as the number one reason they're burnt out. Only 2% of overall respondents reported that high level recognition was a primary motivator provided by their employer in 2018, illustrating another gap opportunity for employers to close.

Another contributing factor to burnout is the desire for more responsibility and more interesting/challenging work. In fact, 34% of tech professionals said they'd change employers to receive more responsibility. Only 10% of respondents said they were provided more interesting/challenging work in 2018 as a primary motivator by their employer, which remains flat year/year.

TOP TECH METROS BY SALARY



1 Silicon Valley

2018 | $118,306
YR/YR Change | 3.2%

2 Seattle

2018 | $105,059
YR/YR Change | 5.7%

3 San Diego

2018 | $103,846
YR/YR Change | 2.8%

4 Minneapolis

2018 | $103,271
YR/YR Change | 6.5%

5 Boston

2018 | $103,106
YR/YR Change | -2.1%

	METRO	2018	YR/YR CHANGE
6	D.C./Baltimore	$101,235	1.3%
7	Portland	$101,019	10.8%
8	New York	$100,616	-3.2%
9	Tampa	$ 96,777	11.8%
10	Denver	$ 96,258	1.7%
11	Los Angeles	$ 96,203	-3.0%
12	Philadelphia	$ 93,340	-4.2%

	METRO	2018	YR/YR CHANGE
13	Chicago	$ 92,300	-0.8%
14	Phoenix	$ 92,246	2.8%
15	Houston	$ 91,591	1.5%
16	Austin	$ 91,382	1.3%
17	Raleigh	$ 91,103	5.2%
18	Charlotte	$ 90,358	-2.3%
19	Dallas	$ 89,779	-5.7%

	METRO	2018	YR/YR CHANGE
20	Detroit	$ 89,619	8.1%
21	Orlando	$ 88,133	8.4%
22	St. Louis	$ 86,206	6.4%
23	Atlanta	$ 85,920	-7.3%
24	Miami	$ 80,493	-6.7%

TOP TECH METROS BY SALARY ADJUSTED FOR COST OF LIVING

WHERE DO TECH SALARIES GO THE FURTHEST? AVERAGE SALARIES ADJUSTED FOR LOCAL COST OF LIVING.

1 Minneapolis

Adjusted Salary
$100,949

2 Portland

Adjusted Salary
$99,330

3 Tampa

Adjusted Salary
$96,971

4 Charlotte

Adjusted Salary
$96,640

5 Seattle

Adjusted Salary
$95,076

	METRO	ADJUSTED SALARY
6	Phoenix	$ 95,001
7	Raleigh	$ 94,998
8	St. Louis	$ 94,941
9	Detroit	$ 93,451
10	Silicon Valley	$ 93,081
11	Boston	$ 92,805
12	Austin	$ 91,382

	METRO	ADJUSTED SALARY
13	Denver	$ 90,809
14	Houston	$ 90,148
15	Orlando	$ 89,932
16	Dallas	$ 89,600
17	San Diego	$ 89,291
18	Atlanta	$ 89,222
19	Chicago	$ 88,921

	METRO	ADJUSTED SALARY
20	Philadelphia	$ 88,140
21	D.C./Baltimore	$ 85,000
22	New York	$ 82,472
23	Los Angeles	$ 81,735
24	Miami	$ 74,808

Cost of living adjustment data sourced from U.S. Bureau of Economic Analysis.

IT'S NOT ONLY ABOUT MONEY

70% of tech professionals would take the same job with a different company for as little as a 15% salary increase. Offering programs that boost job satisfaction may be just as important as hard cash to attract and retain talent.

WHY TECH PROS WANT TO FIND A NEW JOB

Salary isn't the only reason tech professionals plan on changing jobs. Employers can control work-life balance programs and offer more challenging work.

68%
SEEKING HIGHER SALARY

47%
SEEKING BETTER WORKING CONDITIONS

34%
SEEKING MORE RESPONSIBILITY

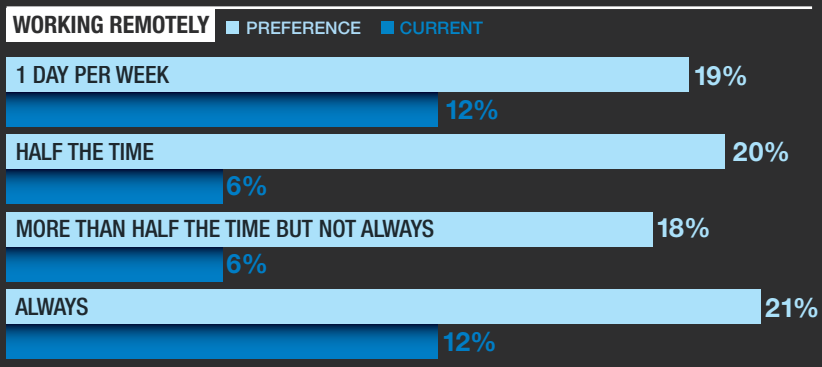
BENEFITS AND BURNOUT

LOOK BEYOND SALARY TO ATTRACT AND RETAIN TECH TALENT

FLEX

52% of tech pros would take a pay cut to work remote more often.

Tech professionals want more remote work opportunities. Flexibility on remote work shows an employer's commitment to the well-being of its talent.



TRAINING

30% of those without certifications say their employers don't pay or allow time for them.

Tech professionals want to keep their skills fresh. Offering training and paying for certifications show an employer's willingness to invest in its talent.

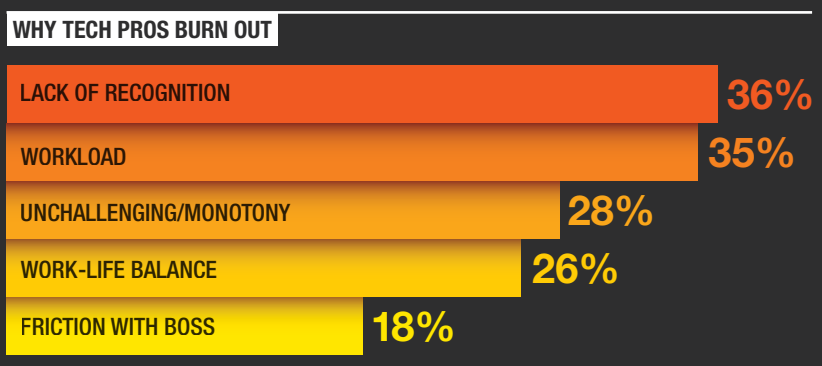
71%
BELIEVE EDUCATION AND TRAINING BENEFITS ARE IMPORTANT

40%
CURRENTLY RECEIVE EDUCATION AND TRAINING BENEFITS

BURNOUT

35% of tech pros say they are very burnt out.

Tech professionals are burnt out. Offering meaningful recognition, educational and remote work programs can help counter some of these top issues.



MANAGING YOUR TEAMS WELL IS KEY TO WINNING (AND KEEPING) TECH TALENT

The tech industry's notably low unemployment rate has created some issues for employers, especially when it comes to locking down highly specialized tech talent. Simply put, there aren't enough machine-learning specialists and IT security experts (to name two particularly in-demand roles) to go around.

With that in mind, what's the best way for employers to attract and retain tech talent, beyond simply offering more money? The answer, in broadest terms, is straightforward: manage your teams well. Among those tech professionals who anticipate changing employers this year, some 68% indicated that they would do so to secure higher compensation — just ahead of those interested in better working conditions (47%) and more responsibility (34%).

In addition to fears over losing their current position or finding a job that matched their skill-set, tech professionals also expressed concern over keeping

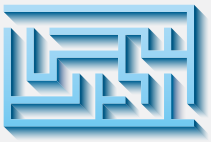
MOTIVATORS

WHAT WAS THE PRIMARY MOTIVATOR YOUR EMPLOYER PROVIDED YOU IN 2018?

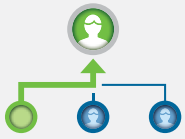
17% Increased compensation

15% Flexible work location/work remote

10% Flexible work hours



10% More interesting or challenging work

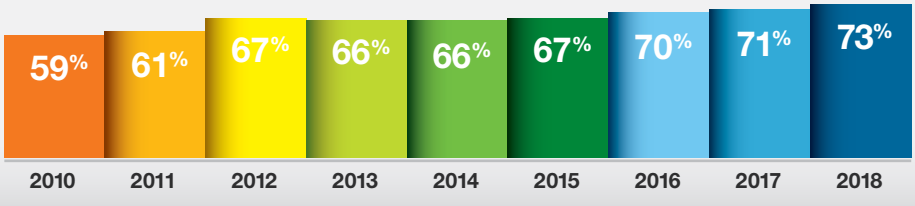


4% Promotion or new title

3% Training and certification courses

2% High-level recognition

PERCENTAGE OF EMPLOYERS PROVIDING MOTIVATORS TO RETAIN TALENT.



their skills up-to-date, not getting promoted and increased workloads. When they suffer burnout, they blame a lack of interesting work and high-level recognition (among other reasons).

Taken individually, these fears and desires seem like a pretty diverse group. However, they all share one thing in common: managers can affect all of them. For example, a team leader can identify which tech staff crave more responsibility, and ensure they're properly stimulated with new projects; at the same time, they can ensure that any stressed-out members of the team have an adjusted workload or more interesting work.

Training and Certification: A Key Differentiator (for Some)

Many tech professionals want training and certification courses. For employers, the benefits of offering education are twofold: Not only does it make employees happier and more skilled, but it creates an in-house pool of talent that might otherwise prove difficult to recruit from the outside.

Those employees who expressed satisfaction with their employer were more likely to have training opportunities than those who weren't satisfied, Dice's Salary Survey found. Yet employers generally didn't seem to prize this "perk" as highly; although some 71% of tech professionals rated training and education as "important," only 40% said they had access to educational opportunities through their employer (a 31% gap). While company access to remote work and flexible schedules, stock programs, 401(k) participation and paid sick leave all lagged well behind the percentage of tech professionals who thought such things were important, educational opportunities represented the largest such gap.

Employers aren't using training as a motivator either. Of the tech professionals who were offered some kind of motivator by their employers in 2018, training and certification ranked sixth (at 3%), behind increased compensation, working remotely, flexible hours, more challenging work and promotions.

The Challenges of Training

It's easy to see why the concept of educating tech professionals could intimidate some employers — training can seem like a huge, long-term investment

CERTIFICATIONS

DO YOU HAVE A CERTIFICATION?

NEARLY HALF OF TECH PROFESSIONALS HAVE A CERTIFICATION, BUT OF THOSE WHO DON'T, 30% CITE TIME CONSTRAINTS OR THAT THEIR EMPLOYER DOESN'T PAY FOR THEM.

with an uncertain payoff. But no matter their size or resources, most employers can figure out a way to meet employees' needs on that front. For example, some companies may opt to hire instructors to teach certain skills within the office, while others might contract with an online-learning institution to tutor a specific team on specialized technology. There's the option to pay for individuals' classes, as well as their certifications.

That's not to say that every tech professional wants a certification. Over half told Dice they don't have any certifications. Most of those without certifications (45%) said they were not needed for their role. Some 16% said they didn't think certifications would be valuable. But 15% said their company didn't pay for certifications, and 15% said they didn't have the time to earn one; that's a significant percentage of employees potentially open to obtaining this benefit, which in turn might boost their morale and, ultimately, their retention rates.

There's a lot of uncertainty in tech. A company riding high on a great product can just as quickly find its fortunes dashed by a competitor; a recession can squeeze off venture funding; or a manager could lose out on the hire who could revitalize a team. Fortunately, it's clear that the things employees care about are often within the employers' purview to actually control — provided managers listen and respond appropriately.

TOP-PAYING TECH SKILLS AND EXPERIENCE

SKILL	2018	YR/YR CHANGE
Golang	$ 132,827	N/A
Kafka	$ 127,554	4.3%
Amazon DynamoDB	$ 125,609	1.3%
Amazon Redshift	$ 125,090	0.4%
Cassandra	$ 124,152	1.1%
Elasticsearch	$ 123,933	-0.6%
RabbitMQ	$ 123,777	5.3%
MapReduce	$ 123,001	-1.9%
PaaS (Platform as a Service)	$ 122,967	-3.3%
HANA (High Performance Analytical Application)	$ 122,907	3.7%
Cloudera	$ 122,753	-1.2%
Amazon Redis	$ 122,592	4.4%
NoSQL	$ 122,504	5.8%
Solr	$ 122,447	2.7%
SOA (Service Oriented Architecture)	$ 122,312	-0.7%
CMMI	$ 120,946	-2.4%
HBase	$ 120,823	2.3%
Artificial Intelligence	$ 120,709	N/A
Containers	$ 120,311	N/A
Amazon Route 53	$ 120,091	1.0%
Zookeeper	$ 120,007	3.6%
Hadoop	$ 119,864	1.1%
JUnit	$ 118,956	5.0%
Gradle	$ 118,819	7.6%
JDBC (Java Database Connectivity)	$ 118,694	2.3%
Docker	$ 118,651	2.4%
SOX (Sarbanes Oxley)	$ 118,543	-1.0%
Mockito	$ 118,198	5.9%
PMBok (Project Management Body of Knowledge)	$ 118,165	-3.3%
Vagrant	$ 118,144	6.5%
Puppet	$ 117,632	9.1%
Informatica	$ 117,411	0.8%
Hive	$ 117,363	1.1%
Cloud Foundry	$ 117,224	-3.2%
Jenkins	$ 117,160	3.7%
RDBMS (Relational Database Management System)	$ 116,910	6.7%
Big Data	$ 116,093	0.2%
Teradata	$ 115,752	4.5%
Sybase	$ 115,642	-1.3%
Postgres	$ 115,615	5.5%
XSLT (Extensible Stylesheet Language Transformations)	$ 115,327	2.4%
Kanban	$ 115,239	1.2%
Confluence	$ 115,142	4.3%
EMC Documentum	$ 115,120	-3.4%
IaaS (Infrastructure as a Service)	$ 114,884	-6.3%
ISO 27000	$ 114,832	-7.1%
TOAD (Tool for Application Development)	$ 114,742	4.5%
Korn Shell	$ 114,718	0.3%
Ansible	$ 114,431	4.1%
JBoss	$ 114,380	2.6%
Waterfall	$ 114,300	0.4%
REST (Representational State Transfer)	$ 114,136	4.4%

SKILL	2018	YR/YR CHANGE
JDE (JD Edwards)	$ 114,002	4.9%
Change Management	$ 113,925	1.5%
Scrum	$ 113,699	2.2%
Splunk	$ 113,690	-0.8%
Rally	$ 113,543	2.2%
Amazon CloudFront	$ 113,459	-0.8%
Spark	$ 113,291	-1.1%
ETL (Extract, Transform and Load)	$ 113,259	0.1%
Machine Learning	$ 113,093	N/A
Groovy	$ 113,009	1.9%
ETL Testing	$ 112,750	0.3%
JMeter	$ 112,740	3.6%
SDLC (System Development Life Cycle)	$ 112,732	-0.4%
Mongo DB	$ 112,572	4.6%
FCoE (Fibre Channel Over Ethernet)	$ 112,527	0.8%
Jetty	$ 112,507	-5.6%
LoadRunner Tutorial	$ 112,397	-4.7%
Amazon S3/AWS (Simple Cloud Storage Service)	$ 112,354	1.6%
NUnit	$ 112,344	N/A
Lean	$ 112,277	-1.8%
NumPy	$ 112,181	6.3%
JIRA	$ 111,781	2.9%
MicroStrategy	$ 111,577	-4.3%
UML (Unified Modeling Language)	$ 111,501	-2.0%
JAX-RS (Java API RestFUL Services)	$ 111,447	-2.8%
Oozie	$ 111,353	-0.5%
OpenStack	$ 111,232	-3.9%
Pure Storage	$ 111,171	-8.7%
Agile	$ 111,131	1.6%
Tomcat	$ 111,116	1.0%
Balsamiq	$ 110,900	0.6%
Weblogic	$ 110,828	-1.0%
Nginx	$ 110,793	1.7%
Perl	$ 110,678	-2.7%
Chef	$ 110,599	-3.1%
Angular	$ 110,505	7.1%
Load Balancers	$ 110,395	-1.2%
Business Intelligence	$ 110,249	2.2%
Solaris	$ 110,127	-4.5%
Hibernate	$ 109,872	0.3%
Spring Framework	$ 109,701	N/A
MariaDB	$ 109,672	7.3%
Shell	$ 109,518	4.0%
GIT	$ 109,484	N/A
EMC	$ 109,419	-4.2%
Cognos	$ 109,419	-1.0%
Agile Testing	$ 109,415	2.7%
SOAP	$ 109,389	1.4%
Websphere	$ 109,389	0.0%
Selenium	$ 109,210	4.5%
SoapUI	$ 109,123	3.4%
Oracle eBusiness	$ 108,986	1.1%

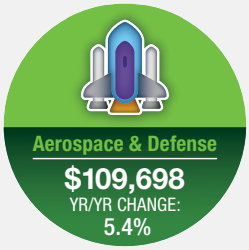
SKILL	2018	YR/YR CHANGE
ERP	$ 108,924	0.0%
Cucumber	$ 108,773	3.2%
Cloud Computing	$ 108,449	-2.1%
Fibre Channel	$ 108,412	-3.1%
ITIL (Information Technology Infrastructure Library)	$ 108,388	-1.1%
JSON	$ 108,379	4.2%
JSP (JavaServer Pages)	$ 108,304	0.8%
Data Warehouse	$ 108,270	-0.9%
Disaster Recovery	$ 108,239	-0.2%
SaaS (Software as a Service)	$ 108,165	0.4%
BASH (Bourne Again Shell)	$ 108,034	1.7%
R	$ 107,873	1.8%
XAML (eXtensible Application Markup Language)	$ 107,842	2.2%
SSIS (SQL Server Integration Services)	$ 107,805	N/A
AIX (Advanced Interactive eXecutive)	$ 107,666	-4.4%
Lucidchart	$ 107,578	4.3%
NetApp	$ 107,408	-5.7%
Microsoft Team Foundation Server	$ 107,308	3.7%
Omnigraffle	$ 107,061	-12.1%
WCF (Windows Communication Foundation)	$ 106,798	-0.8%
Tableau	$ 106,737	-0.5%
DB2	$ 106,599	0.1%
Hitachi	$ 106,421	-6.4%
BABOK (Business Analysis Body of Knowledge)	$ 106,281	0.3%
Data Science	$ 106,008	-2.1%
MPLS (Multi Protocol Label Switching)	$ 105,863	-1.4%
HL7 (Health Level 7)	$ 105,829	0.0%
Six Sigma	$ 105,794	-1.5%
Oracle DB	$ 105,747	-0.8%
Linux	$ 105,568	2.7%
PCI (Payment Card Industry)	$ 105,479	-4.8%
Node.js	$ 105,418	3.7%
Unix	$ 105,267	-0.5%
ALM/Quality Center (Application Lifecycle Mgmt.)	$ 105,217	-2.6%
Java/J2EE	$ 105,164	2.6%
Rackspace	$ 104,782	-7.1%
XML (eXtensible Markup Language)	$ 104,713	1.6%
Blockchain	$ 104,634	N/A
SAN (Storage Area Network)	$ 104,509	0.0%
EDI (Electronic Data Interchange)	$ 104,463	-6.6%
Fortran	$ 104,430	-7.4%
ReactJS	$ 104,418	N/A
Azure	$ 104,349	-1.8%
C	$ 104,247	-3.0%
3Par	$ 104,121	-9.3%
Test Management	$ 104,045	-3.4%
IIS (Internet Information Systems)	$ 104,032	2.3%
SDN (Software Defined Network)	$ 103,947	-9.6%
Informix	$ 103,844	-10.7%
Apache Web Server	$ 103,826	0.4%
TypeScript	$ 103,680	1.7%
Python	$ 103,587	0.4%
Augmented Reality	$ 103,551	N/A
Visio	$ 103,531	-1.3%

SKILL	2018	YR/YR CHANGE
Workday	$ 103,322	-2.1%
Siebel	$ 103,301	-5.1%
BugZilla	$ 103,160	-5.1%
SQLite	$ 103,153	3.7%
T-SQL (Transact SQL)	$ 103,090	0.1%
Unified Communication	$ 103,046	-5.3%
Manual Testing	$ 103,039	0.2%
z/OS	$ 103,005	-1.2%
ServiceNow	$ 102,960	N/A
Virtualization	$ 102,818	-1.2%
Compellent	$ 102,616	-6.2%
Ajax	$ 102,554	2.2%
BMC Remedy	$ 102,353	0.3%
Matlab	$ 102,198	6.7%
Tivoli	$ 102,172	-3.9%
QA (Quality Assurance)	$ 102,088	-0.2%
Ruby	$ 102,086	-1.2%
Database Testing	$ 102,013	-3.6%
VMWare ESXi (Elastic Sky X Integrated)	$ 102,006	1.3%
Data Analysis	$ 101,989	-0.2%
Telepresence	$ 101,823	-1.6%
Swift	$ 101,631	3.2%
Wan Opt	$ 101,622	-3.6%
MS SQL	$ 101,614	0.1%
C#	$ 101,566	1.8%
Glassfish	$ 101,538	-5.2%
Salesforce.com	$ 101,499	-1.5%
SAP	$ 101,388	-4.6%
Heroku	$ 101,376	7.8%
SQL	$ 101,120	1.3%
CPOE (Computerized Physician Order Entry)	$ 100,816	N/A
Sun	$ 100,745	-8.6%
Juniper	$ 100,697	1.0%
Objective-C	$ 100,684	-7.5%
Box	$ 100,669	3.0%
QTP (QuickTest Professional)	$ 100,631	-3.1%
NAS (Network-Attached Storage)	$ 100,608	0.3%
HIPAA (Health Insurance Portability and Accountability Act)	$ 100,539	1.2%
Snagit	$ 100,325	0.0%
CRM (Customer Relationship Management)	$ 100,317	-2.8%
VBA (Visual Basic for Applications)	$ 100,233	2.5%
vCloud	$ 100,218	-2.9%
Web App Firewall	$ 100,078	-1.4%
MySQL	$ 100,040	1.1%
HP ALM (Application Lifecycle Management)	$ 99,996	-0.1%
SQL Server	$ 99,768	1.0%
Cyber Security	$ 99,746	0.9%
KVM (Kernal-based Virtual Machine)	$ 99,711	-4.0%
Metro Ethernet	$ 99,675	-1.8%
FreeBSD	$ 99,665	-3.3%
Mobile Testing	$ 99,498	2.4%
IBM Mainframe	$ 99,449	-4.9%
Infosphere Data Stage	$ 99,424	-8.7%
VSAM (Virtual Storage Access Method)	$ 99,215	-9.3%

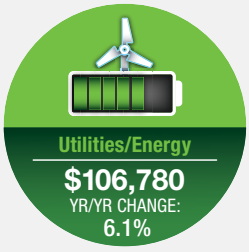
NOTE: Several new tech skills were added to the 2018 survey, therefore, yr/yr change is not available.

TOP INDUSTRIES BY SALARY

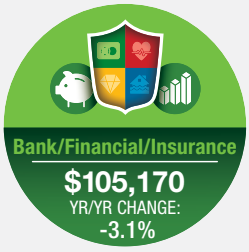
$100,000+



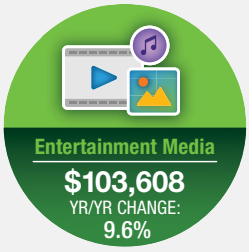
Aerospace & Defense
$109,698
YR/YR CHANGE: 5.4%



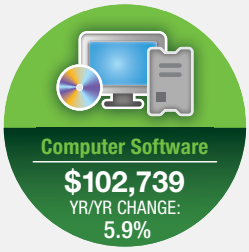
Utilities/Energy
$106,780
YR/YR CHANGE: 6.1%



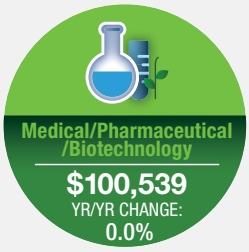
Bank/Financial/Insurance
$105,170
YR/YR CHANGE: -3.1%



Entertainment Media
$103,608
YR/YR CHANGE: 9.6%



Computer Software
$102,739
YR/YR CHANGE: 5.9%



Medical/Pharmaceutical /Biotechnology
$100,539
YR/YR CHANGE: 0.0%

$90,000+

Professional Services
$99,466
YR/YR CHANGE: -0.3%

Telecommunications
$97,702
YR/YR CHANGE: 2.5%

Computer Hardware
$96,309
YR/YR CHANGE: 0.0%

Government
$92,135
YR/YR CHANGE: -1.3%

$80,000+

Manufacturing
$91,634
YR/YR CHANGE: 1.3%

Healthcare Providers
$91,562
YR/YR CHANGE: 3.6%

Consumer Products
$88,476
YR/YR CHANGE: -7.3%

Internet Services
$88,238
YR/YR CHANGE: -2.3%

$70,000+

Retail/ E-Commerce
$80,580
YR/YR CHANGE: -4.4%

Marketing/ Advertising
$80,320
YR/YR CHANGE: -3.8%

Transportation/ Logistics
$78,162
YR/YR CHANGE: -9.6%

Distributor/ Wholesale
$76,716
YR/YR CHANGE: -4.2%

$60,000+

Construction/ Home Building
$74,547
YR/YR CHANGE: N/A

Hospitality/ Travel
$73,859
YR/YR CHANGE: -9.2%

Non-Profit
$71,911
YR/YR CHANGE: -3.1%

Education
$68,586
YR/YR CHANGE: -2.2%

SALARY BY STATE

STATE	2018	YR/YR CHANGE	STATE	2018	YR/YR CHANGE	STATE	2018	YR/YR CHANGE	STATE	2018	YR/YR CHANGE
AL*	$ 86,071	12.8%	IL	$ 92,447	1.4%	MT*	$ 69,582	-8.8%	RI*	$ 78,285	5.4%
AK*	$160,528	71.1%	IN	$ 83,773	9.8%	NE*	$ 82,284	-6.5%	SC	$ 85,306	6.6%
AZ	$ 90,704	0.1%	IA*	$ 78,483	-10.0%	NV*	$ 96,225	24.3%	SD*	$ 62,544	20.5%
AR*	$ 78,504	-8.2%	KS*	$ 80,187	-3.2%	NH*	$106,357	19.3%	TN	$ 89,722	13.1%
CA	$105,953	1.4%	KY*	$ 77,490	-4.0%	NJ	$101,459	2.9%	TX	$ 89,277	-1.4%
CO	$ 95,543	1.0%	LA*	$ 82,203	2.3%	NM*	$ 92,905	0.2%	UT	$ 82,323	-5.4%
CT	$ 89,796	-9.1%	ME*	$ 67,907	-12.1%	NY	$ 98,219	-6.6%	VT*	$ 82,616	0.4%
DE*	$ 86,838	-22.6%	MD	$ 94,015	-5.5%	NC	$ 89,555	5.6%	VA	$101,935	4.4%
DC	$102,394	7.2%	MA	$103,260	-2.6%	ND*	$ 84,909	7.3%	WA	$101,704	4.0%
FL	$ 86,139	3.9%	MI	$ 84,642	5.8%	OH	$ 80,723	-3.2%	WV*	$ 61,834	-9.3%
GA	$ 84,471	-5.8%	MN	$ 99,191	3.3%	OK*	$ 75,429	-5.9%	WI	$ 82,025	-7.6%
HI*	$ 76,784	-4.7%	MS*	$ 67,645	7.7%	OR	$ 96,928	6.5%	WY*	$113,746	46.2%
ID*	$ 92,544	4.5%	MO	$ 81,060	-1.6%	PA	$ 89,721	0.6%			

* Sample size less than 100 respondents, therefore, not statistically valid, but presented for continuity purposes only.

SALARY BY LEVEL

	SALARY
Head of a Department	$121,324
Manager of a Group of Teams	$120,190
Team Lead	$103,708
Member of a Team	$ 81,771
Work Independently	$ 83,184

SALARY BY EXPERIENCE

YEARS	SALARY	YR/YR CHANGE
Under 1	$ 57,541	2.7%
1–2	$ 58,755	2.5%
3–5	$ 69,671	2.3%
6–10	$ 82,094	-0.4%
11–15	$ 96,421	-0.1%
Over 15	$113,503	1.1%

Dice Salary Survey Methodology

The Dice salary survey was administered online by Dice.com, with 10,780 employed technology professionals responding between October 22, 2018 and December 13, 2018. Respondents were invited to participate in the survey in several ways: 1) via an email invitation to Dice's registered database members, 2) through a notification on the Dice.com website pages and/or via site intercept invitations within the site to visitors and 3) via banner ads on the Dice.com site. A cookie methodology was used to ensure that there was no duplication of responses between or within the various sample groups, and duplicate responses from a single email address were removed. Technology professionals earning salaries of $350,000 and above were not automatically eliminated from the survey if they met other criteria.

About Dice

Dice is a leading tech career hub connecting employers with skilled technology professionals and providing tech professionals with career opportunities, data, insights and advice. Established in 1990, Dice began as one of the first career sites and today provides a comprehensive suite of recruiting solutions, empowering companies and recruiters to make informed hiring decisions. Dice serves multiple markets throughout North America. www.dice.com Dice is a DHI Group, Inc. (NYSE:DHX) service.