Business, Industry, and Government 2007 Salary Survey
For AMSTAT NEWS

by Michael D. Larsen, Iowa State University, Department of Statistics and Center for Survey Statistics and Methodology

In the fall of 2006, the SPAIG committee of the ASA began planning a 2007 salary survey of ASA members employed in Business, Industry, and Government (B/I/G). Since there is no ready source of salary information for this group or any comparable group, ASA conducts such surveys as a service to its members. As in previous surveys in 1999, 2003, and 2005, the survey objectives were to

- provide current salary information on B/I/G statisticians,
- provide students with starting salary information by academic degree,
- provide students and employed statisticians information on salary potential,
- provide employers with salary reference information, and
- characterize B/I/G statisticians by several factors.

In order to design an efficient sampling plan, collect data, and analyze results, the ASA contracted with the Center for Survey Statistics & Methodology (CSSM) at Iowa State University (ISU). In consultation with members of the ASA SPAIG committee, CSSM gathered data for the salary survey in March and April of 2007. The plans for the survey were approved by the ASA executive board, ASA's SPAIG committee, and ISU's Institutional Review Board (IRB). Plans for the survey and results are described in this article. The SPAIG committee will begin planning the 2009 survey starting this fall. If you have any comments or suggestions for the future survey, please contact SPAIG committee member Rahul Parsa (Rahul.Parsa@DRAKE.EDU) and CSSM director Diane Anderson (dganders@iastate.edu).

In 2005, the survey was conducted by CSSM with a change in sampling strategy and question focus. As a result, the response rate was much higher (69%) and data quality is believed to be much better. In 2007, a similar sampling strategy was followed: the survey questionnaire was sent directly to a stratified random sample of B/I/G statisticians who are ASA members and were asked only about their own employment situation. In 2007, in order to compare mail versus email contact modes, a mode experiment was implemented within the context of the survey. Additionally, the definition of a statistician was changed slightly to address concerns that arose in 2005. Further discussion of the mode experiment and the definition of a statistician along with concerns in general about the recent survey experience will be discussed at the conclusion of this article.

The ASA membership database contained 4,625 individuals who identified themselves as working in the B/I/G section: 3,573 in Business and Industry, including 494 who were private consultants or self employed, and 1,052 in Government. The population was split into two groups, as in previous surveys, to ensure coverage of new ASA members whose salaries reflect those of newly employed statisticians. Table 1 reports population counts and percents by B/I/G sector and years of ASA experience.

Table 1. ASA B/I/G Members

Years of ASA membership	<2		2+		Total	
	N	%	N	%	N	%
Business/Industry	278	9	2801	91	3079	67
Private Consultant/Self Employed	33	7	461	93	494	11
Business/Industry Subtotal	311	9	3262	91	3573	77
Federal/National Government	50	6	858	94	908	20
State, Provincial, Local Government	9	6	135	94	144	3
Government Subtotal	59	5	993	95	1052	23
Total	370	9	4255	91	4625	100

A partial summary of the sampling strategy is presented in Table 2. One hundred thirty-five (135) ASA B/I/G members had no email listed with ASA and were sampled with certainty. Out of the remaining 4,490, simple random samples were chosen without replacement within strata. In comparison to 2005, the sampling strategy uses more levels of stratification (four sectors of B/I/G instead of two, email available versus not) and samples small sectors at higher rates.

Table 2. Sampling Sizes in Subgroups for 2007 SPAIG Salary Survey

Years of ASA membership	<2		2+		Total	
	n	Sampling %	n	Sampling %	n	Sampling %
Business/Industry	278	100	1085	31	1363	44
Private Consultant/Self Employed	33	100	393	85	426	86
Business/Industry Subtotal	311	100	1478	45	1789	50
Federal/National Government	50	100	377	44	427	47
State, Provincial, Local Government	9	100	135	100	144	100
Government Subtotal	59	100	512	52	571	54
Total	370	100	1990	47	2360	51

Each member of the sample was contacted and asked to provide answers to the questions in the survey. Some sample members had only mail contact information and necessarily received letters for initial contact and follow-ups. Since the survey is quite short, mail contacts included the full questionnaire with a return envelope. The cover letter, printed on ASA letterhead with signatures from ASA and CSSM, included a link to a secure web-based application. Sample members with both mail and email information available were split roughly evenly within strata into four groups by contact mode. Initial contact was made either by both email and mail or by email only. The first follow-up contact, if necessary, was made then either by both email and mail or by email only. A third contact, if necessary, was made by email only. If a respondent email bounced, then subsequent contacts were made by mail only.

The operational definition of "statistician" used in 2007 was a person who:

- Has a university/college degree (Bachelors, Masters, PhD) in statistics, biostatistics, or a statistically related field (psychometrics, econometrics, some dimensions of mathematics, etc.), OR has the academic equivalent of one year of graduate course work in statistics, AND
- Uses statistical reasoning, performs statistical analyses, and/or supervises statisticians as part of her/his employment.

The definition used in 2005 and earlier can be found in the November 2005 *AMSTAT NEWS* article.

One thousand five hundred thirty-two (1,532) ASA members, or 65% of the sample, responded to the survey. Two individuals removed ID numbers from paper forms and will be excluded from analyses. One hundred sixty-three (163) respondents were not employed as statisticians. Excluding the two without ID numbers, the number and percentage of respondents by groups are given Table 3. As in 2005, response rates were higher among government statisticians and statisticians with two or more years of experience than among those in business or industry and with less than two years of experience, respectively.

Table 3. Number and Percentage of Respondents, 2007 SPAIG Salary Survey

Years of ASA membership	<2		2+		Total	
	n	Response %	n	Response %	n	Response %
Business/Industry	142	51	701	65	843	62
Private Consultant/Self Employed	20	61	251	64	271	64
Business/Industry Subtotal	162	52	952	64	1114	62
Federal/National Government	36	72	283	75	319	75
State, Provincial, Local Government	7	78	90	67	97	67
Government	43	73	373	73	416	73

Subtotal						
Total	205	55	1325	67	1530	65

The respondents identified their current employer. Of the 1,367 eligible respondents, all but six (6) provided information. The percent of statisticians in government is inflated by the oversample in government. The weighted percentage is computed using case weights, which are the product of the sampling weights (inverse probabilities of selection), the inverse of the proportion of respondents by strata, and the proportion of respondents who were eligible by strata.

Table 4: Employers of B/I/G Statistician Respondents

Employer	Respondents		
	#	%	Weighted %
Pharmaceutical/Medical Device/Diagnostics, biomedical/pharmacometric consulting	396	29.0	34.1
Government – Federal	283	20.7	18.9
Consulting (general statistical consulting)	151	11.0	8.3
Survey/Market research	66	4.8	4.8
Government – State	55	4.0	2.1
Investments & Lending, Banking, Accounting, Futures, Financial services, Commodity trading	41	3.0	3.1
Technical, survey, and health & safety research, contract research organization, non-profit research organization, non-profit	39	2.9	2.8
Medical clinic/hospital, PPO, health care delivery	37	2.7	2.6
Computer software	35	2.6	2.7
Insurance	28	2.0	2.3
Computer products or services, semi-conductor engineering/manufacturing	22	1.6	1.7
Aerospace	20	1.5	1.6
Environmental services or products	17	1.2	1.1
Energy (oil, gas, coal, electricity)	17	1.2	1.3
Communications (TV, radio, telephone, etc.), Internet, telecom	17	1.2	1.6
Other	143	10.5	10.3
Missing	6	0.4	0.5
Total	1367	100.0	100.0

Respondents provided their geographic location. Results are summarized in Table 5. The number in the South Atlantic is inflated by the oversample of government statisticians.

Table 5: Geographic Location of B/I/G Statistician Respondents

Geographic Region	Statisticians			States
	#	%	Weighted %	
South Atlantic	445	32.6	31.5	DE, DC, GA, FL, MD, NC, SC,

				VA, WV
Middle Atlantic	260	19.0	20.4	NJ, NY, PA
East North Central	161	11.8	12.2	IL,IN,MI,OH.WI
Pacific	188	13.8	13.3	AK,CA,HI,OR,WA
New England	88	6.4	7.3	CT,MA,ME,NH,RI,VT
West North Central	69	5.0	5.0	IA,KS,MN,MO,ND,NE,SD
Other	156	11.4	10.4	States not listed above
Total	1,367	100.0	100.0	

Respondents provided their highest academic degree. Three individuals did not provide this information. Results are presented in Table 6. The percent with bachelors and master's degrees are overrepresented probably due to oversampling of statisticians with less than two years of experience.

Table 6: Highest Academic Degrees of B/I/G Statistician Respondents

Highest Degree	Statisticians		
	#	%	Weighted %
Bachelor's	55	4.0	3.3
Master's	582	42.6	41.9
Doctorate	727	53.2	54.5
Missing	3	0.2	0.2
Total	1,367	100.0	100.0

Respondents were asked the date and month they were first employed as a full-time statistician. Fifteen (15) individuals did not answer. Thirty-four (34) respondents provided a year, but not a month. Results for the 1,320 respondents with full information and for the 1,354 respondents with at least a year provided assuming a missing month is July are presented in Table 7. Years since first being employed as a statistician are calculated from April 1, 2007, which was midpoint in survey data collection. The percent of statisticians with less than two years of experience is affected by the oversampling of ASA members with less than two years of experience.

Table 7. Years Since First Being Employed as a Statistician

Years	Statisticians with complete data			Statisticians with year reported		
	#	%	Weighted %	#	%	Weighted %
0 - 1.9	53	4.0	3.1	53	3.9	3.0
2 – 3.9	70	5.3	4.9	72	5.3	4.9
4 – 7.9	157	11.9	12.3	157	11.6	12.0
8 – 11.9	190	14.4	15.2	197	14.6	15.3
12 – 19.9	281	21.3	22.8	290	21.4	22.9
20 – 27.9	262	19.9	20.3	269	19.9	20.3
28+	305	23.1	21.4	314	23.2	21.6
Total	1318	100.0	100.0	1352	100.0	100.0

Respondents reported whether or not their current position includes managerial responsibilities. The following comment on managerial responsibilities was provided on the survey instrument: "Managerial responsibilities include budget and hiring responsibility, conducting performance appraisals, etc. A technical team leader is not considered to have managerial responsibility." Four individuals did not respond. Results are presented in Table 8. Statisticians with fewer years of experience are less likely to have managerial responsibility. Private consultants and self employed statisticians report the most managerial responsibility.

Table 8: Managerial Responsibility

Managerial Responsibility	Statisticians			
2 or more years of experience	n	# yes	% yes	Weighted % yes
Business/Industry	654	267	40.8	40.9
Private Consultant/Self Employed	207	115	55.6	55.7
Business/Industry Subtotal	861	382	44.4	42.8
Federal/National Government	255	92	36.1	36.3
State, Provincial, Local Gov't	72	27	37.5	37.4
Government Subtotal	327	119	36.4	36.4
Total 2 or more years experience	1188	501	42.2	41.4
Less than 2 years of experience	n	# yes	% yes	Weighted % yes
Business/Industry	121	31	25.6	25.9
Private Consultant/Self Employed	16	6	37.5	37.5
Business/Industry Subtotal	137	37	27.0	27.0
Government	38	4	10.5	10.5
Total less than 2 years experience	175	39	22.3	24.4
Overall total	1363	540	39.6	40.0

Respondents reported their gender. Results are presented in Table 9. Statisticians with less than two years of experience are much more likely than statisticians with more experience to be female. Statisticians in government are more likely than statisticians in business and industry to be female.

Table 9: Gender

Gender	Statisticians			
2 or more years of experience	n	# Female	% Female	Weighted % Female
Business/Industry	656	184	28.0	27.8
Private Consultant/Self Employed	208	61	29.3	29.2
Business/Industry Subtotal	864	245	28.4	28.0
Federal/National Government	256	83	32.4	32.2
State, Provincial, Local Government	72	22	30.6	30.4
Government Subtotal	328	105	32.0	32.0

Total 2 or more years experience	1192	350	29.4	28.9
Less than 2 years of experience	n	# Female	% Female	Weighted % Female
Business/Industry	121	52	43.0	42.8
Private Consultant/Self Employed	16	8	50.0	50.0
Business/Industry Subtotal	137	60	43.8	43.5
Government	38	23	60.5	65.7
Total less than 2 years experience	175	83	47.4	46.8
Overall total	1367	100.0	100.0	30.3

Salary Statistics

Salary statistics are presented by years of experience, highest degree, and managerial status within four groups. Results for statisticians in business and industry are reported in Table 10. Results for self employed statisticians and those in private consulting are in Table 11. Statisticians working for government are summarized in Table 12. The largest subgroup identified during the survey (statisticians working in pharmaceuticals, medical devices, medical diagnostics, biomedical consulting, and pharmocometric consulting) are summarized in Table 13.

Overall, 43 respondents did not give salary information. Three additional individuals did not provide information on managerial status. Three more respondents left highest degree blank. A total of 61 individuals were missing at least one of salary, managerial status, highest degree, and first year ever employed full-time as a statistician. An additional 32 individuals did not provide the month of first employment. For the purposes of Tables 10-13, missing months are assumed to be July.

Salary for this survey was defined as current annual base salary. Here it "excludes bonuses, incentives, or other forms of monetary award." Responding sample sizes are reported by years of experience, highest degree, and managerial status. Medians are presented if the responding sample size is seven or greater. First and third quartiles are presented for sample sizes of ten or greater.

Table 10 contains salary information for statisticians in Business and Industry. From the table it is apparent that salaries are generally higher for PhD than MS statisticians, for managers than non-managers, and for statisticians with more years of experience. Figure 1 displays predicted relationships between salary and years of experience for the six subgroups in Table 10. The biggest differences occur for PhD versus non-PhD and manager versus non-manager. A few individuals with very large incomes were excluded as outliers. One individual was not used in modeling due to high influence: a BS degree, many years of experience, and a high income. In this linear model, interactions were not significant or large. The R-squared for the regression was 0.42 and used 740 observations. When weights were incorporated via weighted linear regression, results were not much different. Future work will consider variance estimation for the linear model in a finite population context.

Table 10: Annual Salaries ($1000s) of Statisticians in Business and Industry

Years of Experience	Highest Degree	n	First quartile	Median	Third quartile
No managerial responsibility					
0-1.9	BS	2			
	MS	19	60	63	80
	PhD	9		82	
2-3.9	BS	2			
	MS	28	65	72	85
	PhD	18	90	95	100
4-7.9	BS	4			
	MS	47	70	83	94
	PhD	32	95	109	114
8-11.9	BS	1			
	MS	33	80	90	103
	PhD	52	105	120	137
12-19.9	BS	2			
	MS	53	85	103	125
	PhD	42	100	120	140
20-27.9	BS	1			
	MS	27	85	106	128
	PhD	37	114	129	160
28+	BS	3			
	MS	21	100	109	128
	PhD	32	124	140	156
Managerial responsibility					
0-1.9	MS	2			
	PhD	1			
2-3.9	MS	1			
	PhD	2			
4-7.9	MS	9		93	
	PhD	13	104	112	115
8-11.9	BS	3			
	MS	24	105	124	130
	PhD	26	121	130	152
12-19.9	BS	3			
	MS	36	98	117	152
	PhD	44	130	150	199
20-27.9	MS	24	110	140	160
	PhD	41	140	170	200
28+	MS	18	95	150	168
	PhD	35	135	170	220

In the ASA B/I/G database, there are not so many statisticians who identify themselves as self employed or a private consulting statistician. As a result, information is presented in Table 11 without regard to managerial status. Managerial status for a

statistician of this type who works alone perhaps is not well defined anyway. Results also are included for statisticians in this group with less than 8 years of experience regardless of highest degree.

Table 11: Annual Salaries ($1000s) Self Employed/Private Consulting Statisticians

Years of Experience	Highest Degree	n	First quartile	Median	Third quartile
0-1.9	BS	1			
	PhD	1			
2-3.9	MS	3			
	PhD	2			
4-7.9	BS	1			
	MS	8		83	
	PhD	3			
0-7.9	Any	19	58	83	105
8-11.9	BS	1			
	MS	11	63	95	120
	PhD	12	100	103	220
12-19.9	BS	1			
	MS	15	70	112	160
	PhD	23	100	130	210
20-27.9	BS	2			
	MS	20	91	110	164
	PhD	13	100	130	190
28+	BS	4			
	MS	19	50	100	178
	PhD	60	80	125	200

An attempt was made to fit a linear model to predict salary, but efforts did not yield a useful linear summary versus years of experience. For this group, there is a very weak linear relationship (correlation 0.09) between salary and years of experience. What appears most important is an interaction between being a manager and having a PhD. MS statisticians make on average almost $7,000 more as managers in this group. PhD statisticians who are not managers make on average slightly more than $10,000 than comparable MS statisticians. PhD statisticians make on average $48,000 more as managers. Exploration of these data also revealed that some individuals report a very small base salary (less than $10,000). As the question was asked, respondents were not supposed to include bonuses and incentives, which could potentially impact this group significantly. Future versions of this survey could consider asking about all sources of income. The extreme values are unlikely to impact very much summaries in Table 11.

The number of statisticians in the ASA B/I/G employed by state, provincial, and local governments is not large. Therefore, results are reported in Table 12 for all government statistician respondents. Due to sparseness in the subtable on managers, results also are presented for statisticians with managerial responsibilities, any degree, and less than 12 years of experience. An exploratory comparison of federal versus

state/provincial/local salaries suggests that federal government salaries are well above those at the more local levels. Numbers are not reported due to small sample sizes.

Figure 2 presents linear model predictions of salaries based on years of experience for several groups of government statisticians. Management has higher predicted salary than non management. Federal has higher predicted salary than state, provincial, and local. There was not much difference between statisticians with bachelor's and master's degrees in this group, so they are combined in this estimation. This finding does not mean that a MS degree in statistics in general does not help in salary. The fact that these BS statisticians are members of ASA suggests that some self selection, which could be related to salary, has occurred. PhD statisticians have both a greater intercept and a greater slope than statisticians with lower degrees. The estimated lines are based on 355 respondents. R-squared was 0.59. A couple of statisticians who had very low salaries for their degrees and years of experience turned out to be employed part time and were excluded from this analysis. In general this is a difficulty for this survey as the question about part-time employment does not ascertain level of part time work.

Table 12: Annual Salaries ($1000s) of Government Statisticians (Federal, State, Provincial, and Local).

Years of Experience	Highest Degree	n	First quartile	Median	Third quartile
No managerial responsibility					
0-1.9	BS	1			
	MS	9		62	
	PhD	7		90	
2-3.9	BS	1			
	MS	7		74	
	PhD	6			
4-7.9	BS	2			
	MS	11	65	68	70
	PhD	16	82	87	92
8-11.9	BS	1			
	MS	10	77	92	101
	PhD	13	85	95	103
12-19.9	BS	1			
	MS	16	80	94	103
	PhD	28	100	113	132
20-27.9	BS	3			
	MS	22	94	102	120
	PhD	29	105	120	125
28+	BS	2			
	MS	20	103	118	121
	PhD	32	114	124	142
Managerial responsibility					
0-1.9	Any	0			
2-3.9	MS	1			
4-7.9	MS	5			

	PhD	4			
8-11.9	MS	2			
	PhD	3			
0-11.9	Any	15	82	100	135
12-19.9	BS	2			
	MS	7		92	
	PhD	10	103	115	133
20-27.9	BS	2			
	MS	8		122	
	PhD	26	118	140	150
28+	BS	7		132	
	MS	20	115	132	143
	PhD	24	130	143	160

Table 13 summarizes self-reported salary information for statisticians in Pharmaceuticals, Medical devices, Medical diagnostics, Biomedical Consulting, or Pharmocometric Consulting. The previous categories of statisticians reported in Tables 10, 11, and 12 were based on ASA B/I/G database self selections, whereas Table 13 membership was ascertained during the survey itself.

In order to produce a graphical illustration of the relationship between salaries and years of experience, degree, and managerial responsibility, a regression function was fit to the data for the group represented in Table 13. Since there are only 5 statisticians in this group with bachelor's degrees, they were not included in regression modeling. An initial regression of salary on years of experience, managerial responsibilities, and degree (MS or PhD) produced an insignificant effect for degree. Upon inspection this was found to be caused by a few individuals in the sample with salaries much larger than the others. These individuals are outliers in terms of salary and also have by far the largest residuals. When they are removed, all three factors are significant and the estimated effect of degree (PhD over MS) almost doubles. Interactions between degree and management and between degree and years of experiences were not significant. The interaction between management and years of experience was nearly significant (P-value 0.06), slightly raised adjusted R-squared to 0.465, and could have a meaningful impact on predicted salaries. Figure 3 presents results. Salary predictions are much higher for PhD than for MS statisticians. Being a manager raises both intercept and slope of the lines. This regression is based on 377 respondents and has a R-squared of 0.47.

Table 13: Annual Salaries ($1000s) of Statisticians in Pharmaceuticals, Medical devices, Medical diagnostics, Biomedical Consulting, Pharmocometric Consulting.

Years of Experience	Highest Degree	n	First quartile	Median	Third quartile
No managerial responsibility					
0-1.9	BS	1			
	MS	4			
	PhD	4			
2-3.9	MS	10	68	76	97
	PhD	12	95	98	111

4-7.9	BS MS PhD	2 19 21	 83 100	 85 109	 96 114
8-11.9	MS PhD	15 36	90 108	102 120	113 137
12-19.9	MS PhD	29 18	100 120	119 130	128 150
20-27.9	MS PhD	12 16	112 114	126 132	140 172
28+	BS MS PhD	1 6 18	 139	 144	 161
Managerial responsibility					
0-1.9	PhD	1			
2-3.9	PhD	2			
4-7.9	MS PhD	2 7		 115	
8-11.9	BS MS PhD	1 14 17	 120 128	 125 134	 130 153
12-19.9	MS PhD	22 36	104 140	135 160	158 199
20-27.9	MS PhD	9 23	 150	157 175	 215
28+	MS PhD	7 20	 158	162 195	 241

Due to small sample sizes few results have been reported about salary of statisticians with a bachelor's degree. Table 14 aggregates statisticians with a bachelor's degree together in order to report some salary information.

Table 14: Annual Salaries ($1000s) of Statisticians with Bachelor's Degrees.

Years of Experience	n	First quartile	Median	Third quartile
0-3.9	7		59	
4-11.9	13	67	72	87
12-27.9	17	100	115	126
28+	16	96	130	165

Additional Details on SPAIG and the Salary Survey

The ASA SPAIG committee homepage is http://www.svsu.edu/orgs/spaig/. Salary survey information on the 2007 survey will be posted at http://www.svsu.edu/orgs/spaig/salarysurveys.html. It is anticipated that the SPAIG Salary Survey will be repeated in two or three years so that current information on salary of B/I/G statistician members of ASA can be made available to members, students, working statisticians, and employers.

Survey Limitations and Issues and Comments on Experiment

A few issues are worth noting.

1. The definition of statistician probably includes some that some might want to exclude and excludes some that some might want to include. An alternative is to ask questions about courses taken, training received, and tasks undertaken. Such a switch would surely make the survey longer, but could possibly improve options for analysis. Perhaps an experiment in 2009 would be in order. Some of the cost of person time for this survey is recording emails and questions about the definition and looking at descriptions provided by respondents.
2. Several ASA emails provided to CSSM did not work. Some ASA mailing addresses also were returned. Does this differentially affect business, industry, state government, or federal government? We should have evidence based on this survey and will investigate it further. In general it can be recommended that ASA should try to improve its databases.
3. A number of email contacts likely were stopped by SPAM filters at various institutions and employers. In general in the case of nonresponse we have no way of knowing if the emails are received by the intended recipient and discarded or stopped by filters. Since this survey is very short, the safest best is to send mail and email simultaneously. In either case, respondents tended to complete the survey via the Internet.
4. Should we have more contacts over a longer period of time? Should we have incentives such as $500 drawing toward JSM? In short, what would it take to get ASA members to do this survey? Perhaps experiments could investigate this in 2009. By the way, there appears to be a time of day effect: if you send an email just before lunch, many respondents answer almost immediately. Should we try more email contacts at staggered times?
5. Comments in the November 2005 *AMSTAT* news article about survey limitations remain valid. Results pertain strictly only to ASA B/I/G members, but could give some general indication of salaries. Annual base salaries and years of experience could have been reported in error, but there is no way to check in general based on this survey. There is potentially high variability due to small sample sizes in subgroup categories.
6. Annual base salaries for statisticians who are self employed or work as private consultants might capture only a small fraction of some statisticians' total incomes. More questions about sources of income would produce a better assessment of total income, but would make the survey longer. In general, there is not a clear method for adjusting salary information for part versus full time positions as reported in this survey. The impact of part time employees was noted in the analysis of government statistician salaries.

As was mentioned in the introduction, a response mode experiment was conducted to contrast the impact on response rates and responses by mail versus email contact. Future writings will report on findings from this small experiment. As mentioned in the preceding points on issues and limitations, until ASA email lists are in excellent condition and SPAM filter issues are resolved, the best strategy for obtaining a response

from ASA B/I/G members will be a combination of multiple email and mail contacts over time. Further details on the survey will be reported in an invited session on SPAIG, organized by Morteza Marzjarani, at the 2007 Joint Statistical Meetings in Salt Lake City, Utah.

Acknowledgments
Diane Anderson directs the Survey Research Services section of the Center for Survey Statistics & Methodology at Iowa State University. Jan Larson and Allison Tyler oversaw data collection. Rick Charles updated the Internet survey instrument. Members of the SPAIG committee, especially Rahul Parsa and Jai Choi, lead the survey planning from SPAIG and were involved in discussions leading to sample selection and survey instrument revision. Thanks also to Ron Fecso for his valuable input. ■

Figure 1: Annual Salaries ($1000s) of Statisticians in Business and Industry Versus Years of Experience.

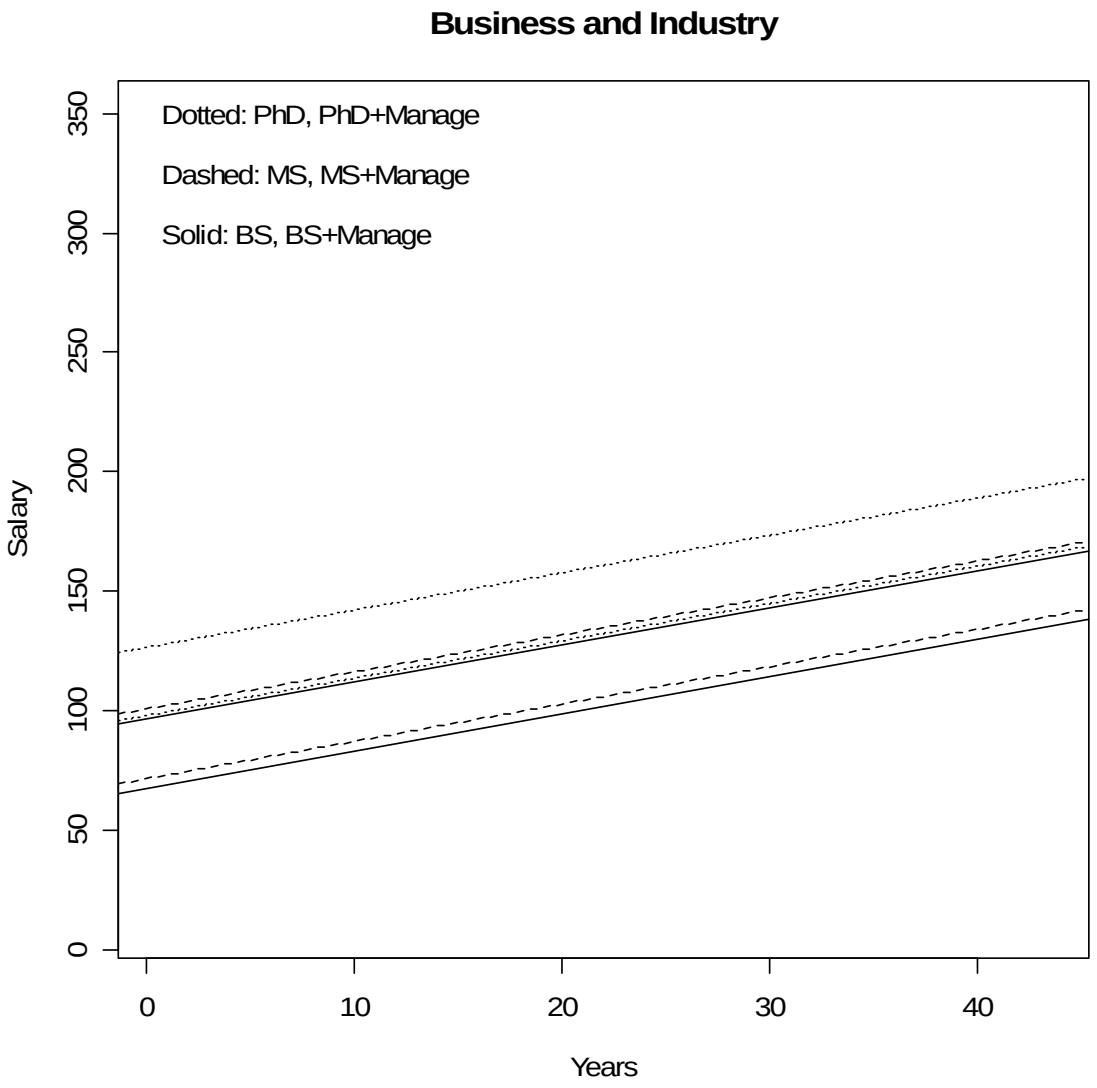

Figure 2: Annual Salaries ($1000s) of Statisticians in Government Versus Years of Experience. Bachelor's and Master's Degree Statisticians Are Combined.

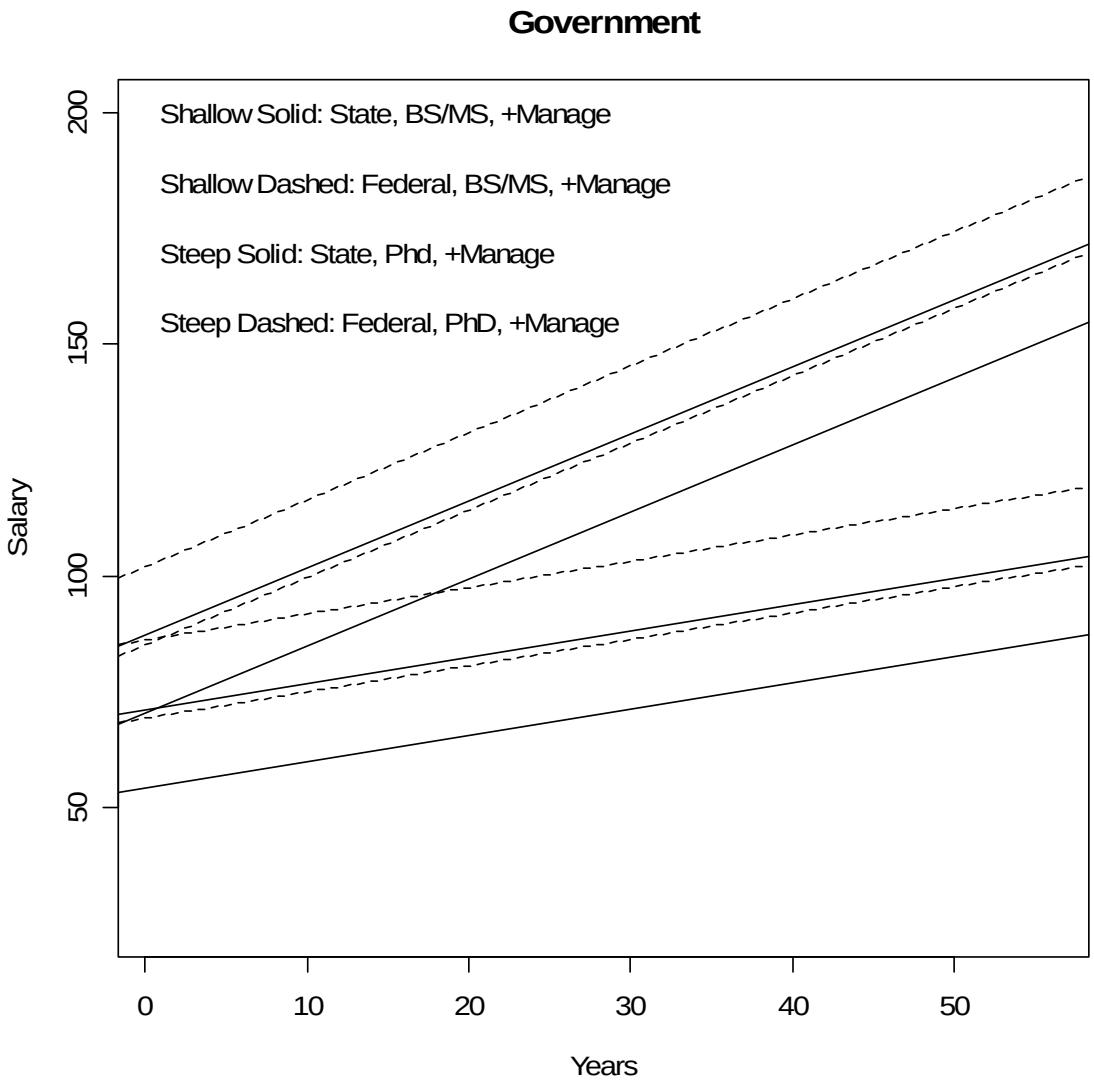

Figure 3: Annual Salaries ($1000s) Versus Years of Experience for Statisticians in Pharmaceuticals, Medical devices, Medical diagnostics, Biomedical Consulting, Pharmocometric Consulting; MS and PhD Statisticians Only.