## 2011 Member Survey Results

The 2011 SCEA member survey was completed in December 2011. This survey provides information to the membership on salary, work, education, and SCEA- related activities. 544 responses were received, which represents $26 \%$ of the membership at the time the survey was conducted. The compiled statistics are provided below. Since not every question was answered, when an average or percentage of the total is given, the calculation is based on the total number responding to that specific question (represented as $n$ ). Throughout the survey the number of respondents varies. Salary figures have been rounded to the nearest 100 dollars and percentages have been rounded to the nearest decimal point.

## DEMOGRAPHICS

Exhibit 1 shows the overall profile of the respondents to the survey. Profile of respondents ( $\mathrm{n}=544$ ).

|  | Percent |
| :--- | :--- |
| Gender |  |
| Male | $75 \%$ |
| Female | $25 \%$ |
| Age Group |  |
| $\leq 30$ | $14 \%$ |
| $31-34$ | $6 \%$ |
| $35-44$ | $17 \%$ |
| $45-54$ | $30 \%$ |
| $\geq 55$ | $33 \%$ |
| Years of Experience |  |
| $\leq 5$ | $19 \%$ |
| $6-9$ | $18 \%$ |
| $10-19$ | $24 \%$ |
| $20-29$ | $23 \%$ |
| $\geq 30$ | $16 \%$ |
| Supervisor | $35 \%$ |
| CCEA | $37 \%$ |
| PCEA | $7 \%$ |

Exhibit 1: Profile of respondents

Exhibit 2 shows the demographic breakdown of members by gender. The plurality of male respondents were in the over 55 category, whereas the plurality of female respondents were in the 45-55 age range (with the next highest percentage of female respondents in the under 30 range).

| Respondents |  |  |
| :--- | :--- | :--- |
|  | Male | Female |
| Age Group |  |  |
| $\leq 30$ | $11 \%$ | $24 \%$ |
| $31-34$ | $5 \%$ | $9 \%$ |
| $35-44$ | $17 \%$ | $17 \%$ |
| $45-54$ | $29 \%$ | $33 \%$ |
| $\geq 55$ | $39 \%$ | $17 \%$ |
|  |  |  |
| Years of Experience | $16 \%$ | $30 \%$ |
| $\leq 5$ | $17 \%$ | $20 \%$ |
| $6-9$ | $24 \%$ | $23 \%$ |
| $10-19$ | $23 \%$ | $23 \%$ |
| $20-29$ | $20 \%$ | $4 \%$ |
| $\geq 30$ |  |  |
|  | $38 \%$ | $23 \%$ |
| Supervisor |  |  |
|  | $39 \%$ | $31 \%$ |
| CCEA | $7 \%$ | $5 \%$ |
| PCEA |  |  |

Exhibit 2: Respondents by gender

Exhibit 3 shows a breakdown by employment status. The vast majority of respondents are employed full-time. The overall unemployment percentage is very low. For those employed part-time, the majority ( $68 \%$ ) are employed as consultants. ( $\mathrm{n}=541$ )

| Employment Status | Percentage |
| :--- | :--- |
| Full-time | $94 \%$ |
| Part-time | $3 \%$ |
| Retired | $2 \%$ |
| Unemployed | $1 \%$ |
| Full-time Student | $>1 \%$ |

Exhibit 3: Employment Status

Exhibit 4 shows the highest level of education the respondents have completed. The majority of respondents hold a Master's degree, and $5 \%$ hold a doctorate. As we've seen in previous SCEA surveys, the overall education level of SCEA members is very high. ( $\mathrm{n}=540$ )

| Level of Education | Percent |
| :--- | :--- |
| High School | $2 \%$ |
| Associate's Degree | $2 \%$ |
| Bachelor's Degree | $35 \%$ |
| Master's Degree | $56 \%$ |
| PhD | $5 \%$ |

Exhibit 4: Highest Level of Education
Exhibit 5 shows the principle field of study in which respondents received their degree. The highest number of respondents indicated that they studied business or management, but this number is down from $40 \%$ in 2005 , indicating a diversification of the types of degrees that lead people to the cost estimating/analysis fields. Since the 2005 survey results, we've seen an increase in the number of respondents who earned their degrees in accounting/finance and operations research. ( $\mathrm{n}=540$ )

| Field of Education | Percent |
| :--- | :--- |
| Business/Management | $26 \%$ |
| Engineering | $21 \%$ |
| Math/Statistics | $10 \%$ |
| Economics | $12 \%$ |
| Accounting/Finance | $16 \%$ |
| Operations Research | $7 \%$ |
| Computer Science/Information Systems | $2 \%$ |
| Physical Sciences | $1 \%$ |
| Other | $5 \%$ |

Exhibit 5: Field of Education
Exhibit 6 provides a breakdown of the job functions of respondents. ( $\mathrm{n}=539$ )

| Job Function | Percent |
| :--- | :--- |
| Cost Estimating/Analysis | $75 \%$ |
| Finance/Accounting | $3 \%$ |
| Program/Project Management | $8 \%$ |
| Procurement/Contracting | $2 \%$ |
| Earned Value Management | $1 \%$ |
| Engineering/Manufacturing/Quality Assurance | $1.5 \%$ |
| Information Management | $1.5 \%$ |
| Other | $8 \%$ |

Exhibit 6: Job Function

Exhibit 7 provides a breakdown of respondents by geographical region. The Atlantic and Pacific Regions of the US represent the largest percentage of the membership. The international presence is up considerably from the 2005 survey (at which time roughly $3 \%$ of respondents were international). ( $\mathrm{n}=540$ )

| Geographical Region | Percent |
| :--- | :--- |
| New England (CT, ME, MA, NH, RI, VT) | $9 \%$ |
| Atlantic (DE, DC, MD, VA, WV) | $30 \%$ |
| Mid-Atlantic (NJ, NY, PA) | $2 \%$ |
| East North Central (IL, IN, MI, OH, WI) | $9 \%$ |
| West North Central (IA, KS, MN, MO, NE, ND, SD) | $4 \%$ |
| South East (FL, GA, NC, SC) | $6 \%$ |
| East South Central (AL, KY, MS, TN) | $6 \%$ |
| West South Central (AR, LA, OK, TX) | $5 \%$ |
| Mountain (AZ, CO, ID, MT, NV, NM, WY, UT) | $6 \%$ |
| Pacific US (AK, CA, HI, OR, WA) | $15 \%$ |
| Canada | $<1 \%$ |
| Japan | $1 \%$ |
| Asia Pacific (Australia, Korea, China, Singapore, India, etc.) | $3 \%$ |
| United Kingdom | $2 \%$ |
| Europe | $<1 \%$ |
| Africa/Middle East | $<1 \%$ |
| Other | $1 \%$ |

Exhibit 7: Respondents by Geographic Region
Exhibit 8 shows a breakdown of respondents by field of employment. For those working within the Government, the respondents are broken out by Active Duty Military and Civilian Employee. ( $\mathrm{n}=535$ )

| Employer | Percent |
| :--- | :--- |
| Business/Industry | $64 \%$ |
| Government | $34 \%$ |
| Active Duty Military | $5 \%$ |
| Civilian | $95 \%$ |
| Academia | $2 \%$ |

Exhibit 8: Employment by field

Exhibit 9 shows the breakdown of respondents by Military Branch or Civilian Agency. The list of civilian agencies includes only those with the highest number of responses, but there were 35 individual agencies named in the responses.

| If you answered "Military" which branch? |  |
| :---: | :---: |
| Air Force | $88 \%$ |
| Navy/Marine Corps | $12 \%$ |
| If you answered "Civilian," for which agency do you work? |  |
| Air Force | $40 \%$ |
| Army | $5 \%$ |
| Navy | $9 \%$ |
| NASA | $5 \%$ |
| DoD, Australia | $4 \%$ |
| Missile Defence Agency | $4 \%$ |
| UK Ministry of Defence | $4 \%$ |

Exhibit 9: Military Branch or Civilian Agency Breakdown
Exhibit 10 shows a breakdown of respondents working in business/industry by primary market focus. ( $\mathrm{n}=339$ )

| Primary Focus | Percentage |
| :---: | :---: |
| Commercial Markets | $21 \%$ |
| Government/Defense Markets | $79 \%$ |

Exhibit 10: Business/Industry employees Primary Market Focus

Exhibit 11 shows a breakdown of the products and services offered by employees who work for Government or Defense Markets. Consulting/Professional Services received the largest percentage of respondents, at $42 \%$.

| Product/Service | Percentage |
| :---: | :---: |
| Aircraft, Missiles, Spacecrafts | $29 \%$ |
| RDT\&E | $3 \%$ |
| Electronics/Communications | $7 \%$ |
| Intelligence/Reconnaissance | $5 \%$ |
| Shipbuilding | $2 \%$ |
| Components/Devices | $1 \%$ |
| Consulting/Professional Services | $42 \%$ |
| N/A | $2 \%$ |
| Other | $7 \%$ |

Exhibit 11: Government/Defense Markets Breakdown of Products/Services

## COMPENSATION

The following data show the median salary breakdown based on a number of factors. We received 345 responses to this question, and based on the overall responses, the median salary was $\$ 105,000$. For reference purposes, the median salary in 2003 was $\$ 90,000$. Because of the high level of interest in this data, we will break down the salary results based on a variety of factors to give the fullest possible picture. ( $\mathrm{n}=345$ )

Exhibit 12 shows the median salary breakdown by employer, both overall and by gender.

| Employer | Median Salary (\$) |  |  |
| :---: | :---: | :---: | :---: |
|  | Overall | Males | Females |
| Business/Industry | 104,000 | 105,000 | 93,500 |
| Government | 109,000 | 109,000 | 103,000 |
| Academia | 150,000 | 156,500 | - |

Exhibit 12: Median Salary by Employer
Exhibit 13 shows the same data, broken out by level of education. It's interesting to note that respondents with a High School diploma earn only slightly less than those with a Bachelor's degree, but significantly less than those with an Associate's degree. This may be attributed to the years of work experience that people with Associate's degrees have, whereas more Bachelor's degree holders may be recent graduates.

| Level of Education | Median Salary (\$) |  |  |
| :---: | :---: | :---: | :---: |
|  | Overall | Males | Females |
| High School | 86,000 | 86,000 | - |
| Associate's Degree | 100,000 | 92,500 | - |
| Bachelor's Degree | 88,300 | 90,000 | 83,000 |
| Master's Degree | 111,500 | 118,500 | 108,000 |
| PhD | 145,000 | 150,000 | 115,000 |

Exhibit 13: Median Salary by Level of Education
Exhibit 14 shows the median salary for those with $C C E A ®{ }^{\circledR}$ and PCEA ${ }^{\circledR}$ certification. The median salary for those with CCEA ${ }^{\circledR}$ degrees is higher than the overall median salary of $\$ 105,000$. The median salary of PCEA ${ }^{\circledR}$-holders is lower than the overall median due to the fact that PCEA-holders must have only 2-5 years of experience in the field. The median salary for PCEA ${ }^{\circledR}$-holders is higher than the overall median salary for people with 5 years or less of experience (see Exhibit 15).

|  | Median Salary (\$) |
| :---: | :---: |
| CCEA $^{\circledR}$ | 114,000 |
| PCEA $^{\circledR}$ | 92,000 |

Exhibit 14: Median Salary for Certification Holder

Exhibit 15 shows the median salary of respondents by years of experience, overall and broken out by gender. For those with 0-19 years of experience, women tend to earn slightly more than men. For those with 20 years of experience or more, women earn less than men.

| Yrs of Experience | Median Salary (\$) |  |  |
| :---: | :---: | :---: | :---: |
|  | Overall | Male | Female |
| 5 Years or Less | 70,000 | 70,000 | 79,000 |
| 6 to 9 Years | 99,000 | 98,500 | 100,000 |
| 10 to 19 Years | 111,500 | 111,250 | 112,000 |
| 20 to 29 Years | 118,500 | 119,500 | 109,500 |
| 30 + Years | 120,000 | 120,000 | 115,000 |

Exhibit 15: Median Salary by Years of Experience
Exhibit 16 shows the median salary of respondents broken out by field of employment. The highest earners can be found in Academia with over 30 years of experience.

| Yrs of Experience | Median Salary (\$) |  |  |
| :---: | :---: | :---: | :---: |
|  | Business/Industry | Government | Academia |
| 5 Years or Less | 70,000 | 83,000 | - |
| 6 to 9 Years | 92,000 | 100,000 | - |
| 10 to 19 Years | 120,000 | 110,000 | 105,000 |
| 20 to 29 Years | 110,000 | 119,000 | 136,500 |
| $30+$ Years | 113,000 | 130,000 | 200,000 |

Exhibit 16: Median Salary by Employer
Exhibit 17 shows the median salary of respondents by age, broken out by gender. As expected, the median salary generally increases by age, in direct correlation to years of experience. However, the median salary of males in the 45-54 age bracket is lower than the median salary of those in the 35-44 age bracket.

| Age | Median Salary (\$) |  |  |
| :---: | :---: | :---: | :---: |
|  | Overall | Male | Female |
| 30 or Younger | 68,500 | 64,500 | 74,000 |
| 31 to 34 | 98,500 | 97,000 | 100,000 |
| 35 to 44 | 109,000 | 115,000 | 104,000 |
| 45 to 54 | 110,000 | 110,000 | 111,000 |
| 55 or Older | 111,500 | 111,500 | 111,500 |

Exhibit 17: Median Salary by Age

Exhibit 18 shows the median salary of respondents by geographic location, broken out by gender. Results for Japan and Central/South America are not listed because we received no responses for those regions.

| Region | Median Salary (\$) |  |  |
| :---: | :---: | :---: | :---: |
|  | Overall | Males | Females |
| New England | 110,000 | 114,000 | 101,000 |
| Atlantic | 109,500 | 115,000 | 94,750 |
| Mid-Atlantic | 105,000 | 105,000 | 108,000 |
| East North Central | 100,000 | 106,000 | 93,000 |
| West North Central | 92,500 | 92,500 | 90,000 |
| South East | 96,000 | 96,000 | 99,500 |
| East South Central | 107,000 | 111,500 | 107,000 |
| West South Central | 102,500 | 105,000 | 88,600 |
| Mountain | 107,500 | 106,00 | 109,000 |
| Pacific US | 109,500 | 109,500 | 99,000 |
| Canada | 107,500 | 107,500 | - |
| Asia Pacific | 93,500 | 99,000 | 75,000 |
| United Kingdom | 55,500 | 55,500 | - |
| Europe | 85,000 | 85,000 | - |
| Africa/Middle East | 122,800 | 125,000 | 120,600 |

Exhibit 18: Median Salary by Geographic Region

## CHAPTERS

Exhibit 19 shows the respondents broken out by SCEA Chapter.

| Chapter | Percent | Chapter | Percent |
| :---: | :---: | :---: | :---: |
| Atlanta | $<1 \%$ | New England | $9 \%$ |
| Australia, Canberra | $2 \%$ | Northwest Florida | $1 \%$ |
| Baltimore | $2 \%$ | Northwest/Washington | $6 \%$ |
| Central Florida | $2 \%$ | Pikes Peak | $3 \%$ |
| Greater Alabama | $5 \%$ | Rocky Mountain | $1 \%$ |
| Greater Dayton | $7 \%$ | San Diego | $2 \%$ |
| Hampton Roads | $3 \%$ | Southern California | $5 \%$ |
| Heart of Texas San Antonio | $<1 \%$ | St. Louis Gateway | $3 \%$ |
| Houston Clear Lake | $1 \%$ | Twin Cities | $1 \%$ |
| Japan, JSCEA | $1 \%$ | Washington DC Metro | $24 \%$ |
| Lone Star Texas | $3 \%$ | At-Large Member | $10 \%$ |
| Mid-Atlantic | $1 \%$ | Do not know | $8 \%$ |

Exhibit 19: Respondents by Chapter

Exhibit 20 shows a breakdown of responses for the question "Do you attend local chapter meetings/workshops?"

| Do you attend local chapter meetings/workshops? |  |
| :---: | :---: |
|  | Percentage |
| Yes | $49 \%$ |
| No | $51 \%$ |

Exhibit 20: Chapter Meeting Attendance, Overall
Exhibit 21 shows a breakdown of responses to the question "What motivates you to attend chapter meetings/workshops?" Respondents were permitted to choose more than one answer. ( $\mathrm{n}=335$ )

|  | Percentage |
| :---: | :---: |
| Who the Speakers are | $80 \%$ |
| If CCEA Training is Conducted | $22 \%$ |
| Other Professional Development | $34 \%$ |
| The Cost | $20 \%$ |
| Educational Value | $59 \%$ |

Exhibit 16: What Motivates Chapter Members to Attend Meetings/Workshops, Overall

For responses by Chapter, that data will be provided directly to the Chapter Presidents.

