

2015 SPE Membership Salary Survey

HIGHLIGHT REPORT

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Society of Petroleum Engineers

2015 SPE Membership Salary Survey Highlight Report

On 29 July 2015, Society of Petroleum Engineers (SPE) sent invitations to 89,102 professional members to participate in the annual SPE Membership Salary Survey by completing an online survey. By the close of the survey on 26 August 2015, 5,553 members responded, of which 4,340 provided valid compensation data, resulting in a 6.2% response rate. This sample of completed responses produces a margin of error of $\pm 1.27\%$ at a 95% confidence level. Salary information and other data in the report are entirely self-reported.

Participants in the 2015 SPE Membership Salary Survey are based in 87 countries and 37 US states. More than three-fourths (77.2%) are citizens of the countries in which they work. Their employers' headquarters are based in 79 countries. Approximately 49.0% of the respondents are based in countries outside of the United States. The percentage of female participants remained the same in 2015 (13.3%) as in 2014, compared with 12.2% in 2013, 11.3% in 2012, and 9.6% in 2011.

Respondents were asked to provide their work status in 2015. The majority (95.6%) of respondents indicated that they are full-time, regular payroll employees. About 2.4% are contract, freelance, or part-time employees, and about 1.7% are self-employed or business owners.

One-fifth (20.2%) of participants in this year's survey are primarily engaged in Reservoir Engineering, while 11.2% specialize in Production and Operations, and another 10.9% are involved in Drilling.

Nearly one-third (31.3%) of respondents work for an independent oil and gas company, while one-fourth (26.7%) are employed by a service or manufacturing company, one-fifth (20.6%) are employed by an integrated oil and gas company, and almost one-tenth (8.3%) work for a national oil and gas company.

General Findings

All compensation data presented in this Highlight Report is expressed in US dollars (USD). Data collected in local currencies has been converted to US dollars using the exchange rate as of 26 August 2015, which is the effective date of this year's data.

Any table figures in bold text have a base size of 30 or more respondents and the data is more likely to be statistically significant.

Petroleum industry professionals reported an average calculated total compensation of USD 206,020 in 2015, lower than reported in 2014 (USD 214,328), and similar to compensation reported in 2013 (USD 203,557).

Although 2015 reported compensation is lower than in 2014, more than half (58.5%) of this year's respondents indicated their base pay increased from 2014 to 2015. However, this is a significantly smaller percentage than the 82.2% who reported an increase from 2013 to 2014. Those who experienced a gain in base pay saw their pay increase by an average of 8.0% over the past year. For respondents whose base pay decreased, the decline was by an average of 18.4% since 2014.

Calculated mean base pay reported in 2015 (USD 153,492) was down compared with 2014 (USD 156,439) and similar to 2013 (USD 153,620). Other compensation (including bonuses) has been declining since 2013 (USD 64,000). This year, members reported an average of USD 52,931 in other compensation; the average in 2014 was USD 57,889.

The number of professionals receiving a car allowance has also continued to decline. One-fourth (26.3%) of the respondents receive a car allowance, which is down from 28.4% in 2014 and 31.0% in 2013.

The average age of energy and petroleum professionals reported in the survey is 43 years, which is consistent with the previous four years. However, this varies by gender; males' average age of 44 is slightly higher than the overall average and significantly higher than females' average age of 37.

The level of experience professionals have in the industry remains consistent this year with previous years, with the average at 18 years. Likely as a result of varied average age, experience also varies by gender with male professionals having significantly more experience than females. The average years of experience for males in 2015 is 18.9, similar to 2014 at 18.8, and females is 11.8, up from 11.1 in 2014.

The number of professionals who reported an education level higher than a bachelor's degree (44.2%) this year is comparable to 2014 (43.2%).

More than three-fourths (76.6%) of industry professionals indicated that they are citizens of the countries in which they work in 2015.

Figure 1

Summary of Results by Work Region (All compensation data is expressed in US dollars)

	Total (n=4,477)	United States of America (n=2,290)	Africa (n=121)	Oceania, Australia, and New Zealand (n=172)	Canada (n=340)	Middle East (n=233)	North Sea and North Atlantic (n=590)	Northern and Central Asia (n=77)	South America, Caribbean, and Mexico (n=308)	South, Central, and Eastern Europe (n=107)	Southeast Asia (n=235)
Base Pay											
Mean	\$153,492	\$177,675	\$154,178	\$180,373	\$110,124	\$151,640	\$139,270	\$104,704	\$93,491	\$116,583	\$110,349
Median	\$138,365	\$165,000	\$132,650	\$143,640	\$98,504	\$123,398	\$120,900	\$52,800	\$70,400	\$90,654	\$81,145
Other Compensation											
Mean	\$52,931	\$69,218	\$93,197	\$36,217	\$36,220	\$41,335	\$32,960	\$42,083	\$21,561	\$33,056	\$25,977
Median	\$23,040	\$36,000	\$13,500	\$15,120	\$19,000	\$18,324	\$14,301	\$3,000	\$4,780	\$6,564	\$8,400
Total Compensation											
Mean	\$206,020	\$246,518	\$246,572	\$216,377	\$145,908	\$192,975	\$172,058	\$146,787	\$114,540	\$149,639	\$135,761
Median	\$167,120	\$205,000	\$153,768	\$163,780	\$118,940	\$153,500	\$141,050	\$64,000	\$80,000	\$108,920	\$85,800
Average Base Pay % Increase	8.0%	6.6%	6.7%	6.8%	6.2%	6.1%	5.7%	6.7%	25.5%	4.5%	9.8%
% With Car Allowance	26.3%	20.3%	54.4%	20.2%	19.8%	49.5%	35.6%	34.2%	23.1%	30.7%	38.6%
Average Age	43	44	43	43	40	42	42	40	39	43	40
Average Years of Experience	18.0	19.7	16.6	18.0	15.4	17.3	16.6	15.4	14.1	16.5	15.5
% With Education Beyond Bachelor's Degree	44.2%	34.8%	53.5%	46.4%	29.5%	55.9%	71.9%	65.8%	49.7%	75.2%	41.3%
% Citizens of Work Region	76.6%	88.3%	54.3%	62.4%	84.6%	32.9%	65.4%	68.0%	76.3%	62.7%	56.1%

Figure 2

Base Pay and Other Compensation by Work Region (USD)

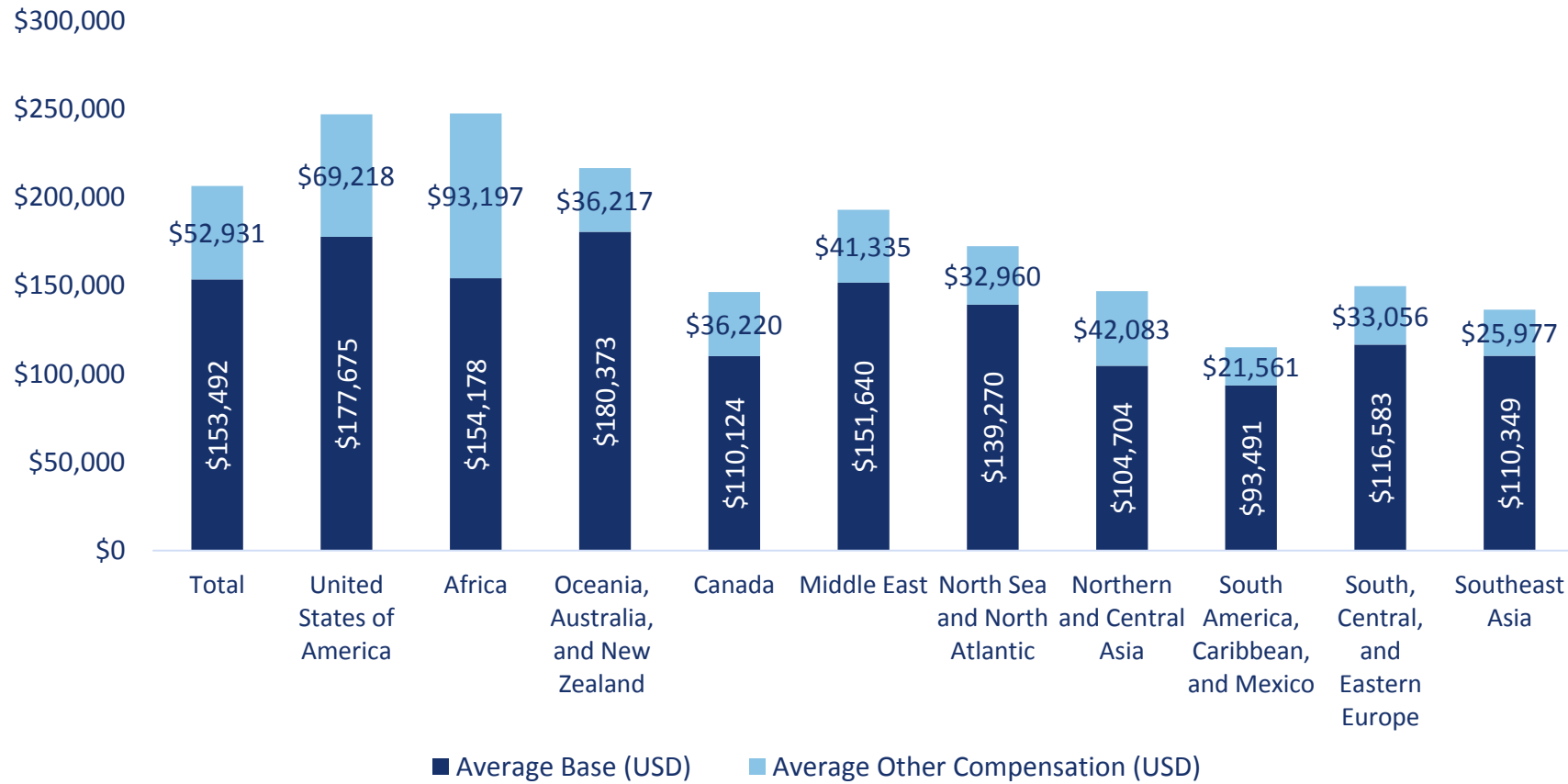


Figure 3

Job Categories and Total Compensation

The mean total compensation among the top tier of professionals declined from 2014, but this was not seen across all regions. The most marked declines are from the United States of America, Canada, and the North Sea and North Atlantic regions. Lower category professionals were able to maintain their level of compensation.

Total Compensation by Job Category and Work Region	United States of America (n=2,290)	Africa (n=121)	Oceania, Australia, and New Zealand (n=172)	Canada (n=340)	Middle East (n=233)	North Sea and North Atlantic (n=590)	Northern and Central Asia (n=77)	South America, Caribbean, and Mexico (n=308)	South, Central, and Eastern Europe (n=107)	Southeast Asia (n=235)	Global Mean
Executive/Top Management	\$429,052	\$560,000	\$585,675	\$252,973	\$328,217	\$290,001	\$430,487	\$380,400	\$648,033	\$113,186	\$391,947
Manager/Director	\$298,088	\$404,985	\$269,188	\$198,558	\$239,882	\$244,233	\$185,000	\$191,170	\$172,335	\$199,932	\$268,936
Supervisor/Superintendent/Lead	\$237,784	\$177,866	\$209,315	\$153,447	\$195,937	\$182,228	\$162,454	\$121,614	\$150,800	\$160,771	\$194,591
Professional/Individual Contributor	\$201,605	\$185,342	\$160,294	\$118,673	\$166,079	\$129,759	\$110,952	\$74,617	\$104,388	\$99,378	\$165,750
Technician/Specialist/Support Staff	\$154,651	\$105,596	\$71,904	\$130,896	\$180,709	\$108,865	\$55,198	\$95,504	\$92,483	\$55,191	\$122,611

Figure 4

Job Function and Work Region

Base Pay by Job Function and Work Region	United States of America (n=2,290)	Africa (n=121)	Oceania, Australia, and New Zealand (n=172)	Canada (n=340)	Middle East (n=233)	North Sea and North Atlantic (n=590)	Northern and Central Asia (n=77)	South America, Caribbean, and Mexico (n=308)	South, Central, and Eastern Europe (n=107)	Southeast Asia (n=235)	Global Mean
College/University/Academic	\$147,346	\$78,210		\$116,787	\$135,069	\$87,620		\$36,933		\$21,840	\$115,170
Computer or Information Technology	\$148,735	\$200,000		\$95,135	\$96,960	\$90,775	\$51,220	\$77,490	\$58,580	\$34,560	\$117,415
Earth Science/Geology	\$187,140	\$123,596	\$166,840	\$107,344	\$190,619	\$138,907	\$132,260	\$90,175	\$124,152	\$140,407	\$154,265
Engineering – Chemical/Chemistry	\$151,217		\$113,615	\$83,547	\$130,413	\$131,408	\$30,750	\$60,229	\$54,317	\$145,561	\$129,228
Engineering – Civil/Construction/Facilities	\$175,940	\$107,517	\$207,128	\$106,096	\$114,280	\$153,732	\$70,560	\$61,443	\$34,916	\$146,194	\$145,679
Engineering – Completions	\$177,619	\$157,458	\$129,247	\$104,076	\$147,725	\$162,554	\$101,760	\$119,840	\$125,880	\$116,153	\$159,223
Engineering – Drilling	\$190,711	\$185,460	\$180,834	\$118,570	\$148,395	\$142,188	\$142,375	\$126,974	\$208,271	\$145,892	\$166,371
Engineering – Health/Safety/Environment	\$165,266	\$97,248	\$112,912	\$88,616	\$101,010	\$120,873		\$34,600	\$155,626	\$119,233	\$135,375
Engineering – Production	\$170,144	\$159,383	\$206,692	\$100,969	\$145,799	\$133,619	\$93,637	\$79,976	\$96,752	\$86,445	\$143,938
Engineering – Reservoir	\$189,605	\$169,170	\$146,650	\$113,488	\$141,276	\$154,291	\$101,791	\$85,798	\$91,933	\$90,692	\$157,055
Engineering – Other or Combination of Above	\$187,617	\$190,961	\$157,464	\$118,368	\$200,989	\$129,883	\$152,085	\$84,238	\$165,611	\$121,449	\$162,155
Finance or Administration	\$198,924	\$146,657	\$187,200	\$128,620		\$184,733	\$41,600	\$75,581	\$200,837	\$181,571	\$175,454
Geophysics/Petrophysics/Physics	\$180,094	\$78,059	\$161,620	\$138,510	\$122,810	\$129,265	\$81,100	\$93,508	\$169,360	\$92,669	\$144,041
Non-Engineering Technical	\$144,969	\$87,500	\$115,200	\$74,290	\$84,619	\$102,548			\$56,486	\$75,144	\$118,110
Professional Training	\$161,939			\$106,400		\$96,300		\$115,000			\$138,850
Research	\$148,162	\$75,500	\$82,176	\$90,725	\$250,248	\$104,865	\$24,000	\$58,380	\$116,177	\$45,000	\$123,217
Sales or Marketing	\$146,955	\$129,393	\$123,600	\$105,817	\$140,544	\$131,531	\$64,467	\$84,414	\$121,701	\$114,366	\$135,463
Other or Combination of Above	\$184,678	\$208,656	\$421,714	\$129,976	\$199,297	\$157,781	\$178,339	\$149,626	\$77,526	\$147,736	\$183,695

Figure 5

The Impact of Gender – Experience Level and Compensation

Base pay and total compensation varies by gender, with male professionals earning more than their female counterparts. This disparity can be attributed in part to male professionals having more reported experience than females, on average.

Compensation by Gender and Experience										
	Female					Male				
	Executive/ Top Management	Manager/ Director	Supervisor/ Superintendent/ Lead	Professional/ Individual Contributor	Technician/ Specialist/ Support Staff	Executive/ Top Management	Manager/ Director	Supervisor/ Superintendent/ Lead	Professional/ Individual Contributor	Technician/ Specialist/ Support Staff
Average Years of Experience	21	20	14	9	12	30	24	19	15	16
Number of Records	15	64	84	351	50	269	852	657	1,750	149
Average Base Pay (USD)	\$161,129	\$163,239	\$125,878	\$109,989	\$88,788	\$257,057	\$192,212	\$156,217	\$134,828	\$104,592
Average Other Compensation (USD)	\$26,015	\$45,321	\$33,072	\$25,269	\$13,952	\$147,647	\$82,866	\$44,608	\$38,440	\$25,275
Average Total Compensation (USD)	\$187,143	\$207,852	\$158,556	\$135,114	\$102,740	\$404,155	\$274,787	\$200,757	\$173,049	\$129,868

Figure 6

The Impact of Gender – Base Pay Increase and Decrease

The majority of professionals of both genders experienced an increase in their salary since 2014. However, the number of respondents reporting an increase has declined significantly since 2014 (81.2% in 2014 compared to 58.4% in 2015 among male respondents). Those reporting no change or a decrease has risen, with 7.0% of males now reporting a decrease compared with only 1.7% in 2014, while those reporting no change has risen from 17.1% in 2014 to 34.6% in 2015. Female professionals were more likely to experience positive salary growth than their male counterparts and were also less likely to experience a decrease.

Respondents' Change in Salary Since July 2014 by Gender

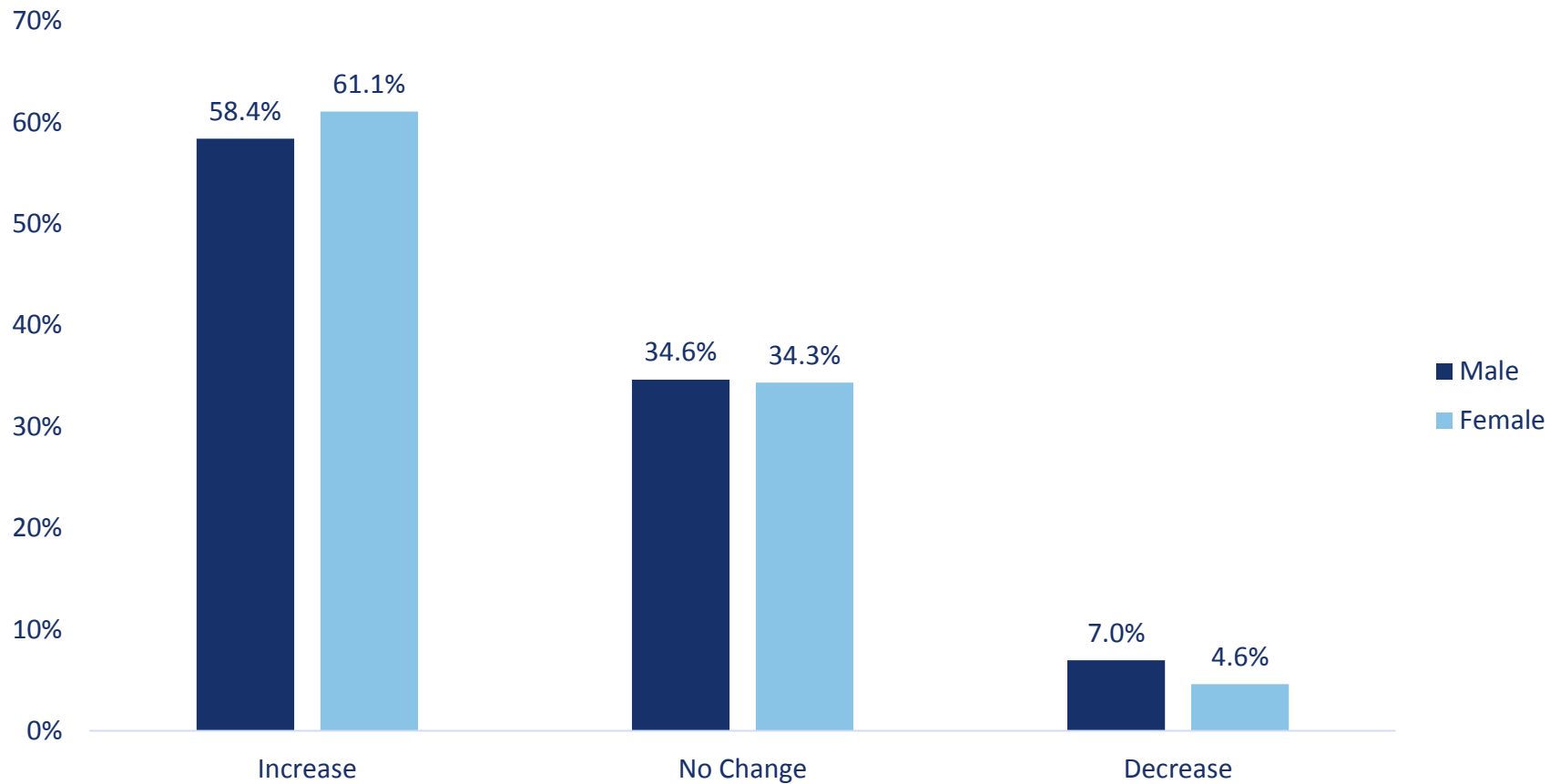


Figure 7

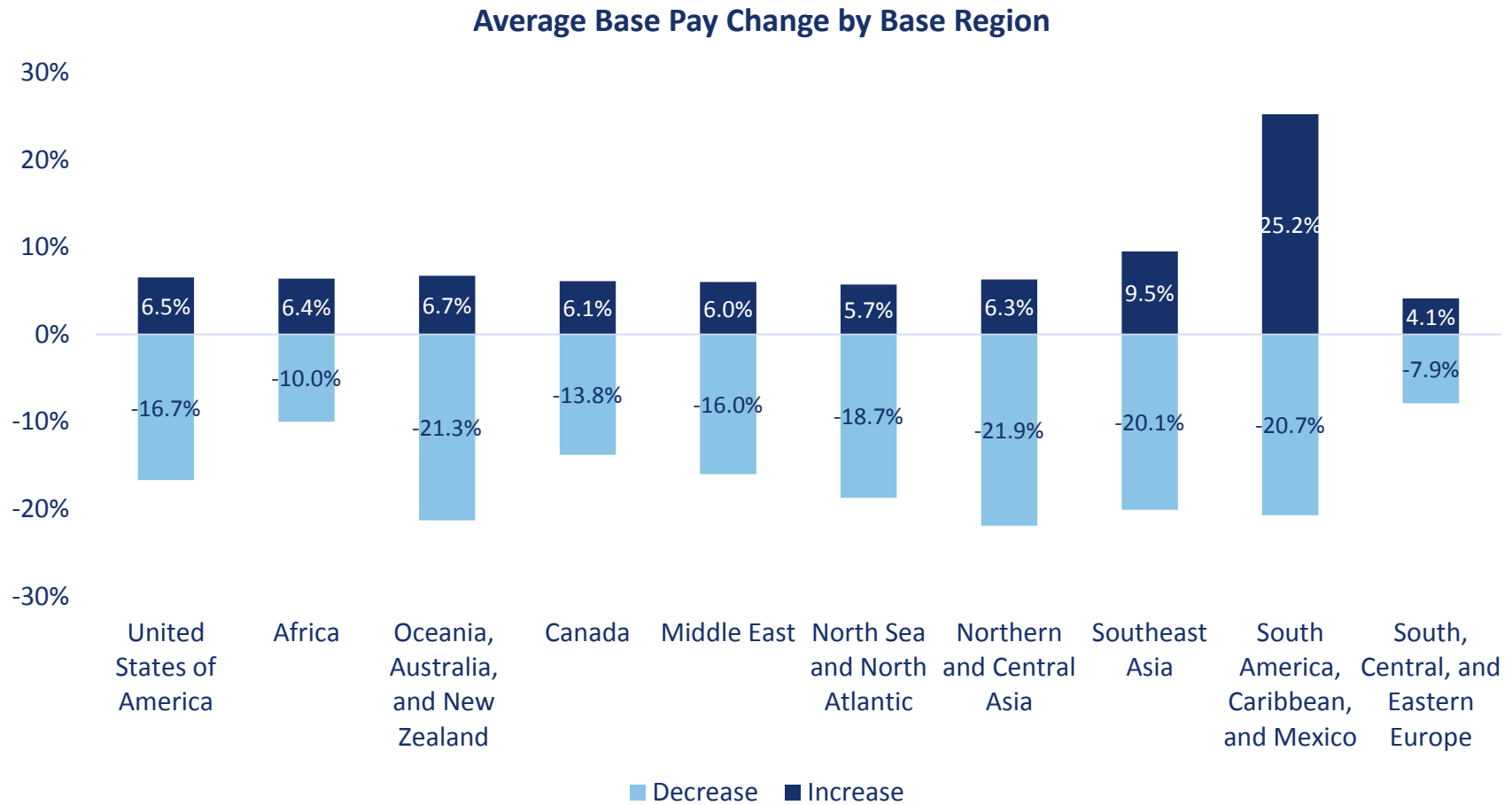
Change in Base Pay by Region

Overall, 6.6% of respondents' base pay went down and 58.5% received an increase in 2015. An even higher percentage (64.4%) of respondents in the South America, Caribbean, and Mexico region received a base pay increase. This could, at least in part, be attributed to the currency devaluation in Venezuela.

Base Region	Decrease in Base Pay	No change in Base Pay	Increase in Base Pay
United States of America	5.1%	34.3%	60.6%
Africa	7.8%	36.2%	56.0%
Oceania, Australia, and New Zealand	10.0%	43.5%	46.5%
Canada	10.8%	37.3%	51.8%
Middle East	10.1%	27.6%	62.3%
North Sea and North Atlantic	5.1%	37.8%	57.1%
Northern and Central Asia	22.7%	33.3%	44.0%
Southeast Asia	3.5%	35.7%	60.9%
South America, Caribbean, and Mexico	8.8%	26.8%	64.4%
South, Central, and Eastern Europe	7.8%	44.1%	48.0%

Figure 8

The South America, Caribbean, and Mexico region received the largest percentage increase of any region; besides that region, salary increases hovered around 6%. The region of Northern and Central Asia had both the largest percentage of respondents who received a decrease in their base pay (22.7%—see figure 6), and experienced the largest reduction in base pay (21.9%).



How to Learn More

This report represents a sample of current compensation in the industry. A detailed summary report containing charts and descriptive statistics of trends and more information on the jobs, geographies, and employer types will be available through the SPE Bookstore at www.spe.org/store in early November 2015.

SPE will make the detailed PDF summary report available to download through the SPE Bookstore at a USD 50 member price and USD 125 nonmember price.

A file containing the raw data from the survey responses will be made available to download through the bookstore to provide the opportunity for individual analysis and localization of data. Pricing for access to data for analysis will be USD 225 for SPE members and USD 425 for nonmembers, also available in early November 2015. The data file comes bundled with the detailed summary report.

In addition to our annual reports, SPE publishes a historical summary of SPE Membership Salary Survey Highlights, updated each year, dating back to the first survey in 1967. The SPE Membership Salary Survey became an annual study beginning in 1984, with previous editions having been conducted in alternate years. The archive document includes the highlights through 2015. The archive PDF document will be available through the SPE Bookstore at a price of USD 125 for SPE members and USD 325 for nonmembers.

Inquiries regarding purchase may be addressed through the SPE Bookstore website. Other questions regarding the survey can be addressed to speresearch@spe.org.

Thank you for your interest in this important project and your continued support of SPE.

The SPE Research Team