ome

The Engineering Income and Salary Survey

Learn the Value of Engineers in Today's Market





The Engineering Income and Salary Survey Standard Report

Trends Analysis, Policies, and Practices

As of April 1, 2012 978-0-7844-1245-9 Published by the Engineering Income and Salary Survey Publishing Group

ISBN: 978-0-7844-1245-9

© 2012 Engineering Income and Salary Survey Publishing Group

Prepared by:

enetrix, A Division of Gallup, Inc. 8476 Greenway Blvd., Suite 100 Middleton, WI 53562 www.enetrix.com

In partnership with:

American Society of Civil Engineers 1801 Alexander Bell Drive Reston, VA 20191 www.asce.org

American Society of Mechanical Engineers Three Park Avenue New York, NY 10016-5990 www.asme.org

Effective Date: April 1, 2012 Publication Date: June 2012

Table of Contents

Introduction
About the American Society of Civil Engineers
About the American Society of Mechanical Engineers
Survey Features
The www.ASCE.org/salaries and ASME.enetrix.com Web Sites
Guide to Finding and Using the Data in this Report .5 Survey Definitions. .5 Methodology. .6 Interpreting the Data. .6
Executive Summary
Income Trends9Length of Experience9Level of Education10Level of Education and Length of Experience12Professional Responsibility.14Major Branch of Engineering15Job Function18Industry or Service of Employer20Licensing and Certification Status22Supervisory Responsibility24Sub-Regions26Metropolitan Area29Gender34Ethnic Origin37Organization Size39
Policies and Practices.40Employment Status40Layoffs/Downsizing.41Change in Base Salary.43Promotions44Contract/Temporary/Consulting Employment.44Compensatory Time Off for Salaried/Exempt Engineers44Registration46Employer-Sponsored Benefit Plans47Appendix: Survey Instrument48

Introduction

The following report represents the findings of the national compensation survey conducted by the American Society of Civil Engineers (ASCE) and the American Society of Mechanical Engineers (ASME). This is the fifth year that ASCE and ASME have partnered to conduct a joint engineering salary survey.

These surveys have proved to be of considerable value to engineering firms, industrial organizations, national engineering organizations, local and state governmental agencies, and the departments of the federal government, as well as, the United States Congress.

Online survey participants were asked to report their current annual base salary, plus additional cash income from that employer (excluding overtime pay) for the preceding calendar year. Income from secondary or part-time employment was excluded. Readers should note that the information provided in this document is based on response data compiled for the 12-month period of April 1, 2011, to March 31, 2012. The online version of the salary survey includes the most recent salary information available. All subscribers are encouraged to use the online database to run and view survey reports that include the most current data survey submissions.

enetrix, A Division of Gallup, Inc., a leader in Internet-based survey technology, assisted with the design of the survey instrument and directed the online survey collection and reporting tools. ASCE and ASME acknowledge and thank all respondents participating in this survey.

About the American Society of Civil Engineers



Founded in 1852, the American Society of Civil Engineers is the world's preeminent civil engineering organization and the U.S.'s oldest engineering society. ASCE is home to more than 140,000 members in the civil engineering profession, positioning them to be global leaders to build a better quality of life.

Mission

Our mission is to help you succeed with yours, by providing essential value to our members, their careers, our partners and the public by developing leadership, advancing technology, advocating lifelong learning, and promoting the profession.

Other Resources

- Organizational resources for getting your company involved www.asce.org/orgresources
- General information about ASCE membership www.asce.org/newmembers
- Information about member benefits visit www.asce.org/benefits
- Career resources www.asce.org/careers
- Online jobs www.asce.org/jobs
- Training for individual or organizations www.asce.org/training
- Access to the world's largest publisher of civil engineering related materials www.pubs.asce.org
- Local activities and programs www.asce.org/local
- Political activities www.asce.org/govrel
- Technical information from any of ASCE's seven Institutes www.asce.org/institutes

General information about ASCE is available at www.asce.org.

About the American Society of Mechanical Engineers



ASME is a not-for-profit membership organization that enables collaboration, knowledge sharing, career enrichment, and skills development across all engineering disciplines, toward a goal of helping the global engineering community develop solutions to benefit lives and livelihoods. Founded in 1880 by a small group of leading industrialists, ASME has grown through the decades to include more than 120,000 members in over 150 countries worldwide.

Vision

ASME aims to be the essential resource for mechanical engineers and other technical professionals throughout the world for solutions that benefit humankind.

Mission Statement

To serve diverse global communities by advancing, disseminating and applying engineering knowledge for improving the quality of life; and communicating the excitement of engineering.

Core Values

In performing its mission, ASME adheres to these core values:

- Embrace integrity and ethical conduct
- Embrace diversity and respect the dignity and culture of all people
- Nurture and treasure the environment and our natural and man-made resources
- Facilitate the development, dissemination and application of engineering knowledge
- Promote the benefits of continuing education and of engineering education
- Respect and document engineering history while continually embracing change
- Promote the technical and societal contribution of engineers

ASME Credo

Setting the Standard...

- ... in Engineering Excellence
- ... in Knowledge, Community & Advocacy
- ... for the benefit of humanity

For more information, please visit: www.asme.org.

Survey Features

The www.ASCE.org/salaries and ASME.enetrix.com Web Sites

These interactive survey sites allow engineers to participate and purchase reports online. The online database is continuously updated, and the information found online is "evergreen". The data included in this printed report represents a point-in-time, taken as of April 1, 2012. Therefore, by going online you can access the most current salary information available.

Complimentary Report

All participants of the survey are given access to an online complimentary survey report. This report contains limited data and provides the engineer with salary data for their professional level and geographic region.

Interactive Custom Reports

The interactive online custom reports allow users to view data as it is updated throughout the year. The custom report enables users to select up to nine demographic and professional criteria for their income data analysis. Subscriptions are based on the number of report runs allowed and are tailored to both individual and corporate needs. The custom reports are priced by either ten report runs or unlimited report runs for one year. The unlimited subscription has an additional option for an accompanying printed report, and also grants access to downloadable standard reports, policies and practices, trend analysis, employer-sponsored benefit information, and much more.

The custom reports also allow users to limit their report data to a geographic area based on a zip code. Each zip code is assigned a metropolitan area, consolidated metropolitan area, state, sub-region, and region as defined by enetrix, A Division of Gallup, Inc. The statistical areas (i.e., consolidated metropolitan area and metropolitan area) are based on population statistics as compiled via the most recent U.S. Census.

As an example, a respondent reporting from zip code 60606 would be included in the Chicago metropolitan area. The data would also be included in the Chicago-Gary-Kenosha, IL-IN-WI consolidated metropolitan area. Finally, the data would also be included in Illinois, the Great Lake States sub-region, and the North Central region.

Standard Reports

Preselected data cuts

Users who purchase an unlimited online subscription also receive access to reports with preselected data cuts. These reports are formatted in HTML and provide statistics for all demographic cuts by engineering level. In addition, a downloadable PDF version of these standard reports is available.

Trends Analysis, Policies, and Practices

Users who purchase an unlimited online subscription also receive access to reports on standard data cuts, trends analysis, policies and practices, and benefits information. These reports are presented in this printed report. All of the reports included in this printed report are also accessible online at either of the association Web sites as downloadable PDF documents for those users with an unlimited subscription.

Guide to Finding and Using the Data in this Report

The information in this year's study is presented in three sections, plus the online custom and standard reports:

- Executive Summary: highlights overall salary and income statistics;
- Income Trends: presents total compensation data for each engineering level, plus various data cuts;
- **Policies and Practices**: highlights trends in prevalence for a number of top areas, such as employment status, changes in base salary, promotion, compensatory time off, and others;
- **Online Custom Report**: allows you to produce calculations on a combination of all the scope factors solicited in the survey; and
- **Online Standard Reports**: provides an income and salary report that uses pre-programmed data cuts based on the scope factors solicited in the survey.

Survey Definitions

The following defines the terms used in all of the income data tables:

- **Income**: constitutes the individual's current annual base salary from the primary employer, plus additional cash income from the individual's primary job (including fees, bonuses, commissions, but excludes over-time pay and income from secondary or part-time employment);
- **Bonus**: additional cash income from the individual's primary job (including fees, bonuses, commissions, but excludes overtime pay and income from secondary or part-time employment) during the preceding 12-month period;
- **Number Reported**: the usable number of responses from which the statistics were derived for the data line in which that specific number appears;
- **Mean**: indicates that the annual compensation of all individuals in a group were added together and the total was divided by the number of individuals involved. This measure of central tendency can be unduly influenced by a few very high or very low data points. While the average permits certain statistical calculations, greater consideration should be given to the median for comparison purposes, especially when the sample size is small;
- **Median**: the value of the middle item (or the average of the two middle items) of a group of values when they are arrayed from the highest to the lowest. The advantage of the median is that it provides a measure of central tendency that is not unduly influenced by a few very high or very low data points;
- **10th Percentile**: a measure of dispersion. When all of the incomes are arrayed from the highest to the lowest, the 10th percentile is that income below which 10% of the incomes fall;
- **25th Percentile**: a measure of dispersion. When all of the incomes are arrayed from the highest to the lowest, the 25th percentile is that income below which 25% of the incomes fall;
- **75th Percentile**: a measure of dispersion. When all of the incomes are arrayed from the highest to the lowest, the 75th percentile is that income below which 75% of the incomes fall; and
- **90th Percentile**: a measure of dispersion. When all of the incomes are arrayed from the highest to the lowest, the 90th percentile is that income below which 90% of the incomes fall.

Methodology

A total of 13,207 online questionnaires were completed between April 1, 2011, and March 31, 2012. Data was eliminated from the survey reports if the respondent was a full-time student, unemployed, was in a job-share position, or retired at the time of the survey. In some cases, pay data was not provided, insufficient, or obviously erroneous. These responses were also eliminated when calculating income statistics. This reduced the sample to 12,720 for this purpose.

Not every participant provided all of the information requested. Questionnaires were included in the study if they provided sufficient information to be included in at least one table of the report.

Anomalies may occur in the income statistics report for a few of the smaller subgroups, if one or more survey participants reported incomes considerably different from the usual income of individuals with a common demographic characteristic. Regretfully, it is not possible to identify and delete all such responses from the survey. Fortunately, these cases have no appreciable effect upon the medians or quartiles reported for major subgroups.

Data for subgroups of extremely small size lack statistical validity. Data was eliminated for any line of data where the sample size was less than 10.

Interpreting the Data

Despite the fact that there was good participation, data for all pertinent variables should be considered simultaneously when the data is interpreted – especially where the sample size of a subgroup is extremely small.

Some respondents may have reported incomes considerably higher or lower than those of the remaining individuals in a subgroup. This would unduly influence the mean for some small subgroups. Therefore, wherever the sample is small and there is a considerable difference between the average and median in a line of data, greater weight should usually be given to the median than to the average.

Sometimes, the information reported in a line of data may appear to be inconsistent with that of related data lines. In such cases, the relative sample size of each line of data should be considered. Usually, more confidence should be placed in the line of data having the larger sample size. However, the "rule of reason" should govern.

As the definitions imply, one-half of respondents are paid more than the median, one-quarter more than the 75th percentile, and 10% more than the 90th percentile. Naturally, length of service and individual capability play a large part in determining an individual's specific income level. Further, as a matter of policy, many employers deliberately set pay rates above the average to attract and retain the best possible employees. Therefore, the fact that an individual's salary is above some otherwise appropriate statistic need not be a matter of concern.

Executive Summary

As of March 31, 2012, the average total annual income of respondents in the survey was \$103,497 (including salaries, fees, cash bonuses, commissions, and profit received from the respondents' primary jobs during the preceding 12-month period—but specifically excluding overtime pay).

Base salaries and incomes vary widely. As Exhibit 1 shows, survey respondents at or below the 10th percentile earn a base salary under \$56,000, while those at or above the 90th percentile earn \$144,000 or more. Exhibit 2 shows that survey respondents at or below the 10th percentile earn a total annual income under \$58,000, while those at or above the 90th percentile earn a total annual income under \$58,000, while those at or above the 90th percentile earn \$160,000 or more.

Both Exhibits 1 and 2 indicate an increase in median base salary and total annual income from 2011 to 2012.

	•	,	
	2011	2012	% Change in Base Salary from 2011
Number of Responses	11,388	12,720	
Average	\$92,726	\$95,603	3.1%
Percentile 10	\$55,000	\$56,000	1.8%
Percentile 25	\$66,000	\$68,640	4.0%
Median	\$86,000	\$90,000	4.7%
Percentile 75	\$111,200	\$116,000	4.3%
Percentile 90	\$140,000	\$144,000	2.9%

EXHIBIT 1: BASE SALARY STATISTICS (ALL RESPONDENTS)

EXHIBIT 2: TOTAL ANNUAL INCOME STATISTICS (ALL RESPONDENTS)

	2011	2012	% Change in Total Income from 2011
Number of Responses	11,388	12,720	
Average	\$99,738	\$103,497	3.8%
Percentile 10	\$56,700	\$58,000	2.3%
Percentile 25	\$68,500	\$71,000	3.6%
Median	\$90,000	\$94,117	4.6%
Percentile 75	\$120,000	\$124,523	3.8%
Percentile 90	\$154,000	\$160,000	3.9%

A matched sample comparison is an excellent indicator of year-to-year changes in compensation as presented in Exhibits 3 and 4. These tables compare the compensation data of the 3,551 respondents who participated in both this and last years' survey. As indicated by these tables, the median total annual income increased 4.4%. Per Exhibit 4, a matched sample comparison of the last three years of survey data is presented. The percent change in median income from 2010 through 2012 is 8.0%.

	2011	2012	% Change in Total Income from 2011
Number of Responses	3,551	3,551	
Average	\$99,441	\$104,473	5.1%
Percentile 10	\$57,800	\$61,110	5.7%
Percentile 25	\$70,000	\$73,711	5.3%
Median	\$91,000	\$95,000	4.4%
Percentile 75	\$119,850	\$125,000	4.3%
Percentile 90	\$150,000	\$158,000	5.3%

EXHIBIT 3: TOTAL ANNUAL INCOME STATISTICS (MATCHED SAMPLE) 2011–2012

EXHIBIT 4: TOTAL ANNUAL INCOME STATISTICS (MATCHED SAMPLE) 2010-2012

	2010	2011	2012	% Change in Total Income from 2011
Number of Responses	1,832	1,832	1,832	
Average	\$100,603	\$103,474	\$108,558	7.9%
Percentile 10	\$59,940	\$62,000	\$65,000	8.4%
Percentile 25	\$72,050	\$75,000	\$78,450	8.9%
Median	\$92,576	\$95,213	\$100,000	8.0%
Percentile 75	\$119,000	\$122,000	\$129,265	8.6%
Percentile 90	\$150,600	\$153,000	\$160,000	6.2%

EXHIBIT 5: CHANGE IN MEDIAN TOTAL ANNUAL INCOME BY SUBREGION (MATCHED SAMPLE) 2011 - 2012

		2011		% Change in Total Income from 2011
	# of Respondents	Median	Median	
New England	194	\$87,150	\$89,800	3.0%
Middle Atlantic	530	\$91,000	\$95,715	5.2%
Middle Southeast	387	\$91,500	\$95,000	3.8%
Lower Southeast	240	\$99,110	\$100,000	0.9%
Great Lakes	601	\$84,000	\$88,000	4.8%
Central Plains	186	\$88,037	\$92,700	5.3%
Upper Mountain	58	\$79,000	\$85,929	8.8%
South Central	449	\$93,500	\$101,000	8.0%
Lower Mountain	285	\$91,500	\$93,000	1.6%
Pacific Northwest	194	\$90,500	\$93,000	2.8%
Pacific Southwest	414	\$102,858	\$108,403	5.4%

Income Trends

The following income trends section provides summary data for various scope factors. This data is representative of the data that was submitted between April 1, 2011, and March 31, 2012. During this time a total of 13,207 respondents completed the survey (of which 12,720 responses were used for this report). The most up-to-date income and salary statistics are available online.

Income and salary statistics are reported only where there are a minimum of 10 respondents for that row of data.

Length of Experience

Median income shows a consistent increase with increased engineering experience. Per Exhibit 6, the median income of full-time salaried respondents increases regularly from \$55,000 for those with under one year of experience to \$127,800 for those with 25 years of experience or more. This is a 132.4% spread.

Earnings differences increase with length of experience, greatest in the most experienced groups. The interquartile range (the middle 50%) is the best measure of the income range. For those with under one year experience, the inter-quartile range was \$15,850 compared to \$53,500 for those with 25 years of experience or more.

		Full-Time Salaried Only							
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median
Under 1 year	366	56,785	41,000	48,000	55,000	63,850	74,000	366	55,000
1–2 years	762	60,688	45,000	51,000	58,678	67,500	78,000	761	58,695
3–4 years	1,161	67,325	50,835	56,515	64,750	74,000	87,000	1,159	64,750
5–9 years	2,319	78,457	57,500	65,000	75,000	87,000	102,000	2,306	75,000
10–14 years	1,706	95,783	67,100	78,575	91,610	108,000	129,000	1,669	91,520
15–19 years	1,323	111,621	75,000	88,688	106,000	127,000	155,000	1,297	106,000
20–24 years	1,302	123,267	80,000	95,600	116,345	140,000	176,800	1,274	116,270
25 or more years	3,781	136,942	87,243	104,500	127,700	158,000	200,000	3,613	127,800

EXHIBIT 6: INCOME (\$) BY LENGTH OF EXPERIENCE

EXHIBIT 7: INCOME BY LENGTH OF EXPERIENCE (FULL-TIME SALARIED ONLY)



Level of Education

The following table shows graphically median income by level of education attained. As is obvious, increased education in the engineering field results in higher earnings.

Full-time salaried respondents holding doctoral degrees in engineering have a median income of \$116,000. Those with an M.S. in engineering earn a median of \$95,576. Finally, those with a B.S. in engineering earn a median income of \$85,900.

Those holding a doctorate in engineering earn a median 35.0% more than those with a B.S. in engineering.

Full-time salaried survey respondents holding an M.B.A. or an M.B.A. and an M.A. or M.S. have higher median incomes than those holding an M.S. in engineering.

		All Respondents								
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median	
Less than BA/BS Degree	113	98,160	53,000	69,805	92,600	115,540	161,500	111	92,600	
BA Degree	57	93,882	53,700	60,000	76,309	109,500	163,000	56	75,805	
BS Degree (non-engineering)	78	106,654	60,000	75,000	95,000	130,000	178,000	76	95,000	
BS Degree (engineering)	6,798	96,452	55,000	66,000	86,000	115,000	148,500	6,670	85,900	
MA/MS Degree (not MBA or engineering)	237	108,330	64,000	77,000	95,000	128,723	175,400	234	95,000	
MBA Degree	570	126,681	75,000	93,630	117,000	150,000	188,500	556	116,250	
MS Degree (engineering)	3,501	106,051	60,500	73,750	96,000	127,000	161,000	3,415	95,576	
MBA and an MA or MS Degree	222	131,107	81,000	102,000	125,125	153,000	190,000	217	125,000	
Doctorate (non-engineering)	37	133,639	78,000	102,000	126,500	162,000	189,000	33	120,000	
Doctorate (engineering)	996	122,127	72,000	92,000	116,364	144,500	180,000	972	116,000	

EXHIBIT 8: INCOME (\$) BY LEVEL OF EDUCATION

EXHIBIT 9: INCOME BY LEVEL OF EDUCATION (FULL-TIME SALARIED ONLY)



Level of Education and Length of Experience

Income by engineering experience versus level of education for three of the largest groups by degree held appears graphically and in tabular form in Exhibits 10 and 11.

The curves by full-time salaried median income for the B.S., M.S., and doctorate in engineering are fairly smooth and follow the expected relationship, with infrequent, minor anomalies.

The spreads of median income for the full-time salaried respondents with B.S., M.S., and doctorate in engineering between under one year of experience and 25 years or more of experience, are 126.6%, 125.9%, and 69.0%, respectively.





			All	Respondent	S			Full-Ti Salaried	me Only
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median
B.S. Degree (engineering)									
Under 1 year	242	54,183	40,000	46,500	53,850	61,000	68,400	242	53,850
1–2 years	513	59,124	45,000	50,000	57,000	65,500	74,750	513	57,000
3–4 years	763	65,446	50,000	55,200	63,000	72,032	83,000	763	63,000
5–9 years	1,317	75,488	56,100	63,600	72,300	84,000	97,000	1,310	72,000
10–14 years	926	93,582	65,400	75,800	89,511	105,000	127,000	905	89,403
15–19 years	654	106,233	72,519	84,500	101,255	121,000	145,000	641	101,000
20–24 years	648	118,820	78,730	91,785	110,000	131,123	172,000	634	110,000
25 or more years	1,735	132,423	85,000	101,000	122,000	150,000	190,200	1,662	122,000
M.S. Degree (engineering))								
Under 1 year	94	58,569	45,000	50,000	58,000	67,000	75,000	94	58,000
1–2 years	183	62,584	50,000	55,000	60,400	67,440	76,000	182	60,450
3–4 years	284	68,031	53,500	58,000	66,114	74,205	83,800	284	66,114
5–9 years	679	80,649	61,200	68,000	77,000	88,500	103,000	675	77,000
10–14 years	486	95,410	68,940	80,000	92,000	105,500	124,000	477	92,000
15–19 years	386	113,414	78,803	92,000	108,230	126,000	151,000	375	108,500
20–24 years	352	126,075	86,200	100,000	120,000	143,307	171,088	341	120,000
25 or more years	1,037	140,518	90,000	107,580	131,000	160,000	201,000	987	131,000
Doctorate (engineering)									
Under 1 year	17	81,406	43,500	79,000	84,000	92,000	102,000	17	84,000
1–2 years	43	71,226	42,000	55,395	73,000	85,000	95,500	43	73,000
3–4 years	57	85,746	50,000	69,500	85,400	100,000	115,000	57	85,400
5–9 years	131	94,218	65,900	75,689	95,000	106,800	120,578	130	95,000
10–14 years	131	106,872	72,962	85,000	103,500	127,000	138,000	126	102,800
15–19 years	126	125,972	78,500	104,788	122,200	140,000	175,000	126	122,200
20–24 years	130	130,902	84,000	101,000	124,750	148,500	186,216	130	124,750
25 or more years	361	147,014	100,000	118,000	140,500	170,000	204,000	343	142,000

EXHIBIT 11: INCOME (\$) BY LEVEL OF EDUCATION AND LENGTH OF EXPERIENCE

Professional Responsibility

All survey participants were able to match their level of professional responsibility to one of the engineering grades defined in the Survey Questionnaire (see Appendix).

It should be noted that respondents' self-grading may not always be accurate, despite the detailed guidelines furnished in the survey instrument.

Exhibit 12 reports income by professional responsibility/engineering grade. The graph follows the shape expected, rising from a full-time salaried median income of \$55,000 for Engineer I to \$150,000 for Engineer VIII. This is a 172.7% spread.

			Full-Time Salaried Only						
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median
*Licensed Prof. Surveyor	12	97,408	60,000	67,500	78,500	120,500	165,000	10	78,500
Engineer Level I	421	55,967	42,000	48,000	55,000	61,500	69,600	421	55,000
Engineer Level II	633	61,211	46,500	52,000	59,500	68,000	78,500	631	59,500
Engineer Level III	1,046	64,659	49,000	55,000	62,235	71,000	83,000	1,046	62,235
Engineer Level IV	2,367	76,974	56,500	64,000	73,000	85,300	100,000	2,362	73,000
Engineer Level V	2,890	97,382	70,000	80,000	93,000	110,000	130,000	2,854	93,000
Engineer Level VI	2,595	121,060	85,000	98,500	115,000	136,000	164,000	2,532	115,000
Engineer Level VII	1,891	142,019	91,100	110,000	133,000	166,200	202,000	1,832	133,000
Engineer Level VIII	862	161,001	99,000	120,000	150,000	186,000	239,000	754	150,000

EXHIBIT 12: INCOME (\$) BY PROFESSIONAL RESPONSIBILITY

EXHIBIT 13: INCOME BY LEVEL OF PROFESSIONAL RESPONSIBILITY (FULL-TIME SALARIED ONLY)



Major Branch of Engineering

The highest full-time salaried median income by major branch of engineering goes to those respondents working in ocean (\$169,000). This group is followed by those in cost management (\$129,500), petroleum (\$127,043), safety (\$125,000), minerals and metals (\$121,000), fire protection (\$116,000), and electrical (\$115,200).

At the other end of the full-time salaried median income spectrum are those employed in structural, agricultural, geotechnical, HVAC and refrigeration, civil, and transportation (all between \$84,500 and \$87,850).

Due to insufficient sample size, income statistics are not reported in Exhibit 14 for the following branches: ceramic, ergonomics, optical, plumbing, and pollution.

	All Respondents							Full-Time Salaried Only	
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median
Aeronautical/aerospace/astronautical	376	111,878	62,000	83,665	110,000	135,713	159,900	370	109,652
Agricultural	35	88,319	50,000	67,880	85,000	105,000	133,000	35	85,000
Architectural	37	114,741	50,300	62,000	97,500	142,000	210,000	34	95,750
Biomechanical/biomedical	131	107,695	52,000	75,000	101,000	130,248	172,000	125	101,000
Chemical	122	124,043	79,000	90,000	113,825	150,000	175,000	121	113,750
Civil	3,228	96,015	55,500	67,293	87,107	113,999	147,100	3,155	86,630
Coastal	46	97,654	52,000	63,345	89,050	115,000	168,000	46	89,050
Computer	21	125,796	84,000	96,000	111,000	138,900	189,000	21	111,000
Control systems	63	110,790	56,000	73,056	102,000	137,480	187,000	61	102,000
Corrosion	13	113,834	50,000	80,000	105,773	145,600	161,724	13	105,773
Cost management	35	135,493	73,200	90,000	130,000	182,000	205,714	34	129,500
Electrical	36	116,606	62,978	75,547	118,500	148,500	178,366	34	115,200
Electronics	61	117,126	59,000	71,500	105,000	142,000	200,000	61	105,000
Environmental	625	104,457	54,500	67,000	91,321	127,500	166,000	614	90,500
Facilities	174	121,040	72,000	91,500	111,620	140,472	185,450	171	111,000
Fire protection	24	114,534	60,000	74,200	107,000	157,250	184,000	23	116,000
Forensic	66	132,798	73,745	92,000	109,140	155,000	223,000	54	104,000
Geotechnical	646	96,808	56,000	67,947	85,500	111,000	154,500	631	85,065
Health care facility	15	87,732	50,000	55,000	99,000	110,000	118,027	15	99,000
HVAC and refrigeration	122	93,136	52,500	65,000	86,027	111,000	149,000	121	85,554
Industrial	105	103,438	56,300	65,400	91,500	128,000	168,725	102	91,500
Manufacturing	516	97,770	56,828	70,000	91,000	116,000	146,000	512	91,000
Marine	68	120,509	60,000	71,250	112,000	152,500	201,000	68	112,000
Materials	74	118,344	66,986	80,000	115,763	145,000	176,000	73	115,000
Mechanical	2,311	107,313	60,452	75,000	99,150	129,129	165,000	2,264	98,922
Metallurgy	29	121,050	67,000	90,000	110,000	140,000	180,000	29	110,000
Minerals and metals	15	128,669	62,000	80,500	121,000	162,000	207,000	15	121,000
Mining	27	111,911	52,000	65,000	110,000	135,000	195,000	27	110,000
Naval	25	99,323	58,240	65,000	95,850	127,451	140,000	25	95,850
Nuclear	200	116,240	66,220	82,000	113,650	137,500	164,250	197	112,364
Ocean	15	169,795	110,000	122,750	170,000	208,974	220,000	14	169,000
Petroleum	261	140,526	74,000	90,000	127,085	170,500	219,000	256	127,043
Plastics	22	118,172	48,500	54,900	99,550	153,000	220,000	22	99,550
Power or Utilities	521	118,303	69,500	86,500	114,000	140,000	171,000	513	114,000
Quality Assurance	99	99,142	51,712	67,360	94,980	120,000	160,000	98	94,990
Reliability	53	114,691	74,000	88,000	110,000	131,600	165,000	53	110,000
Robotics	22	99,466	53,000	62,000	86,536	118,500	159,000	21	91,700
Safety	36	127,724	65,380	93,800	120,000	152,450	179,000	35	125,000
Sanitary	48	111,323	63,000	82,892	111,652	130,926	151,545	48	111,652
Software	29	114,588	79,700	96,500	110,800	129,000	169,500	28	108,900
Structural	1,433	94,538	56,000	66,400	85,000	112,500	143,000	1,381	84,500
Systems	83	116,099	64,559	79,700	112,400	140,000	174,400	83	112,400
Transportation	796	96,636	57,400	67,650	88,000	115,000	149,000	786	87,850
Welding	34	102,470	42,000	78,642	97,000	125,000	148,000	34	97,000

EXHIBIT 14: INCOME (\$) BY MAJOR BRANCH OF ENGINEERING



EXHIBIT 15: INCOME BY MAJOR BRANCH OF ENGINEERING* (FULL-TIME SALARIED ONLY)

Job Function

Full-time salaried median annual income is highest for respondents in executive/administrative/legal job functions (\$150,000). This group is followed by those in sales/marketing/public relations (\$114,500), and research & development applications (\$102,612).

Full-time salaried median incomes in not-for-profit/public service, production/quality management/ maintenance and others, instructional/higher education, and project management/engineering/operations ranges between \$93,880 and \$102,470.

The lowest full-time salaried median incomes are received by those in drafting/estimating (\$54,400), design (\$73,300), training/technical writing (\$77,143), planning/project study & analysis/valuation/testing (\$82,482), construction supervision (\$85,100), and consulting (\$89,000).

A graphical comparison of full-time salaried median incomes by job function appears in Exhibit 17.

		All Respondents							
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median
Construction Supervision	335	94,436	50,000	62,220	85,200	112,000	149,000	330	85,100
Consulting	2,342	103,534	56,980	69,500	90,727	125,000	167,000	2,175	89,000
Design	2,789	81,004	53,000	61,000	73,500	94,827	120,000	2,763	73,300
Drafting/Estimating	57	63,886	40,000	45,000	55,000	66,980	105,000	56	54,000
Executive/Administrative/Legal	600	162,927	99,647	118,000	150,000	190,600	248,750	579	150,000
Instructional/Higher Education	277	110,105	66,177	79,350	102,000	136,000	168,000	277	102,000
Not-for-profit/Public Service	291	96,018	61,000	74,109	93,880	113,630	139,512	291	93,880
Other	329	108,552	60,000	80,000	102,000	131,000	161,000	326	102,000
Planning/Project Study & Analysis/Valuation/Testing	266	91,405	52,000	64,000	82,996	110,800	140,000	264	82,482
Production/Quality Management/ Maintenance and others	487	103,954	58,000	74,000	98,000	123,000	160,000	487	98,000
Project Management/Engineering/ Operations	3,862	110,548	65,500	82,000	102,500	130,112	162,100	3,830	102,470
Research & Development/Applications	876	108,559	60,000	76,872	103,000	133,450	160,000	863	102,612
Sales/Marketing/Public Relations	174	120,017	70,000	92,200	114,750	140,000	180,000	169	114,500
Training/Technical Writing	35	86,932	50,000	67,828	77,143	108,500	134,000	35	77,143

EXHIBIT 16: INCOME (\$) BY JOB FUNCTION

EXHIBIT 17: INCOME BY JOB FUNCTION (FULL-TIME SALARIED ONLY)



Industry or Service of Employer

The highest full-time salaried median incomes of the 27 industry groups studied were received by respondents employed by those in petroleum/natural gas products (\$120,000), utilities - pipelines (\$110,500), utilities - gas (\$108,850), and utilities - electric (\$108,369).

Those receiving the lowest full-time salaried median incomes are employed by a private practice (\$84,032), transportation services (\$84,330), state government (\$85,000), fabricated metal products (\$85,500), and transportation equipment (\$87,333).

			Full-T Salaried	ïme I Only					
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median
Aerospace/aircraft products	436	109,284	62,000	78,750	104,487	131,750	159,400	434	104,487
Chemical, pharmaceutical and allied products	312	114,635	68,250	81,119	104,150	140,500	173,500	310	104,150
Coal products	22	100,744	61,000	73,500	106,151	126,000	131,000	22	106,151
Colleges and universities	388	106,747	57,500	75,000	100,000	136,000	165,000	388	100,000
Communication services	17	106,500	48,500	83,000	97,000	127,000	200,000	17	97,000
Construction and real estate development	446	105,191	55,500	67,210	92,000	132,357	170,000	436	91,700
Electrical and electronics equipment	370	108,529	60,000	76,000	100,582	130,000	170,000	367	100,663
Fabricated metal products	381	94,433	52,500	65,500	85,500	115,900	145,000	379	85,500
Food/Beverage/Tobacco products	65	118,536	53,000	70,600	107,000	141,602	200,059	64	106,300
Government - Federal	614	104,275	60,400	77,000	101,000	128,000	150,300	613	101,000
Government - Local	727	96,989	59,620	76,500	93,120	113,381	140,000	722	92,950
Government - State	366	88,279	51,960	66,227	85,033	105,228	126,000	365	85,000
Machinery (except electrical)	431	101,193	59,800	71,500	93,000	120,000	153,000	425	93,000
Other manufacturing	418	102,737	59,000	71,500	95,377	125,000	156,000	414	95,877
Other non-manufacturing	298	116,002	60,000	81,000	105,000	138,300	185,000	294	105,000
Petroleum/Natural gas products	543	135,382	70,500	89,000	120,200	169,367	214,000	537	120,000
Primary metal industries	80	105,606	56,900	71,950	95,000	125,000	171,500	78	94,500
Private Practice	4,836	97,363	55,120	66,000	85,000	116,270	153,000	4,633	84,032
Research Organizations and Laboratories	237	112,234	62,196	84,000	110,000	135,236	165,000	231	108,204
Rubber and plastic products	97	100,915	54,000	75,000	92,500	125,000	149,000	97	92,500
Stone/Clay/Glass/Concrete Products	60	106,019	64,500	74,368	98,586	123,000	150,250	59	97,550
Transportation equipment	282	95,999	57,700	68,000	87,667	114,000	142,000	279	87,333
Transportation services	161	97,552	53,000	62,800	85,000	113,500	158,000	158	84,330
Utilities - Electric	644	114,770	70,084	85,000	109,000	135,000	165,000	639	108,369
Utilities - Gas	84	116,338	73,000	85,500	108,850	131,200	175,000	84	108,850
Utilities - Other or mixed	286	112,453	65,484	78,000	101,711	135,000	167,500	283	101,421
Utilities - Pipeline	119	123,650	61,500	80,500	110,500	158,800	190,000	117	110,500

EXHIBIT 18: INCOME (\$) BY INDUSTRY OR SERVICE OF EMPLOYER

EXHIBIT 19: INCOME BY INDUSTRY OR SERVICE OF EMPLOYER (FULL-TIME SALARIED ONLY)



Licensing and Certification Status

The vast majority of full-time respondents (54.1%) are PEs who do not hold other licenses, 0.8% are PEs certified in environmental engineering, 0.1% are PEs certified in forensic engineering, 2.3% are PEs certified in some other engineering specialty, 0.9% are PEs and professional or land surveyors, and 1.7% are PEs in some other licensed profession). Engineers-in-training/engineer interns comprise 22.4% of the sample, while professional land surveyors comprise 0.02% of the sample. The remaining participants are neither registered nor certified.

Exhibit 20 reports income by licensing-certification status. Those full-time salaried respondents who are professional engineers in some other licensed profession (\$116,000). Following them are PEs certified in environmental engineering (\$111,550), PEs who are also a professional surveyor or land surveyor (\$111,250), PEs certified in some other engineering specialty (\$110,300), and PEs who do not hold other licenses (\$100,000). Unlicensed engineers have a median income of \$95,500 and engineers-in-training/engineer interns of \$68,450.

			All F	Responden	ts			Full-Time Salaried Only				
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median			
No professional registration or certification	2,212	104,404	57,500	71,500	95,775	126,500	160,000	2,187	95,500			
Professional Land Surveyor	3	!	!	'	l '			2	 			
Engineer-in-Training/ Engineering Intern	2,815	80,603	49,500	56,500	68,580	95,000	128,000	2,802	68,450			
Professional Engineer (PE)	6,784	110,553	66,000	79,210	100,500	130,000	165,568	6,589	100,000			
PE and Certification in Environmental Engineering	99	119,740	69,891	90,000	113,000	134,000	191,000	94	111,550			
PE and Certification in Forensic Engineering	11	150,545	92,000	101,000	160,000	200,000	205,000	9				
PE and Certification in Other Engineering Specialty	285	119,542	73,179	90,000	110,300	140,000	178,366	275	110,300			
PE and Professional Surveyor or Land Surveyor	119	117,814	63,000	85,000	111,400	132,000	180,000	110	111,250			
PE in some other Licensed Profession	214	124,359	72,000	93,000	116,000	150,000	186,000	200	116,000			

EXHIBIT 20: INCOME (\$) BY LICENSING OR CERTIFICATION STATUS

EXHIBIT 21: INCOME BY LICENSING OR CERTIFICATION STATUS (FULL-TIME SALARIED ONLY)



Supervisory Responsibility

Supervisory responsibility plays an important part in determining income, and 50.3% of full-time respondents have supervisory or managerial responsibility.

Income increases regularly with increased supervisory/managerial responsibility. As one might expect, supervision of engineers and other professionals results in higher earnings than does supervision of sub-professional personnel, given the same number of subordinates.

Full-time salaried engineers in nonsupervisory positions have a median income of \$78,500, while the median income of those supervising/managing one or two professionals (e.g., engineers, scientists, or technologists) increases regularly from \$94,000 to \$169,000 for those who direct the activities of 50-plus professionals.

Full-time salaried engineers supervising both professionals and nonprofessionals result in a similar progression in median income from \$89,000 for those supervising one to four subordinates to \$177,500 for the group that manages 250 or more such subordinates.

This data is displayed in Exhibits 22 and 23.

EXHIBIT 22: INCOME (\$) BY SUPERVISORY RESPONSIBILITY

			All F	Responden	ts			Full-Time Salaried Only	
	#of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	#of Responses	Median
No supervisory responsibility	5,703	87,689	53,000	62,400	79,000	104,814	134,200	5,619	78,500
1–2 professionals supervised	495	100,501	66,300	77,000	94,000	115,540	144,000	483	94,000
3–4 professionals supervised	690	106,797	69,725	83,362	100,240	123,593	149,900	669	100,000
5–9 professionals supervised	893	119,404	82,680	95,000	113,000	136,000	166,000	881	113,000
10–49 professionals supervised	889	144,922	97,000	115,000	136,500	167,000	202,000	877	136,000
50 or more professionals supervised	191	182,631	113,600	138,000	169,000	212,400	265,000	189	169,000
1–2 non-professionals supervised	233	79,595	53,751	63,500	73,000	90,834	112,000	226	72,500
3–4 non-professionals supervised	213	81,934	56,500	64,078	74,000	93,333	115,000	209	74,000
5–9 non-professionals supervised	181	85,779	52,200	63,000	77,501	100,000	129,000	181	77,501
10–49 non-professionals supervised	197	101,064	58,000	70,000	92,300	120,000	151,572	194	92,045
50 or more non-professionals supervised	49	132,176	75,000	100,000	124,800	158,000	200,000	49	124,800
1–4 professionals and non-professionals supervised	481	96,712	64,000	76,000	89,000	113,000	136,300	456	89,000
5–9 professionals and non-professionals supervised	403	109,919	70,000	84,433	102,000	125,736	157,000	389	102,000
10–49 professionals and non-professionals supervised	633	130,635	81,369	99,216	120,000	150,000	198,000	608	119,000
50–99 professionals and non-professionals supervised	113	153,006	102,000	114,304	140,000	183,500	220,000	111	140,000
100–249 professionals and non- professionals supervised	77	166,124	100,000	125,000	152,800	200,000	251,000	75	152,800
250 or more professionals and non-professionals supervised	42	201,575	120,000	149,000	177,500	220,000	305,000	42	177,500

EXHIBIT 23: INCOME BY SUPERVISORY RESPONSIBILITY (FULL-TIME SALARIED ONLY)



Sub-Regions

Exhibit 24 reports income by geographic sub-region (with sub-regions including metropolitan areas surveyed). As the data indicate, the highest median incomes are in the Pacific Southwest States (\$104,061), the South Central States (\$101,000), and the Middle Atlantic States (\$95,000). The lowest full-time salaried median incomes are found in the Upper Mountain States (\$80,878), the Great Lakes States (\$86,067) and the Central Plains States (\$88,000).

The online report also includes the ability to select data by state, major metropolitan area, zip code, and the following regions:

- North Central: Central Plains, Great Lakes, and Upper Mountain States
- North East: Middle Atlantic and New England States
- South Central: Lower Mountain and South Central States
- South East: Lower Southeast and Middle Southeast States
- West Coast: Pacific Northwest and Pacific Southwest States

EXHIBIT 24: MEDIAN ANNUAL INCOME BY SUB-REGION—METROPOLITAN AREAS INCLUDED (FULL-TIME SALARIED ONLY)



			All	Respondent	6			Full-Time Salaried Only				
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median			
New England	786	99,376	55,800	68,000	91,172	118,833	157,000	761	91,000			
Middle Atlantic	1,854	102,845	57,200	70,000	95,000	124,000	157,350	1,823	95,000			
Middle Southeast	1,447	102,859	58,000	71,390	94,422	124,575	160,000	1,415	94,200			
Lower Southeast	950	100,895	55,630	68,200	93,850	122,750	151,000	928	93,000			
Great Lakes	2,045	95,486	55,825	68,000	86,958	114,264	143,000	2,014	86,067			
Central Plains	654	95,998	56,480	67,000	88,520	117,000	145,000	644	88,000			
Upper Mountain	183	88,335	52,000	63,654	82,000	107,000	135,539	173	80,878			
South Central	1,656	116,198	61,105	76,000	102,000	140,000	190,000	1,622	101,000			
Lower Mountain	908	101,489	58,500	72,000	93,000	121,860	150,500	890	92,729			
Pacific Northwest	696	100,619	60,000	71,500	93,000	119,457	151,000	681	92,227			
Pacific Southwest	1,423	114,042	65,000	80,000	104,814	138,796	176,328	1,384	104,061			

EXHIBIT 25: INCOME (\$) BY SUB-REGION (METROPOLITAN AREAS INCLUDED)

Exhibit 27 graphically displays the 10 highest full-time salaried median incomes by metropolitan area. As Exhibit 26 shows, when full-time salaried median income data by sub-region are analyzed excluding the metropolitan areas that are presented in Exhibit 27, the highest median incomes are in the Pacific Southwest States (\$101,000) and the Middle Atlantic States (\$93,775).

			All	Respondents	S			Full-Time Salaried Only		
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median	
New England	786	99,376	55,800	68,000	91,172	118,833	157,000	761	91,000	
Middle Atlantic	1,702	101,069	56,800	69,729	94,000	120,000	154,000	1,674	93,775	
Middle Southeast	1,190	98,944	57,000	70,000	90,500	120,000	151,003	1,166	90,425	
Lower Southeast	900	100,349	55,560	68,132	92,543	120,493	152,750	879	92,000	
Great Lakes	2,045	95,486	55,825	68,000	86,958	114,264	143,000	2,014	86,067	
Central Plains	654	95,998	56,480	67,000	88,520	117,000	145,000	644	88,000	
Upper Mountain	183	88,335	52,000	63,654	82,000	107,000	135,539	173	80,878	
South Central	1,043	105,003	57,900	70,500	93,000	125,000	168,000	1,016	92,500	
Lower Mountain	908	101,489	58,500	72,000	93,000	121,860	150,500	890	92,729	
Pacific Northwest	682	100,430	60,000	71,000	92,760	118,956	151,300	668	92,077	
Pacific Southwest	1,131	111,085	64,230	77,000	102,000	135,000	168,000	1,099	101,000	

EXHIBIT 26: INCOME (\$) BY SUB-REGION (TEN HIGHEST METROPOLITAN AREAS EXCLUDED)



EXHIBIT 27: 10 HIGHEST INCOMES BY METROPOLITAN AREA (FULL-TIME SALARIED ONLY)

Metropolitan Area

For this analysis, only those metropolitan areas with a minimum of 10 full-time salaried respondents are included. The highest full-time salaried median income is found in Bakersfield, CA (\$129,000); Brazoria, TX (\$125,850); Bellingham, WA (\$120,000); Houston, TX (\$120,000); Huntsville, AL (\$117,700); Vallejo-Fairfield-Napa, CA (\$117,500); Washington, DC-MD-VA-WV (\$116,871); San Jose, CA (\$116,372); Orange County, CA (\$115,000); and Middlesex-Somerset-Hunterdon, NJ (\$113,968).

The lowest full-time salaried median incomes found in this study are in Burlington, VT (\$56,040); Iowa City, IA (\$58,800); Savannah, GA (\$64,950); Erie, PA (\$65,000); and Duluth-Superior, MN-WI (\$66,700).

The full-time salaried median incomes in the remaining metropolitan areas surveyed range from \$67,080 to \$113,000.

			All	Responder	its			Full-Time On	Salaried ly
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median
Akron, OH	47	103,158	68,000	80,000	98,100	127,000	137,500	46	98,050
Albany-Schenectady-Troy, NY	90	94,209	53,490	65,000	92,378	115,000	133,836	88	90,478
Albuquerque, NM	53	105,609	62,150	78,000	100,200	136,000	149,000	52	101,629
Allentown-Bethlehem-Easton, PA	43	93,793	53,664	64,300	76,000	110,120	147,300	43	76,000
Amarillo, TX	13	97,514	63,759	69,000	89,022	123,000	148,500	13	89,022
Anchorage, AK	73	109,746	62,400	74,298	104,064	132,500	160,000	73	104,064
Ann Arbor, MI	41	111,654	53,000	66,546	98,565	153,000	187,000	40	98,383
Appleton-Oshkosh-Neenah, WI	18	90,746	56,500	78,000	85,000	96,058	150,000	18	85,000
Atlanta, GA	180	108,307	59,650	71,250	100,000	130,500	170,882	173	100,000
Augusta-Aiken, GA-SC	19	100,470	49,900	66,000	95,000	125,000	150,111	19	95,000
Austin-San Marcos, TX	119	105,142	58,300	72,500	86,000	126,000	177,000	114	85,250
Bakersfield, CA	21	143,606	90,000	99,500	127,000	180,880	228,000	20	129,000
Baltimore, MD	158	104,908	64,501	77,000	99,917	126,000	159,000	155	100,000
Baton Rouge, LA	78	99,297	59,100	73,500	90,115	115,000	145,000	77	92,000
Beaumont-Port Arthur, TX	13	119,461	64,126	73,800	110,000	150,000	174,500	13	110,000
Bellingham, WA	14	109,844	72,000	80,000	119,750	129,000	140,000	13	120,000
Bergen-Passaic, NJ	50	108,257	67,000	75,000	110,638	127,500	156,000	50	110,638
Billings, MT	12	83,311	55,000	62,000	80,500	103,500	114,581	12	80,500
Birmingham, AL	67	105,634	60,000	69,500	100,000	138,000	162,000	67	100,000
Boise City, ID	43	90,824	52,500	63,000	86,500	113,463	135,539	42	86,700
Boston, MA-NH	277	99,802	56,000	69,000	89,895	121,000	160,500	267	88,301
Boulder-Longmont, CO	31	108,031	70,000	77,056	111,500	128,600	144,876	31	111,500
Brazoria, TX	14	134,521	94,000	102,000	125,850	165,000	202,000	14	125,850
Bremerton, WA	11	116,026	61,505	62,000	84,619	114,496	280,000	11	84,619
Bridgeport, CT	15	99,720	55,500	70,000	99,000	117,000	150,000	15	99,000
Bryan-College Station, TX	17	100,073	60,000	86,200	95,840	116,000	129,000	16	95,420
Buffalo-Niagara Falls, NY	52	89,821	53,000	62,568	86,670	105,500	136,000	52	86,670
Burlington, VT	17	75,383	44,500	47,677	58,000	106,202	110,000	16	56,040
Canton-Massillon, OH	12	88,699	51,833	57,830	84,548	102,810	126,500	12	84,548
Cedar Rapids, IA	13	98,403	65,000	73,200	84,790	119,257	154,600	12	87,448

EXHIBIT 28: INCOME (\$) BY METROPOLITAN AREA

	All Respondents								Full-Time Salaried Only	
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median	
Champaign-Urbana, IL	12	105,764	58,822	73,684	90,850	149,500	172,000	12	90,850	
Charleston, SC	41	100,971	58,800	73,000	91,600	120,000	150,000	39	91,600	
Charleston, WV	21	105,976	49,088	63,000	81,000	118,800	169,000	21	81,000	
Charlotte-Gastonia-Rock Hill, NC-SC	128	105,420	61,360	72,819	99,000	122,075	171,000	126	99,000	
Charlottesville, VA	16	89,805	63,000	69,027	77,750	101,000	120,000	15	76,500	
Chattanooga, TN-GA	41	104,352	70,370	75,300	90,000	124,800	163,000	40	91,500	
Chicago, IL	385	101,665	60,000	71,000	93,000	123,000	159,000	381	93,000	
Cincinnati, OH-KY-IN	81	93,043	52,000	61,000	89,700	118,000	140,000	78	88,850	
Cleveland-Lorain-Elyria, OH	105	92,391	59,000	72,600	88,000	106,000	131,500	104	88,250	
Colorado Springs, CO	34	95,018	57,100	77,900	92,500	110,000	148,653	34	92,500	
Columbia, SC	26	105,646	59,085	73,200	92,950	125,000	154,300	26	92,950	
Columbus, OH	108	98,492	54,000	70,360	87,900	118,200	154,000	105	87,700	
Corpus Christi, TX	17	123,124	62,400	65,000	104,000	134,000	291,500	16	97,000	
Corvallis, OR	12	105,560	67,000	80,950	93,500	122,209	142,000	12	93,500	
Dallas, TX	165	106,111	55,500	71,000	95,000	120,000	166,000	161	95,000	
Davenport-Moline-Rock Island, IA-IL	18	77,762	50,000	60,320	72,092	94,000	110,000	18	72,092	
Dayton-Springfield, OH	42	95,875	59,160	72,500	92,897	115,000	130,000	41	88,554	
Denver, CO	248	103,981	57,623	71,978	95,000	125,000	162,000	243	95,000	
Des Moines, IA	39	80,121	51,000	64,400	77,500	93,000	106,000	39	77,500	
Detroit, MI	120	100,233	56,000	72,350	90,000	122,000	156,450	117	90,000	
Duluth-Superior, MN-WI	20	85,017	48,294	52,000	66,700	81,406	172,500	20	66,700	
El Paso, TX	10	141,704	49,325	64,000	110,750	222,000	292,500	10	110,750	
Erie, PA	15	75,993	54,000	57,000	65,000	100,000	126,500	15	65,000	
Evansville-Henderson, IN-KY	21	87,703	50,856	63,000	74,963	105,400	150,000	21	74,963	
Flagstaff, AZ-UT	16	76,992	46,800	51,762	67,080	82,500	108,530	16	67,080	
Fort Collins-Loveland, CO	47	96,307	60,000	65,000	82,806	114,000	142,000	45	82,806	
Fort Lauderdale, FL	28	106,319	62,500	72,400	92,500	134,726	155,000	28	92,500	
Fort Pierce-Port St. Lucie, FL	13	103,344	63,500	69,000	102,586	124,000	168,000	13	102,586	
Fort Wayne, IN	22	78,856	54,230	60,500	74,250	90,000	116,500	22	74,250	
Fort Worth-Arlington, TX	91	99,733	56,000	62,000	86,630	127,049	167,000	87	86,630	
Fresno, CA	23	93,972	61,800	74,000	87,000	107,580	128,900	23	87,000	
Gainesville, FL	17	98,901	50,250	65,000	100,000	129,817	154,000	17	100,000	
Galveston-Texas City, TX	13	148,382	74,880	96,000	131,800	177,000	240,000	11	110,000	
Gary, IN	22	109,359	60,000	77,000	112,259	132,600	141,000	22	112,259	
Grand Rapids-Muskegon-Holland, MI	41	88,744	61,650	71,136	80,300	98,843	130,000	40	80,384	
Green Bay, WI	16	92,142	50,528	61,523	72,800	107,572	123,300	16	72,800	
Greensboro-Winston Salem-High Point, NC	24	111,240	69,000	83,500	98,452	137,750	147,760	24	98,452	
Greenville-Spartanburg-Anderson, SC	79	100,546	58,500	73,000	87,480	122,800	159,400	79	87,480	
Hamilton-Middletown, OH	11	111,095	72,000	80,000	104,000	139,500	180,845	11	104,000	
Harrisburg-Lebanon-Carlisle, PA	51	84,143	52,500	64,000	79,083	95,000	116,000	48	79,042	
Hartford, CT	103	106,850	60,320	75,500	104,000	131,300	155,000	101	104,000	
Honolulu, HI	44	101,621	65,440	78,177	93,000	120,450	150,000	44	93,000	

		All Respondents								
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median	
Houston, TX	599	135,263	70,380	87,000	120,000	170,000	212,536	592	120,000	
Huntsville, AL	50	110,723	58,748	88,000	117,850	136,000	148,100	49	117,700	
Indianapolis, IN	95	84,477	51,960	60,000	80,000	105,000	133,000	95	80,000	
Iowa City, IA	11	74,935	53,300	54,700	58,800	112,000	113,600	11	58,800	
Jackson, MS	19	87,838	58,100	64,000	74,000	107,000	150,000	19	74,000	
Jacksonville, FL	32	97,256	55,000	69,900	89,952	110,650	158,000	32	89,952	
Johnson City-Kingsport-Bristol, TN-VA	25	104,921	65,000	74,500	84,378	138,000	161,000	25	84,378	
Kalamazoo-Battle Creek, MI	15	87,451	60,000	65,500	83,000	94,000	116,000	15	83,000	
Kansas City, MO-KS	155	102,400	57,750	68,500	98,000	125,000	155,453	152	97,900	
Knoxville, TN	69	103,241	60,000	72,000	96,270	131,000	150,000	68	98,135	
La Crosse, WI-MN	14	92,507	48,500	66,574	93,650	111,595	137,797	14	93,650	
Lafayette, LA	24	122,896	53,500	67,750	112,027	159,500	190,000	23	111,854	
Lakeland-Winter Haven, FL	12	98,046	52,250	64,500	77,732	116,250	145,000	11	74,464	
Lancaster, PA	17	98,028	55,000	65,000	97,500	115,000	150,150	17	97,500	
Lansing-East Lansing, MI	16	83,204	57,990	68,750	76,200	91,720	123,500	16	76,200	
Las Vegas, NV-AZ	48	105,779	70,899	77,500	103,574	124,713	150,000	46	103,574	
Lawrence, MA-NH	16	121,726	57,700	68,150	107,000	153,000	215,000	15	104,000	
Lexington-Fayette, KY	33	103,735	55,000	69,000	98,000	113,500	153,000	33	98,000	
Lincoln, NE	23	103,742	66,600	80,600	95,000	130,000	149,000	23	95,000	
Little Rock-North Little Rock, AR	15	91,480	50,000	62,600	79,600	110,041	124,000	15	79,600	
Longview-Marshall, TX	13	81,162	62,075	66,000	68,000	83,800	128,000	13	68,000	
Los Angeles-Long Beach, CA	213	116,529	65,000	80,000	106,500	140,000	190,000	206	105,400	
Louisville, KY-IN	41	91,634	55,000	67,947	82,250	103,500	148,000	39	82,250	
Lowell, MA-NH	27	94,643	51,340	64,450	91,000	113,968	135,150	27	91,000	
Lubbock, TX	10	94,049	52,400	72,000	88,147	108,000	148,200	10	88,147	
Lynchburg, VA	25	104,207	64,450	74,750	106,500	122,000	134,000	25	106,500	
Macon, GA	11	93,123	52,000	58,153	107,000	120,000	128,000	11	107,000	
Madison, WI	46	81,333	51,000	65,000	76,000	93,842	110,000	46	76,000	
Manchester, NH	24	73,804	48,500	55,800	68,500	88,971	110,000	24	68,500	
Melbourne-Titusville-Palm Bay, FL	14	94,923	53,500	71,318	88,750	120,000	146,500	14	88,750	
Memphis, TN-AR-MS	32	93,533	55,000	63,500	81,000	116,750	134,650	32	81,000	
Miami, FL	25	120,875	62,400	84,895	104,000	120,000	223,000	24	102,915	
Middlesex-Somerset-Hunterdon, NJ	53	119,239	66,000	74,760	116,435	142,500	174,800	52	113,968	
Milwaukee-Waukesha, WI	110	94,283	53,075	62,800	82,500	114,580	154,210	108	82,500	
Minneapolis-St. Paul, MN-WI	208	97,272	56,000	70,542	90,000	115,000	150,000	206	89,808	
Mobile, AL	17	114,502	77,250	92,000	107,542	116,000	160,000	17	107,542	
Monmouth-Ocean, NJ	23	102,694	65,000	72,000	99,500	124,000	130,000	22	96,850	
Nashville, TN	75	84,565	50,003	60,000	77,500	102,500	125,000	73	77,000	
Nassau-Suffolk, NY	61	111,773	53,000	78,000	103,000	141,000	195,000	61	103,000	
New Haven-Meriden, CT	20	109,905	57,000	70,467	105,250	135,100	173,000	20	105,250	
New London-Norwich, CT-RI	25	106,377	65,500	84,000	105,500	126,000	142,000	25	105,500	

			All	Responder	nts			Full-Time Salaried Only		
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median	
New Orleans, LA	95	122,457	62,880	82,000	110,000	154,800	195,000	93	109,000	
New York, NY	247	105,825	60,000	70,700	94,459	127,000	175,000	244	94,130	
Newark, NJ	89	113,938	65,500	73,000	100,000	140,000	177,000	86	101,000	
Norfolk-Virginia Beach-Newport News, VA-NC	87	104,994	60,000	80,000	100,000	125,000	150,000	85	100,000	
Oakland, CA	184	119,982	67,000	80,000	105,500	149,000	190,000	181	105,000	
Oklahoma City, OK	46	93,798	50,000	60,000	80,000	120,000	157,000	45	77,000	
Olympia, WA	11	82,810	59,950	62,780	82,000	102,000	105,228	11	82,000	
Omaha, NE-IA	56	94,862	55,900	66,750	86,250	113,444	151,513	56	86,250	
Orange County, CA	152	125,563	65,000	85,000	116,422	156,500	200,000	149	115,000	
Orlando, FL	106	98,933	56,000	67,000	98,250	122,000	140,000	106	98,250	
Peoria-Pekin, IL	24	87,986	63,240	67,968	85,409	110,550	123,000	23	84,318	
Philadelphia, PA-NJ	254	97,773	55,000	65,666	91,162	120,000	149,800	248	91,162	
Phoenix, AZ	173	105,197	60,000	74,256	96,096	123,500	152,800	169	96,096	
Pittsburgh, PA	185	97,507	60,000	72,000	93,750	118,000	134,000	183	93,750	
Portland, ME	33	98,716	50,500	68,540	83,500	100,000	145,000	29	79,675	
Portland-Vancouver, OR-WA	172	97,715	55,000	69,061	90,040	112,400	155,000	167	90,000	
Portsmouth-Rochester, NH-ME	27	94,019	60,140	64,700	90,000	116,000	137,000	27	90,000	
Providence-Fall River-Warwick, RI-MA	50	99,104	51,480	69,160	85,150	112,800	172,500	49	85,000	
Provo-Orem, UT	32	94,218	68,580	76,000	92,997	104,955	126,175	32	92,997	
Raleigh-Durham-Chapel Hill, NC	106	96,567	55,395	65,300	91,450	112,000	150,000	102	88,500	
Reading, PA	16	106,794	66,851	75,354	106,500	132,000	149,999	16	106,500	
Reno, NV	26	97,572	61,000	70,000	92,775	99,500	150,000	26	92,775	
Richland-Kennewick-Pasco, WA	33	102,371	62,400	83,054	99,650	125,000	140,000	32	98,825	
Richmond-Petersburg, VA	60	101,111	59,250	78,438	96,174	118,753	140,625	60	96,174	
Riverside-San Bernardino, CA	52	105,307	65,810	77,820	102,248	125,000	150,000	51	101,900	
Roanoke, VA	16	80,871	45,000	59,315	83,754	93,300	117,000	16	83,754	
Rochester, NY	60	97,405	51,000	66,414	89,000	108,250	123,523	59	88,000	
Sacramento, CA	95	110,433	63,360	73,500	102,234	128,500	174,000	93	102,234	
Salem, OR	10	86,664	65,570	74,172	83,257	95,305	114,800	10	83,257	
Salt Lake City-Ogden, UT	106	104,622	60,500	70,035	94,800	126,000	168,725	106	94,800	
San Antonio, TX	70	96,925	59,500	70,000	87,235	118,027	142,500	68	87,235	
San Diego, CA	183	109,145	64,880	78,793	102,500	132,000	160,000	173	102,000	
San Francisco, CA	87	111,889	64,000	72,000	104,000	140,000	178,000	86	102,500	
San Jose, CA	104	123,305	68,600	92,850	117,186	148,200	178,000	101	116,372	
San Luis Obispo-Atascadero-Paso Robles, CA	18	92,184	46,000	72,000	84,124	115,000	141,500	18	84,124	
Santa Barbara-Santa Maria-Lompoc, CA	13	126,220	61,000	68,000	115,000	164,000	220,000	12	108,858	
Santa Fe, NM	16	111,624	74,500	84,000	101,250	138,750	160,000	16	101,250	
Santa Rosa, CA	22	101,121	54,743	82,000	93,500	114,350	143,000	22	93,500	
Savannah, GA	12	73,454	50,000	51,375	64,950	88,110	115,000	12	64,950	
Seattle-Bellevue-Everett, WA	224	105,264	62,000	73,150	95,710	125,000	159,720	219	95,300	
Shreveport, LA	12	86,799	52,700	54,500	85,000	98,300	137,000	12	85,000	

		All Respondents							Full-Time Salaried Only	
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median	
South Bend, IN	16	82,446	55,200	62,500	79,442	98,570	110,000	16	79,442	
Spokane, WA	28	86,825	50,500	64,379	85,125	104,288	120,000	28	85,125	
Springfield, IL	13	104,620	61,180	75,480	112,000	131,246	140,000	13	112,000	
Springfield, MA	22	94,593	45,000	60,000	90,250	108,000	130,000	22	90,250	
Springfield, MO	11	88,816	56,250	71,000	82,000	100,480	136,000	10	84,296	
St. Louis, MO-IL	147	102,094	57,000	68,000	91,500	126,500	158,000	145	91,000	
State College, PA	12	102,742	56,000	71,000	96,350	134,378	160,120	12	96,350	
Syracuse, NY	51	107,336	53,000	61,360	85,650	126,000	170,000	50	85,325	
Tacoma, WA	19	91,885	59,000	70,000	84,500	105,200	120,000	19	84,500	
Tallahassee, FL	10	88,035	42,000	53,000	76,675	103,000	173,500	10	76,675	
Tampa-St. Petersburg-Clearwater, FL	94	93,133	54,100	67,981	85,450	108,868	147,000	92	85,000	
Toledo, OH	26	109,508	60,000	72,500	103,150	127,000	189,000	26	103,150	
Trenton, NJ	32	106,335	69,000	80,948	103,806	129,200	155,000	32	103,806	
Tucson, AZ	45	94,473	55,000	66,500	81,060	112,400	146,000	44	80,530	
Tulsa, OK	52	103,707	59,000	73,150	93,750	121,356	154,000	51	93,000	
Tyler, TX	19	101,941	55,000	60,000	82,320	132,000	150,000	19	82,320	
Vallejo-Fairfield-Napa, CA	15	114,663	75,000	94,000	117,500	131,500	159,000	15	117,500	
Ventura, CA	21	124,928	78,508	86,000	106,000	150,000	198,000	18	105,407	
Washington, DC-MD-VA-WV	356	121,992	63,000	83,088	117,830	147,250	178,000	346	116,871	
West Palm Beach-Boca Raton, FL	52	103,289	63,504	82,241	99,400	117,500	140,000	50	99,400	
Wichita, KS	18	101,592	60,320	71,000	102,067	119,200	146,000	17	94,134	
Wilmington, NC	15	104,510	50,000	70,000	104,000	128,000	137,000	15	104,000	
Wilmington-Newark, DE-MD	30	113,926	67,750	93,900	113,000	144,000	157,793	30	113,000	
Worcester, MA-CT	21	97,932	66,620	80,330	99,680	110,100	136,000	21	99,680	
York, PA	17	88,389	57,950	65,000	80,000	106,700	147,424	17	80,000	

EXHIBIT 28: INCOME (\$) BY METROPOLITAN AREA

Gender

The median income of female engineers (\$76,984) is 80.2% of that of male engineers (\$96,000).

		All Respondents							ime I Only
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median
Male	11,173	105,616	58,660	72,600	96,500	127,000	163,000	10,927	96,000
Female	1,314	85,243	53,500	62,530	77,000	99,000	129,000	1,295	76,984

EXHIBIT 29: INCOME (\$) BY GENDER

When data is analyzed by length of experience, female engineers have a higher median income than male engineers with under 2 years of experience. With all other lengths of experience, male engineers have higher median incomes. Comparison of the income by gender in the remaining groups revealed that female engineers with 3-4 years' experience received 98.2% as much as male engineers, 94.9% with 5-9 years, 92.4% with 10-14 years, 86.8% with 15-19 years, 93.9% with 20-24 years, and 90.7% with 25 or more years of experience.

EXHIBIT 30: INCOME (\$) BY GENDER VS. LENGTH OF EXPERIENCE (FULL-TIME SALARIED ONLY)

	Male Res	pondents	Female Respondents			
	# of Respondents	Median	# of Respondents	Median		
Under 1 year	306	55,000	57	58,700		
1–2 years	635	58,695	116	59,000		
3–4 years	945	64,880	192	63,732		
5–9 years	1,901	75,106	368	71,250		
10–14 years	1,454	92,022	188	85,000		
15–19 years	1,169	107,050	105	92,950		
20–24 years	1,160	116,623	86	109,500		
25 or more years	3,357	128,200	183	116,276		

EXHIBIT 31: INCOME BY GENDER VS. LENGTH OF EXPERIENCE (FULL-TIME SALARIED ONLY)



When analyzed still further, by length of experience and level of education simultaneously, much of the same relationship was found.

Tabular comparisons of median income by gender versus education and experience simultaneously in Exhibit 32.

	Male Res	pondents	Female Re	spondents				
	# of Responses	Median	# of Responses	Median				
BS Degree (engineering)							
Under 1 year	206	53,000	34	55,000				
1–2 years	432	57,000	76	58,120				
3–4 years	637	63,500	114	61,570				
5–9 years	1,097	73,000	194	68,250				
10–14 years	795	90,000	98	82,400				
15–19 years	577	102,425	56	87,500				
20–24 years	582	110,872	43	109,000				
25 or more years	1,564	123,000	62	110,175				
MS Degree (engineering)								
Under 1 year	76	57,625	17	61,000				
1–2 years	152	60,397	28	60,001				
3–4 years	220	66,124	59	66,227				
5–9 years	534	77,533	127	74,700				
10–14 years	409	92,029	60	89,050				
15–19 years	338	110,000	26	98,000				
20–24 years	310	120,000	22	114,075				
25 or more years	900	131,500	67	124,000				
Doctorate (engineering)								
Under 1 year	13	84,000	4					
1–2 years	35	75,000	6					
3–4 years	43	85,000	11	99,600				
5–9 years	108	96,662	21	80,000				
10–14 years	112	103,750	10	92,250				
15–19 years	113	125,000	11	102,000				
20–24 years	111	125,000	14	99,049				
25 or more years	317	141,756	21	142,000				

EXHIBIT 32: INCOME (\$) BY GENDER VS. LEVEL OF EDUCATION AND LENGTH OF EXPERIENCE (FULL-TIME SALARIED ONLY)

Ethnic Origin

To the degree that the data in this year's survey permit, some comparisons will be made regarding ethnic origin.

		All Respondents							Full-Time Salaried Only	
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median	
American Indian or Alaskan Native	43	97,098	64,000	70,000	87,500	112,000	133,000	43	87,500	
Asian or Pacific Islander	744	102,846	58,000	72,400	95,000	122,000	154,500	737	95,000	
Black	172	97,449	55,000	64,675	88,000	118,000	150,000	171	88,000	
Hispanic	469	94,601	54,000	65,000	85,000	113,000	142,500	460	85,000	
White (not of Hispanic origin)	10,582	103,844	58,000	71,000	94,600	125,000	161,000	10,345	94,000	
Other	162	100,950	58,510	70,000	94,890	124,000	152,000	159	94,100	

EXHIBIT 33: INCOME (\$) BY ETHNIC ORIGIN

The sample was limited to respondents who are employed full-time as salaried employees and analyzed by length of experience and level of education simultaneously versus ethnic origin of respondent.

Resulting data are displayed in Exhibit 34.

The sample sizes for American Indian/Alaskan Native respondents were too small to produce an education versus length of experience cell with more than 10 respondents.

With the primary exception of White respondents, caution should be used with any statistical conclusions made based upon origin versus level of education and length of experience due to the small sample sizes for the cells. However, there were certain trends that became apparent within this level of analysis.

	White (not Hispanic) Respondents		Asian/Pacific Islander Respondents		Hispanic Respondents		Black Respondents	
	# of Responses	Median	# of Responses	Median	# of Responses	Median	# of Responses	Median
B.S. Degree (engineer								
Under 1 year	210	53,682	10	56,000	13	61,000	2	
1-2 years	439	57,200	18	53,145	23	55,000	11	62,000
3-4 years	641	63,000	29	65,520	42	57,000	12	66,055
5-9 years	1,135	71,979	40	79,275	55	75,000	11	67,500
10-14 years	776	89,202	23	96,640	46	88,450	5	
15-19 years	569	100,371	25	107,000	20	107,000	5	
20-24 years	545	110,000	21	122,900	17	120,000	11	110,000
25 or more years	1,459	122,154	50	125,000	34	122,182	8	
M.S. Degree (engineering)								
Under 1 year	77	59,000	12	54,000	1		3	
1-2 years	143	60,000	19	64,500	7		5	
3-4 years	234	65,500	25	71,500	9		4	
5-9 years	502	76,588	78	79,892	34	82,000	13	74,700
10-14 years	382	92,000	37	93,000	24	91,000	8	
15-19 years	302	109,940	28	105,500	9		6	
20-24 years	279	120,000	20	132,500	17	102,334	6	
25 or more years	845	130,248	63	137,000	19	135,000	4	
Doctorate (engineerin	g)							
Under 1 year	14	82,750	1		2		0	
1-2 years	25	78,500	10	66,300	2		0	
3-4 years	31	87,500	17	82,000	2		1	
5-9 years	82	92,750	30	96,250	8		7	
10-14 years	81	104,000	26	103,650	6		3	
15-19 years	68	122,200	31	116,700	10	124,750	4	
20-24 years	84	123,486	21	120,000	7		5	
25 or more years	266	144,000	42	139,650	6		5	

EXHIBIT 34: INCOME (\$) BY ORIGIN VS. HIGHEST DEGREE EARNED AND LENGTH OF EXPERIENCE (FULL-TIME SALARIED ONLY)

Organization Size

Overall, full-time salaried median income shows an increase from smaller organizations to larger organizations, based on employee size. Per Exhibit 35, the median income increases from \$83,932 for those in organizations with less than 200 employees to \$107,245 for those in organizations with 20,000 employees and over.

EXHIBIT 35: INCOME (\$) BY ORGANIZATION SIZE (NUMBER OF EMPLOYEES)									
	All Respondents								ime I Only
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median
Under 200	4,055	95,901	53,000	65,000	85,000	114,000	150,000	3,796	83,932
200–499	1,636	97,522	56,400	68,120	88,530	117,510	147,000	1,630	88,530
500–999	988	101,962	60,000	72,000	94,500	121,240	154,000	985	94,200
1,000–1,999	829	105,203	60,500	75,400	98,009	123,509	160,000	828	98,426
2,000–4,999	1,261	108,325	61,325	76,066	100,000	128,301	165,740	1,260	100,000
5,000–9,999	894	111,748	64,350	79,000	105,000	132,622	164,000	894	105,000
10,000–19,999	814	110,806	64,000	76,800	102,239	131,420	170,000	813	102,148
20,000 and over	2,057	116,108	64,000	81,000	107,245	140,000	178,230	2,057	107,245

Overall, full-time salaried median income also shows an increase from smaller organizations to larger organizations, based on sales/revenue. Per Exhibit 36, the median income increases from \$84,000 for those in organizations with less than \$50 million in sales/revenue to \$111,792 for those working in organizations with over \$2 billion in sales/revenue.

EXHIBIT 36: INCOME (\$) BY ORGANIZATION SALES/REVENUE									
	All Respondents								ime I Only
	# of Responses	Mean	10th Pctl	25th Pctl	Median	75th Pctl	90th Pctl	# of Responses	Median
Under \$50 million	4,501	95,526	54,000	65,350	85,000	112,320	147,000	4,238	84,000
\$50–99.9 million	1,084	98,655	57,623	69,500	90,539	118,000	149,000	1,080	90,473
\$100–499.9 million	769	109,278	63,900	78,520	102,000	130,000	160,000	769	102,000
\$500–\$999.9 million	1,664	105,295	61,000	74,471	98,000	125,000	160,000	1,662	98,000
\$1–\$1.99 billion	847	109,824	63,000	76,572	100,556	131,500	167,000	847	100,556
\$2 billion and over	2,772	120,247	67,500	84,888	111,792	145,000	183,000	2,770	111,792

Policies and Practices

The tables in this section summarize the responses to the employment status, overtime, promotion, and benefits questions.

The "# of Responses" reported reflects those that answered the question as "Yes" or the value that is being measured. The "% of Responses" reflects the percentage that provided the requested value divided by the total number of responses for that question.

Employment Status

For example, Exhibit 37 displays the percentage of participants that changed employers during 2011. This table indicates that of 12,720 total responses, 1,673 engineers changed employers, or 13.2%.

	# of Responses	% of Responses
Entire Sample Combined	1,673	13.2%
Engineer Level I	148	35.2%
Engineer Level II	145	22.9%
Engineer Level III	190	18.2%
Engineer Level IV	325	13.7%
Engineer Level V	351	12.1%
Engineer Level VI	260	10.0%
Engineer Level VII	176	9.3%
Engineer Level VIII	77	8.9%

EXHIBIT 37: PERCENTAGE OF PARTICIPANTS THAT CHANGED EMPLOYERS DURING 2011

EXHIBIT 38: PERCENTAGE OF PARTICIPANTS THAT WERE UNEMPLOYED BETWEEN JANUARY 1 AND DECEMEBER 31, 2011

	# of Responses	% of Responses
Entire Sample Combined	623	4.9%
Engineer Level I	113	26.8%
Engineer Level II	82	13.0%
Engineer Level III	79	7.6%
Engineer Level IV	102	4.3%
Engineer Level V	101	3.5%
Engineer Level VI	77	3.0%
Engineer Level VII	47	2.5%
Engineer Level VIII	21	2.4%

	Under 1 Month	At Least 1 Month, But Less than 3 Months	3 Months or More
Entire Sample Combined	18.5%	29.9%	51.7%
Engineer Level I	8.8%	29.2%	61.9%
Engineer Level II	25.6%	26.8%	47.6%
Engineer Level III	16.5%	34.2%	49.4%
Engineer Level IV	11.8%	33.3%	54.9%
Engineer Level V	24.8%	23.8%	51.5%
Engineer Level VI	26.0%	31.2%	42.9%
Engineer Level VII	25.5%	25.5%	48.9%
Engineer Level VIII	9.5%	42.9%	47.6%

EXHIBIT 39: TIME PERIOD OF UNEMPLOYMENT

Layoffs/Downsizing

The following tables summarize permanent job losses due to layoffs or downsizing.

	# of Responses	% of Responses
Entire Sample Combined	1921	15.1%
Engineer Level I	23	5.5%
Engineer Level II	37	5.8%
Engineer Level III	94	9.0%
Engineer Level IV	278	11.7%
Engineer Level V	540	18.7%
Engineer Level VI	517	19.9%
Engineer Level VII	327	17.3%
Engineer Level VIII	103	11.9%

EXHIBIT 40: PERCENTAGE OF PARTICIPANTS THAT LOST A PERMANENT JOB DUE TO LAYOFF/DOWNSIZING

EXHIBIT 41: NUMBER OF PERMANENT JOBS LOST DUE TO LAYOFF/DOWNSIZING

	One	Тwo	Three	Four or More
Entire Sample Combined	70.5%	19.8%	5.9%	3.9%
Engineer Level I	91.3%	4.3%	4.3%	0.0%
Engineer Level II	83.8%	13.5%	0.0%	2.7%
Engineer Level III	90.4%	7.4%	0.0%	2.1%
Engineer Level IV	79.4%	11.6%	6.1%	2.9%
Engineer Level V	66.1%	23.5%	5.7%	4.6%
Engineer Level VI	68.2%	21.9%	5.6%	4.3%
Engineer Level VII	64.8%	23.5%	8.0%	3.7%
Engineer Level VIII	69.9%	17.5%	8.7%	3.9%

	Within the Past Year	Within the Past 2 Years	Within the Past 5 Years	Within the Past 10 Years	Over 10 Years
Entire Sample Combined	8.5%	13.2%	25.8%	20.0%	32.4%
Engineer Level I	26.1%	26.1%	34.8%	13.0%	0.0%
Engineer Level II	18.9%	13.5%	62.2%	5.4%	0.0%
Engineer Level III	17.0%	36.2%	40.4%	5.3%	1.1%
Engineer Level IV	11.9%	21.2%	38.5%	14.7%	13.7%
Engineer Level V	8.5%	11.1%	26.5%	23.1%	30.7%
Engineer Level VI	5.4%	10.4%	18.8%	22.4%	42.9%
Engineer Level VII	6.1%	8.3%	18.7%	23.2%	43.7%
Engineer Level VIII	6.8%	8.7%	16.5%	16.5%	51.5%

EXHIBIT 42: RECENCY OF PERMANENT JOB LOSS DUE TO LAYOFF/DOWNSIZING

EXHIBIT 43: TYPE OF SUBSEQUENT EMPLOYMENT FOUND AFTER LOSS OF PERMANENT JOB DUE TO LAYOFF/DOWNSIZING (AS A PERCENT OF PARTICIPANTS THAT LOST A PERMANENT JOB DUE TO LAYOFF/DOWNSIZING)

	Permanent Job	Self- Employed as a Consultant	Temp Job for a Specific Time	Temp Job for Specific Project	Other Non- Permanent Employment	Currently Unemployed
Entire Sample Combined	84.1%	6.9%	3.8%	2.6%	1.8%	0.8%
Engineer Level I	60.9%	0.0%	30.4%	0.0%	4.3%	4.3%
Engineer Level II	86.5%	2.7%	2.7%	5.4%	2.7%	0.0%
Engineer Level III	84.0%	2.1%	2.1%	6.4%	2.1%	3.2%
Engineer Level IV	85.3%	3.6%	5.4%	2.5%	2.5%	0.7%
Engineer Level V	87.4%	4.4%	3.5%	2.6%	1.3%	0.7%
Engineer Level VI	83.4%	9.9%	3.7%	1.5%	1.0%	0.6%
Engineer Level VII	82.9%	8.6%	2.4%	2.1%	3.1%	0.9%
Engineer Level VIII	77.7%	14.6%	1.9%	5.8%	0.0%	0.0%

EXHIBIT 44: ECONOMIC EFFECT AFTER LOSS OF PERMANENT JOB DUE TO LAYOFF/DOWNSIZING (AS A PERCENT OF PARTICIPANTS THAT LOST A PERMANENT JOB DUE TO A LAYOFF/DOWNSIZING)						
	Better Almost Immediately, Better Overall to Date	Better Almost Immediately, Worse Overall to Date	Worse Almost Immediately, Better Overall to Date	Worse Almost Immediately, Worse Overall to Date		
Entire Sample Combined	40.4%	6.1%	36.9%	16.6%		
Engineer Level I	47.8%	0.0%	26.1%	26.1%		
Engineer Level II	37.8%	8.1%	40.5%	13.5%		
Engineer Level III	32.6%	5.4%	42.4%	19.6%		
Engineer Level IV	44.2%	8.3%	33.7%	13.8%		
Engineer Level V	44.1%	6.7%	33.7%	15.5%		
Engineer Level VI	38.4%	5.8%	37.9%	17.9%		
Engineer Level VII	38.2%	4.6%	40.4%	16.8%		
Engineer Level VIII	35.0%	4.9%	42.7%	17.5%		

EXHIBIT 45: CHANGE IN STARTING SALARY AFTER LOSS OF PERMANENT JOB COMPARED TO PREVIOUS SALARY (AS A PERCENT OF PARTICIPANTS THAT LOST A PERMANENT JOB DUE TO A LAYOFF/DOWNSIZING)							
	20% or more Lower	10–19% Lower	5–9% Lower	Within 5%	5–9% Higher	10–19% Higher	20% or more Higher
Entire Sample Combined	15.2%	12.9%	7.5%	29.5%	12.6%	11.8%	10.4%
Engineer Level I	13.0%	4.3%	8.7%	34.8%	17.4%	4.3%	17.4%
Engineer Level II	11.1%	8.3%	5.6%	36.1%	16.7%	13.9%	8.3%
Engineer Level III	6.5%	15.1%	10.8%	33.3%	17.2%	7.5%	9.7%
Engineer Level IV	13.5%	11.3%	7.7%	30.3%	14.6%	10.6%	12.0%
Engineer Level V	12.5%	12.7%	6.2%	32.5%	13.6%	12.1%	10.4%
Engineer Level VI	17.6%	14.0%	8.1%	29.7%	10.7%	11.6%	8.3%
Engineer Level VII	18.0%	13.8%	8.0%	21.1%	12.5%	15.0%	11.6%
Engineer Level VIII	22.3%	12.6%	6.8%	31.1%	5.8%	9.7%	11.7%

Change in Base Salary

71.9% of all survey respondents indicated a salary increase in 2011. Of those respondents, the average increase was 5.73% and the median increase was 3.6%.

EXHIBIT 46: PERCENTAGE OF PARTICIPANTS INDICATING A CHANGE IN BASE SALARY IN 2011					
	# of Responses	% of Responses			
Promoted in 2011	2,192	17.6%			
Changed Employers in 2011	1,548	12.4%			
Received PE in 2011	782	6.3%			
Salary decreased	452	3.6%			
No change in salary	3,042	24.4%			
Increased less than 2%	533	6.0%			
Increased 2–2.9%	1,383	15.4%			
Increased 3–3.9%	1,876	21.0%			
Increased 4–4.9%	813	9.1%			
Increased 5–5.9%	776	8.7%			
Increased 6–6.9%	346	3.9%			
Increased 7–7.9%	257	2.9%			
Increased 8–8.9%	226	2.5%			
Increased 9–10.9%	491	5.5%			
Increased 11–12.9%	152	1.7%			
Increased 13–14.9%	98	1.1%			
Increased 15–16.9%	131	1.5%			
Increased 17–18.9%	43	0.5%			
Increased 19–20.9%	93	1.0%			
Increased 21–22.9%	22	0.2%			
Increased 23–24.9%	17	0.2%			
Increased 25% or more	179	2.0%			
Increase not specified	1,517	16.9%			

Promotions

Contract/Temporary/Consulting Employment

	# of Responses	% of Responses
Entire Sample Combined	2,209	17.4%
Engineer Level I	39	9.26%
Engineer Level II	134	21.17%
Engineer Level III	241	23.04%
Engineer Level IV	558	23.57%
Engineer Level V	520	17.99%
Engineer Level VI	357	13.76%
Engineer Level VII	273	14.44%
Engineer Level VIII	85	9.86%

EXHIBIT 47: PERCENTAGE OF PARTICIPANTS THAT WERE PROMOTED IN 2011

EXHIBIT 48: PERCENTAGE OF ORGANIZATIONS USING CONTRACT/TEMPORARY/CONSULTING EMPLOYEES AS A PERCENTAGE OF TOTAL ENGINEERING WORKFORCE OF THE ORGANIZATION

	# of Responses	% of Responses
None	2,789	21.93%
Under 1%	1,995	15.68%
1% - 4.9%	2,647	20.81%
5% - 9.9%	1,465	11.52%
10% - 24.9%	1,116	8.77%
25% or more	780	6.13%
Unknown	1,656	13.02%

Compensatory Time Off for Salaried/Exempt Engineers

EXHIBIT 49: PERCENTAGE OF PARTICIPANTS THAT ARE SALARIED/EXEMPT* ENGINEERS

	# of Responses	% of Responses
Entire Sample Combined	11,248	88.4%
Engineer Level I	296	70.3%
Engineer Level II	485	76.6%
Engineer Level III	841	80.4%
Engineer Level IV	1,976	83.5%
Engineer Level V	2,609	90.3%
Engineer Level VI	2,447	94.3%
Engineer Level VII	1,784	94.3%
Engineer Level VIII	801	92.9%

*Not paid an hourly rate and exempt from the provision of the Fair Labor Standards Act.

EXHIBIT 50: PERCENTAGE OF PARTICIPANTS ELIGIBLE FOR OVERTIME PAY OR COMPENSATORY TIME OFF (AS A PERCENTAGE OF INDIVIDUALS RESPONDING TO THE QUESTION)

	# of Responses	% of Responses
Entire Sample Combined	3,982	31.3%
Engineer Level I	134	31.8%
Engineer Level II	233	36.8%
Engineer Level III	392	37.5%
Engineer Level IV	849	35.9%
Engineer Level V	1,036	35.8%
Engineer Level VI	740	28.5%
Engineer Level VII	428	22.6%
Engineer Level VIII	168	19.5%

EXHIBIT 51: CIRCUMSTANCES UPON WHICH ORGANIZATIONS COMPENSATE EXEMPT ENGINEERS FOR WORKING OVERTIME (AS A PERCENTAGE OF ORGANIZATIONS GRANTING COMPENSATION UNDER ANY CIRCUMSTANCE)

	# of Responses	Worked During Normal Workweek	6th Workday	7th Workday	Holiday
Entire Sample Combined	3,982	90.9%	85.1%	84.2%	81.3%
Engineer Level I	134	90.3%	70.9%	68.7%	64.2%
Engineer Level II	233	93.1%	83.7%	82.4%	78.1%
Engineer Level III	392	91.6%	84.4%	83.7%	80.1%
Engineer Level IV	849	92.1%	87.8%	88.0%	80.7%
Engineer Level V	1,036	91.4%	85.9%	84.5%	83.2%
Engineer Level VI	740	90.4%	85.5%	85.0%	84.2%
Engineer Level VII	428	86.9%	83.2%	81.3%	81.5%
Engineer Level VIII	168	89.9%	85.1%	82.7%	81.0%

	# of Responses	Cash Pay Only	Compensatory Time Off	Cash Pay or Time Off
Additional Hours in Normal Workweek	3,620	49.7%	29.0%	21.4%
6th Workday	3,390	50.3%	28.9%	20.8%
7th Workday	3,352	50.3%	28.7%	21.0%
Holiday	3,239	47.9%	29.9%	22.1%

EXHIBIT 52: TYPE OF COMPENSATION EXEMPT ENGINEERS RECEIVE FOR WORKING OVERTIME

EXHIBIT 53: RATE PAID TO EXEMPT ENGINEERS FOR WORKING OVERTIME WHEN CASH IS PAID

	# of Responses	Less than Straight Time	Straight Time	Time and One-Half	Straight Time & One-Half Normal Workweek	Double Time	Combo of Straight and Premium Rate
Additional Hours in Normal Workweek	3,211	4.1%	67.3%	6.1%	1.7%	0.1%	1.3%
6th Workday	3,030	3.7%	63.2%	6.3%	1.6%	0.1%	1.3%
7th Workday	3,009	3.7%	62.5%	5.8%	1.4%	1.0%	1.3%
Holiday	2,967	3.4%	59.3%	5.7%	1.4%	3.0%	1.7%

Registration

EXHIBIT 54: PERCENTAGE OF PARTICIPANTS THAT OBTAINED THEIR REGISTRATION AS A PROFESSIONAL ENGINEER IN 2011

	# of Responses	% of Responses
Entire Sample Combined	787	6.2%
Engineer Level I	5	1.2%
Engineer Level II	23	3.6%
Engineer Level III	93	8.9%
Engineer Level IV	476	20.1%
Engineer Level V	129	4.5%
Engineer Level VI	39	1.5%
Engineer Level VII	18	1.0%
Engineer Level VIII	3	0.3%

Employer-Sponsored Benefit Plans

A standard set of benefits is provided to 56.67% of survey respondents, while the remaining 43.33% are provided with flexible or "cafeteria" benefits.

EXHIBIT 55: BENEFITS PROVIDED TO SURVEY PARTICIPANTS							
	Benefit Provided (# of Responses)	Fully Employer Paid	Partially Employee Paid	Fully Employee Paid	Supplemental Coverage Option Offered	Family Coverage Option Offered	
		Retiren	nent Plans		Λ.		
Defined Benefit Plan	8,414	23.2%	76.8%	NA	NA	NA	
401(k) Plan	10,189	NA	80.9%	19.1%	NA	NA	
403(b)	553	NA	68.2%	31.8%	NA	NA	
Thrift Plan	975	10.8%	61.6%	27.6%	NA	NA	
Profit Sharing Plan	2,393	77.5%	17.6%	4.9%	NA	NA	
ESOP	1,809	45.9%	33.7%	20.4%	NA	NA	
457 Deferred Comp	1,009	10.4%	18.6%	71.0%	NA	NA	
Money Purchase Plan	137	33.6%	25.5%	40.9%	NA	NA	
		Health and	Welfare Plans				
Life Insurance	10,585	47.1%	45.3%	7.6%	40.1%	35.1%	
Short-Term Disability	9,281	44.4%	37.9%	17.7%	27.3%	NA	
Long-Term Disability	8,704	53.8%	31.7%	14.5%	23.2%	NA	
Medical Insurance	12,015	13.3%	83.9%	2.7%	12.3%	58.1%	
Dental Insurance	11,063	13.5%	77.4%	9.1%	11.4%	56.9%	
AD & D Insurance	7,377	40.1%	47.2%	12.7%	28.3%	28.2%	
Vision Insurance	9,178	14.5%	73.4%	12.1%	11.5%	53.3%	
Retiree Medical Insurance	2,334	10.8%	72.2%	17.1%	16.2%	42.5%	
Reimbursement Accounts							
Dependent Care Costs	5,940	NA	29.7%	70.3%	NA	NA	
Medical Costs	7,427	NA	34.5%	65.5%	NA	NA	



DEMOGRAPHICS

- 1. Indicate your EEO classification. (check only one)
 - 1. [] White (not of Hispanic origin)
 - 2. [] Black
 - 3. [] Hispanic
 - 4. [] Asian or Pacific Islander
 - 5. [] American Indian or Alaskan Native
 - 6. [] Other (not adequately described above)
 - 7. [] I prefer not to answer this question.

2. Indicate your gender (for statistical purposes only). (check only one)

- 1. [] Male
- 2. [] Female
- 3. [] I prefer not to answer this question.

EXPERIENCE, EDUCATION, AND REGISTRATION/CERTIFICATION STATUS

- 1. Indicate the total number of years of professional experience you have had in the engineering field, including related managerial experi
 - ence. (check only one)
 - 1. [] Under 1 year
 - 2. [] 1 year
 - 3. [] 2 years
 - 4. [] 3 years
 - 5. [] 4 years
 - 6. [] 5 9 years
 - 7. [] 10 14 years
 - 8. [] 15 19 years
- 9. [] 20 24 years 10. [] 25 – 29 years
- 10. [] 23 29 years 11. [] 30 years or more

2. Indicate your highest degree earned. Exclude honorary degrees. (check only one)

- 1. [] Less than a BA/BS Degree
- 2. [] BA Degree
- 3. [] BS Degree (non-engineering)
- 4. [] BS Degree (engineering)
- 5. [] MA/MS Degree (not MBA or engineering)
- 6. [] MBA Degree
- 7. [] MS Degree (engineering)
- 8. [] MBA and an MA or MS Degree
- 9. [] Doctorate (non-engineering)
- 10. [] Doctorate (engineering)
- 11. [] Other (please specify)

3. Indicate your licensing/certification status. (check only one)

- 1. [] No professional licensing or certification
- 2. [] Engineer-in-training/engineer intern
- 3. [] Professional Engineer (PE)
- 4. [] Professional Engineer (PE) and certification in environmental engineering
- 5. [] Professional Engineer (PE) and certification in forensic engineering
- 6. [] Professional Engineer (PE) and certification in some other engineering specialty (safety, fire protection, etc.)
- 7. [] Professional Engineer (PE) and Professional Surveyor (PS) or Land Surveyor (LS)
- 8. [] Professional Engineer (PE) and some other professional registration (RA, MD, CPA, Bar, etc.)
- 9. [] Other (please specify)_

PROFESSIONAL RESPONSIBILITY

- 1. Which of the following best describes your current major branch of engineering work? (check only one)
 - 1. [] Aeronautical/aerospace/ astronautical
 - 2. [] Agricultural
 - 3. [] Architectural
 - 4. [] Biomechanical/ biomedical
 - 5. [] Ceramic
 - 6. [] Chemical
 - 7. [] Civil
 - 8. [] Coastal
 - 9. [] Computer
- 10. [] Control systems
- 11. [] Corrosion
- 12. [] Cost management

- 13. [] Electrical
- 14. [] Electronics
- 15. [] Environmental
- 16. [] Ergonomics
- 17. [] Facilities 18. [] Fire protection
- 19. [] Forensic
- 20. [] Geotechnical
- 21. [] Health care facility
- 22. [] Heating, ventilating, air conditioning, and refrigeration
- 23. [] Industrial
- 24. [] Manufacturing
- 25. [] Marine
- 26. [] Materials
- 27. [] Mechanical
- 28. [] Metallurgy
- 29. [] Minerals and metals
- 30. [] Mining
- 31. [] Naval
- 32. [] Nuclear
- 33. [] Ocean
- 34. [] Optical
- 35. [] Petroleum
- 36. [] Plastics
- 37. [] Plumbing
- 38. [] Pollution
- 39. [] Quality assurance
- 40. [] Reliability
- 41. [] Robotics
- 42. [] Safety
- 43. [] Sanitary
- 44. [] Software
- 45. [] Structural
- 46. [] Systems
- 47. [] Transportation
- 48. [] Welding

2. Which one of the following best describes your current job function? (check only one)

- Construction supervision (may include some design) 1.
- Consulting 2 3.
- Design 4. Drafting/estimating
- Executive/administrative/legal 5.
- Production/quality management/maintenance/process control/performance/risk control/loss control/safety
- 6. [7. [Project management/engineering/operations
- Planning/project study and analysis valuation/testing 8.
- Research and development/applications 9.
- Sales/marketing/public relations 10.
- 11. [] Teaching/training/technical writing 12. [] Not-for-profit/public service
- 13. [] Other (please specify)

3. Select the statement which best describes your current supervisory status. (check only one)

- 1. [] I supervised engineers, scientists, and/or technologists (without significant involvement in directing the activities of clerical, construction, maintenance, or production employees).
- 2. [] I supervised clerical, construction, maintenance, and/or production employees (without significant involvement in directing engineers, scientists, and/or technologists).
- 3. [] I supervised the types of employees described above equally.
- 4. [] I had no consistent supervisory responsibility (staff engineering or specialist, consultant, etc.).
- 5. [] Other (please specify)
- 4. Indicate the number of employees you currently supervise (through subordinate supervisors) or direct....
- 5. Indicate which position best describes your current level of professional responsibility (as defined in the table on pages 5 and 6). (check only one)
 - 1. [] Position Code: 1001, Engineer I/II
 - 2. [] Position Code: 1003, Engineer III
 - 3. [] Position Code: 1004, Engineer IV
 - 4. [] Position Code: 1005, Engineer V
 - 5. [] Position Code: 1006. Engineer VI
 - 6. [] Position Code: 1007, Engineer VII
 - 7. [] Position Code: 1008, Engineer VIII

COMPENSATION

1. What is your current annual base salary from your primary full-time job? (Exclude fees, overtime pay, bonuses exclude income from secondary employment such as part-time teaching, part-time consulting, etc.)	, and co \$	commissions. Also,	
		Report in whole numbers	
 2. During the last calendar year, did you receive additional cash income from your primary job? (Additional cash income includes fees, bonuses, and commissions, and excludes salary, overtime pay, and income from secondary or part-time employment.)	Yes []	No [] Report in whole num-	
bers		-	
 4. Indicate the percentage increase in your annual base salary during the last calendar year. (check only one) [] Not applicable (self-employed/ unemployed/retired/student) [] Salary decreased [] No change [] Increased less than 2% [] Increased less than 2% [] Increased 2 - 2.9% [] Increased 3 - 3.9% [] Increased 4 - 4.9% [] Increased 5 - 5.9% [] Increased 5 - 5.9% [] Increased 5 - 5.9% [] Increased 5 - 7.9% [] Increased 8 - 8.9% [] Increased 9 - 10.9% [] Increased 15 - 16.9% [] Increased 15 - 16.9% [] Increased 17 - 18.9% [] Increased 19 - 20.9% [] Increased 21 - 22.9% [] Increased 23 - 24.9% [] Increased 23 - 24.9% [] Increased 25% or more 			
5. Were you promoted during the last calendar year?	res []	No []	
6. Are you a salaried/exempt engineer (not paid an hourly rate and exempt from the provisions of the Fair Labor Standards Act)?	Yes []	No []	
(If no, go to next section)			
 7. If yes, are you eligible for additional cash compensation or compensatory time-off for "overtime" hours worked under any circumstances? (If no, go to next section) 	Yes []	No []	
8. Are "overtime" hours worked during the normal workweek (i.e., not holiday or weekends) included	res []	No []	
9. Indicate the type of compensation provided: a. Type of Compensation b. Overtime Rate When Cash is Paid (check only one per line) (check only one per line)			

	Engineer Level I	Engineer Level II	Engineer Level III	Engineer Level IV
General Characteristics	Acquires limited knowledge and develops basic skills. Applies prescribed tech-	quires limited knowledge d develops basic skills. plies prescribed tech- cific practice area.	Develops broad knowledge and skills in a specific prac- tice area.	Applies broad knowledge of principles and practices in a specific practice area.
	niques and procedures in accordance with established criteria to perform assigned tasks.	Applies standard techniques, procedures, and criteria to perform assigned tasks as part of a broader assignment.	Evaluates, selects, and ap- plies standard techniques, procedures, and criteria to perform a task or sequence of tasks for conventional	Independently evaluates, se- lects, and adapts standard techniques, procedures, and criteria.
	Performs routine technical work which does not require previous experience. Acquires an understanding of professional and ethical re-	Exercises limited judgment on details of work and in ap- plication of standard methods for conventional work.	rcises limited judgment details of work and in ap- ation of standard methods conventional work.	Acquires general knowledge of principles and practices of related fields, and ability to function on multi-disciplinary teams.
	sponsibilities		tine aspects of assignments. Works on small projects or portions of larger projects.	Works on multiple projects of moderate size or portions of major projects.
Technical Responsibilities	Collects data and gathers in- formation or documents.	Performs basic design tasks. Assists on other tasks such	Performs moderate design tasks.	Designs a complete project, system, component, or pro- cess.
	Performs standard computa- tions or analysis. Prepares drawings and visual	as: preparation of permit ap- plications, material testing, and CADD work.	documents. Edits specifications.	Prepares complete project documents.
	aids. Observes construction activi- ties.		Performs research and inves- tigations.	Designs and conducts experi- ments, and analyzes and in- terprets data.
	Performs basic survey work.			Formulates and solves prob- lems.
Managerial Responsibilities	No managerial responsibili- ties at this level.	Assigns tasks to and coordi- nates with technicians or ad- ministrative staff.	Assigns tasks to and coordi- nates work with entry-level engineers, technicians, or ad-	Assigns tasks to and directs engineers, technicians and administrative staff.
			Assists in determining sched- ule and budget requirements.	Plans and coordinates detailed aspects of the engineering work.
				Prepares scopes, budgets, and schedules for assign- ments.
				Assists with proposals to pro- vide professional services or obtain funding for engineer- ing projects or programs.
Direction Received	Receives close supervision on all aspects of assign-	Receives close supervision on unusual or difficult prob-	Receives instruction on spe- cific objectives.	Receives general direction on key objectives.
	ments.	lems, and general review of all aspects of work.	Receives direction on un- conventional and/or complex problems, and possible solu- tions. Receives a thorough review of	Receives guidance when nec- essary on unconventional or complex problems, direction on modified techniques, and new approaches on assign-
			completed work for application of sound professional judg- ment.	ria.
Communication Skills	Possesses basic oral and written communication skills.	Interacts with staff, general public, officials, and contrac-	Possesses effective oral and written communication skills.	Interacts with clients, cus- tomers, officials, contractors, and others
	Interacts with other staff.		Assists with client, customer, or official contacts and com- munication pertaining to spe- cific assignments or meet- ings.	Attends project meetings and presents specific aspects of engineering assignment.
Typical Titles	Engineer in Training, Engineer Engineering	ing Intern, Assistant Engineer, J	Civil Engineer, Associate En- gineer,	
	Instructor		Project Engineer, Resident	
				Engineer, Assistant Professor
Equivalent Federal General Schedule	GS-5	GS-7	GS-9	GS-11

	Engineer Level V	Engineer Level VI	Engineer Level VII	Engineer Level VIII
General Characteristics	Independently applies exten- sive and diversified knowledge of principles and practices in broad areas of assignments and related fields	Applies a thorough knowledge of current principles and prac- tices of engineering as related to the variety of aspects affect- ing their organization	Uses creativity, foresight, and mature judgment in anticipat- ing and solving unprecedent- ed problems.	Makes decisions with broad influence on the activities of their organizations. Makes authoritative decisions
	Uses advanced techniques in the modification or extension of theories and practices of	Applies knowledge and expertise acquired through progressive experience to resolve crucial is-	Makes decisions and recom- mendations that are authori- tative and have an important impact on extensive organiza- tional activities	and recommendations that are conclusive, and have a far-reaching impact on the organization.
	Works on a major project or several projects of moderate scope with complex features.	Keeps informed of new meth- ods and developments affecting their organization, and recom- mends new practices or chang- es in emphasis of programs.	Sets priorities and reconciles directions from competing interests Works on programs with complex features.	Demonstrates a high degree of creativity, foresight, and mature judgment in planning, organizing and guiding exten- sive programs and activities of major consequence.
		Works on programs of limited complexity and scope.		
Technical Responsibilities	Reviews complete project documents for conformity and quality assurance. Develops new techniques and/or improved processes, matoriale or producte	Serves as the technical spe- cialist for the organization in the application of advanced concepts, principles, and methods in an assigned area.	Develops standards and guidelines. Leads the organization in a broad area of specialization or in narrow but intensely specialized field	Performs advisory or con- sulting work for the organiza- tion for broad program areas or an intensely specialized area with innovative or im- portant aspects.
	Assists upper level management and staff as a technical specialist or advisor.	ments and requirements affect- ing the organization for the pur- pose of recommending changes in programs or applications.		Performs advisory or consult- ing work for the organization for broad program areas or an intensely specialized area with
		Interprets, organizes, executes and coordinates assignments.		
Managerial Responsibilities	Supervises all staff necessary to complete assignments.	Supervises a staff of engineers and technicians.	Supervises several organiza- tional segments or teams. Rec-	Leads an entire program of critical importance.
	Reviews and approves scopes, budgets, and sched- ules for assignments. Prepares proposals to pro- vide professional services or obtain funding for engineer- ing projects or programs.	Plans, schedules, or coor- dinates the preparation of documents or activities for multiple major projects, or is responsible for an entire pro- gram of an organization. Reviews operational proce- dures to insure compliance with applicable policies and performance measures.	ommends facilities, personnel, and funds required to carry out programs Oversees the techni- cal, legal, and financial issues of an entire program. Determines program objec- tives and requirements. Develops standards and guidelines.	Decides the kind and extent of engineering and related programs needed for accom- plishing the objectives of an organization.
Direction Received	Receives supervision and guidance relating to overall	Receives administrative	Receives administrative	Receives general administra- tive direction from a board of
	objectives, critical issues, new concepts, and policy matters.	ments given in terms of broad general objectives and limits.	supervision with assign- ments given in terms of broad general objectives and limits.	directors or regional council.
	Receives direction on un- usual conditions and devel- opments.			
Communication Skills	Possesses advanced oral and written communication skills. Represents the organization in communications and con- ferences pertaining to broad	Routinely interacts with cli- ents, customers, officials, contractors, and others. Leads project meetings and makes presentations.	Possesses exceptional oral and written communication skills. Routinely interacts with orga- nization leaders, clients, cus- tomers, officials, contractors,	Negotiates critical and con- troversial issues with top- level engineers and officers of other organizations and companies.
	signments.	Represents the organization and maintains liaison with individuals and related orga- nizations.	and others. Initiates and maintains exten- sive contacts with key engi- neers and officials or other organizations and companies and is skilled in persuasion and negotiation of critical issues.	Conducts presentations and may participate in media in- terviews. Represents their organization at important functions or conferences, in- cluding media interviews as required.
Typical Titles	Senior Engineer, Project Man- ager, Associate Professor	Principal Engineer, District Engineer, Engineering Man- ager, Professor	Director, Program Manager, City Engineer, County Engineer, Division Engineer, Department Head, Vice President	Bureau Engineer, Director of Public Works, Dean, President
Equivalent Federal General Schedule	GS-12	GS-13	GS-14	GS-15, Senior Executive Ser- vice (SES)

ISBN: 978-0-7844-1245-9