NPSMA

NATIONAL PROFESSIONAL SCIENCE MASTER'S ASSOCIATION

2009 PSM ALUMNI EMPLOYMENT SURVEY REPORT

Copyright 2009 National Professional Science Master's Association

Executive Summary

The National Professional Science Master's Association (NPSMA) completed the first-ever *PSM Alumni Employment Survey* in August 2009. There were 281 PSM alumni (a 14% response rate) who participated in the survey. More than 60% of respondents reported working in industry with the remainder divided across government, nonprofit, and academia. Approximately 55% worked for employers with more than 1000 employees and the remainder split almost equally between medium and small employers. These data illustrate the employability of PSM graduates across employment sector and industry size.

Two hundred forty four graduates provided data on their annual salary range with the most frequent response being the category "Greater than $90,000." The only open-ended question, which asked graduates about what was not provided in their PSM training that would have been beneficial to their career, yielded strong results suggesting that additional finance/accounting and business/project management education would have been useful to them at this stage in their employment.

Introduction & Purpose

The NPSMA conducted the *PSM Alumni Employment Survey* from mid-spring until mid-summer 2009. The purpose of the study was to ask graduates directly about the degree they earned, the industry where they work, and their current employment status. Previous information collected about PSM alumni was provided by individual PSM degree programs. This information will be invaluable to advance the PSM degree by providing program directors, staff, administrators, and faculty with a profile of PSM graduates' employment.

These data are crucial for the NPSMA to have when representing the needs of its constituents in discussions with employers, professional associations, policymakers, or the media. It is our premise that the annual collection and reporting of this information will continue to show the rapid growth and success of the PSM degree. Ongoing development of the NPSMA Alumni Network will advance this study over the coming years.

Survey Instrument & Data Collection Process

The initial survey tool (see appendix) was drafted by Eleanor Babco of the Council of Graduate Schools and author/PSM consultant Sheila Tobias. The survey was slightly edited by the NPSMA Peer Review Committee: Cliff Chancey (University of Northern Iowa), Elizabeth Friedman (Illinois Institute of Technology), Jung Choi (Georgia Institute of Technology), Jean Schaake (University of North Texas), and Cynthia Bainton (Northeastern University). The final survey contained only twelve questions and took no more than five minutes to complete.

Dan Romanchik of Web Publishing Group, a subcontractor of the NPSMA, created an online survey instrument via SurveyMonkey (www.surveymonkey.com), and placed a link to the instrument on the NPSMA website homepage (www.npsma.org).

PSM alumni were notified of the study by their program directors who received NPSMA listserv announcements as well as project notices in the *News & Updates* newsletter. Additional information about the survey was placed on the NPSMA social media pages. A report on the preliminary findings was presented by NPSMA Executive Director Stephen Lemire at the June Quarterly Workshop in Nashville. Subsequent telephone outreach was conducted by volunteer Marcia Lee of Cambridge College. The final report was presented at the September 2009 Quarterly Workshop in Springfield, MA.

There was a 14% response rate (281 of 2100 estimated PSM alumni). The total population of 2100 alumni used for this study was the most recent tally compiled by the NPSMA in April 2008. An updated total will be collected in December 2009 during the *Annual Enrollment/Graduate Survey*.

Project Limitations

NPSMA's research strategy has been to conduct a barebones study each time it undertakes a new initiative. The purpose has been to collect preliminary data, identify contacts for more detailed studies, and to determine the most appropriate survey questions to ask in subsequent iterations. This approach has been successful. In the "Conclusion and Recommendations" section strategies such as increased outreach via the Alumni Network to increase response rate are identified.

In addition to the small sample size, the aggregate response may be weighted by response rates of graduates from certain PSM degree programs and specific PSM disciplines. Some of the responses lead themselves to more detailed queries. For example, graduates were not asked to identify if they were full-time students or working professionals when they earned their degree nor were they asked how long it had been since they graduated. This is the type of information which will be gathered in the next study.

Respondents

Of the 281 PSM alumni that responded to the survey, all reported the college or university as well as the name of the degree they received. Additionally, 238 provided their names and 223 their email addresses. Respondents will be provided with a courtesy copy of the report. They will be asked at that time if they would be interested in answering any follow up questions, willing to participate in follow up studies, and wish to remain in the NPSMA Alumni Network database.

PSM Degree Programs Represented by Alumni

The PSM degrees earned by study respondents had a similar, but not identical, ratio to what the NPSMA had collected in its *PSM Enrollee Graduate Survey Report*. As this is a smaller sample than the previously mentioned study, the 281 respondents to this survey are grouped according to the following broad disciplines for reporting purposes only (other=2%):

Life Sciences	53%
Environmental/Geographical Sciences	13%
Mathematical Sciences	10%
Computational Sciences	9%
Physics	7%
Chemistry	6%

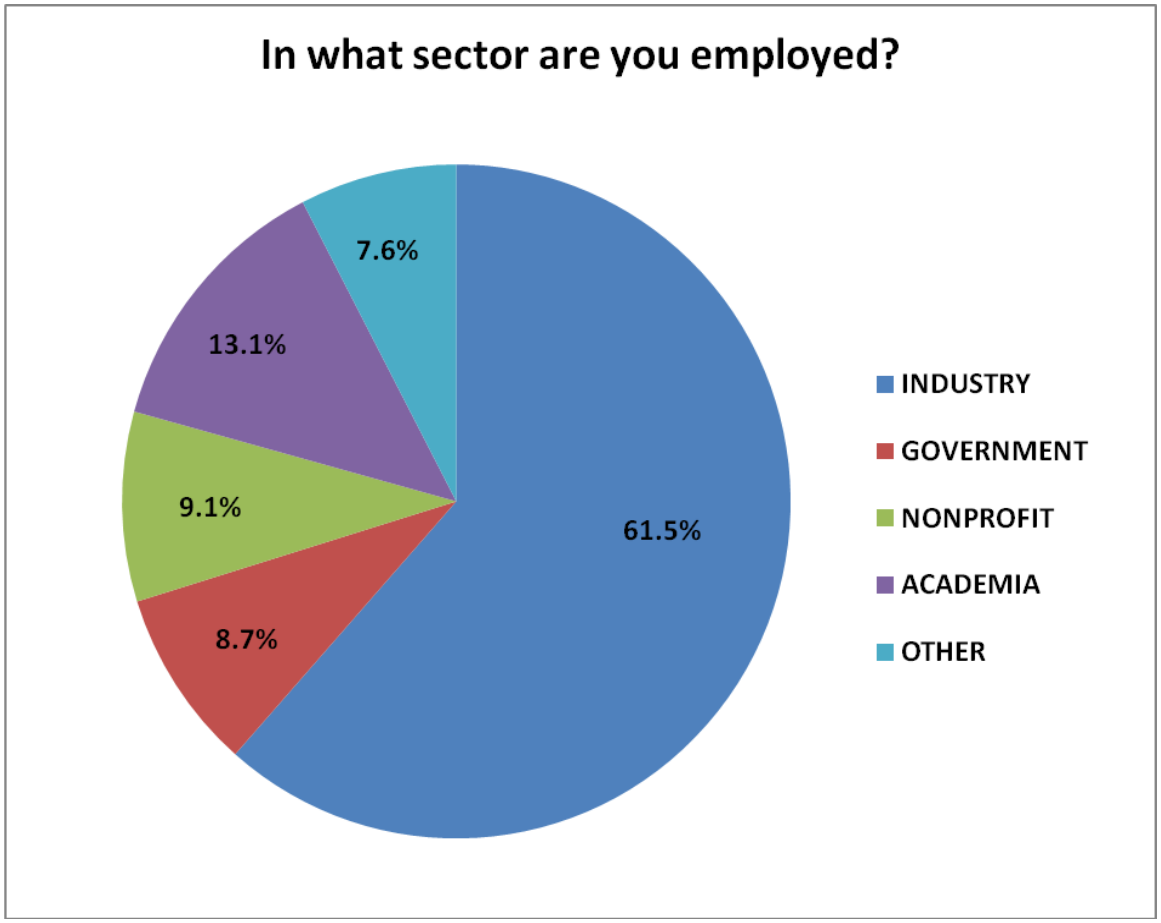
Colleges & Universities Represented by Alumni

PSM alumni from thirty different colleges and universities were represented in the results. (Academic institution members of the NPSMA will receive a university-specific breakout of their graduates' data upon request.) The nine institutions with the greatest number of respondents are listed in the table below.

Academic Institution	**Respondents**
Keck Graduate Institute of Applied Life Sciences	44
Michigan State University	25
Illinois Institute of Technology Rice University	24
Pennsylvania State University North Carolina State University	18
Oregon State University	17
Case Western Reserve University	16
California State University, Channel Islands	14

PSM Graduates' Employment Sectors

Study respondents were asked to identify the employment sector in which they worked. The pie chart below depicts the distribution.

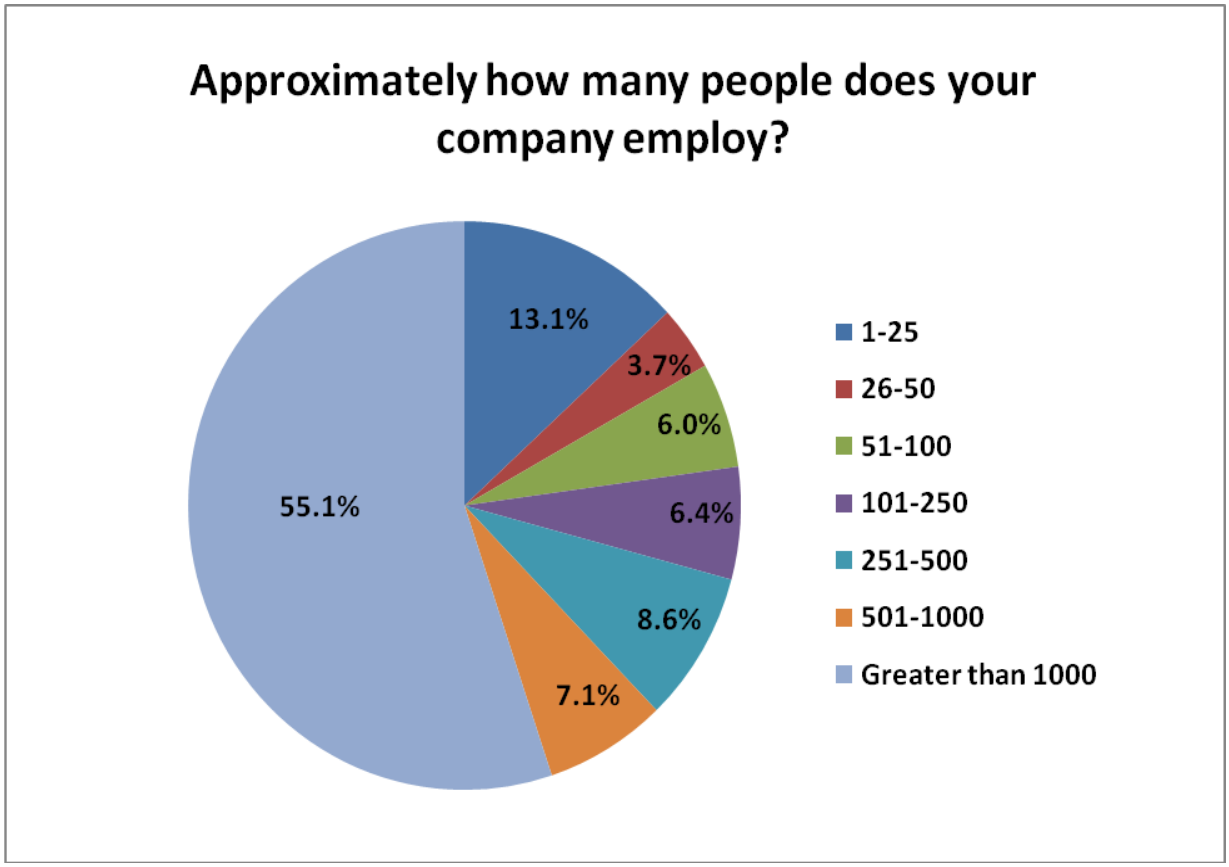


Common Job Titles

Identifying the most common job titles of PSM graduates had been relatively difficult prior to this study. Even the respondents to this survey had very little overlap of exact title. Specific key words "Senior", "Research", and "Manager" were most frequently reported. The two most common job titles were variations of "Senior/Research Assistant/Associate" and "Project/Product/Program Manager."

Size of Employer (by number of employees)

Fifty-five percent of respondents are working for large employers – those with 1000 or more employees. There is near equal distribution of the remaining forty-five percent of respondents with 22% at mid-sized companies – those with 101-1000 employees and 23% at small companies – those with fewer than 100 employees.

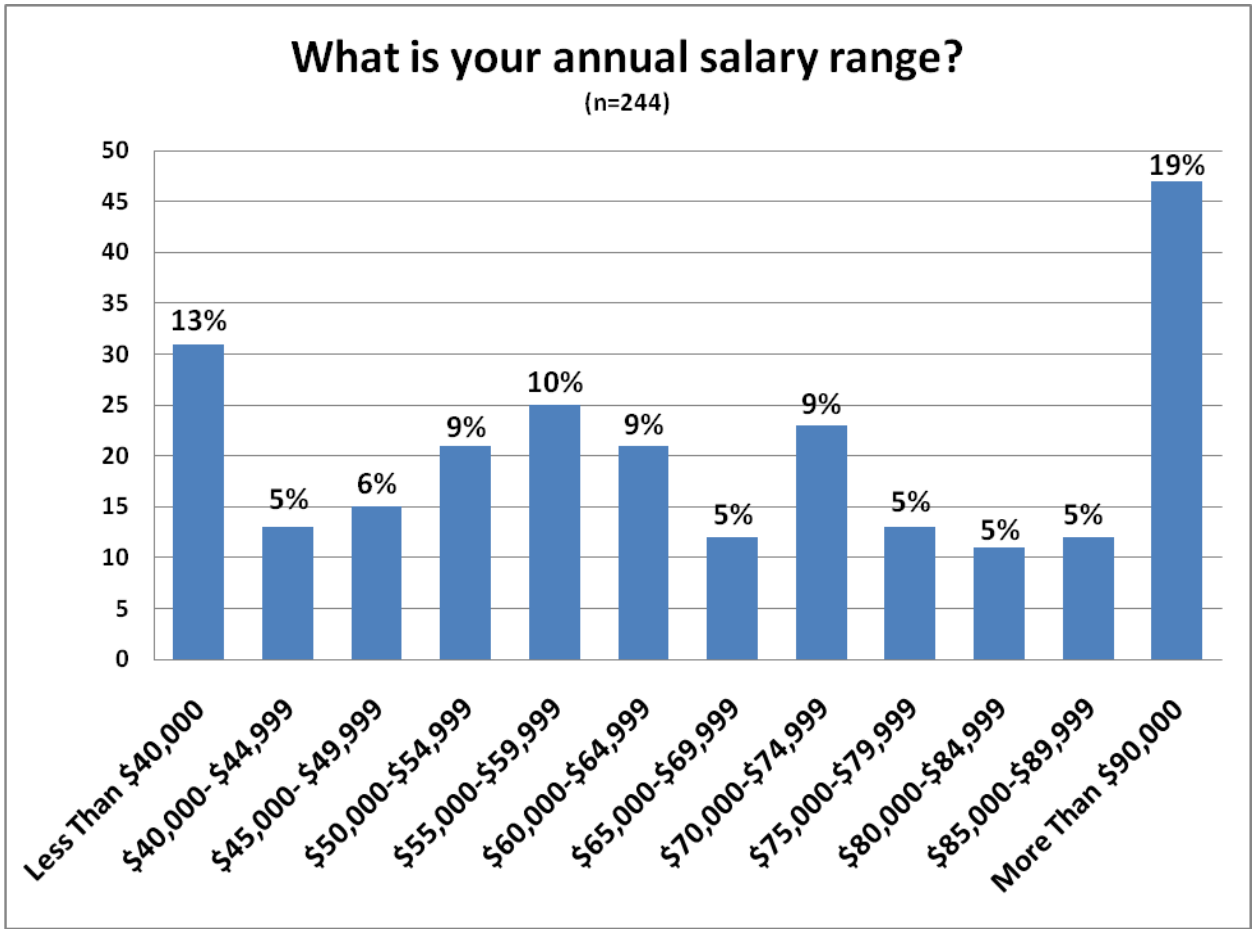


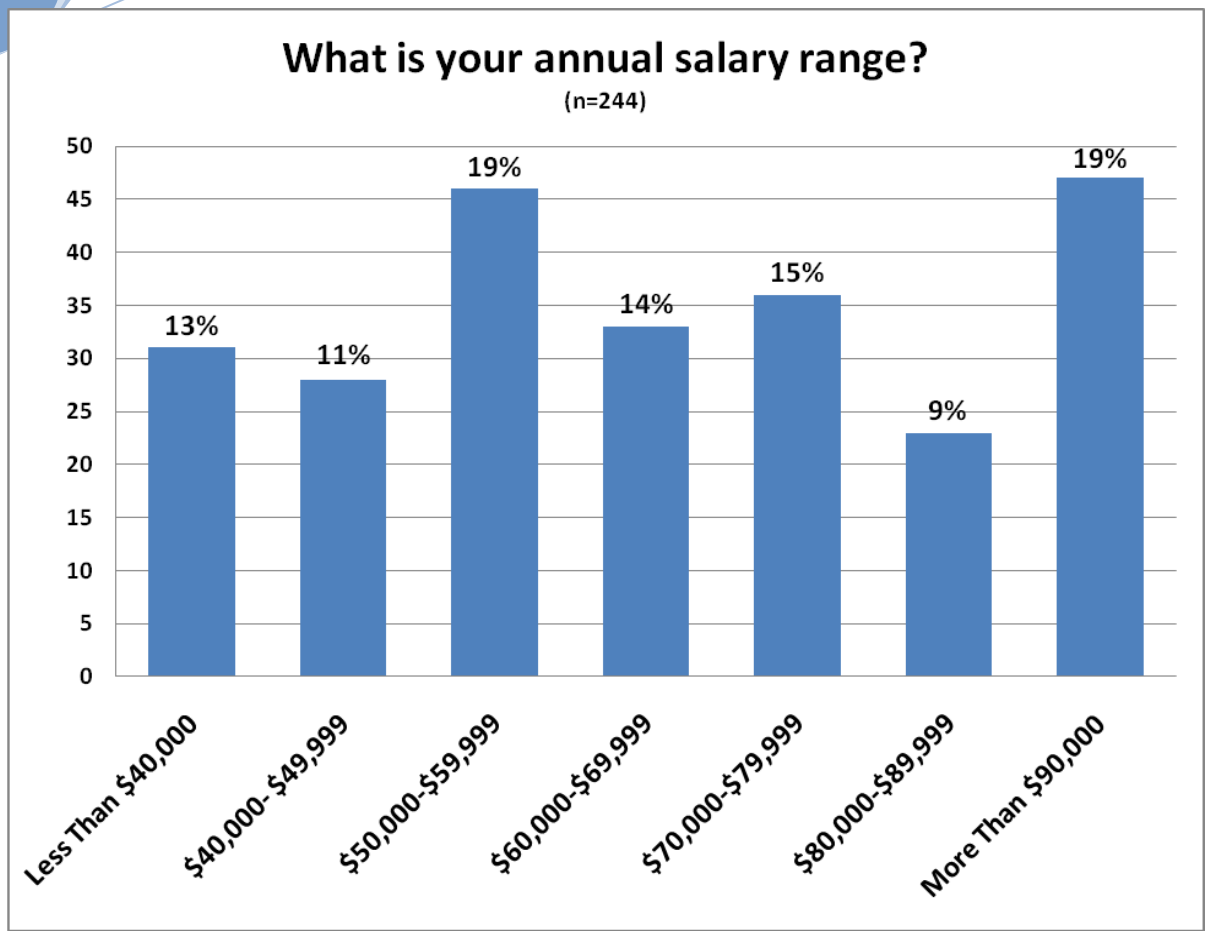
Promotions

Fifty-one percent of respondents reported that they were in the same job that they had upon completion of their PSM degree. Forty-three percent had earned a promotion since receiving their PSM degree and, of those, 44% indicated that their eligibility for the promotion was a result of having received the PSM degree.

PSM Alumni Salary Ranges

Two hundred forty four PSM alumni identified their current annual salary range. The ranges they could select from began with "Less than $40,000" and increased incrementally by $5,000 amounts to "Greater than $90,000." The first chart below illustrates the distribution and identifies the "Greater than $90,000" category as the most frequently checked. The chart on the following page is a grouping of the responses by increments of $10,000 amounts for presentation purposes.





Additional Education Alumni wish had been Provided

The survey asked one open-ended question which was, "What was not provided in your PSM training that would have been beneficial to your career at this point?" One hundred forty graduates responded to this question. Their suggestions are grouped below into the top six suggested fields of study or recommended areas in which their PSM degree program could have better assisted them.

Finance: Accounting, Analysis, Modeling	19
Project & Business Management	18
Career Development: Internship & Employment Assistance	17
Networking with Industry and Alumni	12
Statistics	9
Software Applications	9

Conclusion & Recommendations

The *2009 PSM Alumni Employment Survey Report* offers the first self-reported information about PSM graduates' employment. The study provides useful information, in particular data related to employment sector, the size of the employer where alumni work, and salary range. Responses to the open-ended question offer important feedback to program directors who are continually looking to improve their PSM degree programs. Further review of these answers is advised.

In the future, this study will be conducted with greater outreach efforts initiated by the NPSMA Alumni Network. In addition, more detailed questions will be asked and many response options will be provided in drop-down menus in an attempt to help standardize the answers.

Acknowledgments

The NPSMA thanks the PSM alumni who took the time to provide us with this valuable information about their employment. We also thank the program directors, staff, administrators, and faculty who assisted with the outreach efforts to alert their graduates about this study. We also thank the following individuals whose efforts made this project possible:

Survey Design:
Eleanor Babco, Associate Program Director, Council of Graduate Schools
Sheila Tobias, Author, PSM Consultant and NPSMA Academic Liaison

Project Volunteer:
Marcia Lee, Capt., RNC
Cambridge College

Project Management:
Stephen Lemire
NPSMA Executive Director

PROFESSIONAL SCIENCE MASTER'S (PSM) ALUMNI EMPLOYMENT SURVEY

Confidentiality Statement

No information submitted by you as part of this survey will be identified with you. Neither your name nor your contact information provided will be shared with any group outside the NPSMA office.

GENERAL INFORMATION

1. Name: _____
2. Permanent e-mail address: _____
3. Professional Science Master's degree program: _____
4. University: _____

EMPLOYMENT STATUS

5. In what sector are you employed?
   - ☐ Industry
   - ☐ Nonprofit
   - ☐ Government
   - ☐ Other
   - ☐ Academia
6. What is the approximate number of employees at your company? _____
7. What is your official job title? _____
8. Is this job the same one you had immediately after receipt of the PSM degree? _____ Yes _____ No
9. Is this job a promotion from a prior position? _____Yes _____No
   If yes, did your eligibility for this promotion result from receipt of the PSM? _____ Yes _____ No
10. What is your annual salary range?
    - ☐ Less than $40,000
    - ☐ $40,000 - $45,999
    - ☐ $50,000 - $54,999
    - ☐ $55,000 - $59,999
    - ☐ $60,000 - $64,999
    - ☐ $65,000 - $69,999
    - ☐ $70,000 - $74,999
    - ☐ $75,000 - $79,999
    - ☐ $80,000 - $84,999
    - ☐ $85,000 - $89,999
    - ☐ More than $90,000
11. WHAT WAS NOT PROVIDED IN YOUR PSM TRAINING THAT WOULD HAVE BEEN BENEFICIAL TO YOUR CAREER TO THIS POINT?