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# 2015 Salary Survey of Business, Industry, and Government Statisticians 

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Committee on Statistical Partnerships among Academe, Industry, and Government

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## I. SURVEY DESIGN AND ADMINISTRATION

## Background

The American Statistical Association (ASA) has conducted salary surveys of its membership over several years. The primary purpose of these surveys was to obtain benchmark salary information for statisticians in the US that could be referenced by students, statisticians, and employers of statisticians.

## Survey Design

ASA non-academic members in the US who were employed by Business, Industries and Government ( $\mathrm{B} / \mathrm{I} / \mathrm{G}$ ) were emailed a link to SurveyMonkey ${ }^{\circledR}$ to access the survey. The final 2015 survey was brief and consisted of only eleven items (Appendix A). Academic salaries are analyzed in a separate survey.

The Statistical Consulting and Survey Center (SCSC) in the Department of Biostatistics and Epidemiology at Augusta University (AU) was contracted by the ASA to help with the design and analyze the data. This report describes the procedures followed and the final survey outcomes. The survey was conducted under the directives of Ronald L. Wasserstein, Executive Director, ASA, Donna LaLonde, Director of Strategic Initiatives and Outreach, ASA, and ASA's Statistics Partnership among Academic, Industry \& Government (SPAIG) committee.

For this survey, a B/I/G STATISTICIAN is defined as a person employed in business, industry, or government (not academia) who: (1) has a Bachelors, Masters, or Doctorate degree in statistics, biostatistics, or mathematical statistics, OR has the equivalent of one year of graduate course work in academic statistics (including a Federal Government employee who meets the education requirements for a Mathematical Statistician), AND (2) currently uses statistical reasoning or performs statistical analyses (including supervision of statisticians) as part of his or her job.

## Project Staff

Representatives of ASA involved in this project are Donna LaLonde (Director of Strategic Initiatives and Outreach), Ronald L. Wasserstein (Executive Director), Barry D. Nussbaum, 2015 Chair of SPAIG Committee, and members of the SPAIG Committee. Department of Biostatistics and Epidemiology and SCSC staff members, involved in this project, are listed in the following table.

| Augusta University SCSC Staff |  |  |
| :--- | :--- | :--- |
| Name | Title | Project Responsibilities |
| Varghese George, PhD | Professor and Chair, <br> Department of Biostatistics <br> and Epidemiology | Survey design, project monitoring, overall <br> supervision, and preparation of the final <br> reports |
| Patricia Hall, MS | Biostatistician and <br> SCSC Manager | Survey design, administration, statistical <br> analysis, and final report preparation |

## II. SURVEY IMPLEMENTATION AND PROCEDURES

## Project Planning

The survey methodology and scope of work was approved by the Chair of the SPAIG Committee and the ASA representatives. The Augusta University Human Assurance Committee (Institutional Review Board) approved the research protocol. On October 12, 2015 the contract was executed and all AU approvals were obtained allowing us to begin the actual work on the survey.

Programming of the on-line survey and all preliminary work necessary to implement the e-mail invitations were completed by the end of November 2015. The survey period extended from middle of December through early January.

## Survey Development

The 2015 SPAIG survey was developed in collaboration with ASA project representatives. A draft of the 2015 survey was provided to the ASA Survey Review Committee. The committee suggested modifications which were incorporated into the survey. The final survey questionnaire appears in Appendix A.

SurveyMonkey ${ }^{\circledR}$ was used to implement the on-line survey. The instrument pages were coded with check boxes for categorical response items with "strong" typing and format control. The instrument was deployed on SurveyMonkey's website (www.surveymonkey.com). A unique "collector" was used for each phase of the survey. In an effort to increase response rate, the team made the decision to have the ASA send the invitations and to not require a password for the survey.

The layout of the web instrument was designed using SurveyMonkey's design templates. The first question was whether the participant was employed as a statistician (with proper definition): (1) if the respondent answered "NO", they were taken to the end of the questionnaire; (2) If they answered "YES", they were taken to a new page to answer the remaining 9 questions. A minimal amount of scrolling was required to view all questions on a single page.

The online survey was extensively tested and validated. The on-line survey was opened and e-mail invitations were sent on December 15, 2015.

## Respondent Activity

Respondents were allowed to access their survey only once. Answers to specific items could be changed as often as desired until they exited the last page of the survey. When they exited the final page their responses were stored as the "FINAL" version.

## Data and Response Management

Survey completion status and general comments were maintained for each respondent in Excel data. Periodic progress reports were made available to project staff as needed.

## Data Collection Procedure

An Excel database of $n=5,412$ ASA B///G members was received from the ASA in early January 2013 and was processed, examined and cleaned by BCSC project staff. Of the 5,412 members, 5,296 had valid e-mail address. On December 15, 2015, the initial e-mail invitation was sent to those with valid e-mail addresses. This invitation described the study and its purpose, and invited the ASA members to participate; it also included the URL for the on-line survey. The e-mail invitation letter can be found in Appendix A. On December 21, 2015, reminder e-mails were sent to those that had not yet responded. The survey was closed on January 8, 2016.

## III. FINAL RESULTS AND RESPONSE RATES

Of the 5296 with valid e-mail addresses that were invited to participate, 1157 responded to the survey.

Respondents that were not employed as a statistician or not employed at all, including retired individuals, were classified as not eligible. In addition, respondents who were employed in academia were also classified as ineligible.

Based on the responses received, it was determined that 126 individuals (10\%) were not eligible to be included in the final analysis. Those ineligible were either employed in academia, unemployed, not employed as a statistician, retired, or reported that they did not meet the definition of a statistician. Consistent with best practice, it was assumed the rate of ineligibility among the respondents would be similar in the population. When adjusted for delivery failure, eligibility, and non-response, 1,031 (1157-126) eligible responses were received from an adjusted universe of eligible members of 4766 (5296-530), for an adjusted response rate of $\mathbf{2 2 \%}$.

The 2013 SPAIG survey had a response rate of $31.6 \%$. Our goal was to match or exceed that rate; however, the 2015 SPAIG survey response rate was $9.6 \%$ lower than the 2013 survey.

## Respondent Characteristics

One thousand one hundred fifty-seven $(1,157)$ ASA members responded to the $B / / / G$ salary survey. However, 53 of these were reported as non-statisticians, 7 were academic statisticians, 56 were working outside the USA, and 10 had invalid salaries reported. All these, totaling 126, were excluded from further analysis, resulting in a sample consisting of 1031 eligible B///G statisticians. Their current employment and other relevant characteristics are given in Appendix B.

Of the 1031 eligible respondents, 65 reported being employed part-time (6.3\%). Their reported percentage effort ranged from $10 \%$ to $90 \%$ with a median of $50 \%$.

Sixty-five percent (65\%) of the respondents were male. The majority (60\%) reported employment by a for-profit-business or industry, followed by federal government (19\%) and non-profit organization ( $12 \%$ ). Thirty-six percent ( $36 \%$ ) reported having managerial responsibility in their current position.

Fifty-eight percent (58\%) reported their highest academic degree as Doctorate, 40\% reported as Masters and $2 \%$ reported as Bachelors. Since the number of respondents with a Bachelor's degree was very small (21 out of 1031), they were not further classified for other categories.

Twenty-five percent (25\%) reported working in the pharmaceutical area and an additional $15 \%$ in the biomedical area; 9\% reported working in Survey Research Methods, 7\% reported general consulting, and $7 \%$ reported statistical computing.

The location was reported as the State where they perform their work. These data were initially consolidated into four geographic regions (Northeast, Midwest, South and West), as defined by the US Census Bureau. Northeast accounted for 22.2\% (226 respondents), 19.3\% (199 respondents) in the Midwest, 36.9\% in the South and 20.3\% (209 respondents) in the West, with $1.3 \%$ ( 13 respondents) unknown. Further investigation of the disproportionally large representation of South revealed that more than half of it was from the vicinity of District of Columbia, covering Washington, Virginia, Maryland and Delaware. Therefore, that region was separated from South, calling it the Beltway. The Beltway accounted for $21.7 \%$ (224 respondents) of the total responses, the remaining South accounting for 15.2\% (157 respondents).

Respondents were asked the year they were first employed as a statistician. Years of Experience, as a Statistician, was calculated by subtracting the reported starting year from 2015. One respondent's entry (which resulted in an implausible 88 years of experience) was not included in the calculation of the summary statistics for this variable. Without this observation, the average Years of Experience was 19.3 years $\pm 12.5$ years. Experience ranged from zero to 58 years with a median of 18 years.

## Salary Statistics

Respondents were asked to report their annual base salary (in dollars) and were instructed to include bonuses, incentives, or other forms of monetary reward. Salary (dollars per year) was "annualized" for those who responded as part-time employees. Salary statistics are reported in tables as full-time equivalents in thousands of dollars per year.

The average salary reported was $\$ 175,060 \pm \$ 104,674$ and ranged from $\$ 40,000$ to $\$ 1,000,000$. The median salary reported was $\$ 150,000$.

Various descriptive statistics are given in Appendix B for the following variables:

1. Quantitative Variables:
a. Part-Time \% Effort
b. Salary
c. Years of Experience as a Statistician
2. Categorical Variables:
a. Full--Part-Time
b. Gender
c. Employer
d. Highest Degree
e. Geographic Region
f. Managerial Responsibility
g. Years of Experience (coded into intervals)
h. Application Area or Job Type

Geographic Region was coded as:

| Geographic Region | States |
| :--- | :--- |
| Northeast | CT, MA, ME, NH, NJ, NY, PA, RI, VT |
| Beltway | DE, DC, MD, VA |
| West | AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY |
| Midwest | IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI |
| South | AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, WV |
| Unknown | Unknown area of US |

Appendix C gives percentiles (10, 25, 50, 75, 90) of overall Annual Salary and for levels of the following Variables:

1. Employer
2. Geographic Region
3. Managerial Responsibility
4. Gender
5. Highest Degree
6. Years of Experience
7. Application Area or Job Type

Appendix D gives Percentiles (10, 25, 50, 75, 90) of Annual Salary for Managerial Responsibility by Years of Experience by Highest Degree (Masters and Doctorate only).

Appendix E gives Percentiles (10, 25, 50, 75, 90) of Annual Salary for Employer by Highest Degree.
Appendix F gives Percentiles (10, 25, 50, 75, 90) of Annual Salary for Employer by Application Area or Type of Job by Highest Degree (Masters and Doctorate only).

## III. COMMENTS AND SUGGESTIONS

Comments:

- In 2015, Georgia Regents University (GRU) changed its name to Augusta University (AU).
- Because a very small sample (21) of respondents indicated that their highest degree was bachelors, this degree group was not broken down into any smaller categories in the analyses.


## Suggestions:

- Several of those invited to participate in the survey commented that they were reluctant to provide their salary. Also, there were 53 respondents who indicated they were non-statisticians and 56 who were outside the US. A question could be included at the beginning of the survey to identify these non-eligible respondents, and the survey should end if a respondent fits into one of these categories, so they don't have to fill out the rest of the information.
- Consider alternatives to using SurveyMonkey® to administer the survey and collect responses. This may alleviate issues with SPAM filters
- Consider comparing the characteristics of responders vs. the characteristics of nonresponders.


## IV. ACKNOWLEDGEMENTS

The authors gratefully acknowledge the critical input provided by Donna LaLonde, Director of Strategic Initiatives and Outreach, Ronald L. Wasserstein, Executive Director, the ASA Survey Review Committee, Barry D. Nussbaum, Chair of 2015 SPAIG Committee, Kelly H. Zou, Chair of the 2016 SPAIG Committee, Polly Phipps, SPAIG Committee, Pamela D. McGovern, SPAIG Committee member, other members of the SPAIG Committee, and the members of the Survey Review Committee.

We also wish to thank the ASA members who responded to the survey. Without their participation, the survey could not have been conducted. Their valuable comments will surely improve future surveys.

## APPENDIX A

## 2015 American Statistical Association Salary Survey of Business, Industry, and Government Statisticians

## 2015 Salary Survey of Statisticians in Business, Industry, and Government

Your assistance is requested for the 2015 American Statistical Association (ASA) survey of statisticians in business, industry, government, and non-profit organizations. This research will update similar ASA surveys conducted in the past (see reports on the Career Center page of the ASA Web site). Survey results will provide relevant statistician salary benchmarks to ASA members and will be very helpful in addressing the salary/career questions ASA receives from students, employers, and researchers.

Please complete the following information about your background and current primary employment as a statistician. All information will remain strictly confidential and will only be reported as aggregated data.

Your input is valuable and important to us. Thank you very much for your time.

For this study, a Statistician is defined as a person who is employed in business, industry, or government (not academia) and meets the following criteria:

- Has a university/college degree (Bachelor's Master's, doctorate) in statistics, biostatistics, or mathematical statistics, or
- Has the equivalent of one year of graduate course work in academic statistics (including Federal Government employees who meet the education requirements for a Mathematical Statistician), and Currently uses statistical reasoning or performs statistical analyses (includes supervision of statisticians) as part of their job.
* 1. Using the definition above, are you currently employed as a statistician?
Yes
○ No
* 2. What is your highest degree you have received?
( bachelor's
( master's
doctorate
* 3. What is your gender?FemaleMale
* 4. In what year were you first employed full-time as a statistician? (Could be at an organization other than your current employer.)
$\square$
* 5 . Is your current position full-time or part-time?

Full-timePart-time, please enter percent of full-time equivalent (FTE = 40 hours per week).
$\square$

* 6. Managerial responsibilities include budget and hiring responsibility, conducting performance appraisals, etc. A technical team leader is not considered to have managerial responsibility. Does your current position include managerial responsibilities?
YesNo

7. What is the location of your current position?
$\square$
Other (please specify)
$\square$

* 8. In US dollars, including base salary, bonuses, incentives, or other forms of monetary awards from your employer, what is your current annual total income from your primary job?
$\square$
* 9. Which option best describes your current employer?Federal GovernmentState or Local GovernmentFor-Profit Business or IndustryNon-Profit OrganizationSelf-Employed/Private ConsultantOther (please specify)
$\square$
* 10. Which option best describes your current job type or application area?BiomedicalBusinessGeneral ConsultingMarketing ResearchPharmaceuticalsPhysical or Engineering SciencesPolicyPublic HealthQuality and ProductivityStatistical ComputingSurvey Research MethodsOther (please specify)
$\square$


## 2015 Salary Survey of Statisticians in Business, Industry, and Government

11. Please provide feedback to help us improve this survey.
$\square$

Thank you for completing this survey.

Dear Colleague,

STAND UP AND BE COUNTED! Your assistance is requested for the 2015 American Statistical Association (ASA) survey of statisticians in business, industry, government, and non-profit organizations. This research will update similar ASA surveys conducted in the past (see reports on the Career Center page of the ASA Web site). Survey results will provide relevant statistician salary benchmarks to ASA members and will be very helpful in addressing the salary/career questions ASA receives from students, employers, and researchers. Your response is requested by January 8, 2016.

Your participation matters. You have been selected from the ASA membership records to participate in this survey. The questions are brief and primarily relate to your current employment situation. It should take only 3 or 4 minutes to complete. Your response is very important to an accurate representation of statistics as a career.

Your participation is voluntary; however we encourage you to make this special survey a priority. Strict security procedures are in place so that your information will be kept confidential. All data will be stored in a password-protected electronic format. To help protect your confidentiality, the survey will not contain information that will personally identify you. Your name will not be associated with any information you provide.

The results of this study will be used for scholarly purposes only and will be shared with the ASA. Published data will be summarized by type of organization and geographic region, as well as by academic degree and length of work experience.

We statisticians are well aware of the current trend toward decreasing survey response rates that can bias a study's results. Let's practice what we preach and prove that statisticians value high response rates by completing this survey conducted on our very own population of professionals. Please use this link [SurveyLink] and complete the survey today.

If you have questions about the survey, please contact Donna LaLonde at DonnaL@amstat.org.
Thank you for all that you do to support the ASA.

## Happy Holidays!

Please note: If you do not wish to receive further survey emails from us, please click the link below, and you will be automatically removed from our survey mailing list.

## [OptOutLink]

Sincerely,
Statistical Partnerships Among Academe, Industry, \& Government (SPAIG) Committee

## APPENDIX B - Descriptive Statistics <br> Entire Sample Responding ( $\mathrm{N}=1031$ ) Descriptive Statistics for Quantitative Variables

| Statistic | Part-time <br> \% Effort | Salary <br> (Annualized <br> in 1000s) | Years of <br> Experience |
| :--- | ---: | ---: | ---: |
| N | 65 | 1031 | 1030 |
| Mean | 53.7 | 175.1 | 19.3 |
| Std. Deviation | 23.3 | 104.7 | 12.5 |
| Minimum | 10.0 | 40.0 | 0.0 |
| 10th percentile | 20.0 | 90.8 | 3.0 |
| 25th percentile | 30.0 | 113.0 | 9.0 |
| 50th percentile | 50.0 | 150.0 | 18.0 |
| 75th percentile | 78.0 | 200.0 | 30.0 |
| 90th percentile | 80.0 | 293.3 | 36.0 |
| Maximum | 90.0 | 1000.0 | 58.0 |

Number Non-Missing and Missing for Categorical Variables

| Variable | $\mathbf{N}$ | \# Missing |
| :--- | ---: | ---: |
| Full-/Part-Time | 1031 | 0 |
| Gender | 1031 | 0 |
| Employer | 1031 | 0 |
| Highest Degree | 1031 | 0 |
| Geographic Region | 1018 | 13 |
| Managerial Responsibility | 1031 | 0 |
| Application Area or Type of Job | 1031 | 0 |

Frequency Table for Categorical Variables


[^0]Frequency Table for Categorical Variables (cont.)

|  |  | Frequency | Percent |
| :---: | :---: | :---: | :---: |
| Managerial Responsibility | No | 657 | 63.7 |
|  | Yes | 374 | 36.3 |
|  | Total | 1031 | 100.0 |
| Years of Experience | 0-5 | 184 | 17.9 |
|  | 6-10 | 131 | 12.7 |
|  | 11-15 | 120 | 11.7 |
|  | 16-25 | 247 | 24.0 |
|  | 26+ | 348 | 33.8 |
|  | Total | 1030 | 99.9 |
| Application Area/ Job Type | Pharmaceuticals | 261 | 25.3 |
|  | Biomedical | 157 | 15.2 |
|  | Survey Research Methods | 90 | 8.7 |
|  | General Consulting | 72 | 7.0 |
|  | Statistical Computing | 68 | 6.6 |
|  | Business | 66 | 6.4 |
|  | Public Health | 62 | 6.0 |
|  | Physical or Engineering Sciences | 58 | 5.6 |
|  | Marketing Research | 33 | 3.2 |
|  | Policy | 24 | 2.3 |
|  | Quality and Productivity | 24 | 2.3 |
|  | Other | 116 | 11.3 |
|  | Total | 1031 | 100.0 |

## APPENDIX C

Salary (Annualized in Thousands)

|  |  | n | Percentiles |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 10 | 25 | 50 | 75 | 90 |
| Total Sample |  | 1031 | 90.8 | 113.0 | 150.0 | 200.0 | 293.3 |
| Employer | Federal Government | 199 | 92.5 | 110.0 | 135.0 | 157.3 | 177.0 |
|  | State or Local Government | 16 | 75.0 | 80.0 | 105.5 | 137.5 | 202.6 |
|  | For-Profit Business or Industry | 620 | 97.0 | 120.0 | 161.0 | 236.5 | 300.0 |
|  | Non-Profit Organization | 122 | 75.0 | 92.0 | 120.0 | 152.0 | 200.2 |
|  | Self-Employed/Private Consultant | 59 | 100.0 | 120.0 | 180.0 | 275.0 | 360.0 |
|  | Other | 15 | 90.0 | 100.0 | 117.0 | 140.0 | 158.0 |
| Geographic Region | Northeast (CT, MA, ME* ${ }^{*} \mathrm{NH}^{*}, \mathrm{NJ}$, NY, PA, RI, VT) | 229 | 100.0 | 135.0 | 180.0 | 250.0 | 350.0 |
|  | Beltway (DE, DC, MD, VA) | 224 | 95.0 | 115.5 | 146.0 | 168.1 | 220.1 |
|  | West (AK, AZ, CA, CO, HI, ID, MT*, NV, NM, OR, UT, WA, WY) | 209 | 87.5 | 110.0 | 144.6 | 200.0 | 300.0 |
|  | Midwest (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI) | 199 | 80.0 | 106.0 | 133.0 | 180.0 | 265.0 |
|  | South (AL, AR, FL, GA, KY, LA, MS, NC, OK*, SC, TN, TX, WV) | 157 | 81.0 | 106.0 | 140.0 | 200.0 | 277.0 |
|  | Unknown (in US) | 13 | 105.0 | 120.0 | 165.0 | 309.7 | 420.0 |
| Managerial <br> Responsibility | No | 657 | 83.0 | 103.0 | 130.5 | 172.5 | 245.0 |
|  | Yes | 374 | 111.0 | 140.0 | 177.1 | 250.0 | 350.0 |
| Gender | Female | 364 | 85.0 | 103.0 | 134.0 | 178.6 | 260.0 |
|  | Male | 667 | 94.0 | 120.0 | 150.0 | 210.0 | 300.0 |
| Highest Degree | Bachelor's | 21 | 63.0 | 88.0 | 120.0 | 152.0 | 190.0 |
|  | Master's | 415 | 80.0 | 97.5 | 125.0 | 170.0 | 240.0 |
|  | Doctorate | 595 | 105.0 | 128.9 | 160.0 | 228.0 | 325.0 |

*No observations from this state

## APPENDIX C (cont.)

Salary (Annualized in Thousands)

|  |  | n | Percentiles |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 10 | 25 | 50 | 75 | 90 |
| Years of <br> Experience | 0-5 |  | 184 | 68.0 | 81.5 | 100.0 | 123.0 | 157.4 |
|  | 6-10 | 131 | 85.0 | 99.6 | 122.0 | 145.0 | 175.0 |
|  | 11-15 | 120 | 100.0 | 114.0 | 142.9 | 189.5 | 250.0 |
|  | 16-25 | 247 | 110.0 | 140.0 | 177.3 | 250.0 | 324.0 |
|  | 26+ | 349 | 116.0 | 139.5 | 170.0 | 240.0 | 350.0 |
| Application Area or Type of Job | Business \& Industry | 294 | 86.0 | 105.0 | 140.0 | 185.0 | 275.0 |
|  | Pharmaceuticals | 263 | 119.0 | 150.0 | 200.0 | 270.0 | 400.0 |
|  | Health \& Medicine | 243 | 80.0 | 102.0 | 130.0 | 160.0 | 220.1 |
|  | Survey Research Methods | 92 | 92.5 | 118.0 | 147.5 | 166.1 | 205.0 |
|  | General Consulting | 72 | 90.0 | 112.3 | 146.0 | 195.0 | 300.0 |
|  | Other | 67 | 90.0 | 100.0 | 125.0 | 187.0 | 240.0 |

## APPENDIX D

Managerial Responsibility by Experience by Highest Degree

## Salary (Annualized in Thousands)

| Years of | Highest |  | Percentiles |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Experience | Degree $^{1}$ | n | 10 | 25 | 50 | 75 | 90 |

No Managerial Responsibility

| $0-5$ | Master's | 78 | 65.0 | 73.0 | 83.7 | 98.0 | 118.3 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctorate | 85 | 85.0 | 99.2 | 110.0 | 145.0 | 162.3 |
| 6 -10 | Master's | 43 | 80.0 | 84.0 | 100.0 | 120.0 | 150.0 |
|  | Doctorate | 52 | 96.0 | 115.3 | 129.5 | 150.0 | 180.0 |
| $11-15$ | Master's | 35 | 92.5 | 100.0 | 120.0 | 150.0 | 175.0 |
|  | Doctorate | 40 | 107.0 | 128.5 | 151.5 | 205.8 | 260.0 |
| $16-25$ | Master's | 56 | 96.0 | 110.0 | 141.8 | 172.6 | 247.0 |
|  | Doctorate | 66 | 115.0 | 145.0 | 174.5 | 200.0 | 275.0 |
| $26+$ | Master's | 72 | 103.0 | 120.0 | 147.5 | 201.5 | 250.0 |
|  | Doctorate | 116 | 120.0 | 139.8 | 166.0 | 231.7 | 362.0 |

## Managerial Responsibility

| $0-5$ | Master's | 5 | 63.0 | 90.8 | 120.0 | 123.0 | 150.0 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctorate | 12 | 100.0 | 111.1 | 124.5 | 162.5 | 180.0 |
| 6 -10 | Master's | 11 | 90.0 | 92.5 | 115.0 | 130.0 | 135.0 |
|  | Doctorate | 23 | 107.0 | 120.0 | 140.0 | 175.0 | 250.0 |
| $11-15$ | Master's | 16 | 96.0 | 104.0 | 136.6 | 172.5 | 189.0 |
|  | Doctorate | 26 | 129.0 | 140.0 | 195.0 | 250.0 | 293.0 |
| $16-25$ | Master's | 44 | 120.0 | 130.0 | 172.5 | 265.0 | 310.0 |
|  | Doctorate | 77 | 145.0 | 175.0 | 228.0 | 300.0 | 425.0 |
| $26+$ | Master's | 55 | 100.0 | 135.0 | 161.4 | 206.3 | 260.0 |
|  | Doctorate | 98 | 135.2 | 158.0 | 210.0 | 300.0 | 450.0 |

${ }^{1}$ There were too few respondents with a Bachelor's degree to include in this table.

## APPENDIX E

## Employer by Highest Degree

## Salary (Annualized in Thousands)

| Employer | Highest <br> Degree ${ }^{1}$ | $n$ | Percentiles |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 10 | 25 | 50 | 75 | 90 |
| Federal Government | Master's | 69 | 73.0 | 100.0 | 118.1 | 141.0 | 157.2 |
|  | Doctorate | 125 | 98.0 | 118.0 | 144.6 | 160.0 | 190.0 |
| State or Local Government | Master's | 9 | 55.0 | 80.0 | 86.0 | 111.0 | 202.6 |
|  | Doctorate | 7 | 75.0 | 100.0 | 120.0 | 141.8 | 230.0 |
| For-Profit Business or Industry | Master's | 254 | 85.0 | 104.0 | 140.0 | 187.0 | 252.0 |
|  | Doctorate | 354 | 115.0 | 143.0 | 185.0 | 270.0 | 400.0 |
| Non-Profit Organization | Master's | 52 | 67.0 | 79.0 | 94.3 | 114.8 | 148.0 |
|  | Doctorate | 67 | 100.0 | 118.0 | 140.0 | 190.0 | 228.0 |
| Self-Employed or Private Consultant | Master's | 26 | 83.3 | 113.6 | 146.8 | 225.0 | 360.0 |
|  | Doctorate | 32 | 110.0 | 135.0 | 200.0 | 277.5 | 350.0 |
| Other | Master's | 5 | 100.0 | 102.0 | 117.0 | 130.0 | 140.0 |
|  | Doctorate | 10 | 85.0 | 99.2 | 114.0 | 157.0 | 166.0 |

[^1]
## APPENDIX F

## Employer by Application Area or Type of Job by Highest Degree

## Salary (Annualized in Thousands)

| Employer | Application Area or <br> Type of Job | Highest <br> Degree ${ }^{1}$ | n | Percentiles |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 10 | 25 | 50 | 75 | 90 |
| Federal <br> Government | Business \& Industry | Master's | 14 | 72.0 | 73.0 | 112.0 | 130.0 | 155.0 |
|  |  | Doctorate | 20 | 98.0 | 100.0 | 112.5 | 154.4 | 171.5 |
|  | Pharmaceuticals | Doctorate | 7 | 121.6 | 129.0 | 149.0 | 168.2 | 200.0 |
|  | Health \& Medicine | Master's | 12 | 110.0 | 118.0 | 126.5 | 132.5 | 141.0 |
|  |  | Doctorate | 50 | 99.2 | 128.8 | 146.8 | 160.0 | 201.4 |
|  | Survey Research Methods | Master's | 23 | 96.0 | 110.0 | 139.5 | 155.0 | 170.0 |
|  |  | Doctorate | 31 | 98.0 | 120.0 | 150.0 | 165.0 | 175.0 |
|  | General Consulting | Master's | 7 | 64.4 | 90.8 | 110.0 | 135.0 | 156.7 |
|  |  | Doctorate | 7 | 88.2 | 135.0 | 139.5 | 158.7 | 700.0 |
|  | Other | Master's | 13 | 84.0 | 90.8 | 99.0 | 107.0 | 145.0 |
|  |  | Doctorate | 10 | 85.5 | 125.0 | 150.0 | 174.0 | 230.0 |
| For-Profit <br> Business or <br> Industry | Business \& Industry | Master's | 98 | 80.0 | 95.0 | 125.0 | 160.0 | 240.0 |
|  |  | Doctorate | 122 | 107.0 | 129.6 | 163.6 | 233.0 | 324.0 |
|  | Pharmaceuticals | Master's | 82 | 105.0 | 130.0 | 171.8 | 240.0 | 270.0 |
|  |  | Doctorate | 153 | 128.8 | 165.0 | 220.0 | 300.0 | 429.0 |
|  | Health \& Medicine | Master's | 39 | 84.5 | 99.0 | 120.0 | 158.0 | 204.0 |
|  |  | Doctorate | 41 | 115.0 | 140.0 | 161.0 | 239.9 | 300.0 |
|  | Survey Research Methods | Master's | 10 | 86.1 | 118.7 | 142.8 | 162.5 | 420.0 |
|  |  | Doctorate | 10 | 114.8 | 130.0 | 162.5 | 221.4 | 229.0 |
|  | General Consulting | Master's | 15 | 80.0 | 92.0 | 140.0 | 200.0 | 250.0 |
|  |  | Doctorate | 21 | 114.5 | 130.0 | 170.0 | 250.0 | 300.0 |
|  | Other | Master's | 10 | 77.3 | 97.5 | 156.0 | 240.0 | 382.5 |
|  |  | Doctorate | 7 | 100.0 | 115.0 | 116.0 | 150.0 | 210.0 |

[^2]
## APPENDIX F

## Employer by Application Area or Type of Job by Highest Degree (cont.)

## Salary (Annualized in Thousands)

| Employer | Application Area or Type of Job | Highest <br> Degree ${ }^{1}$ | n | Percentiles |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 10 | 25 | 50 | 75 | 90 |
| Other (State/Local Government, | Business \& Industry | Master's | 17 | 77.5 | 83.3 | 117.0 | 152.0 | 225.0 |
|  |  | Doctorate | 11 | 100.0 | 120.0 | 155.0 | 160.0 | 200.0 |
|  | Pharmaceuticals | Master's | 6 | 100.0 | 130.0 | 145.0 | 200.0 | 200.0 |
| Nonprofit |  | Doctorate | 13 | 110.0 | 125.0 | 200.0 | 275.0 | 350.0 |
| Organization, Self- | Health \& Medicine | Master's | 43 | 65.4 | 77.0 | 100.0 | 122.2 | 150.0 |
| Employed/Private |  | Doctorate | 48 | 85.0 | 113.5 | 134.1 | 177.0 | 228.0 |
| Consultant, and Other Employers not listed above) | Survey Research Methods | Master's | 5 | 73.0 | 81.0 | 86.9 | 125.0 | 130.0 |
|  |  | Doctorate | 9 | 90.0 | 120.0 | 205.0 | 250.0 | 500.0 |
|  | General Consulting | Master's | 7 | 88.0 | 96.0 | 170.0 | 316.7 | 360.0 |
|  |  | Doctorate | 13 | 108.0 | 135.0 | 175.6 | 190.0 | 240.0 |
|  | Other | Master's | 5 | 90.0 | 92.5 | 99.1 | 133.3 | 400.0 |
|  |  | Doctorate | 15 | 99.2 | 110.0 | 175.0 | 205.0 | 300.0 |

[^3]
[^0]:    *No observations from this state

[^1]:    ${ }^{1}$ There were too few respondents with a Bachelor's degree to include in this table.

[^2]:    ${ }^{1}$ There were too few respondents with a Bachelor's degree to include in this table.

[^3]:    ${ }^{1}$ There were too few respondents with a Bachelor's degree to include in this table.

