



2018 NAYGN Career Report

Issued: AUGUST 2018
Revision: FINAL

This page intentionally left blank

2018 NAYGN Benchmarking Committee

Paul Balik (Lead)	Rolls-Royce
Matthew Mairinger	Ontario Power Generation
Glen Lawson	Duke Energy
Justin Frost	Entergy
Christine Johnsen (Core Sponsor)	Duke Energy

This page intentionally left blank

Table of Contents

Table of Contents.....	5
Table of Figures.....	5
Table of Tables.....	7
I. Executive Summary.....	8
II. Introduction.....	9
III. Methodology and Data Collection.....	10
IV. Demographic Information.....	11
V. Salary and Raise Results.....	21
VI. Work Hours Results.....	29
VII. Job Satisfaction Results.....	35
VIII. Importance vs. Satisfaction.....	43
VIII. Training and Professional Development.....	49
X. Nuclear Outlook.....	53
XI. NAYGN Related Results.....	60
XII. Conclusions and Recommendations.....	64
XIII. Acknowledgments.....	67
XIII. References.....	67
Appendix A: Importance vs. Satisfaction Results.....	68
Appendix B: Survey Questions.....	87

Table of Figures

Figure 1: Distribution of NAYGN Regions.....	11
Figure 2: Distribution of Age.....	12
Figure 3: Distribution of Gender.....	12
Figure 4: Years of Experience.....	13
Figure 5: Highest Level of Education.....	14
Figure 6: Current Position.....	15
Figure 7: Company Type.....	16
Figure 8: Job Function.....	17
Figure 9: Job Function by Total Years of Experience throughout Career.....	17
Figure 10: Job Function by Total Years of Experience with Current Company.....	18
Figure 11: Type of Engineering.....	19
Figure 12: Type of Operations.....	20

Figure 13: Starting annual base salary in nuclear industry	21
Figure 14: Current Annual Base Salary.....	22
Figure 15: Current Annual Additional Pay (overtime, bonuses, etc.)	23
Figure 16: Current Total Salary (Annual Base + Additional Pay).....	24
Figure 17: Average Salary vs. Gender	25
Figure 18: Average Salary vs. Gender by Position.....	26
Figure 19: Average Current Total Salary based on Job Function vs. Total Work Experience	27
Figure 20: Average Current Total Salary based on Job Function vs. Highest Level of Education	28
Figure 21: General Work Hour Preference	29
Figure 22: Work Hour Preference by Age	30
Figure 23: Average Hours per Week	31
Figure 24: Average Work Hours per Week vs. Level within Organization	32
Figure 25: Average Hours per Week vs. Average of Current Total Salary	33
Figure 26: Work Hour Change over Past Year vs. Level within Organization	34
Figure 27: Overall Job Satisfaction.....	35
Figure 28: General Job Satisfaction.....	36
Figure 29: Job Search	37
Figure 30: Industry of Job Search.....	38
Figure 31: If job searching, how soon would you like to change?	38
Figure 32: If you left the nuclear industry, what would be the #1 reason?	39
Figure 33: Job Search Answer vs. Time with Current Company	39
Figure 34: In 5 years, do you still see yourself working in the nuclear industry?.....	40
Figure 35: Job Satisfaction vs. Avg. Hours per Week.....	42
Figure 36: Seeking New Employment vs. Avg. Hours per Week.....	42
Figure 37: What types of soft skill (communication, presentation, etc.) training options are available at your company?	49
Figure 38: How effective is the classroom training?.....	50
Figure 39: How effective is the online training?	50
Figure 40: How effective is the reading material/handout training?	51
Figure 41: What types of soft skill skills would you like to develop?	51
Figure 42: Does your company offer rotational programs in nuclear? If so, do you believe it is valuable?	52
Figure 43: How has your peers/family impression of nuclear changed since you started working in the industry?	53
Figure 44: How would you feel if your children/grandchildren were to work in the nuclear industry?	54

Figure 45: What type of impact do you think the Delivering the Nuclear Promise initiatives will have on the industry?	55
Figure 46: What nuclear technology do you think will be the most successful in North America in the next 10 years?	57
Figure 47: Regional Outlook.....	58
Figure 48: Government Support	59
Figure 49: NAYGN Pillar Review	60
Figure 50: 2017 NAYGN Events Attended	61

Table of Tables

Table 1: Job Function by Total Years of Career Experience Data	18
Table 2: Job Function by Total Years with of Experience with Current Company Data	18
Table 3: Average Salary vs. Gender by Position.....	26
Table 4: Average Current Total Salary by Job Function vs. Total Work Experience	27
Table 5: Current Total Salary Change from 2016 Results	28
Table 6: Average Current Total Salary based on Job Function vs. Highest Level of Education	28
Table 7: Top Ten Importance, Satisfaction, and Largest Difference.....	44
Table 8: Top Five Most Important by Age.....	45
Table 9: Top Five Most Satisfied	45
Table 10: Top Five Largest Difference between Importance vs. Satisfaction.....	46
Table 11: Female; Top Ten Importance, Satisfaction, and Largest Difference	46
Table 12: Male; Top Ten Importance, Satisfaction, and Largest Difference.....	47
Table 13: SHRM Survey Responses [2].....	48
Table 14: Top five largest differences between Importance vs. Satisfaction for NAYGN & SHRM	48
Table 15: NAYGN Pillar Review	60
Table 16: Do you belong to other professional groups? If so, please identify.	62
Table 17: Importance, Satisfaction, and Largest Difference – All Results	68
Table 18: Overall Importance by Age – All Results	71
Table 19: Overall Satisfaction by Age - All Results.....	74
Table 20: Largest Difference between Importance vs. Satisfaction by Age – All Results	77
Table 21: Female; Importance, Satisfaction, and Largest Difference – All Results.....	80
Table 22: Male; Importance, Satisfaction, and Largest Difference – All Results	83

I. Executive Summary

Since the formation of NAYGN in 1999, the North American Young Generation in Nuclear (NAYGN) has sought to be the voice of the next generation of leaders in the nuclear industry. This survey and accompanying report represent an opportunity for young professionals in nuclear energy to provide their feedback and perspective on their careers and the industry as a whole.

As in previous surveys, this report addresses several main topics relevant to NAYGN members and their career, including demographic information, salary, job satisfaction, job importance vs. satisfaction, professional development, and nuclear outlook. Participants were also asked to rate their satisfaction with NAYGN.

In total, 1,067 employees of the nuclear industry responded to the survey. The survey responses were diverse, as results spanned across seven different regions in North America and five different age brackets. This diversity assisted with multi-layered analysis based on the questions asked within the survey.

The results show that 95% of people that responded to this survey have some form of higher education post high school. The highest level of education correlated directly to an increase in average total salary (annual base plus additional pay) for all job functions except for positions within Maintenance and Operations, where the average total salary was relatively equal across all levels of education. The results also identified careers in Maintenance and Operations or Business Planning and Project Manager as, on average, the highest paying careers for total salary at approximately \$125,000/year. Careers within Science and Engineering averaged at approximately \$100,000/year.

For overall job satisfaction, the results indicate that 86% of respondents are very satisfied or satisfied with their job. Other key outputs of the general job satisfaction questions identified that 96% of respondents are determined to accomplish their work goals and 90% are confident they can meet these work goals.

Survey responders were asked if they were currently seeking new employment and based upon the results, 47% of respondents were either actively (12%) or passively (35%) searching for a new career. Of those searching, most responses indicated they were either completing a broad job search (outside and inside of the nuclear industry) or outside of the industry. Responders indicated that their top reasons for leaving the nuclear industry would be attributed to the uncertainty around the future of nuclear (34%) or the lack of advancement / growth opportunities (20%) currently available.

A portion of the survey asked questions on 37 different topics to understand what respondents valued within their career. The survey asked the responders to rate their level of importance and their level of satisfaction for these topics. The overall results indicate that compensation/pay had the highest level of importance and the relationship with co-workers and immediate supervisor had the highest level of satisfaction. The topic with the largest difference between level of importance and level of satisfaction was trust between employees and senior management. This result was consistent with the general working force from another survey [1].

Responders provided clarity on their how they viewed the general outlook and government support within their region. General outlook and government support was perceived to be the highest in the Canadian region and lowest in the USA-Northeast and West.

II. Introduction

As the industry continues to evolve and adapt to market pressures, the perspective of the young generation is an important factor in guiding the future of the industry. NAYGN surveyed its members to capture data that represents the voice of the young generation in the nuclear industry. The opinions and responses reported here represent a workforce that cares deeply about the future of the industry and how the industry is going to respond to the challenges facing it. NAYGN kept a large portion of the survey similar to previous reports from 2014 and 2016 to enable trending between reports.

All previous career reports can be found here: <http://naygn.org/resources/naygn-org-documents/>

For additional information or questions with regards to this report, please contact info@naygn.org or benchmarking@naygn.org.

III. Methodology and Data Collection

The development of the 2018 NAYGN Career Report occurred in three phases from October 2017 to July 2018. Survey methodology, data collection, and analysis were the focus during the survey creation and analysis phases. The third phase, report writing, was the final phase that gathered conclusions and made recommendations based on the data.

During survey creation, the Benchmarking Committee agreed to use similar survey questions from the previous Career Reports, but to also include new questions based upon feedback from previous surveys. NAYGN decided to remove the Knowledge Transfer and Retention questions that were asked in previous surveys. These questions will be asked in a subsequent survey.

The survey continued to focus on several areas of interest, such as demographics, salary, career satisfaction, job importance vs. satisfaction, professional development, nuclear outlook, and NAYGN satisfaction.

The survey asked a total of 51 questions which were divided into pages according to the relevant areas. Some questions were branched depending on the response provided. This branching allowed for a deeper analysis.

The committee focused on maintaining a survey for NAYGN members to gather data and information that would be useful to the industry. Open response question feedback and conclusions are included in the report.

The survey was open from November 20, 2017 to January 31, 2018. The link for the survey was provided to all NAYGN members via email in the NAYGN Membership Announcements and a Local Chapter Lead brief. There were 1,067 respondents, one of the highest number of responses achieved in the report's history. All survey responses were anonymous.

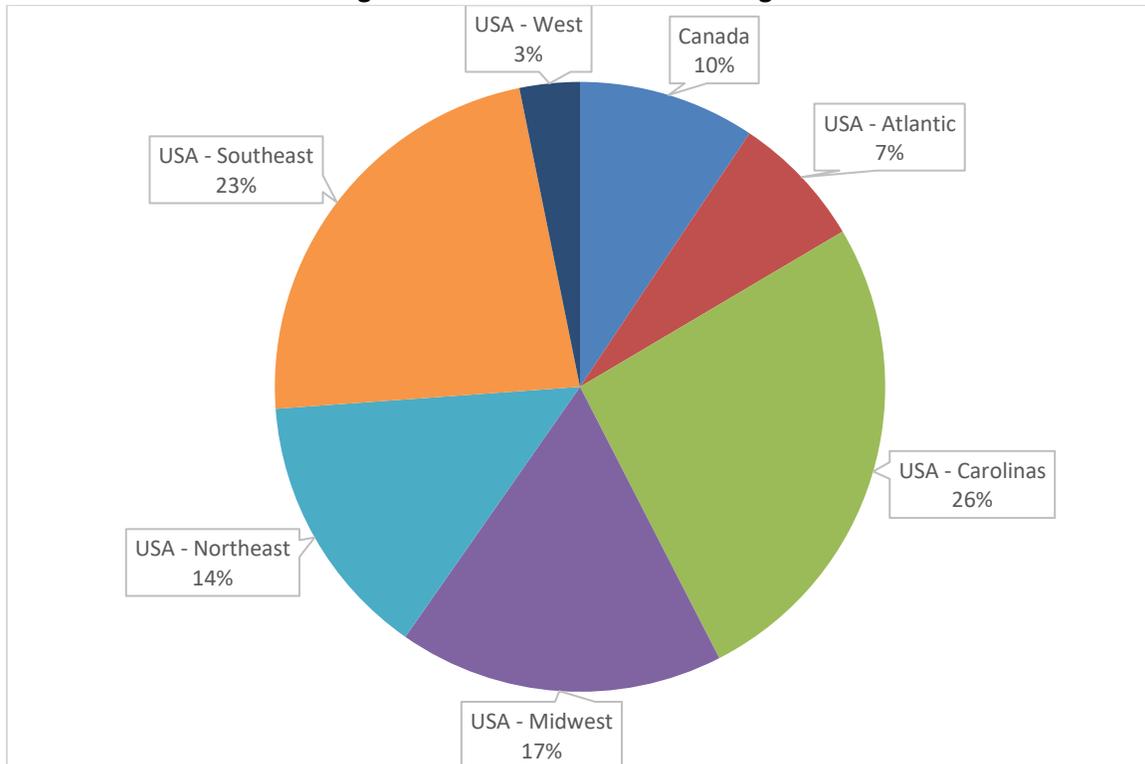
Analysis was prepared in a similar manner to the 2016 Career Report. When applicable, trends between previous surveys have been noted in the report. To provide clarity on some graphs, a few of the response categories were combined as noted.

In most cases, the percentages identified in the report are based upon a total of 1,067 survey respondents.

IV. Demographic Information

The goal of this section is to define the demographics of the survey respondents. The demographic data is used in multiple sections to add an additional layer to the analysis of the data.

Figure 1: Distribution of NAYGN Regions



The regions are divided and contain chapters in the following states/provinces:

- Canada
 - Ontario and Saskatchewan
- USA-Atlantic
 - Virginia, Maryland, and District of Columbia
- USA-Carolinas
 - South and North Carolina
- USA-Midwest
 - Nebraska, Missouri, Illinois, Wisconsin, Michigan, Kansas, Iowa, and Ohio
- USA-Northeast
 - Pennsylvania, Delaware, New Jersey, New York, Connecticut, Massachusetts, and New Hampshire
- USA-Southeast
 - Texas, Louisiana, Arkansas, Mississippi, Alabama, Georgia, Florida, and Tennessee
- USA-West
 - California, Washington, Idaho, Arizona, Colorado, and New Mexico

Figure 2: Distribution of Age

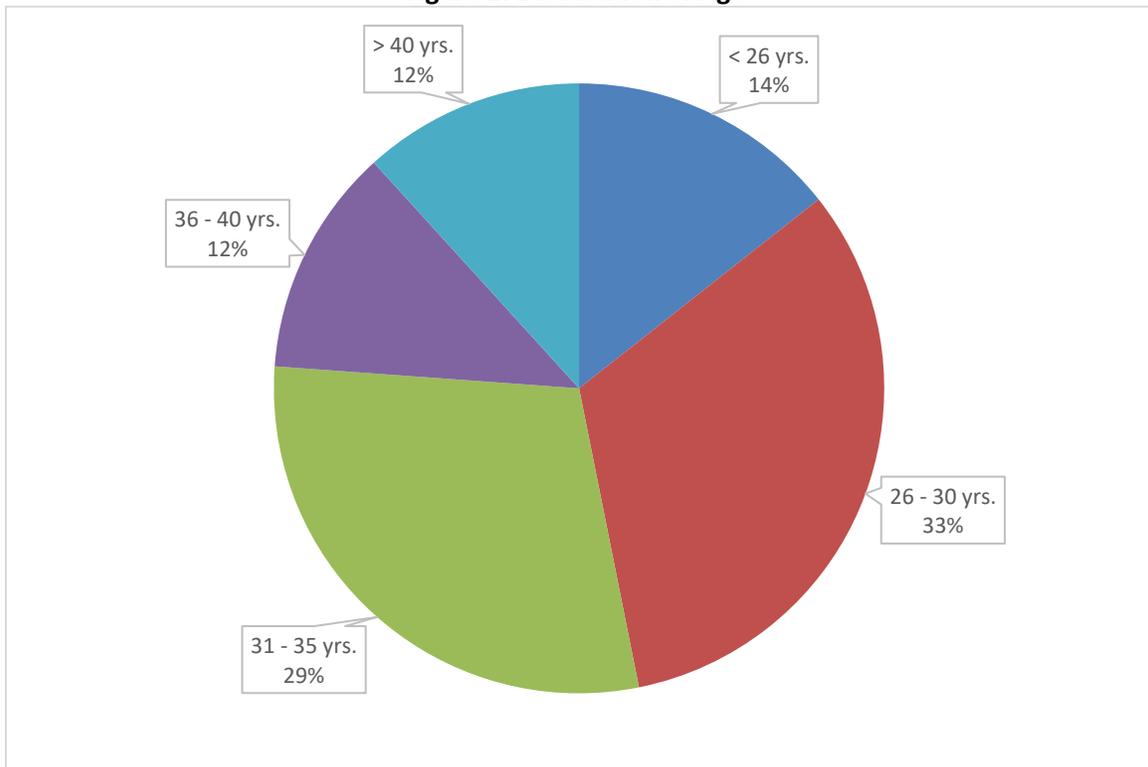


Figure 3: Distribution of Gender

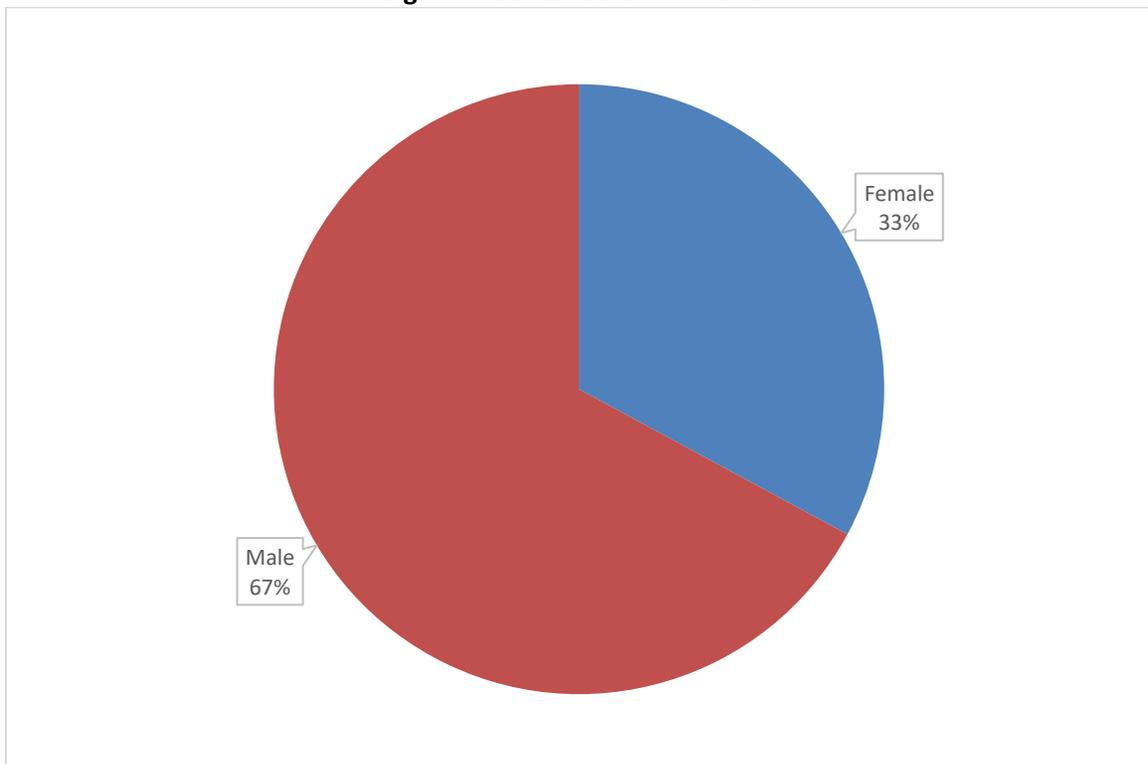


Figure 4: Years of Experience

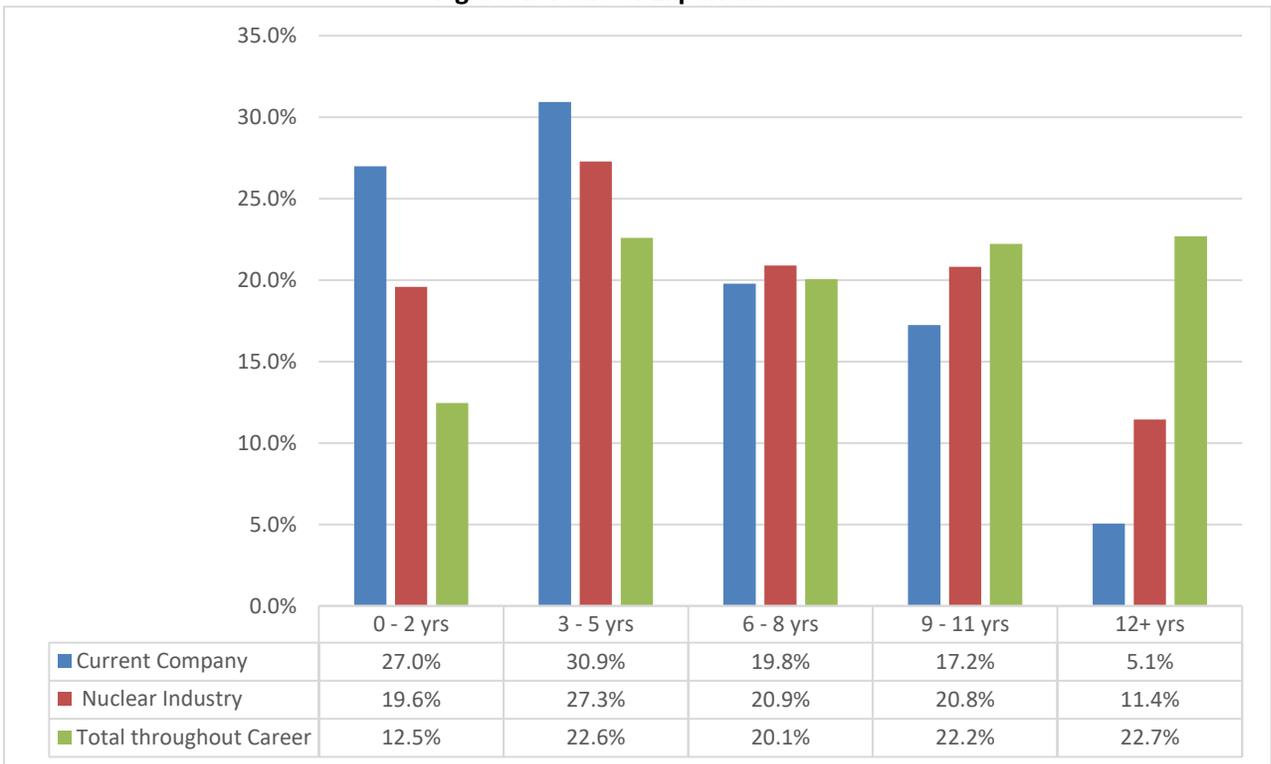


Figure 3 defines the distribution of male and female survey respondents. A response from 67% male and 33% female closely aligns with the distribution nuclear employees defined by the 2018 US Energy and Employment Report [1]. The 2018 US Energy and Employment Report (pg. 58, Table 14) defines that approximately 62% male and 38% female were employed by the nuclear industry in 2017.

Figure 4 defines the amount of experience of the survey respondents. It can be noted that approximately 68% of employees have been with their current company for less than five years but only 36% of respondents have less than five years of working experience throughout their professional career. For the total data analyzed, 68% of respondents have been in the nuclear industry for the last eight years or less. This decreased from 79% in 2016 and 92% in 2014. Finally, 55% of the respondents have eight years or less years of throughout career experience. This is a decrease from 2016 and 2014, where the results showed 66% and 83%, respectively. This indicates a larger number of respondents have been in their careers longer than eight years.

Figure 5: Highest Level of Education

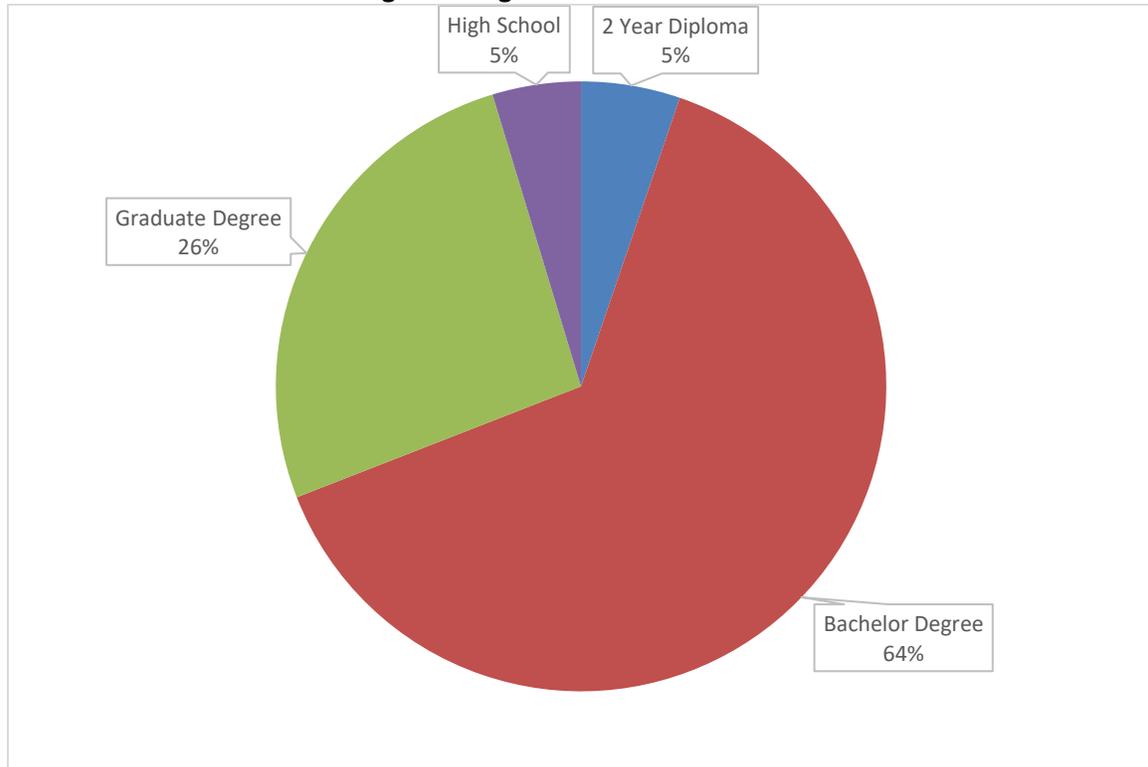


Figure 5 defines the highest level of education of the survey respondents. These numbers closely align with the 2016 Career Report. Based upon the responses, approximately 95% of the respondents have continued their schooling through higher education. The number of respondents with a bachelor's degree, 64%, is consistent with the 2016 (65%) and 2014 (63%) survey results.

Figure 6: Current Position

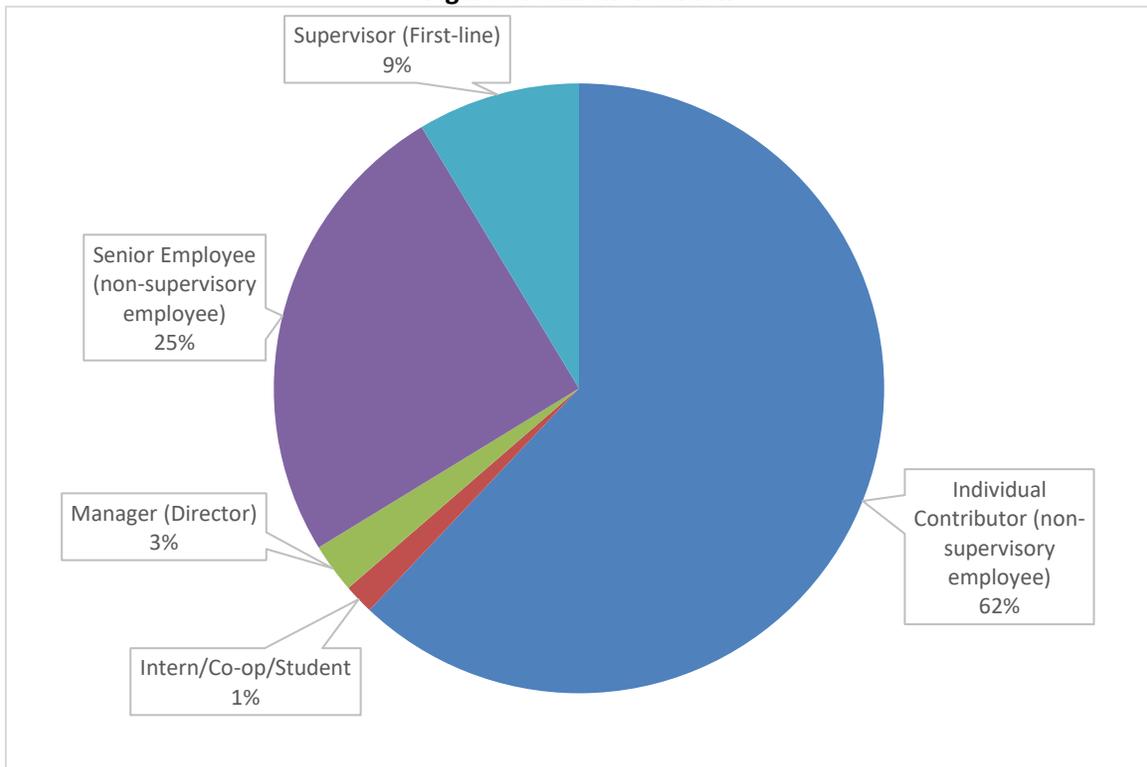


Figure 6 defines the current role of the survey respondents. It can be noted that most employees occupy a role of either an Individual Contributor or Senior Employee. This breakdown is consistent with the data collected in 2014 and 2016. In 2016, 70% of respondents were Entry Level or Individual Contributor and 18% were Senior Employees. The 2018 results above show a small transition of respondents from Individual Contributors to Senior Employees resulting in 25% of respondents in Senior Employee roles.

Figure 7: Company Type

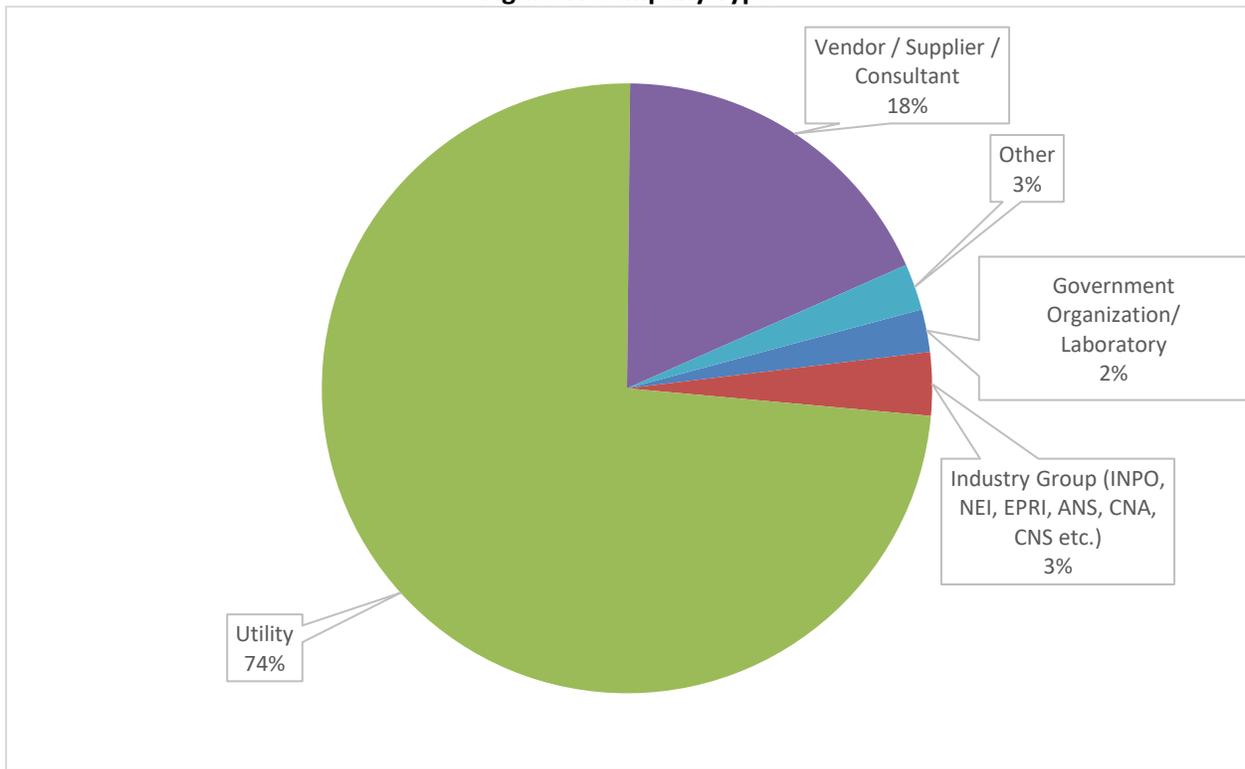


Figure 7 indicates that 74% of the respondents work in nuclear utilities. Those who work in industry groups, government organizations, and laboratories make up 5% of the responses. Overall, this is consistent with the membership of NAYGN.

Figure 8: Job Function

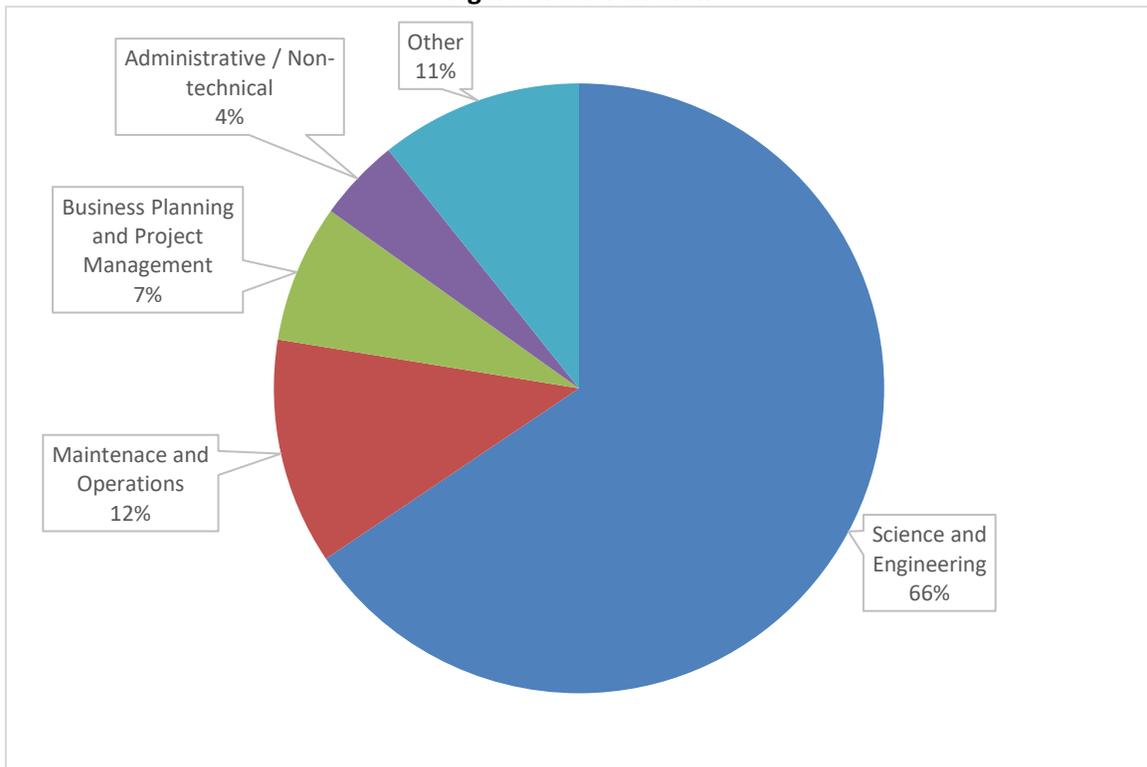


Figure 8 plots the respondent's job functions. Responses from NAYGN members in a wide range of job functions are represented in this survey. Overall, the representation is consistent with responses from 2016.

Figure 9: Job Function by Total Years of Experience throughout Career

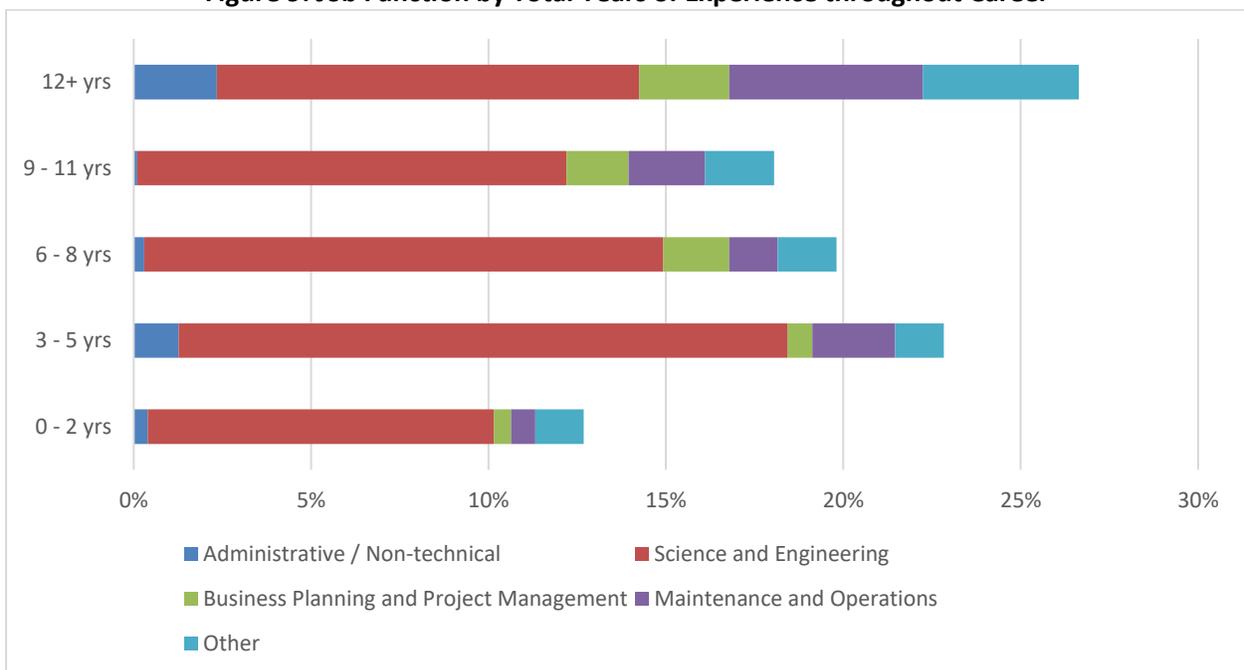


Table 1: Job Function by Total Years of Career Experience Data

	Administrative / Non-technical	Science and Engineering	Business Planning and Project Management	Maintenance and Operations	Other	Total
0 - 2 yrs.	0.39%	9.76%	0.49%	0.68%	1.37%	12.68%
3 - 5 yrs.	1.27%	17.17%	0.68%	2.34%	1.37%	22.83%
6 - 8 yrs.	0.29%	14.63%	1.85%	1.37%	1.66%	19.80%
9 - 11 yrs.	0.10%	12.10%	1.76%	2.15%	1.95%	18.05%
12+ yrs.	2.34%	11.90%	2.54%	5.46%	4.39%	26.63%

Figure 9 and Table 1 show the distribution of job function by total years of career experience. It can be noted that approximately 64% of all respondents have professional career experience greater than five years.

Figure 10: Job Function by Total Years of Experience with Current Company

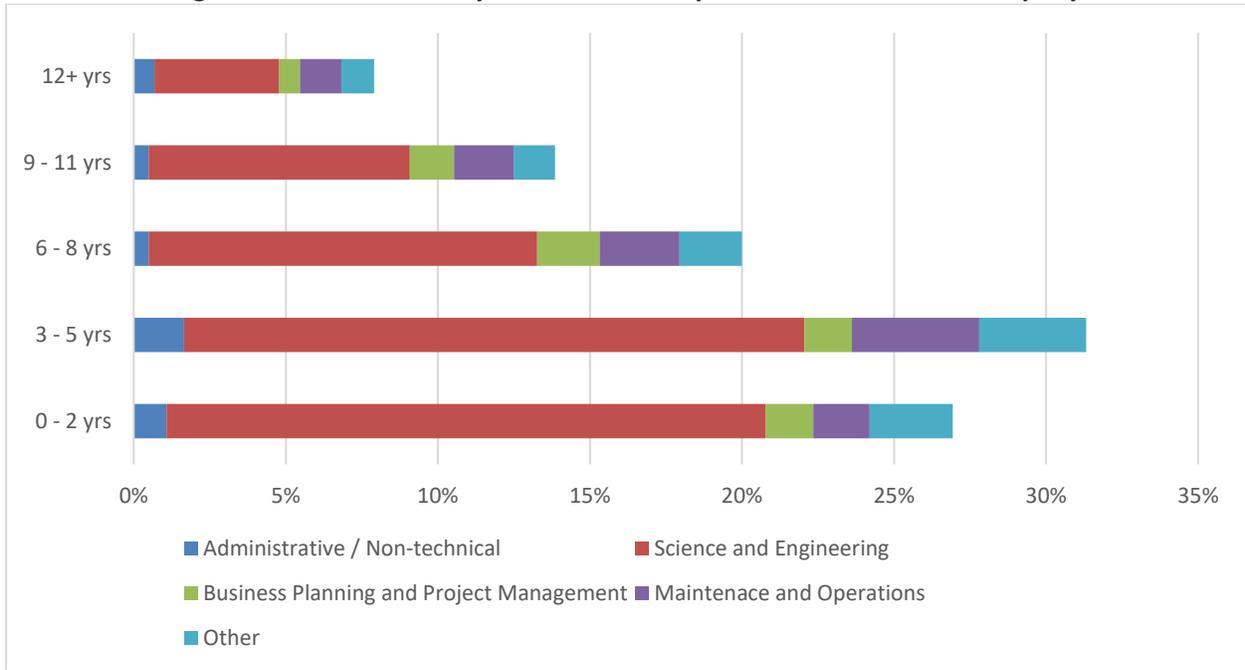
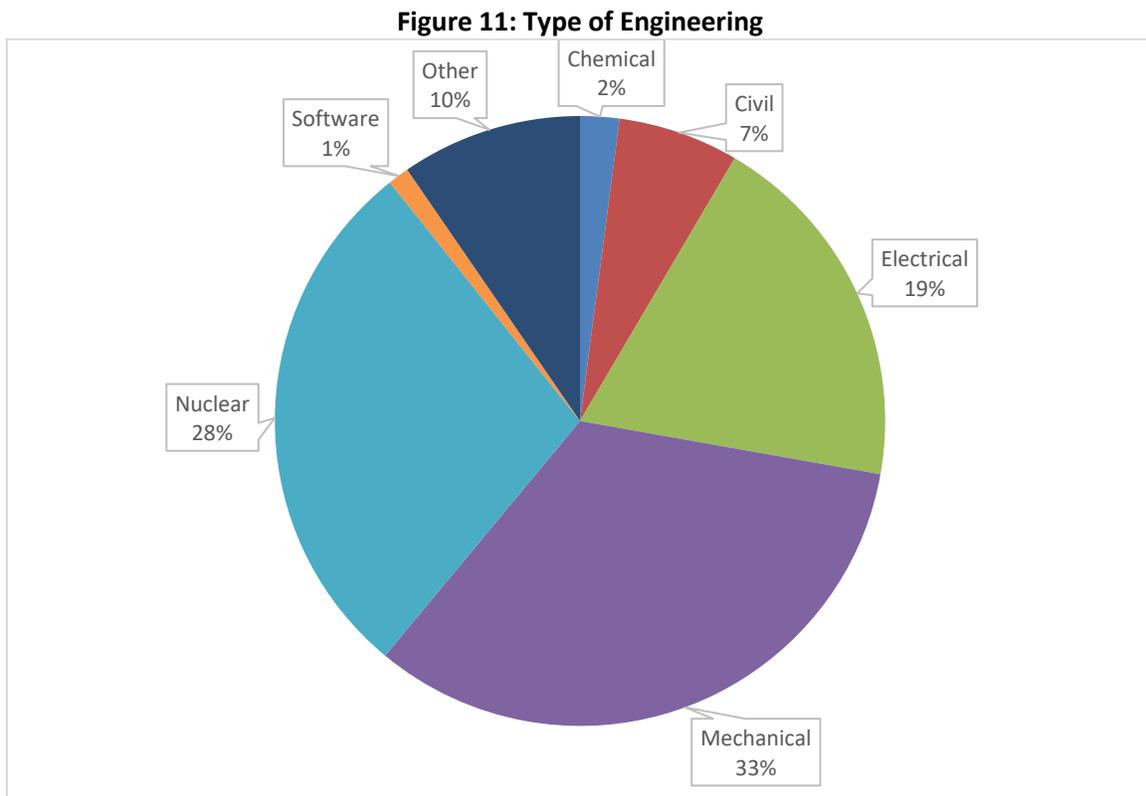


Table 2: Job Function by Total Years with of Experience with Current Company Data

	Administrative / Non-technical	Science and Engineering	Business Planning and Project Management	Maintenance and Operations	Other	Total
0 - 2 yrs.	1.07%	19.71%	1.56%	1.85%	2.73%	26.93%
3 - 5 yrs.	1.66%	20.39%	1.56%	4.20%	3.51%	31.32%
6 - 8 yrs.	0.49%	12.78%	2.05%	2.63%	2.05%	20.00%
9 - 11 yrs.	0.49%	8.59%	1.46%	1.95%	1.37%	13.85%
12+ yrs.	0.68%	4.10%	0.68%	1.37%	1.07%	7.90%

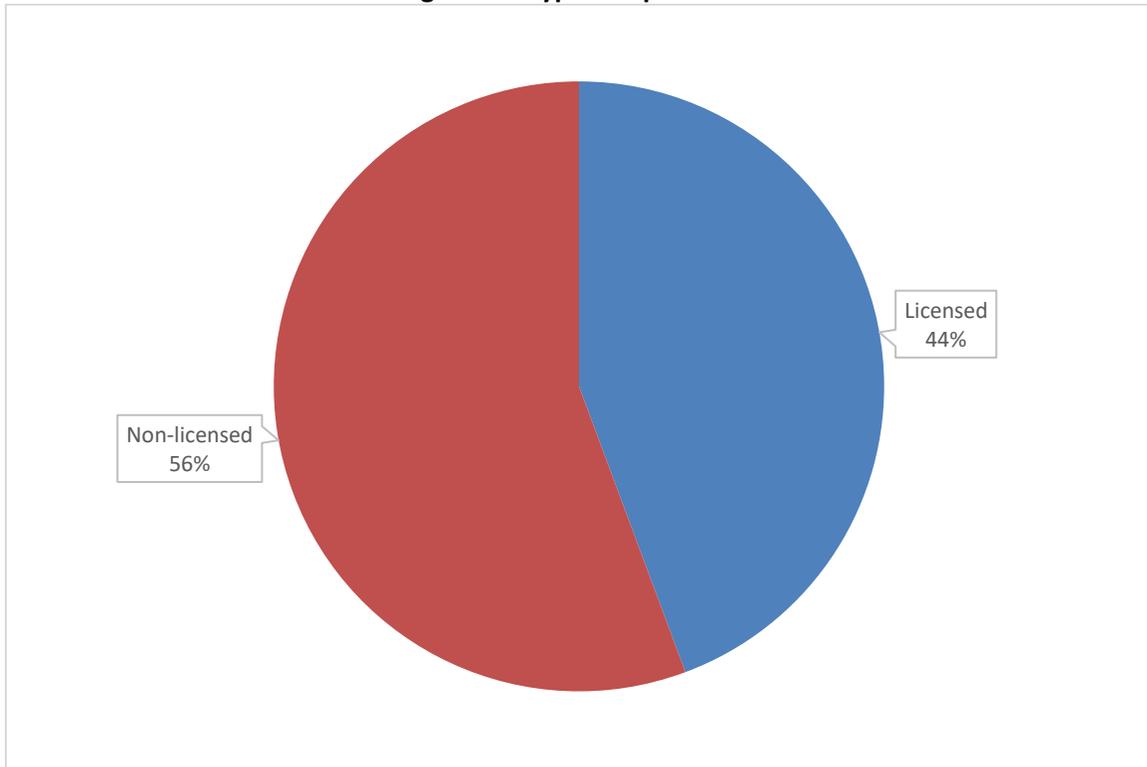
Figure 10 and Table 2 show the distribution of job function by total years of experience with the current company. It can be noted that 42% approximately of all respondents have been with their company for greater than five years.

When comparing the distribution of results between Table 1 and Table 2, we can note that in Table 1 approximately 27% of respondents have greater than twelve years of career experience but in Table 2 approximately 31% of respondents have been with their current company between three and five years. A conclusion can be drawn that employees may seek new employment after being with their current company after five years but remain within the nuclear industry (see Figure 33).



As shown in Figure 8, 66% of respondents are in Science and Engineering. The results of Figure 11 show that 80% of engineering respondents are mechanical, nuclear, or electrical engineers. The majority of the engineering respondents are mechanical engineers at 33%, a slight decline from 36% in 2016 and 40% in 2014. Nuclear Engineering and Civil Engineering responses remain consistent with 2016 result.

Figure 12: Type of Operations

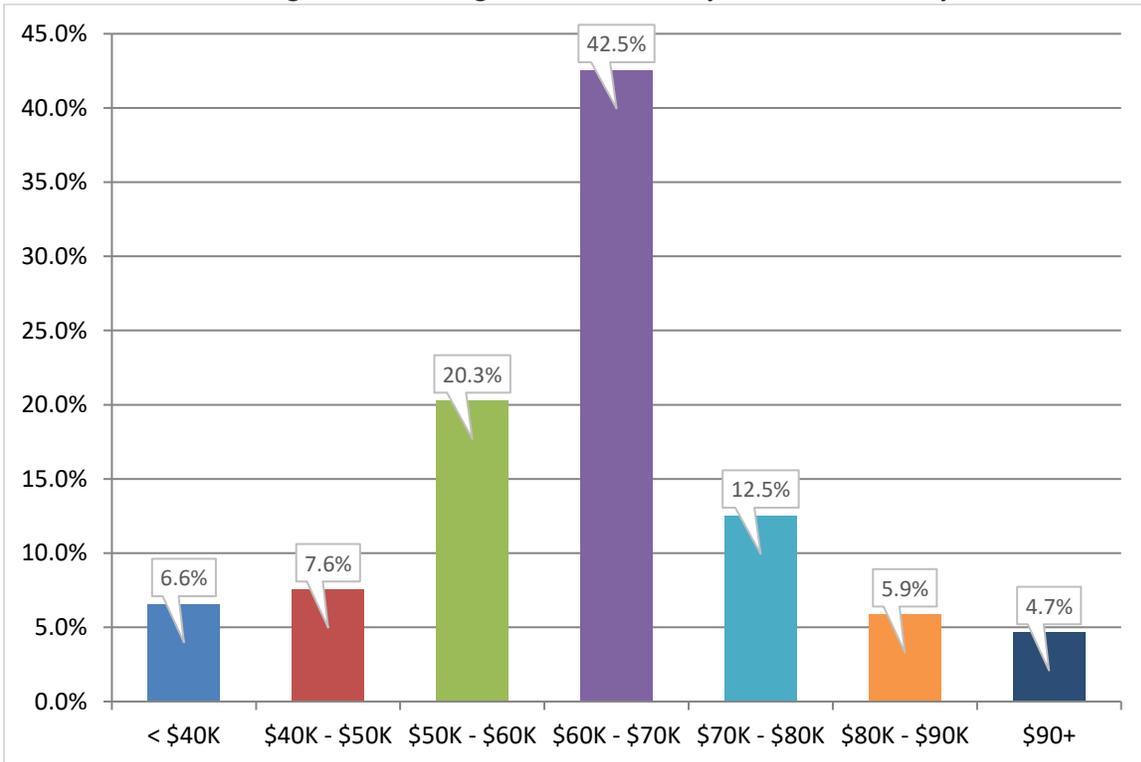


As shown in Figure 8, 12% of the respondents are from Maintenance and Operations. As shown above in Figure 12, 56% of operations respondents are non-licensed operators and 44% are licensed operators.

V. Salary and Raise Results

The goal of this section is to define the average salary of the survey respondents and then compare the results to other sections such as demographics. Note that all salary results in this report are adjusted to US dollars.

Figure 13: Starting annual base salary in nuclear industry



Based on Figure 13, it can be noted that the over 80% of the jobs in the industry start at a salary that is greater than \$50,000. The average starting base salary is \$62,875. Another item to note is that these results do not factor in inflation over time based upon when each survey respondent entered the industry.

Figure 14: Current Annual Base Salary

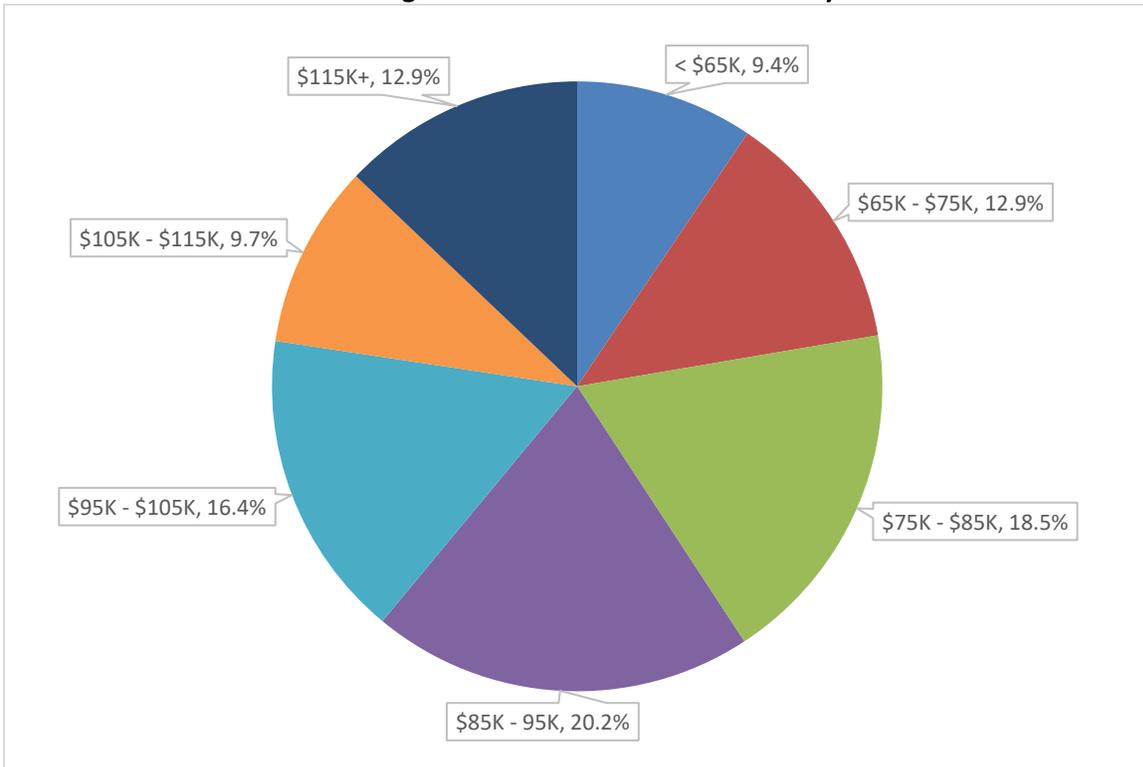


Figure 14 shows the current base salary excluding overtime and bonuses which is shown in Figure 13. Over 20% of respondents reported a base salary over \$105,000. The average current base salary is \$90,072. This is a 6% increase from the 2016 survey results.

Figure 15: Current Annual Additional Pay (overtime, bonuses, etc.)

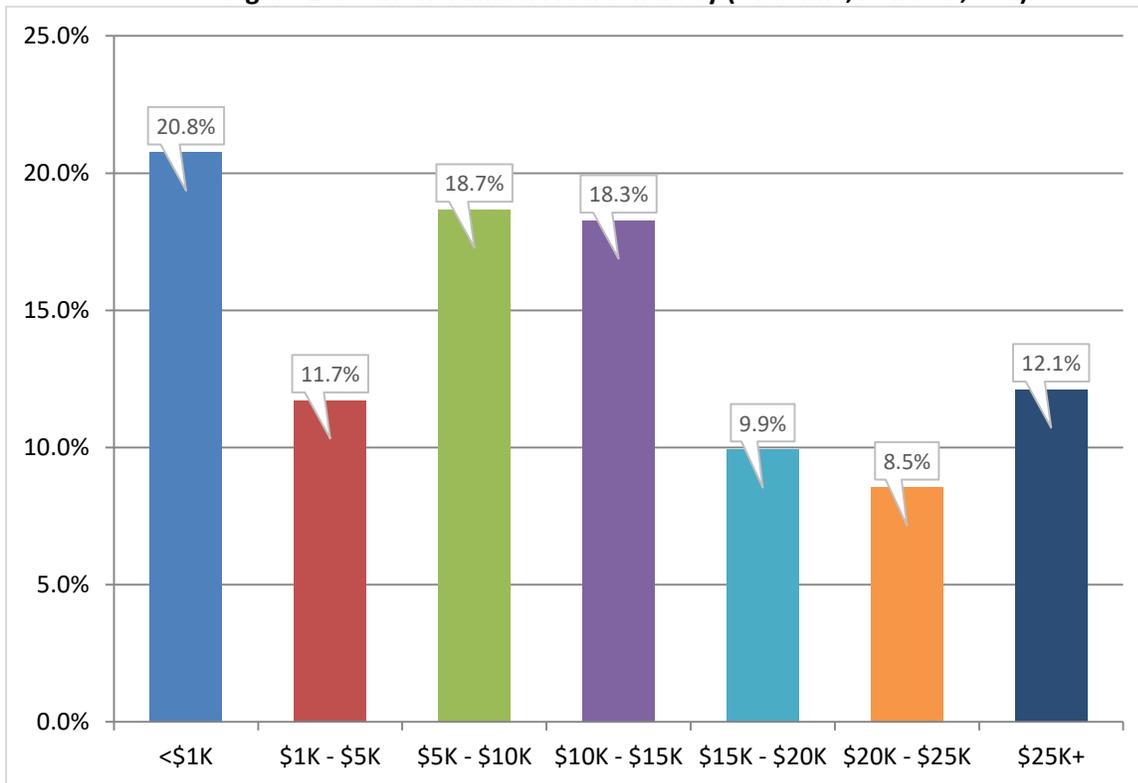


Figure 15 displays the current annual additional pay (overtime, bonuses, etc.). The average annual additional pay for respondents is \$11,974.

Figure 16: Current Total Salary (Annual Base + Additional Pay)

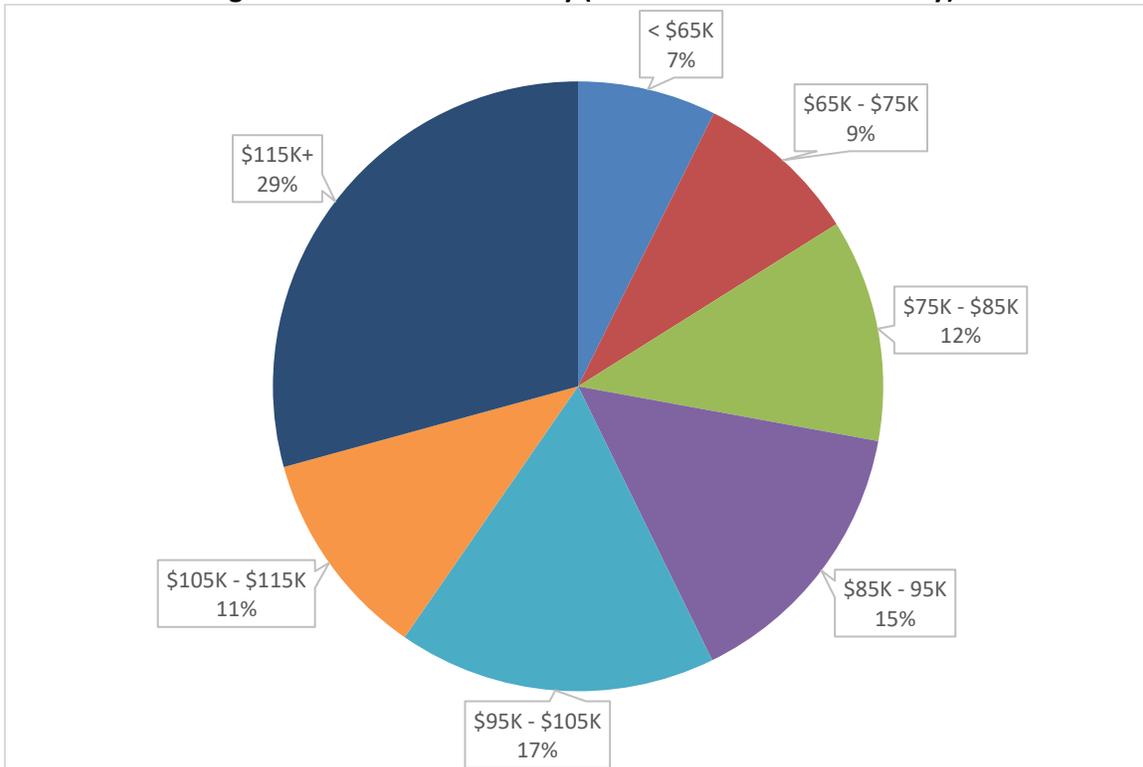


Figure 16 displays the current total salary (Annual Base + Additional Pay). Approximately 40% of respondents reported a total salary over \$105,000. The average current total salary is \$102,034. This is a 7% increase from the 2016 results.

Figure 17: Average Salary vs. Gender

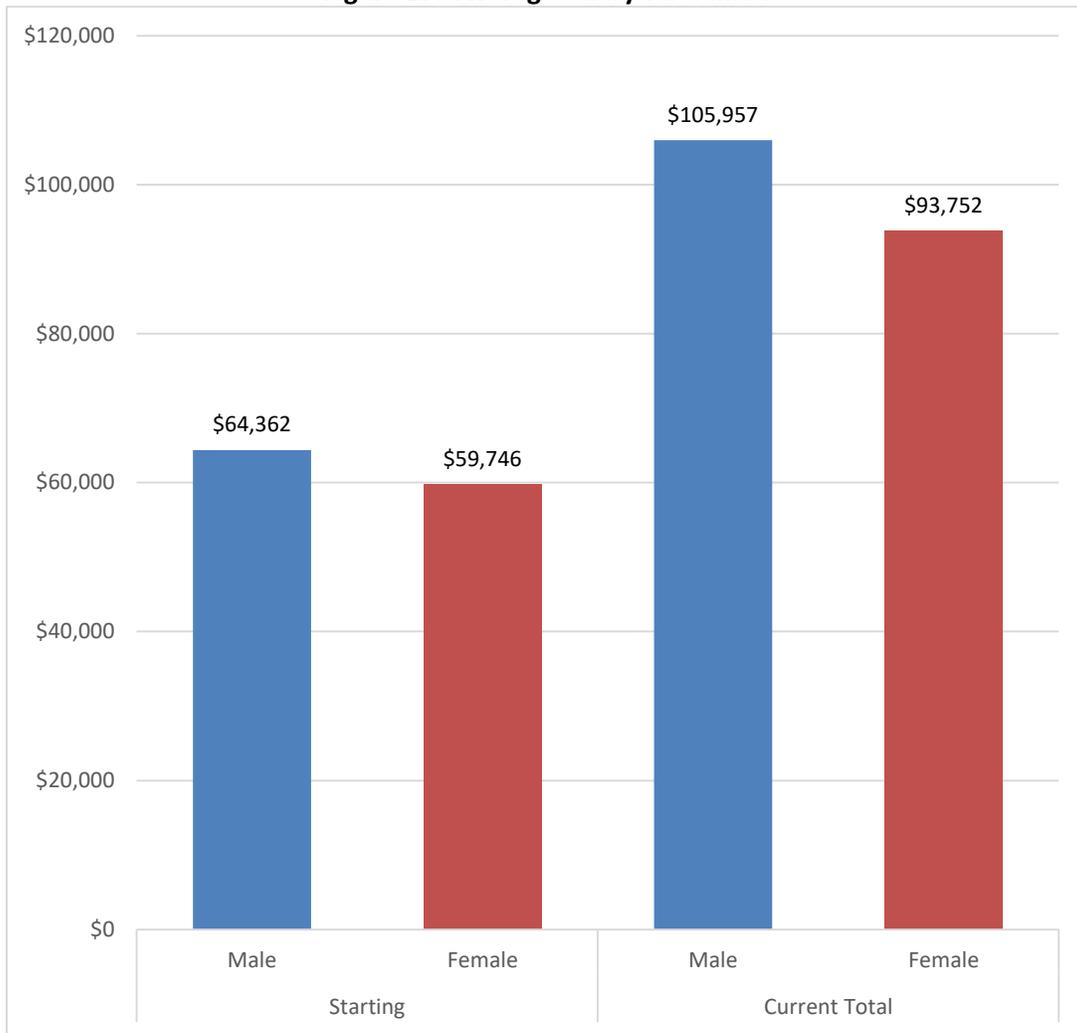


Figure 17 shows the average salary compared to gender. Female starting salary is approximately 7% less than male starting salary. Current average salary is 11.5% lower for females compared to males.

Figure 18: Average Salary vs. Gender by Position

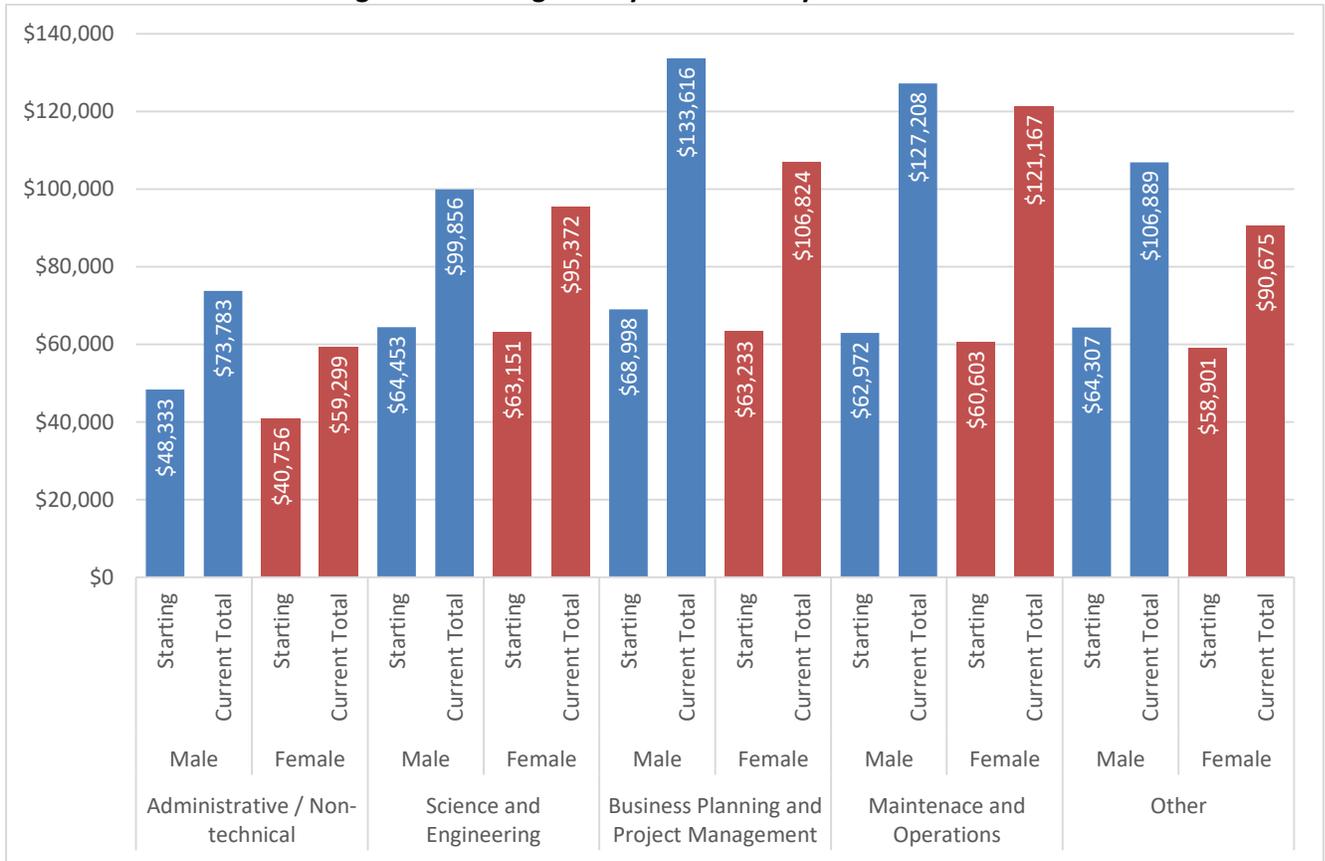


Figure 18 and Table 3 show the average salary vs. gender by position within the industry. Consistently, for every single position, female starting and current salary is lower than male starting and current salary. The largest starting salary difference occurs in Administrative / Non-technical roles, where females make 16% less than their male counterparts.

The largest current salary difference occurs in Business Planning and Project Management, followed closely by Administrative / Non-technical roles, where females' salary is approximately 20% less than males' salary in both positions.

Table 3: Average Salary vs. Gender by Position

	Administrative / Non-technical		Science and Engineering		Business Planning and Project Management		Maintenance and Operations		Other	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Starting	\$48,333	\$40,756	\$64,453	\$63,151	\$68,998	\$63,233	\$62,972	\$60,603	\$64,307	\$58,901
Current Total	\$73,783	\$59,299	\$99,856	\$95,372	\$133,616	\$106,824	\$127,208	\$121,167	\$106,889	\$90,675

Figure 19: Average Current Total Salary based on Job Function vs. Total Work Experience

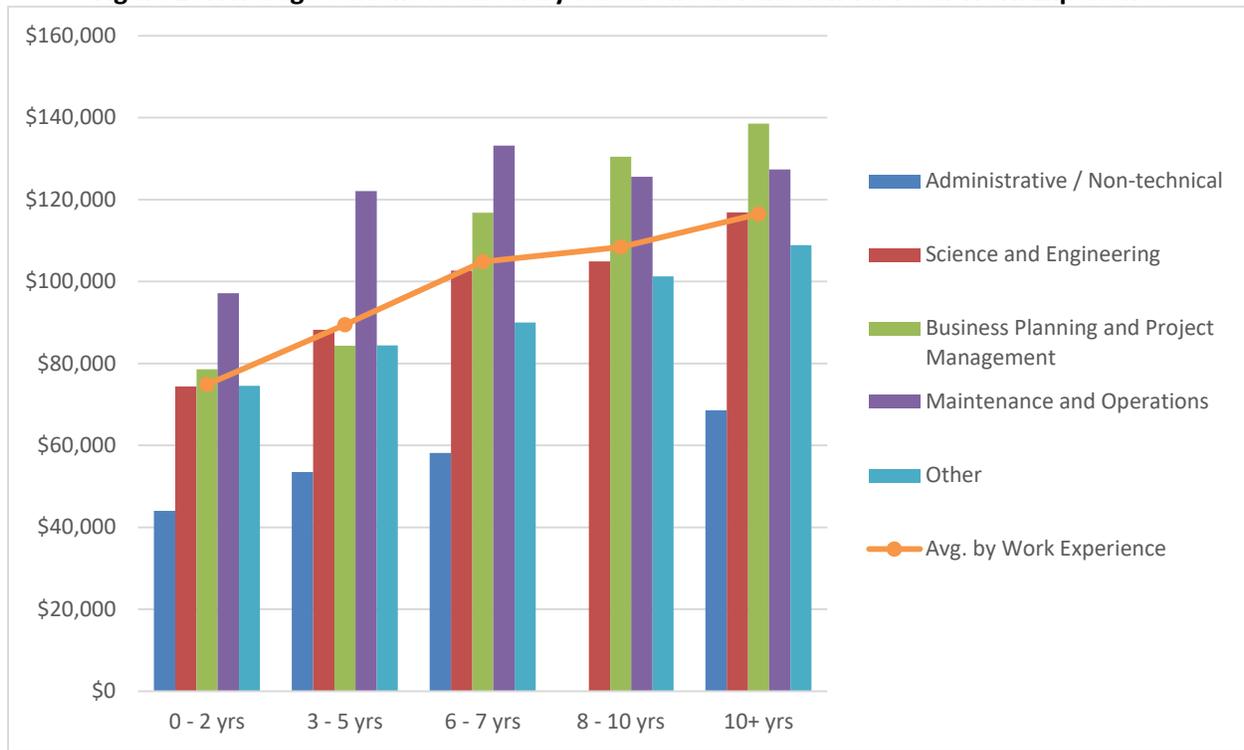


Table 4: Average Current Total Salary by Job Function vs. Total Work Experience

Total Work Experience	Administrative / Non-technical	Science and Engineering	Business Planning and Project Management	Maintenance and Operations	Other	Avg. by Work Experience
0 - 2 yrs.	\$43,995*	\$74,382	\$78,600*	\$97,143*	\$74,554	\$74,853
3 - 5 yrs.	\$53,483	\$88,195	\$84,286*	\$122,042	\$84,430	\$89,410
6 - 7 yrs.	\$58,180*	\$102,625	\$116,783	\$133,160	\$89,951*	\$104,821
8 - 10 yrs.	---	\$104,860	\$130,477	\$125,527	\$101,249	\$108,380
10+ yrs.	\$68,519	\$116,844	\$138,564	\$127,315	\$108,895	\$116,450
Avg. by Job Function	\$61,320	\$98,639	\$125,860	\$122,133	\$99,464	

*Results included fewer than 10 responses.

A summary of changes shown in Figure 19 compared to 2016 is shown below in Table 5. Table 5 shows an overall increase in salary when compared to years of total workforce experience when compared to 2016 results.

Table 5: Current Total Salary Change from 2016 Results

Years of Total Workforce Experience	Current Total Salary Change
0-2	4.5%
3-5	2.1%
6-7	9.5%
8-10	-1.2%
10+	2.3%

Figure 20: Average Current Total Salary based on Job Function vs. Highest Level of Education



Table 6: Average Current Total Salary based on Job Function vs. Highest Level of Education

Level of Education	Administrative / Non-technical	Science and Engineering	Business Planning and Project Management	Maintenance and Operations	Other	Avg. by Level of Education
High School	\$58,029	\$65,565	\$112,550*	\$129,556	\$78,448*	\$89,157
2 Year Diploma	\$53,404	\$83,387	\$123,000*	\$121,386	\$84,896	\$88,326
Bachelor's Degree	\$67,937	\$96,642	\$116,831	\$125,592	\$99,633	\$100,803
Graduate Degree	\$59,600*	\$106,650	\$134,394	\$127,570	\$108,751	\$109,718

*Results included fewer than 10 responses.

VI. Work Hours Results

Figure 21: General Work Hour Preference

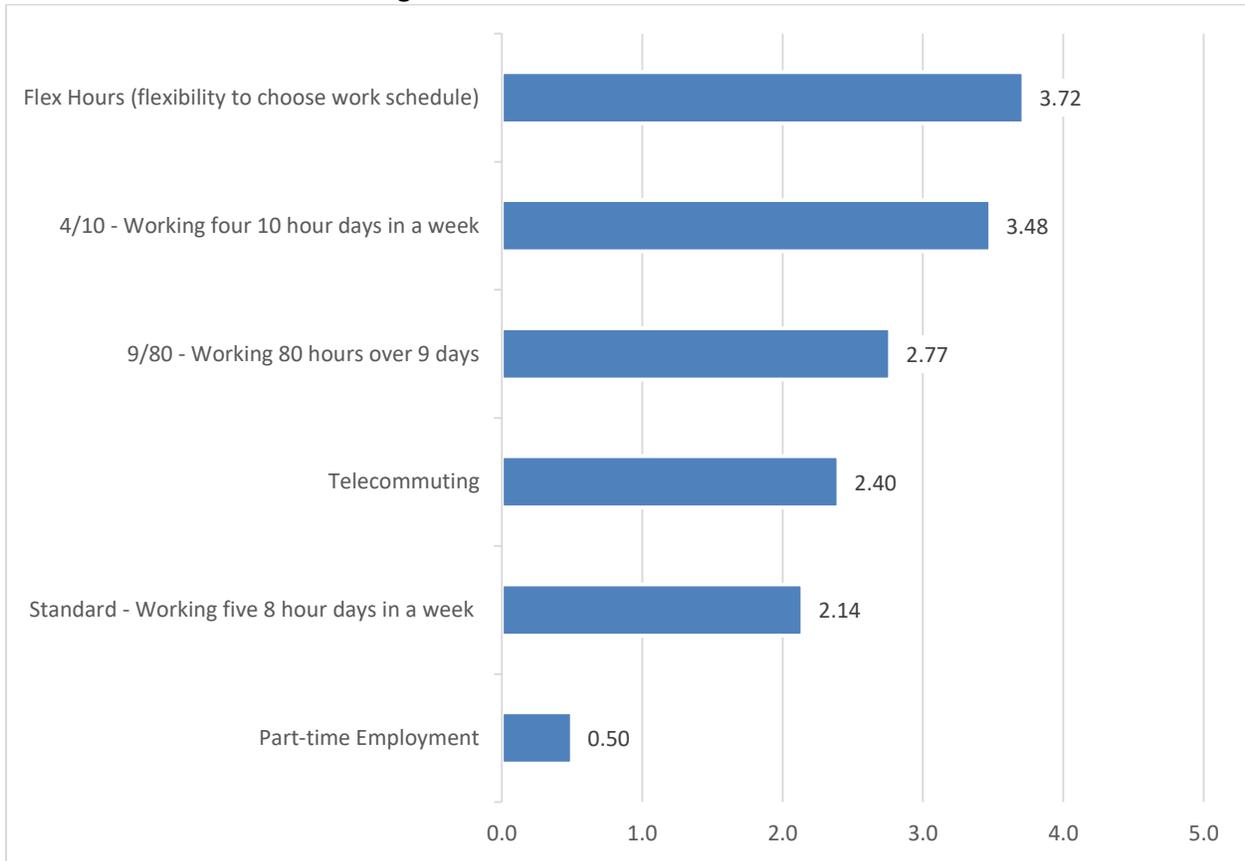


Figure 21 shows the survey ranking results for a variety of alternate work hour arrangements. Respondents were asked to rank their preference in order from 1 to 5, with 1 being the best. The results are displayed based on a weighted scale with 1 being assigned a point value of 5, and so on. The strongest preferences are for Flex Hours (flexibility to choose work schedule) and 4/10s (working four 10-hour days in a week). Figure 21 shows purely a ranking of preferences and remains consistent with responses to the 2016 survey. Figure 22, below, displays the work hour preferences by age.

Figure 22: Work Hour Preference by Age

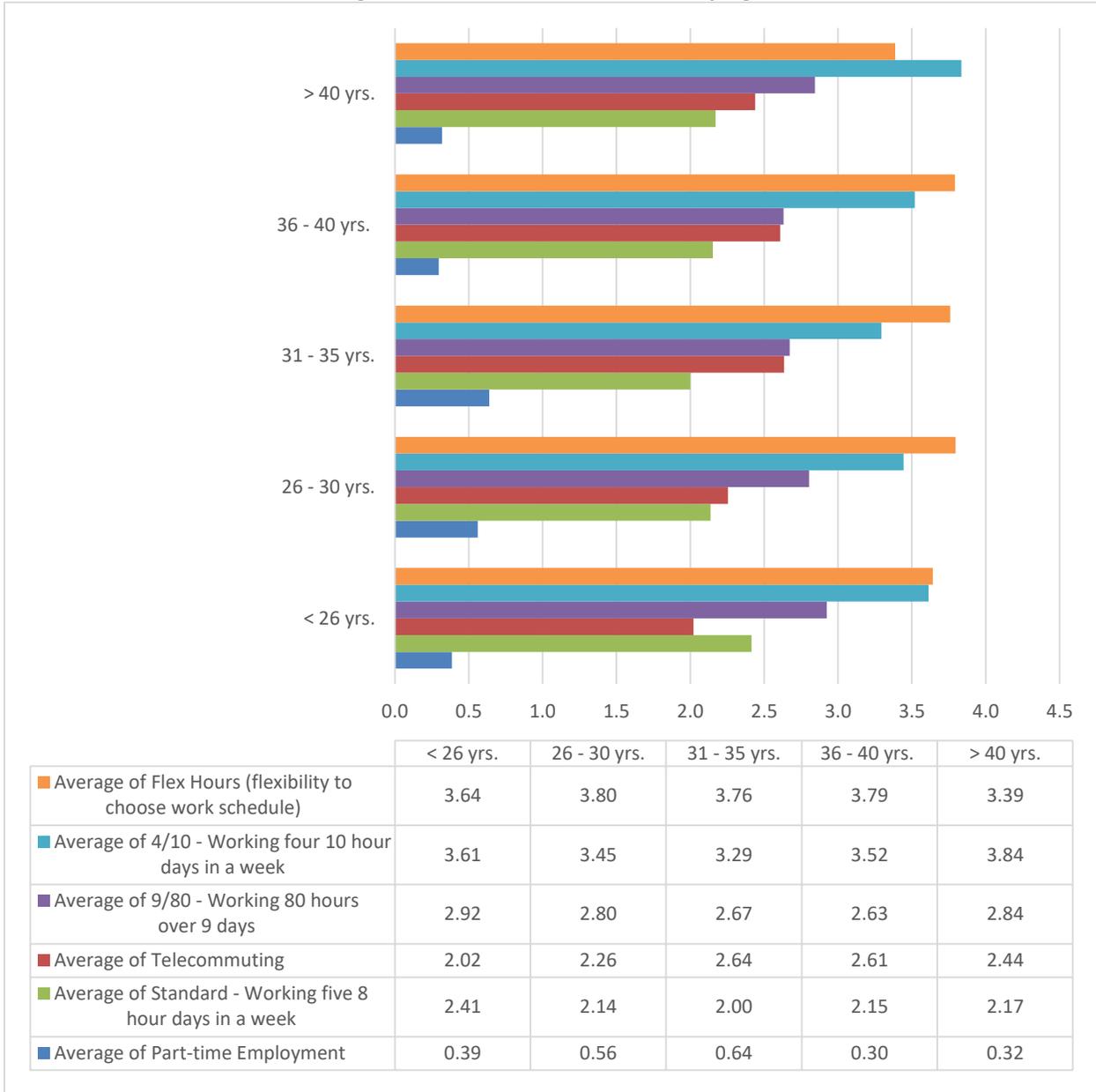


Figure 23: Average Hours per Week

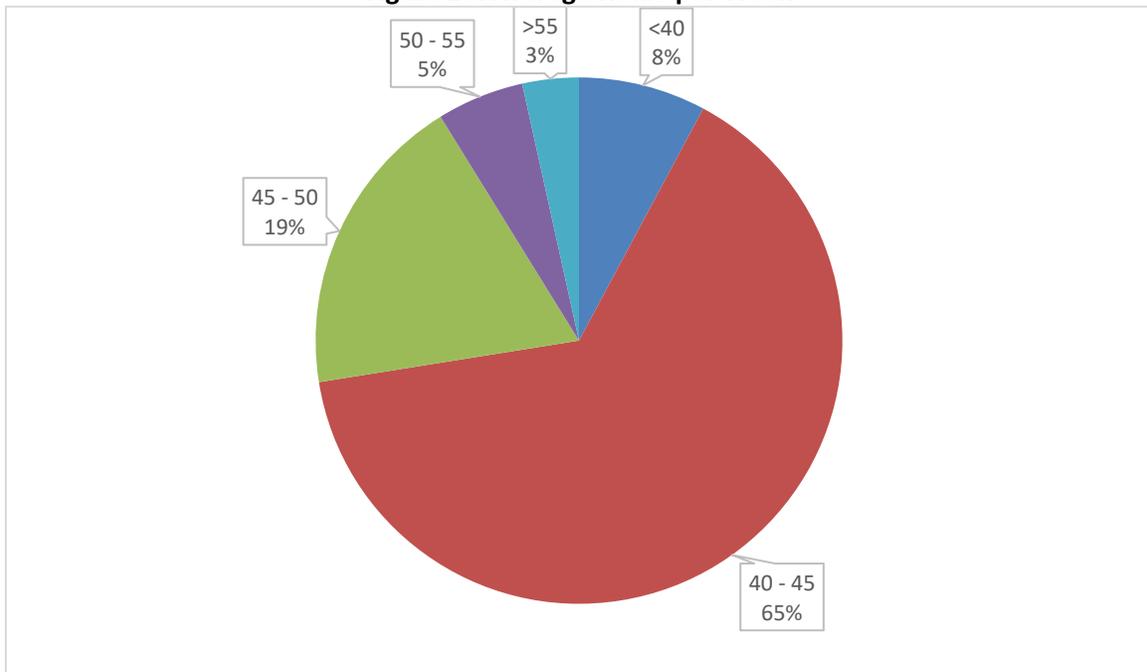


Figure 23 shows that on average, a majority of respondents work 40-45 hours per week.

Figure 24: Average Work Hours per Week vs. Level within Organization

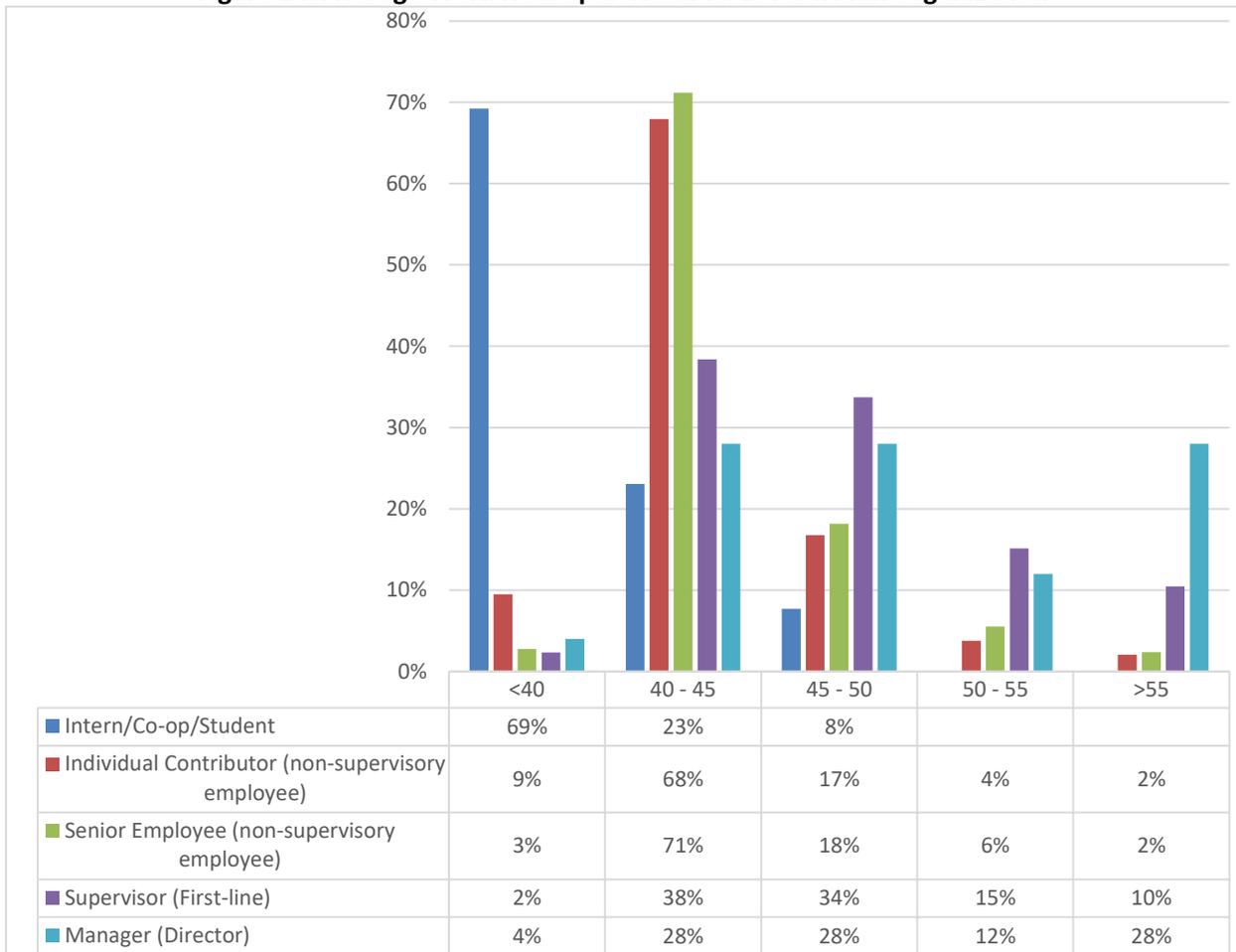


Figure 24 further breaks down the distribution of hours worked based upon respondent’s level within the organization.

Figure 25: Average Hours per Week vs. Average of Current Total Salary

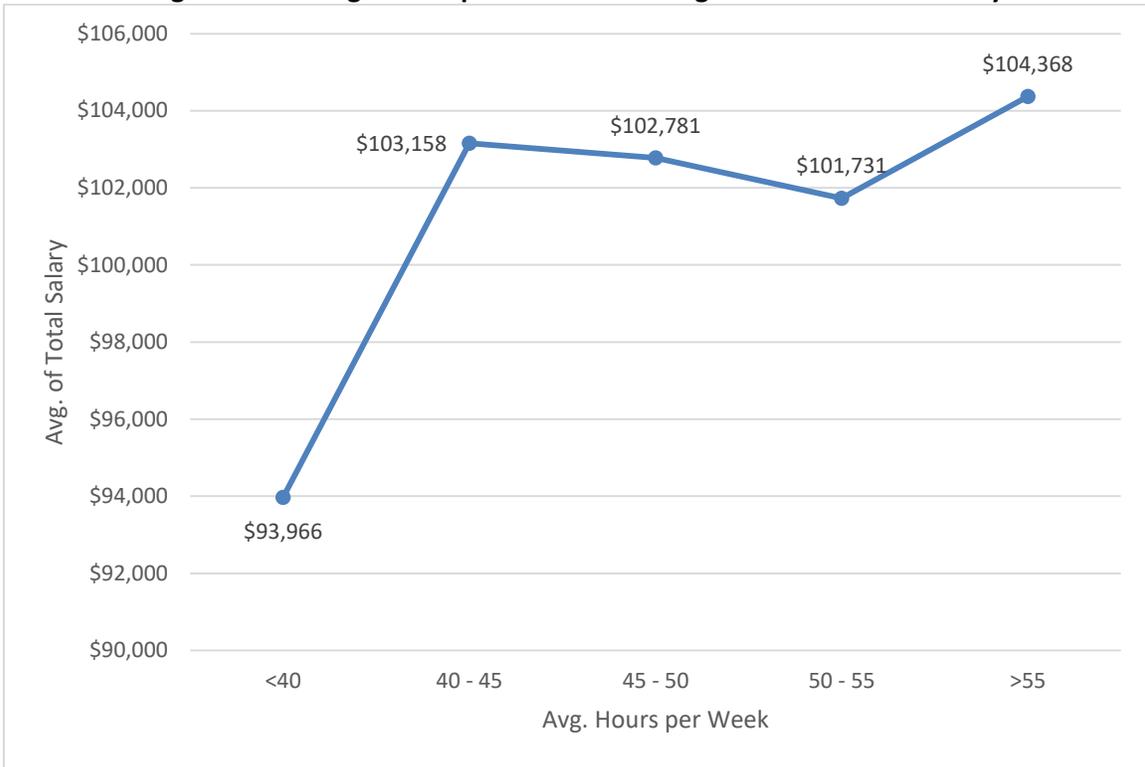


Figure 26: Work Hour Change over Past Year vs. Level within Organization

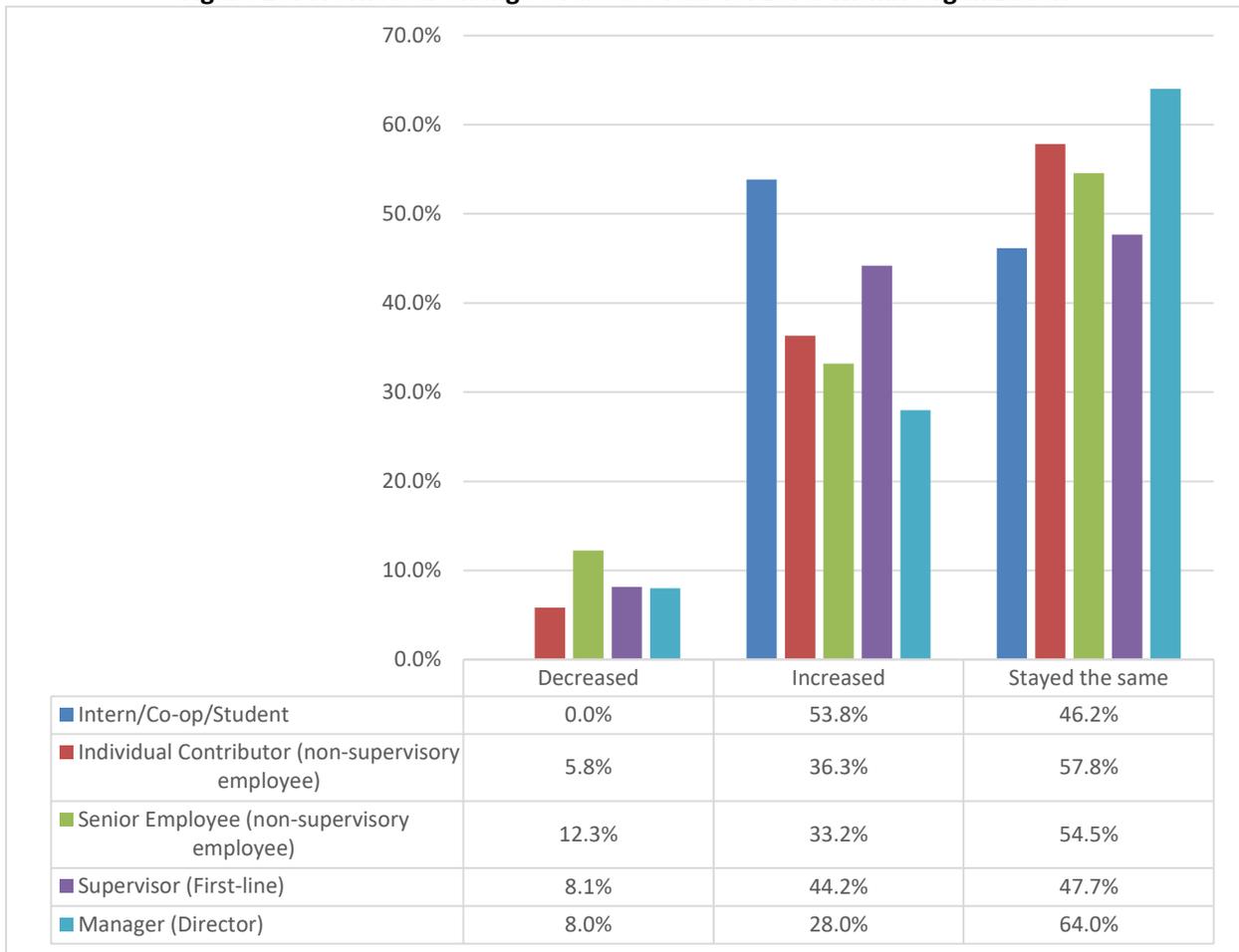
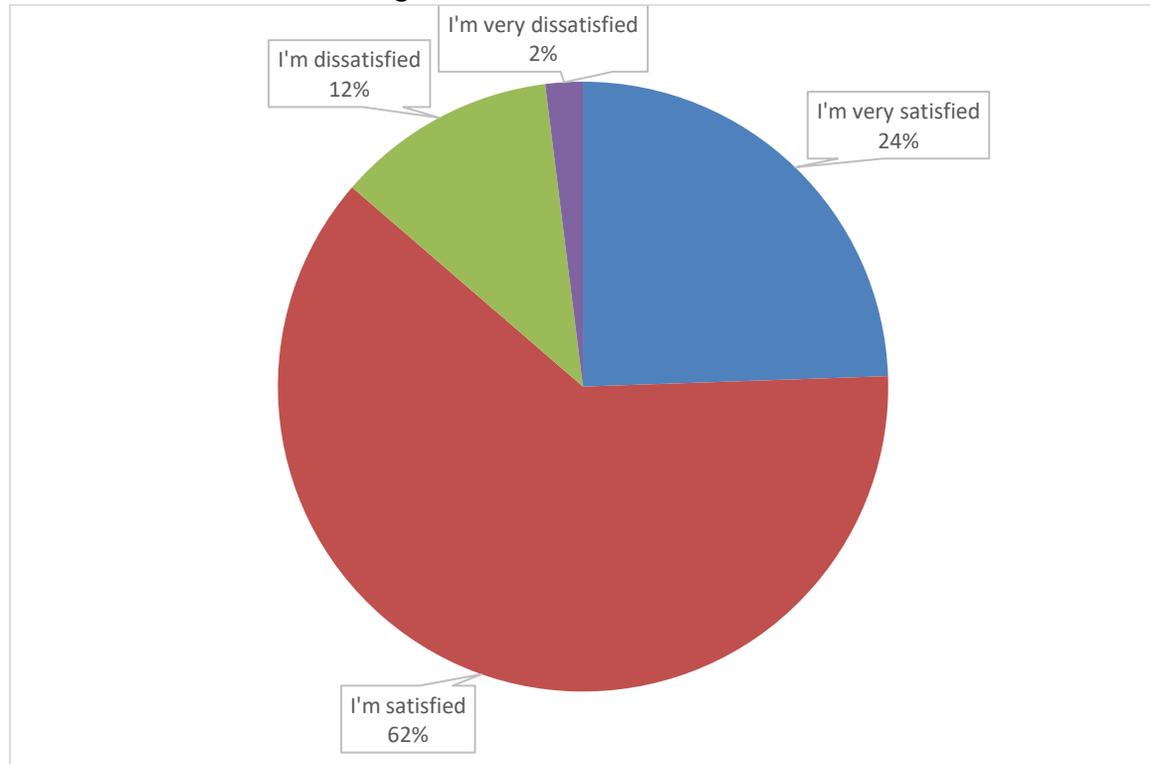


Figure 26 shows how work hours have changed over the past year compared to level within the organization. For the majority of full-time (non-student) respondents, work hours have stayed the same or decreased over the past year.

VII. Job Satisfaction Results

Figure 27: Overall Job Satisfaction



Overall job satisfaction is shown in Figure 27. Responses for satisfied or very satisfied totaled 86%, a slight increase from the 2016 Survey (83%). Only a small portion of respondents indicated they are very dissatisfied with their jobs.

Figure 28, below, shows responses to various general job satisfaction questions. 90% of respondents strongly agree or agree that they are confident they can meet work goals and 96% of respondents strongly agree or agree that they are determined to meet work goals. 71% of respondents strongly agree or agree that they have passion and excitement about their work. 82% of respondents strongly agree or agree that they are provided opportunities to support and participate in NAYGN activities.

Figure 28: General Job Satisfaction

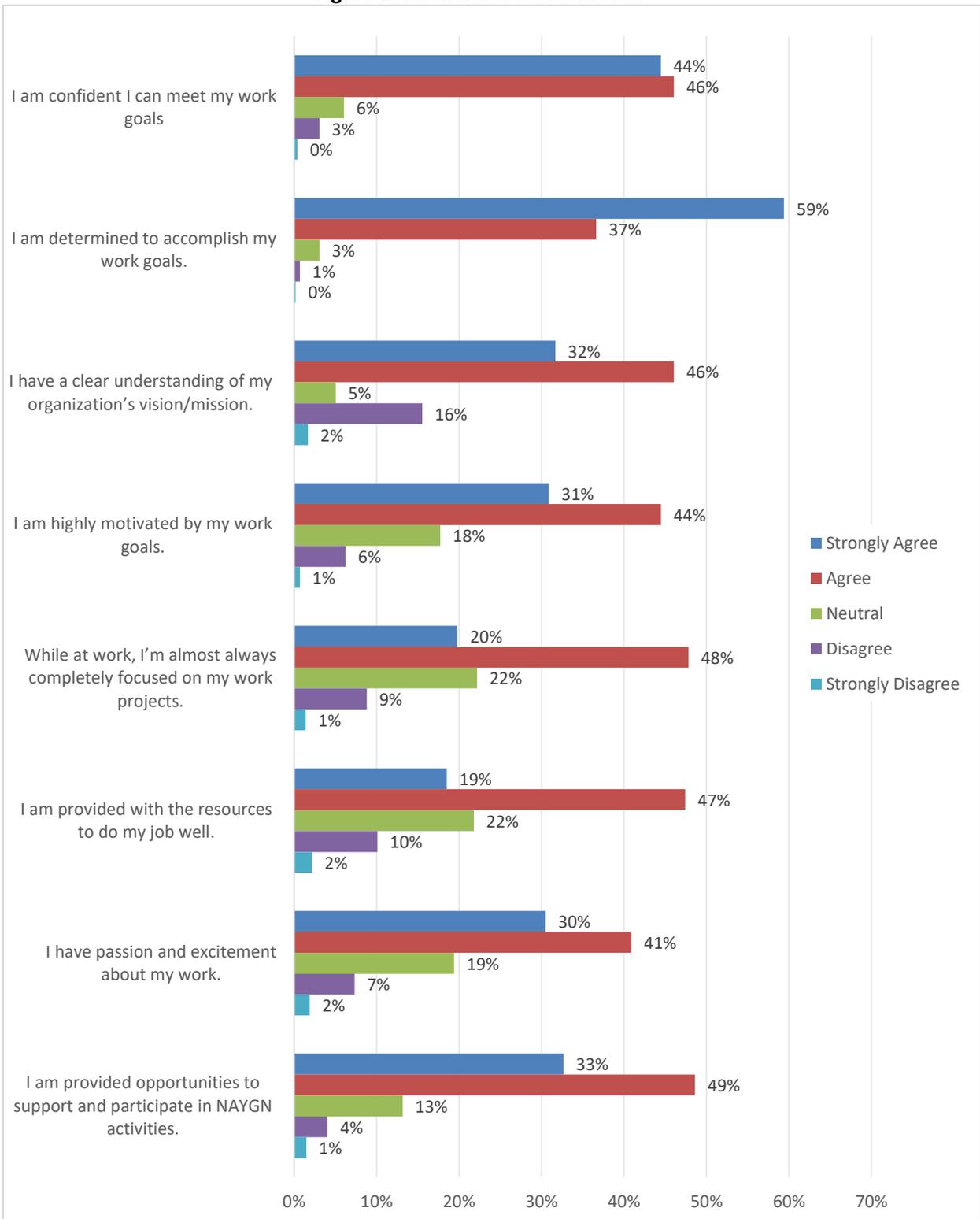


Figure 29: Job Search

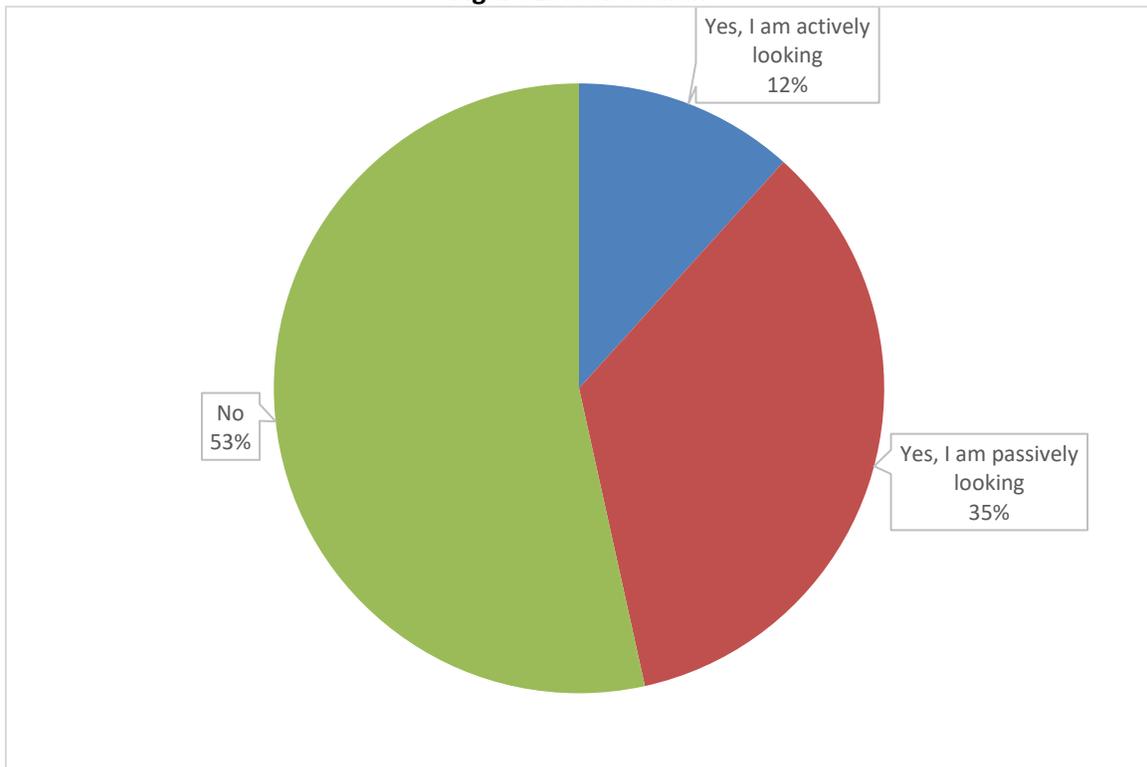


Figure 29 displays the responses for NAYGN members asked if they were seeking new employment. Nearly half of respondents indicated that they are actively or passively looking for new employment.

Figure 30 below displays refined responses for NAYGN members that indicated they were seeking new employment. The results show if they are seeking employment within or outside of their company and the industry.

Figure 30: Industry of Job Search

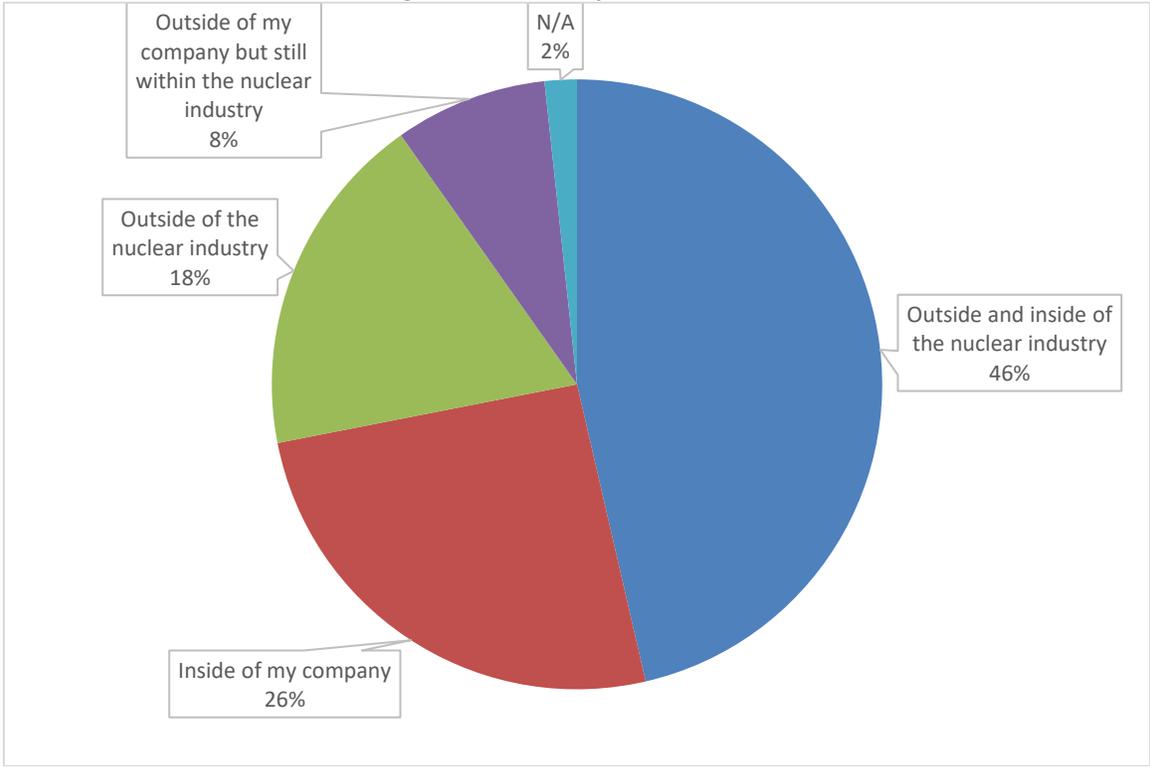


Figure 31: If job searching, how soon would you like to change?

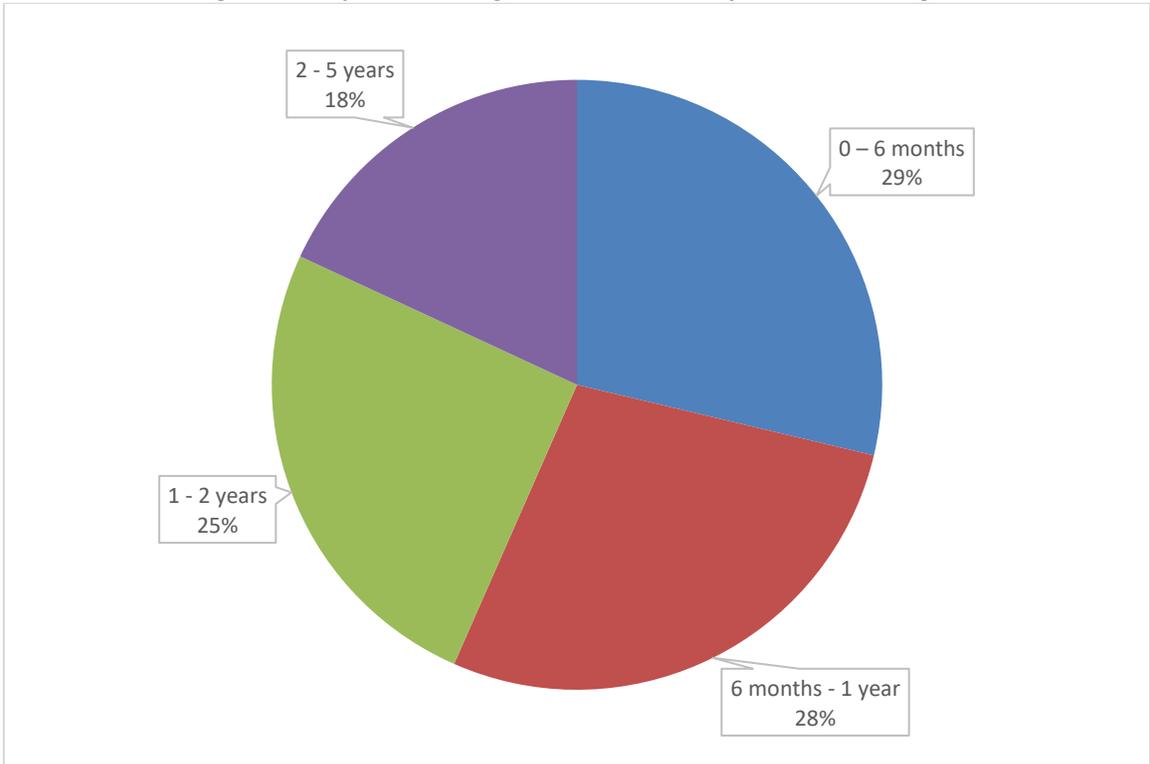


Figure 32: If you left the nuclear industry, what would be the #1 reason?

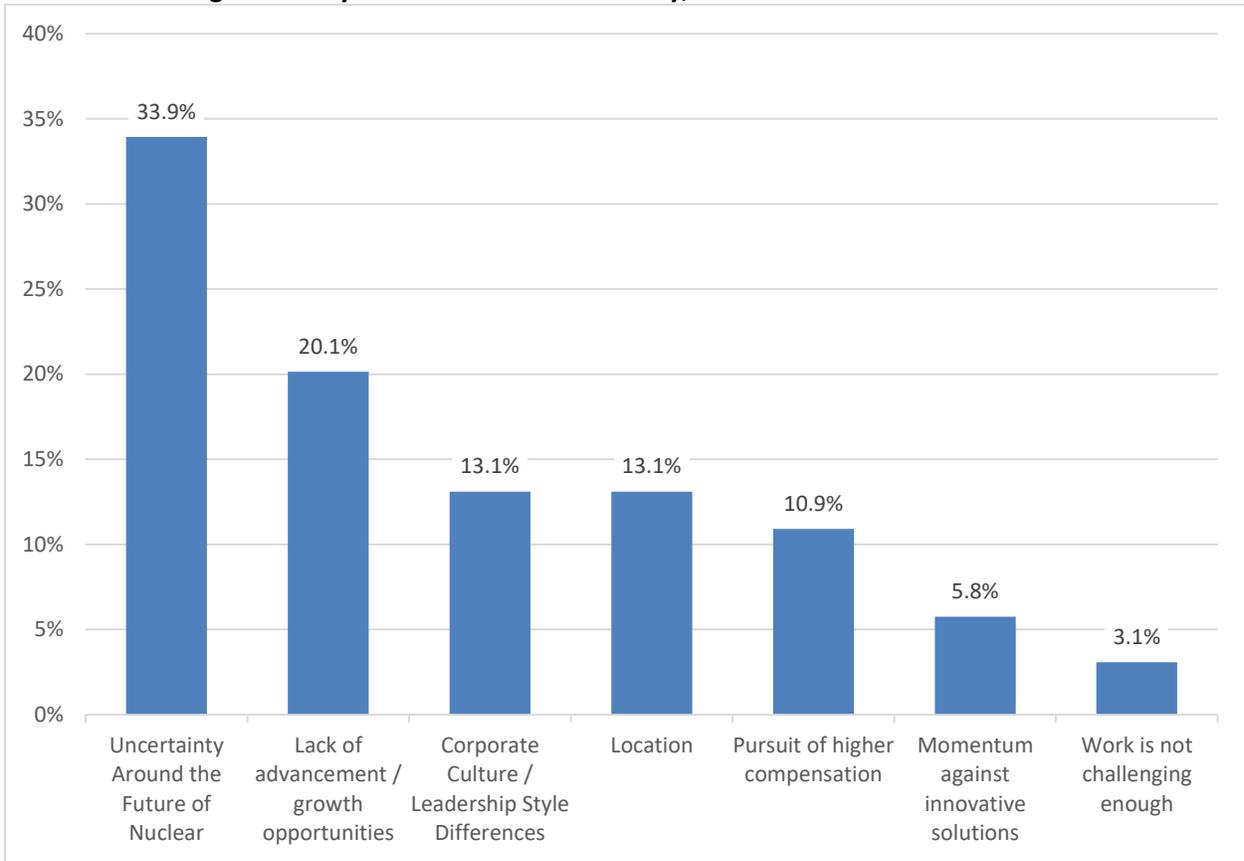
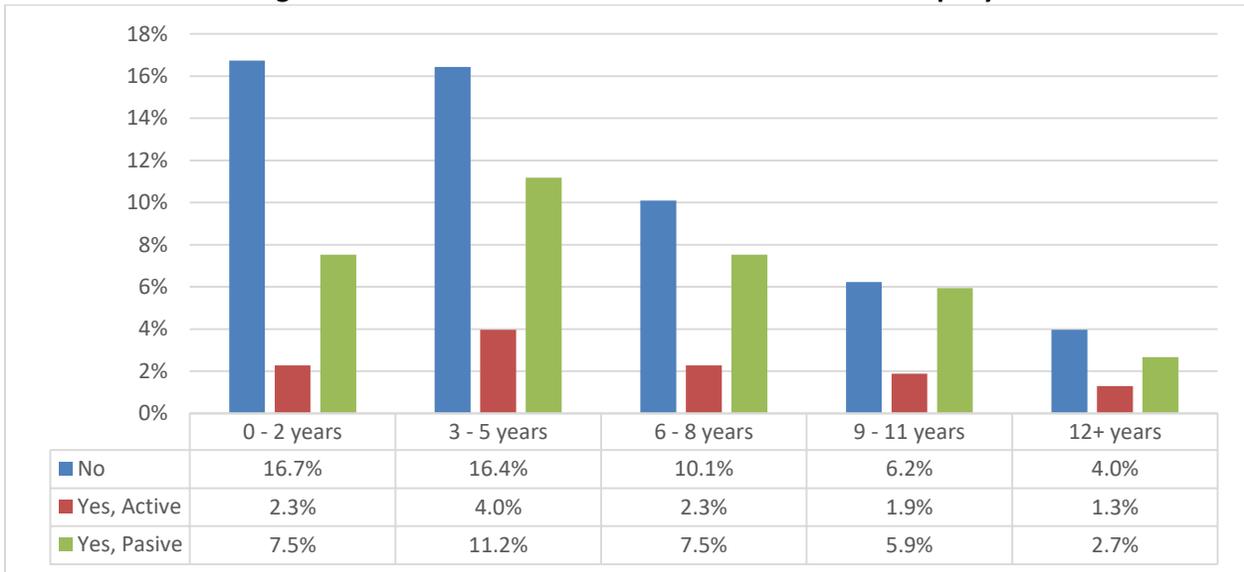


Figure 33: Job Search Answer vs. Time with Current Company

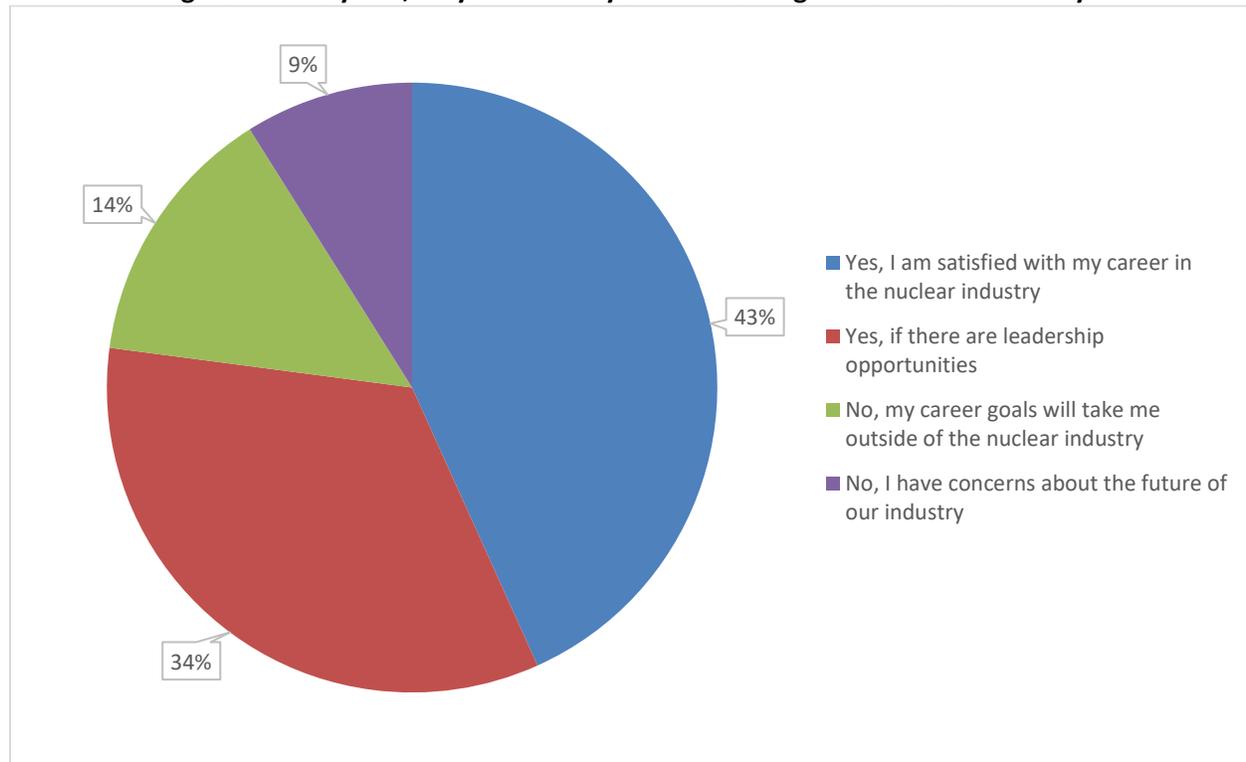


The top reason for seeking new employment, as seen in Figure 32, is the uncertainty around the future of nuclear. This demonstrates that concerns about the nuclear industry providing a stable and life-long career are common among NAYGN members. In 2016, Corporate Culture/Leadership Style Differences was the top reason, but this year it comes in as the third highest reason. In 2016, 14% of respondents

choose pursuit of higher compensation as their top reason and this has declined to 5.8% in the 2018 responses.

As seen in Figure 33, the highest amount of respondents who identified they were either actively or passively looking for a new job have been with their current company for between three to five years (approximately 15%).

Figure 34: In 5 years, do you still see yourself working in the nuclear industry?



Based on Figure 34, in the next five years, 43% of members see themselves satisfied with their career in the nuclear industry. This is a decrease from 48% in 2016. The next 34% responded that they would see themselves working in the nuclear industry if there are leadership opportunities. 23% of respondents do not see themselves working in the nuclear industry in five years with 14% of respondents believing that their career goals will take them outside of nuclear and 9% are concerned about the future of a career in the nuclear industry.

Respondents were also provided the opportunity to input open-ended responses based upon their job satisfaction and their job status within the nuclear industry. Below is a culmination of some of these responses.

“Assuming the nuclear industry receives the political support necessary to keep it viable, I have no plans to leave the industry.”

“Concerns over the future of the industry certainly exist. Although I don't intent to leave nuclear, I do worry that I may not be able to have a full 40-year career in the industry.”

“High uncertainty around the future of nuclear is potentially a big driver for leaving the nuclear industry. However, the compensation is typically high relative to other engineering professions. If compensation within the industry were to stagnate, then it is likely that other options will increase in attractiveness.”

“I feel that the nuclear industry has an unsure future in the USA at the moment. I think the opportunity for growth within our career is largely reliant upon openings within our own companies at this point. Considering how little development the industry is seeing, the opportunity for work at new companies or transitioning to other companies is dwindling.”

“I really enjoy and cherish the uniqueness of the nuclear industry but the state of my current company puts into question my career development and financial potential.”

“I would say that one of the reasons that could cause me to leave nuclear is the lack of efficiency, leadership styles/capabilities, and lack of ability to control my work. It can be very frustrating to work in nuclear because you feel like you're not accomplishing tasks to the degree or timeline you would like. Without the high pay rate and good people, I don't know that I would be working in nuclear.”

“If our corporate culture is changed I would be more likely to continue in Nuclear Industry. Current changes are promising, but not sure if they will filter down to the sites in the same way.”

“I'm staying in the nuclear industry as long as I can.”

“One of the top reasons I would leave the nuclear industry is the work schedule. It is very difficult to juggle outage hours, emergency response team duty, early morning meetings, etc and a home life. With young children, it is close to impossible.”

“This is a delicate subject. I love working in the nuclear field but it is and will continue to change rapidly. I will do what I need to maintain a career in nuclear, but if a better non-nuclear job that is a better fit comes along, I am not married to nuclear. I love working in this field but security and benefits for my family out way my love for nuclear.”

“Uncertainty and job security is a main player in how I set myself up for the future, but additionally, I wish there was more space and options in the nuclear industry for personal and leadership development. Because of the uncertainty of nuclear energy, there's a lag in investing time and effort into innovation, development of technology, and further projects. It's unfortunate because much of the place for personal development would be found if we were pushing nuclear technology and development more.”

Figure 35: Job Satisfaction vs. Avg. Hours per Week

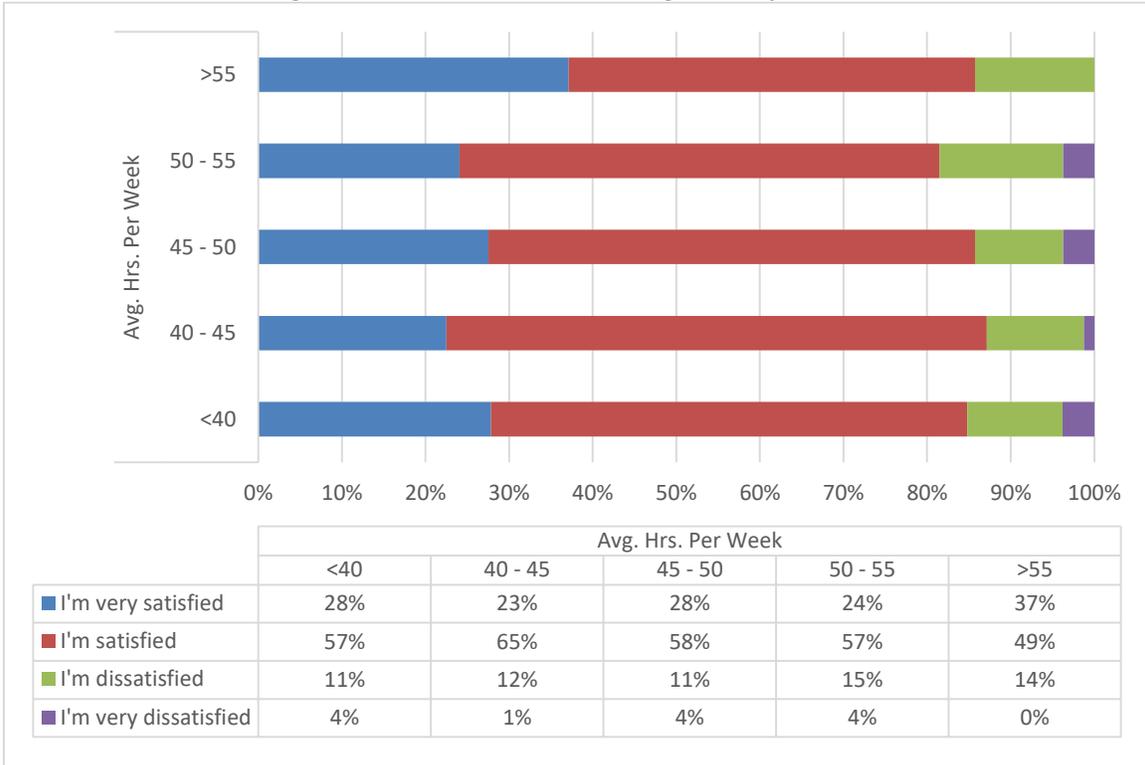
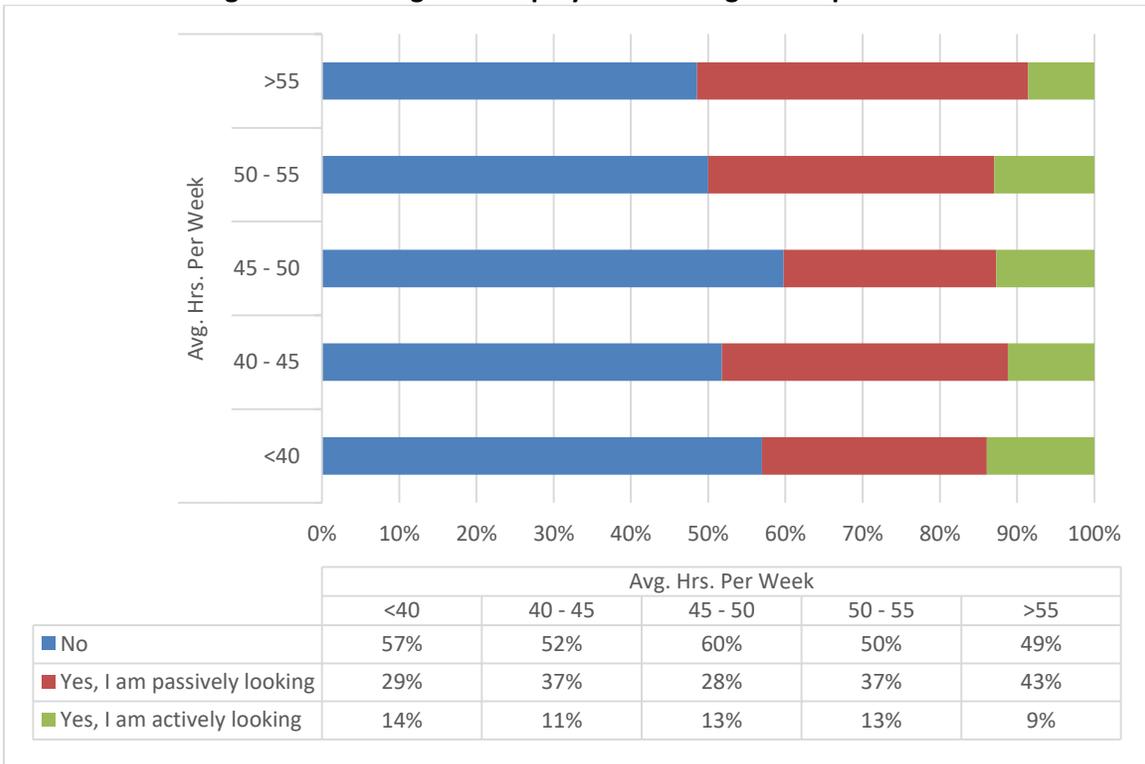


Figure 36: Seeking New Employment vs. Avg. Hours per Week



VIII. Importance vs. Satisfaction

The respondents were asked a series of questions on how important a topic was to them and then asked a follow-up question on how satisfied they were with that topic. These questions were sourced from a survey and report developed by the Society for Human Resources Management (SHRM). The SHRM survey was released to the general working force in the United States. [2]

The results of these questions will be displayed in three categories

- General responses
- Sub-groups of age and gender
- Compared to the responses from the SHRM survey.

The following 37 topics were asked on a scale of Importance and Satisfaction:

1. Autonomy and independence
2. Base rate of pay
3. Being paid competitively with the local market
4. Benefits, overall
5. Career advancement opportunities
6. Career development opportunities
7. Communication between departments/business units
8. Communication between employees and senior management
9. Company's financial stability
10. Company-paid general training
11. Compensation/pay
12. Contribution of your work to the company's business goals
13. Defined benefit pension plan
14. Defined contribution plans (i.e. 401(k))
15. Family-friendly benefits
16. Flexibility to balance life and work issues
17. Health care/medical benefits
18. Immediate supervisor's respect for employee's ideas
19. Job security
20. Job-specific training
21. Management's communication of organization's goals and strategies
22. Management's recognition of employee job performance
23. Meaningfulness of the job
24. Networking opportunities
25. Opportunities to use skills/abilities
26. Organization's commitment to professional development
27. Overall corporate culture
28. Paid time off
29. Relationship with co-workers
30. Relationship with immediate supervisor
31. Respectful treatment of all employees at all levels
32. Stock options
33. Teamwork within department/business unit
34. The work itself
35. Trust between employees and senior management

- 36. Variety of work
- 37. Wellness program

The survey respondents were first asked to rate the topics on importance, ranging from; Very Important, Important, Neutral, Unimportant, Very Unimportant.

They were then asked to rate the same topics on their satisfaction level, ranging from; Very Satisfied, Satisfied, Neutral, Dissatisfied, Very Dissatisfied.

The results below group Importance from the Very Important and Important responses and Satisfaction from the Very Satisfied and Satisfied responses.

The full results of Importance vs. Satisfaction can be found in [Appendix A: Importance vs. Satisfaction Results](#).

General Responses

Table 7: Top Ten Importance, Satisfaction, and Largest Difference

	Importance	Satisfaction	Largest difference between Importance vs. Satisfaction
1	Compensation/pay	Relationship with co-workers	Trust between employees and senior management
2	Base rate of pay	Relationship with immediate supervisor	Career advancement opportunities
3	Job security	Defined contribution plans (i.e. 401(k))	Communication between employees and senior management
4	Respectful treatment of all employees at all levels	Benefits, overall	Communication between departments/business units
5	Immediate supervisor’s respect for employee’s ideas	Paid time off	Career development
6	Relationship with immediate supervisor	Base rate of pay	Job-specific training
7	Trust between employees and senior management	Compensation/pay, overall	Organization’s commitment to professional development
8	Flexibility to balance life and work issues	Immediate supervisor’s respect for employee’s ideas	Opportunities to use skills/abilities
9	Paid time off	Autonomy and independence	Meaningfulness of the job
10	Opportunities to use skills/abilities	Health care/medical benefits	Company’s financial stability

Age Comparison

Table 8: Top Five Most Important by Age

	<26	26 -30	31 - 35	36 - 40	>40
1	Base rate of pay	Compensation / pay	Compensation /pay	Company's financial stability	Respectful treatment of all employees at all levels
2	Compensation/pay	Flexibility to balance life and work issues	Job security	Respectful treatment of all employees at all levels	Base rate of pay
3	Career advancement opportunities	Base rate of pay	Base rate of pay	Compensation / pay	Compensation / pay
4	Career development opportunities	Job security	Trust between employees and senior management	Base rate of pay	Organization's commitment to professional development
5	Meaningfulness of the job	Immediate supervisor's respect for employee's ideas	Relationship with immediate supervisor	Job security	Defined contribution plans (i.e. 401(k))

Table 9: Top Five Most Satisfied

	<26	26 -30	31 - 35	36 - 40	>40
1	Relationship with immediate supervisor	Benefits, overall	Relationship with co-workers	Relationship with immediate supervisor	Defined contribution plans (i.e. 401(k))
2	Relationship with co-workers	Relationship with immediate supervisor	Relationship with immediate supervisor	Relationship with co-workers	Relationship with co-workers
3	Benefits, overall	Defined contribution plans (i.e. 401(k))	Defined contribution plans (i.e. 401(k))	Defined contribution plans (i.e. 401(k))	Immediate supervisor's respect for employee's ideas
4	Immediate supervisor's respect for employee's ideas	Health care/medical benefits	Base rate of pay	Benefits, overall	Relationship with immediate supervisor
5	Paid time off	Paid time off	Compensation/pay, overall	Paid time off	Autonomy and independence

Table 10: Top Five Largest Difference between Importance vs. Satisfaction

	<26	26 -30	31 - 35	36 - 40	>40
1	Career advancement opportunities	Trust between employees and senior management	Trust between employees and senior management	Trust between employees and senior management	Career advancement opportunities
2	Opportunities to use skills/abilities	Career advancement opportunities	Career advancement opportunities	Communication between departments/business units	Organization's commitment to professional development
3	Trust between employees and senior management	Communication between departments/business units	Communication between employees and senior management	Communication between employees and senior management	Job-specific training
4	Communication between employees and senior management	Communication between employees and senior management	Career development	Career development	Trust between employees and senior management
5	Paid time off	Paid time off	Compensation/pay, overall	Career advancement opportunities	Communication between employees and senior management

Gender comparison

Table 11: Female; Top Ten Importance, Satisfaction, and Largest Difference

	Importance	Satisfaction	Largest difference between Importance vs. Satisfaction
1	Job security	Defined contribution plans (i.e. 401(k))	Career advancement opportunities
2	Immediate supervisor's respect for employee's ideas	Relationship with immediate supervisor	Trust between employees and senior management
3	Respectful treatment of all employees at all levels	Paid time off	Communication between departments/business units
4	Compensation/pay	Benefits, overall	Career development
5	Relationship with immediate supervisor	Relationship with co-workers	Communication between employees and senior management
6	Flexibility to balance life and work issues	Immediate supervisor's respect for employee's ideas	Job-specific training
7	Base rate of pay	Base rate of pay	Overall corporate culture
8	Benefits, overall	Health care/medical benefits	Organization's commitment to professional development
9	Opportunities to use skills/abilities	Compensation/pay, overall	Opportunities to use skills/abilities
10	The work itself	Autonomy and independence	Respectful treatment of all employees at all levels

Table 12: Male; Top Ten Importance, Satisfaction, and Largest Difference

	Importance	Satisfaction	Largest difference between Importance vs. Satisfaction
1	Compensation/pay	Relationship with co-workers	Trust between employees and senior management
2	Base rate of pay	Relationship with immediate supervisor	Career advancement opportunities
3	Job security	Benefits, overall	Communication between employees and senior management
4	Paid time off	Defined contribution plans (i.e. 401(k))	Communication between departments/business units
5	Trust between employees and senior management	Immediate supervisor's respect for employee's ideas	Career development
6	Respectful treatment of all employees at all levels	Compensation/pay, overall	Job-specific training
7	Relationship with immediate supervisor	Base rate of pay	Organization's commitment to professional development
8	Flexibility to balance life and work issues	Paid time off	Opportunities to use skills/abilities
9	Immediate supervisor's respect for employee's ideas	Respectful treatment of all employees at all levels	Meaningfulness of the job
10	Opportunities to use skills/abilities	Autonomy and independence	The work itself

SHRM Comparison

Table 13: SHRM Survey Responses [2]

	Importance	Satisfaction	Largest difference between Importance vs. Satisfaction
1	Respectful treatment of all employees at all levels	Feeling safe in the work environment	Trust between employees and senior management
2	Compensation/pay, overall	Relationship with immediate supervisor	Communication between departments/ business units
3	Benefits, overall	Immediate supervisor's respect for employee's ideas	Compensation/pay, overall
4	Job security	Opportunities to use skills/abilities	Teamwork between departments/business units
5	Opportunities to use skills and abilities at work	Relationship with co-workers	Communication between employees and senior management
6	Trust between employees and senior management	The work itself	Management's recognition of employee job performance
7	Organization's financial stability	Meaningfulness of the job	The Organization's commitment to professional development
8	Relationship with immediate supervisor	Organization's financial stability	Job-specific training
9	Feeling safe in the work environment	Job security	Career advancement opportunities within the organization
10	Immediate supervisor's respect for employee's ideas	Autonomy and independence	Management's communication of organization's goals and strategies

Table 14: Top five largest differences between Importance vs. Satisfaction for NAYGN & SHRM

	NAYGN	SHRM
1	Trust between employees and senior management	Trust between employees and senior management
2	Career advancement opportunities	Communication between departments/ business units
3	Communication between employees and senior management	Compensation/pay, overall
4	Communication between departments/business units	Teamwork between departments/business units
5	Career development	Communication between employees and senior management

VIII. Training and Professional Development

Figure 37: What types of soft skill (communication, presentation, etc.) training options are available at your company?

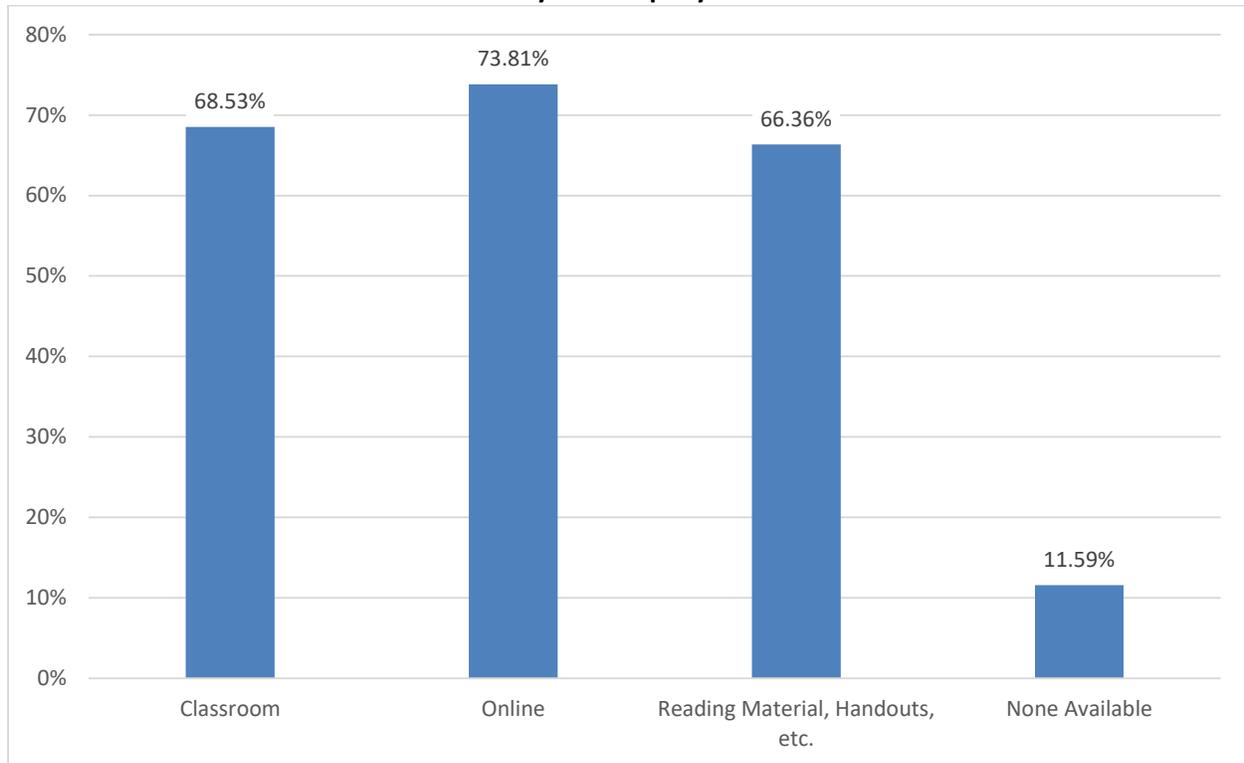


Figure 37 displays what type of soft skills training options are available at the respondents' companies. While the majority of members have access to either classroom, online, or handouts, over 11% of respondents have no soft skills training available to them.

Figure 38-40 show how respondents feel about the effectiveness of each style of training. Respondents believe that classroom training is the most effective form of training for soft skill development. However, Figure 37 above shows that over 30% of respondents do not have access to classroom training at their respective companies.

The most coveted soft skills respondents would like to develop are (1) Leadership/Management, (2) software/programming proficiency, (3) Public Speaking and Presentations, as shown in Figure 41.

Figure 38: How effective is the classroom training?

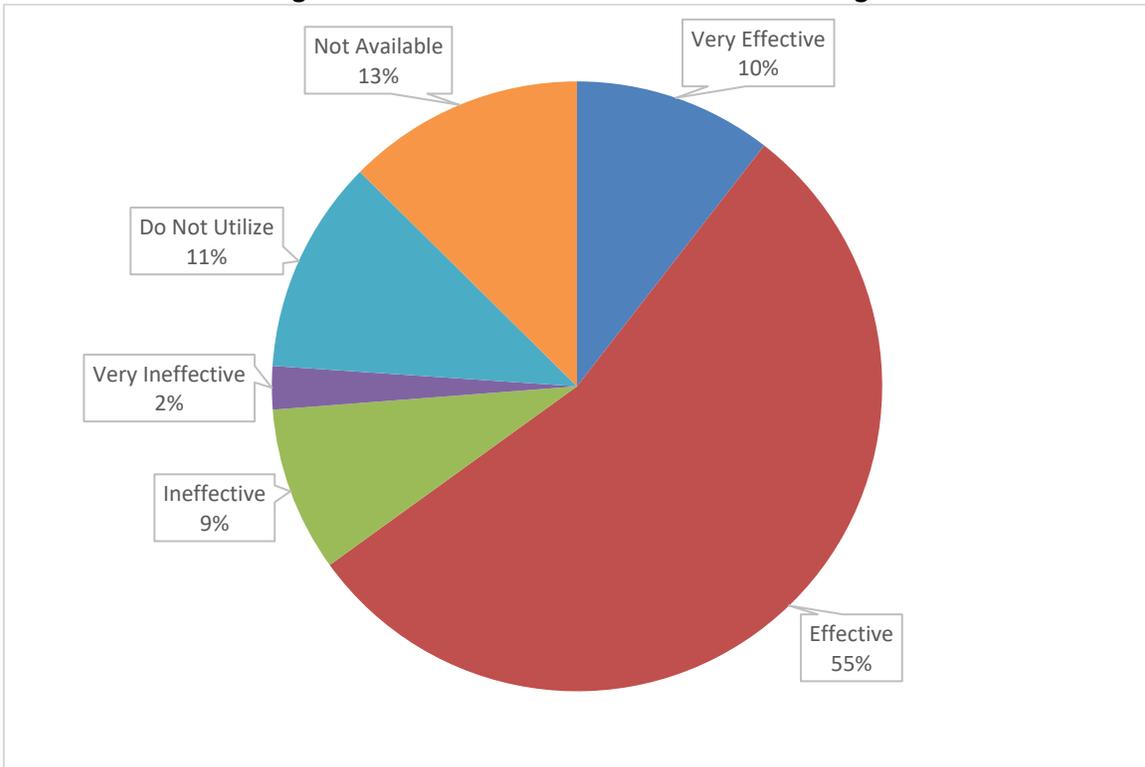


Figure 39: How effective is the online training?

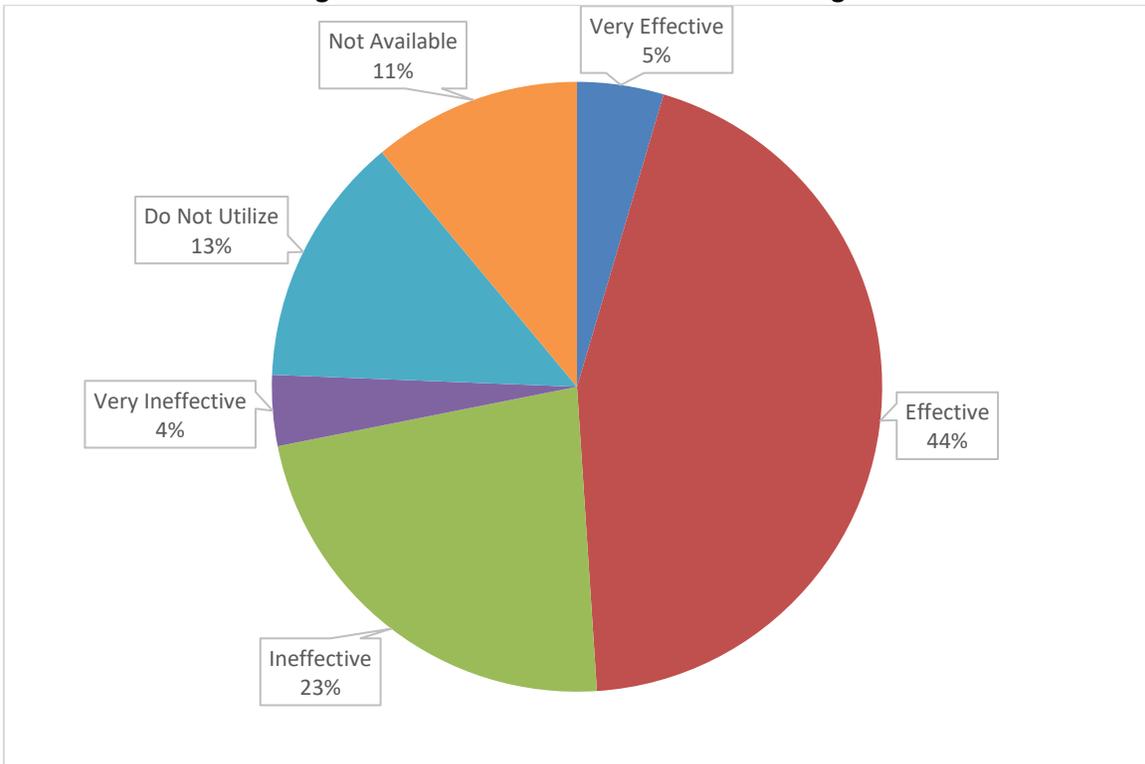


Figure 40: How effective is the reading material/handout training?

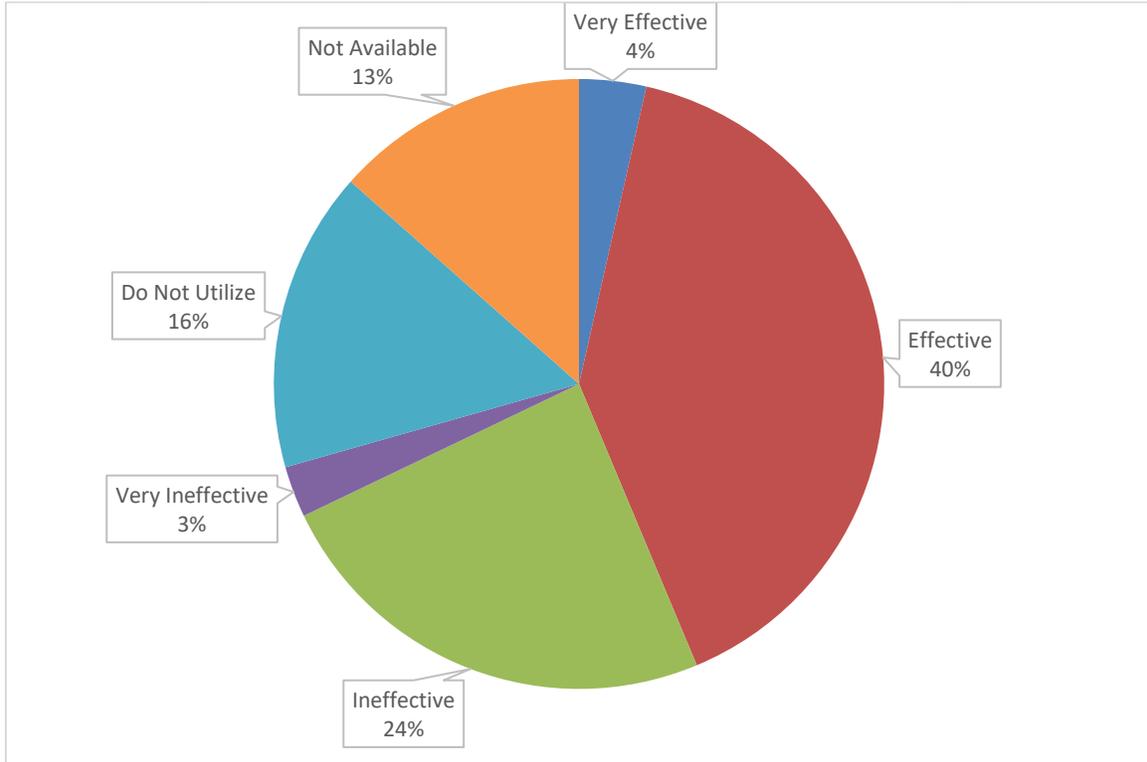


Figure 41: What types of soft skill skills would you like to develop?

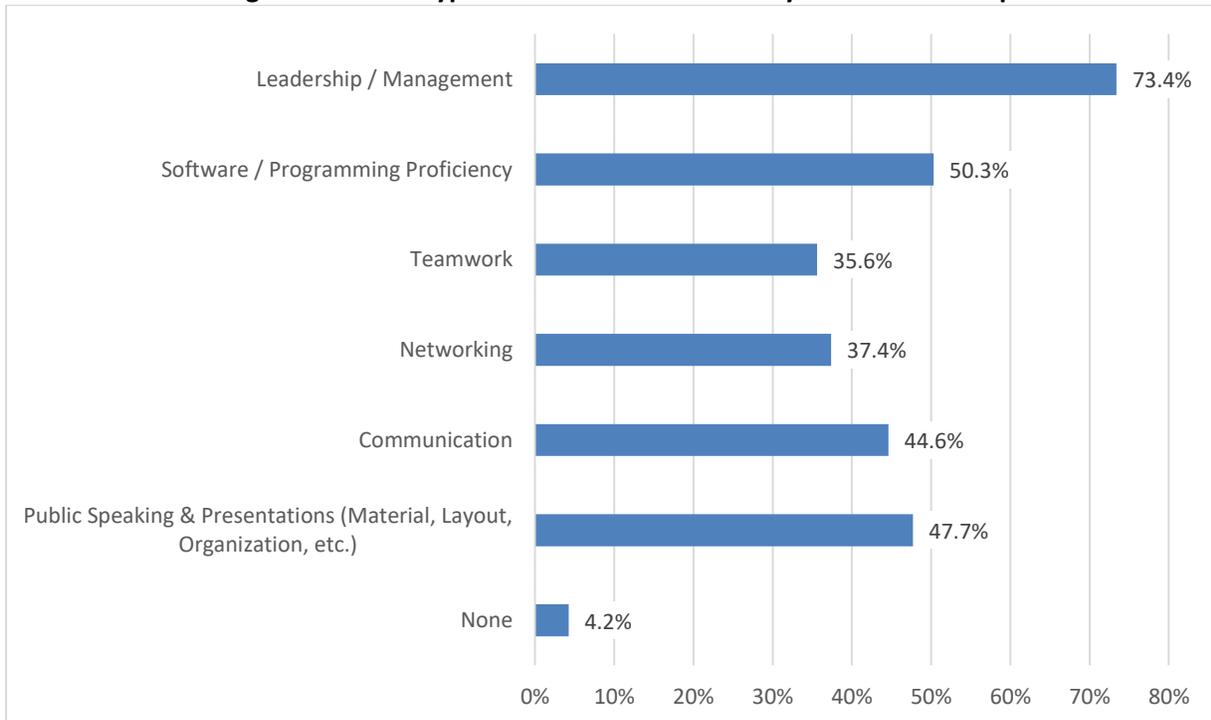


Figure 42: Does your company offer rotational programs in nuclear? If so, do you believe it is valuable?

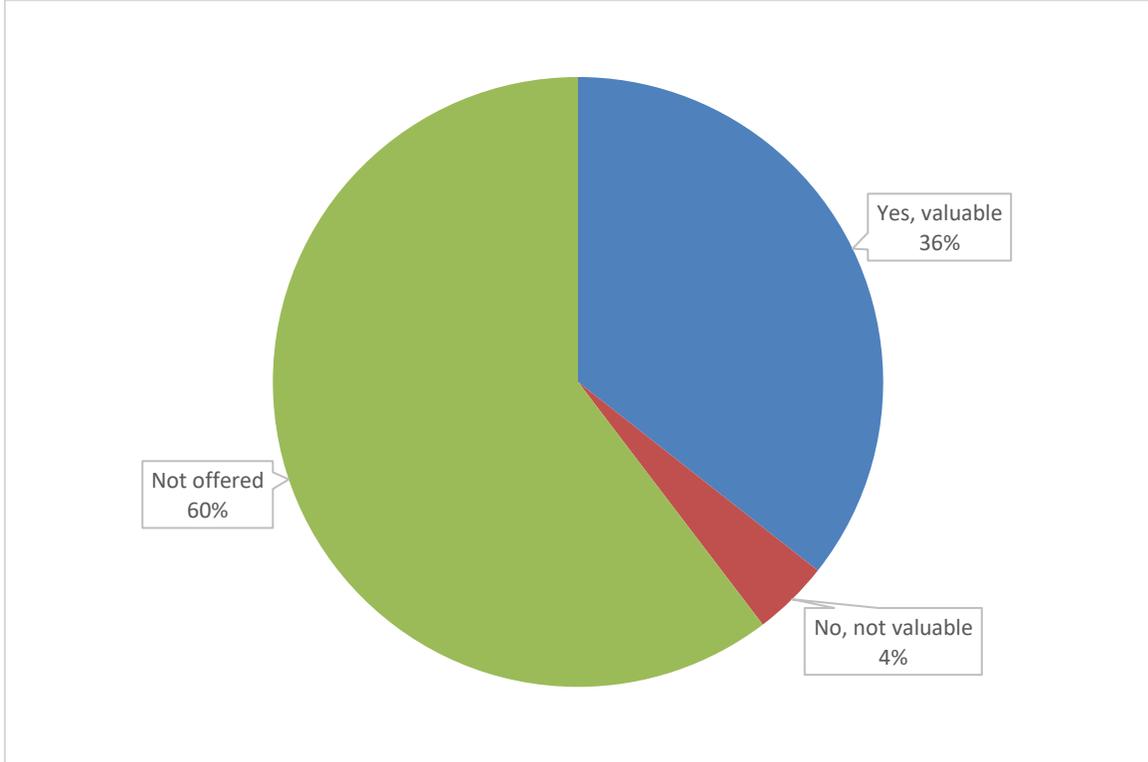


Figure 42 shows that 60% of respondents' companies do not offer rotational program in nuclear. Of those respondents who do have access to a rotational program within their companies, 90% believe the program is valuable.

X. Nuclear Outlook

Figure 43: How has your peers/family impression of nuclear changed since you started working in the industry?

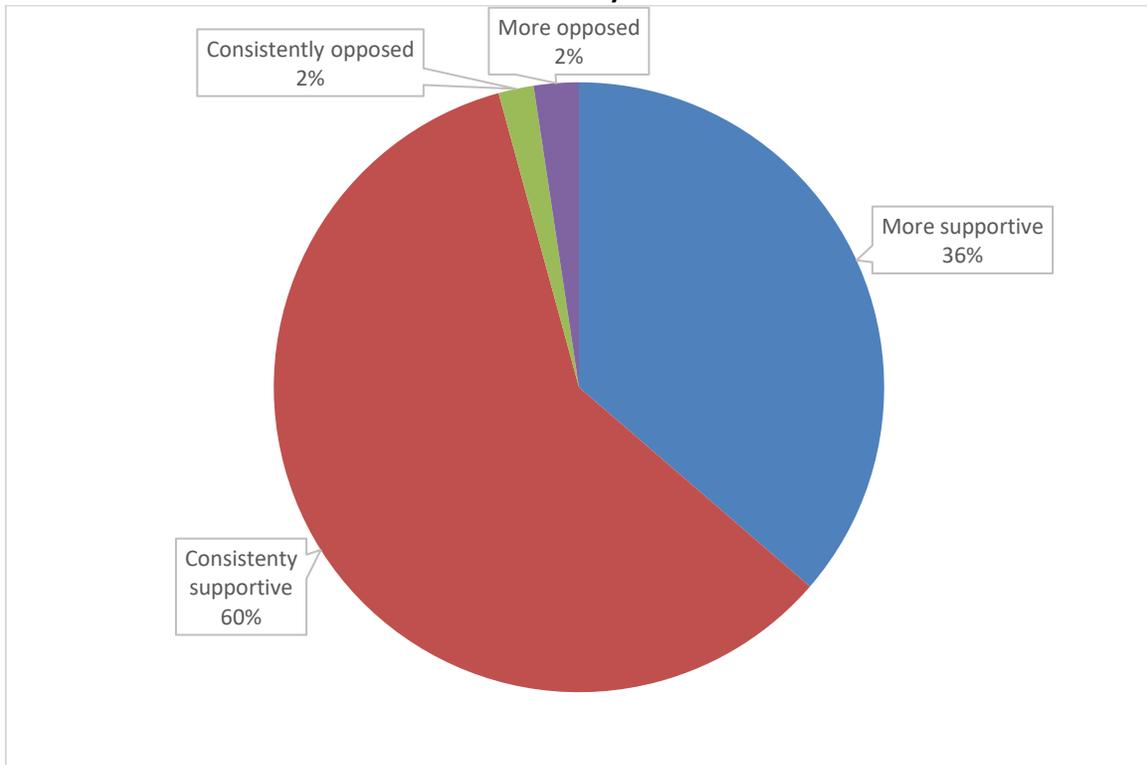


Figure 43 shows that 96% of respondents' peers and families are consistently supportive or more supportive of nuclear since the respondent started working in the industry.

Figure 44: How would you feel if your children/grandchildren were to work in the nuclear industry?

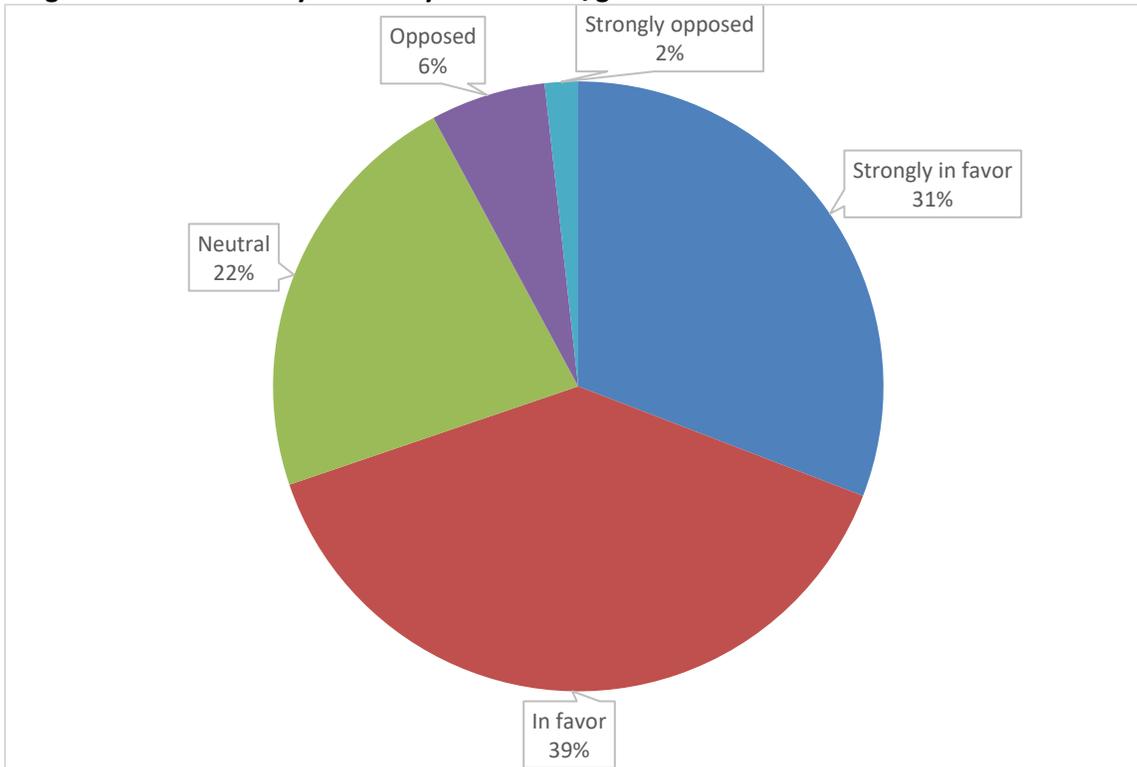


Figure 44 shows that 70% of respondents are either strongly in favor or in favor of their children/grandchildren working in the nuclear industry, with only 8% opposed or strongly opposed. This is a good indication of the safety and stability of the careers the respondents see the nuclear industry provides.

Figure 45: What type of impact do you think the Delivering the Nuclear Promise initiatives will have on the industry?

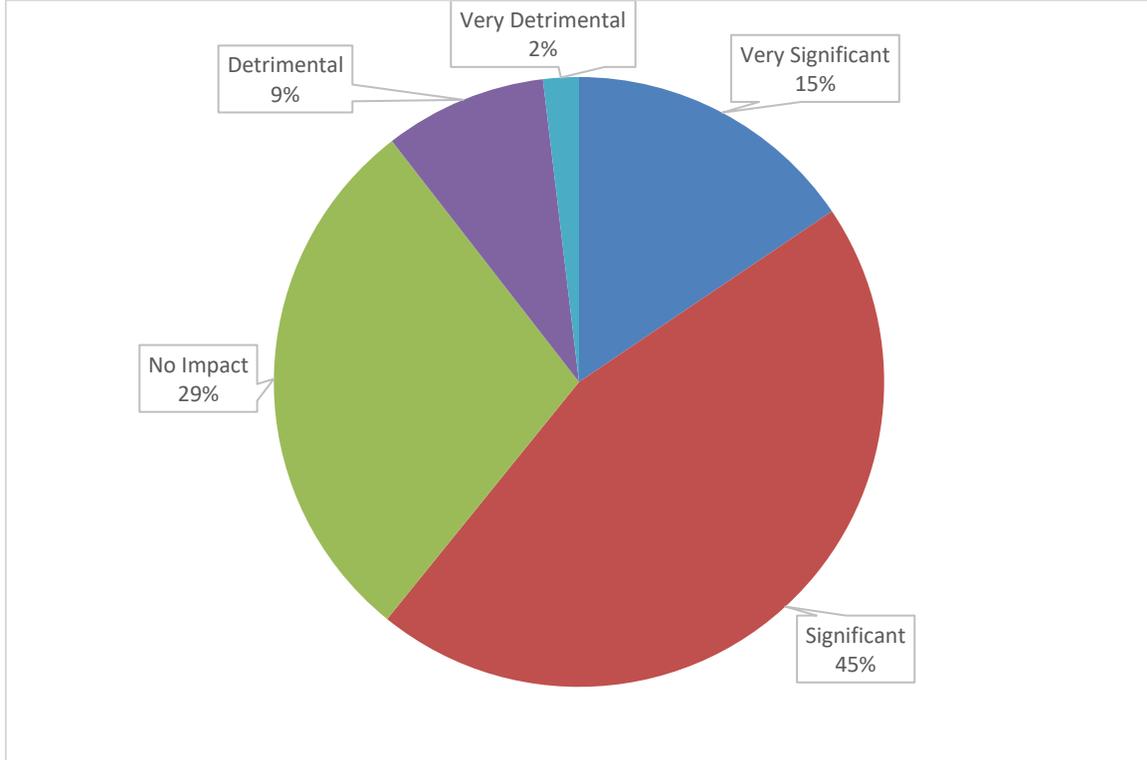


Figure 45 shows that 60% of respondents believe that the Delivering the Nuclear Promise (DNP) initiative will have a significant or very significant impact on the industry. 29% believe that the initiative will have no impact. 11% believe that the initiative will have a detrimental or very detrimental impact on the nuclear industry.

Respondents were also allowed to provide an open-ended response with their general thoughts on Delivering the Nuclear Promise Initiatives. Many respondents believe that the Delivering the Nuclear Promise initiative is a good start and a much needed, essential initiative for the continued operation and potential expansion of the nuclear industry. However, many respondents noted that the change has not spread to supporting and regulating organizations.

Respondents note that continued success of the industry will require a highly skilled, well trained, and motivated, new generation of workforce committed towards long-term objectives, but the immediate impact of Delivering the Nuclear Promise has decreased the quality of life for some individual contributors due to increased workload resulting from the initiative. Responses echoed that the high-level efforts are well intended but are often lost in translation or not fully implemented due to a reluctance to change processes. Respondents believe that the initiative can have a greater impact if lean tools and ingenuity are further embraced by the industry. Lastly, many open-ended responses noted that increased government support and public acceptance of nuclear are imperative to the future of the industry.

Below are a few sample responses to the open-ended question about their general thoughts on Delivering the Nuclear Promise Initiatives:

"A valuable resource and message to the industry to continue the safety and reliability in our plants. Agree with making changes, but the change seems not to spread to the supporting organizations (NRC, INPO, WANO etc.). Feel like when things happen in the industry, we find ways to accumulate more work for ourselves."

"Delivering the Nuclear Promise appears to me to be essential for the continued operation, let alone the expansion of the nuclear industry, and continued professional success will be imperative. To do so, however, will require a highly skilled (and thus, well trained and motivated) new generation of workforce committed towards long-term objectives."

"DNP is an effort to reduce costs as plants are struggling to compete with low natural gas prices. However, DNP alone will not be enough, support from state or federal government may be necessary long term."

"High level efforts are well-intended and effective, but some of those initiatives are bypassed or implemented inefficiently, causing an opposite effect at reducing work and cost."

"I think it's a step in the right direction for those in the nuclear industry to start thinking outside of their comfort zones. I'm not sure that this initiative will yield significant results up front, but I think it help to kick-start new ways of thinking for the future."

"I think the idea is great but the implementation will rely on a complete culture change throughout the industry that doesn't appear to be happening as quickly as necessary."

"I think the overall initiatives are great however the issues are with the implementation portions of DNP. A lot of the changes have created some down-sizing in companies however the work, processes, etc. were not eliminated with the change in jobs. A lot of people feel there is a focus on doing more with less which can be very detrimental to teamwork and morale."

Figure 46: What nuclear technology do you think will be the most successful in North America in the next 10 years?

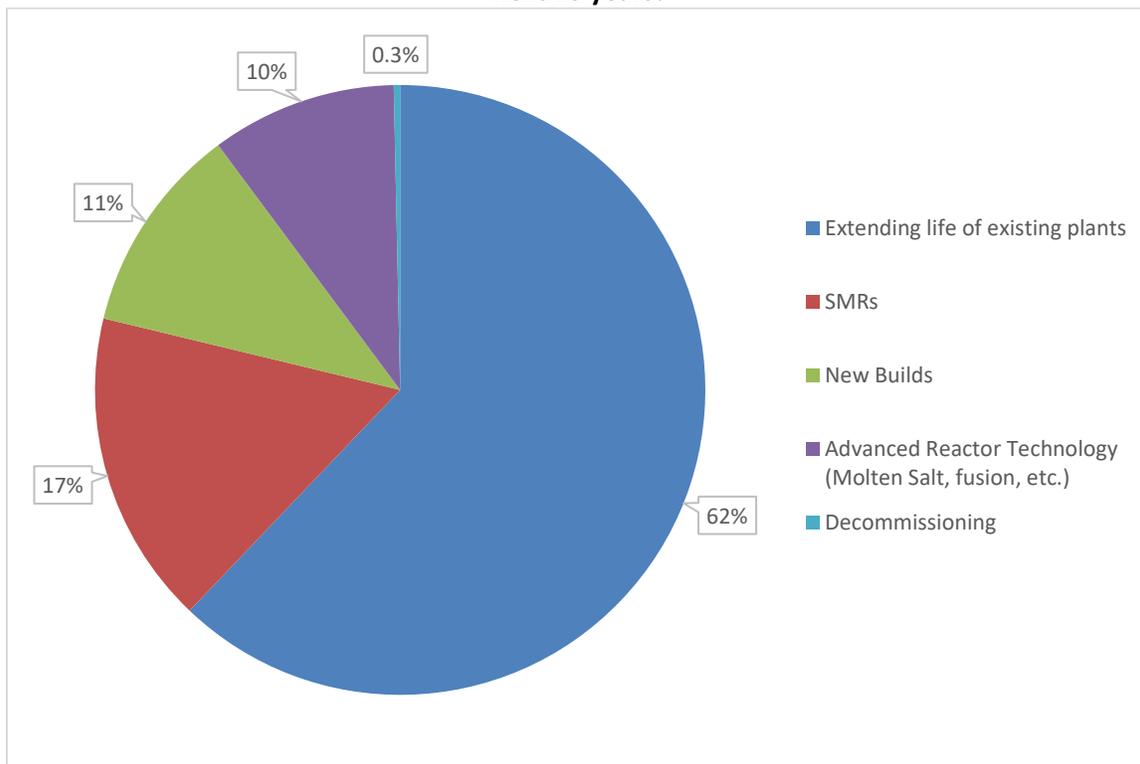


Figure 46 shows responses to the question “What nuclear technology do you think will be the most successful in North American in the next 10 years?” 62% of respondents believe that extending the life of existing plants will be the most successful.

Respondents were able to provide open ended comments to supplement their answer to the above question. Many respondents who choose SMRs or Advanced Reactor Technology provided two reasons, decommissioning of nuclear plants in the unregulated markets and the cancelation of a new plant build, as their reasoning for their selection. Many respondents who choose extending the life of existing plants as their selection, provided additional feedback that their nuclear plant is a large employer in their local area and the local community views the nuclear plant favorably.

Figure 47: Regional Outlook

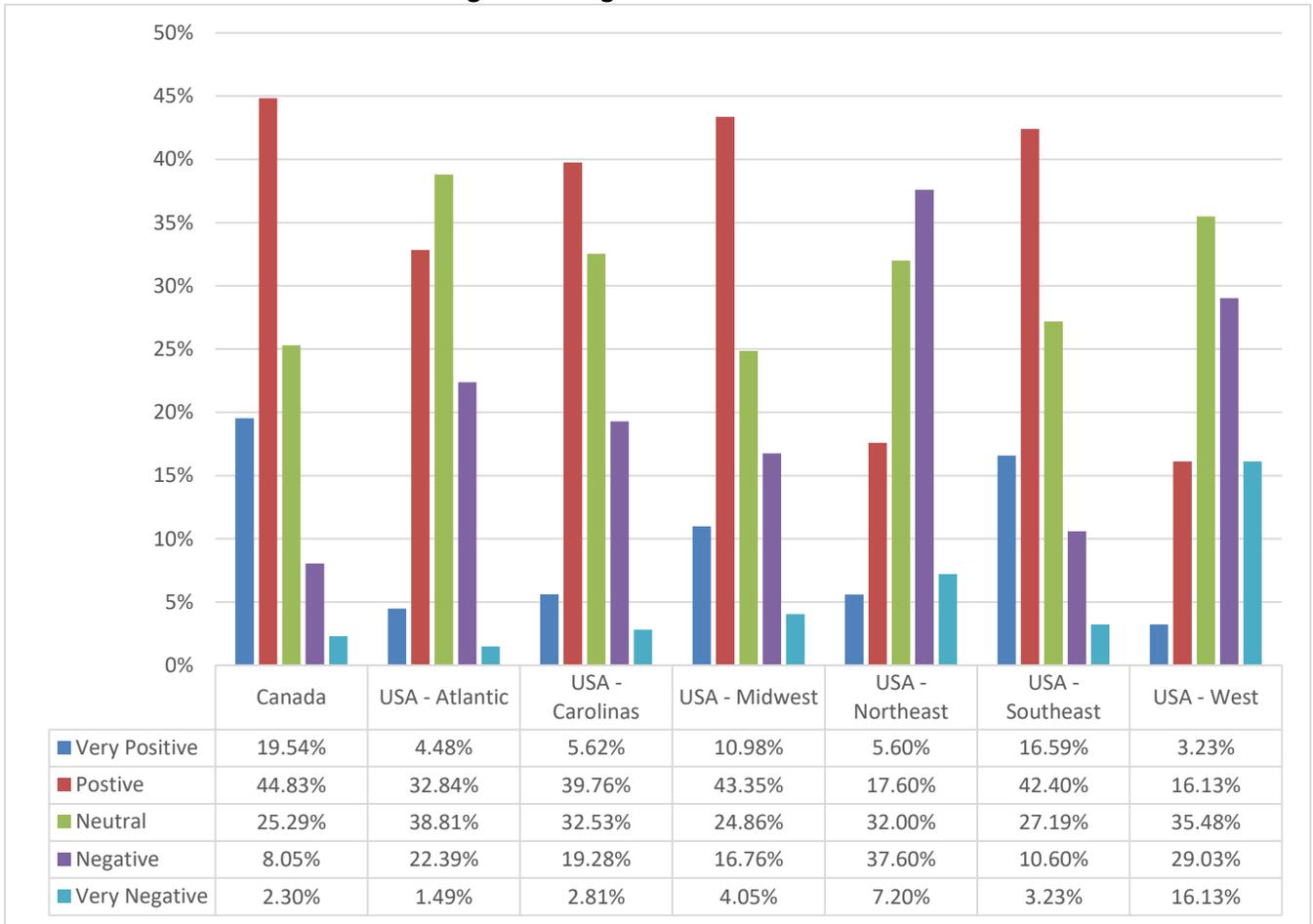


Figure 47 shows the respondents' beliefs on the outlook of nuclear for their region on a scale from very negative to very positive. Regions are defined on page 11 of this report. The most positive respondents are in Canada. In the Northeast and West, the Negative and Neutral responses were greater than the positive responses.

Figure 48: Government Support

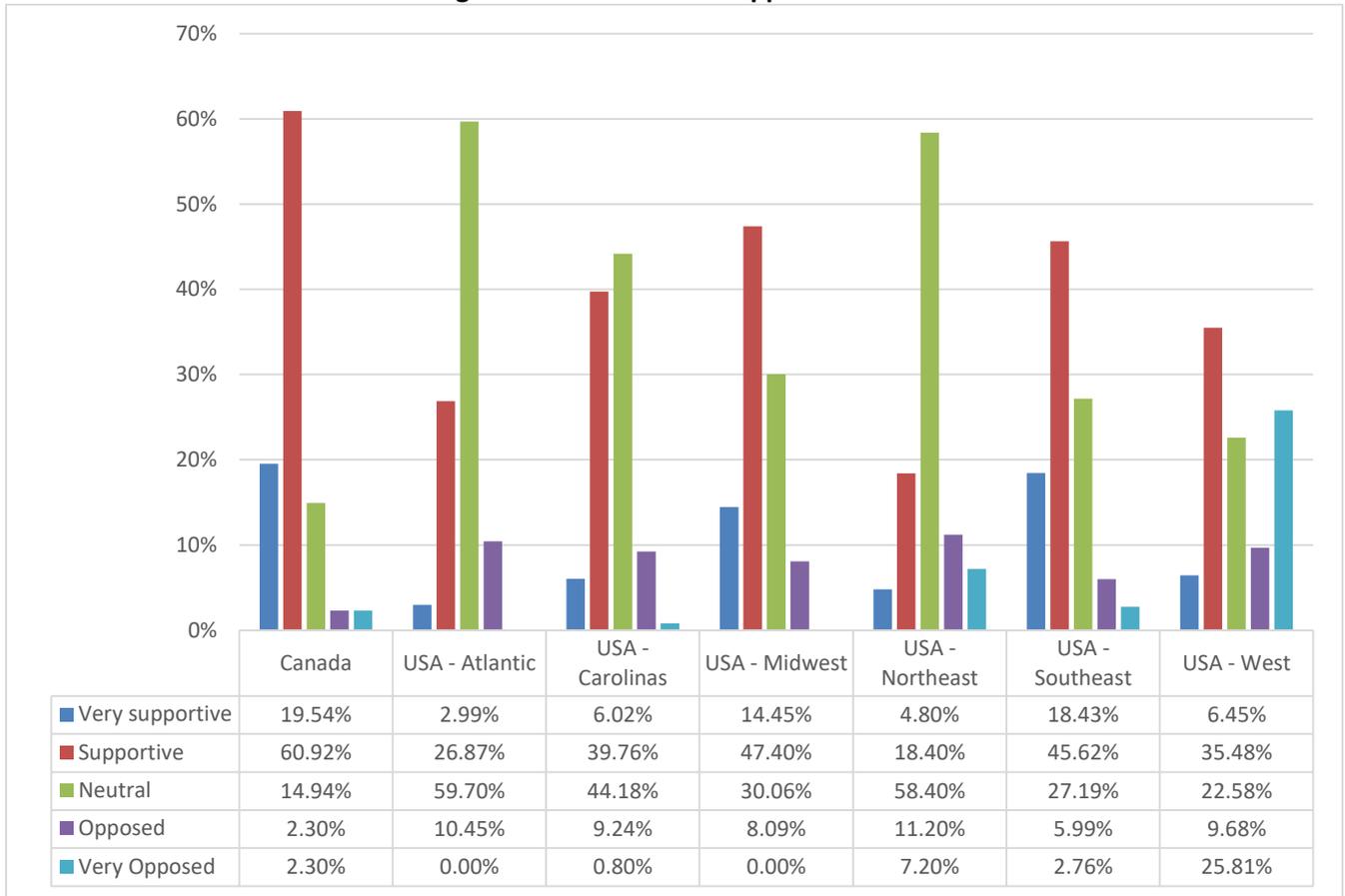


Figure 48 shows the respondents' beliefs of government support for nuclear for their region on a scale from very opposed to very supportive. Regions are defined on page 11 of this report.

XI. NAYGN Related Results

Figure 49: NAYGN Pillar Review

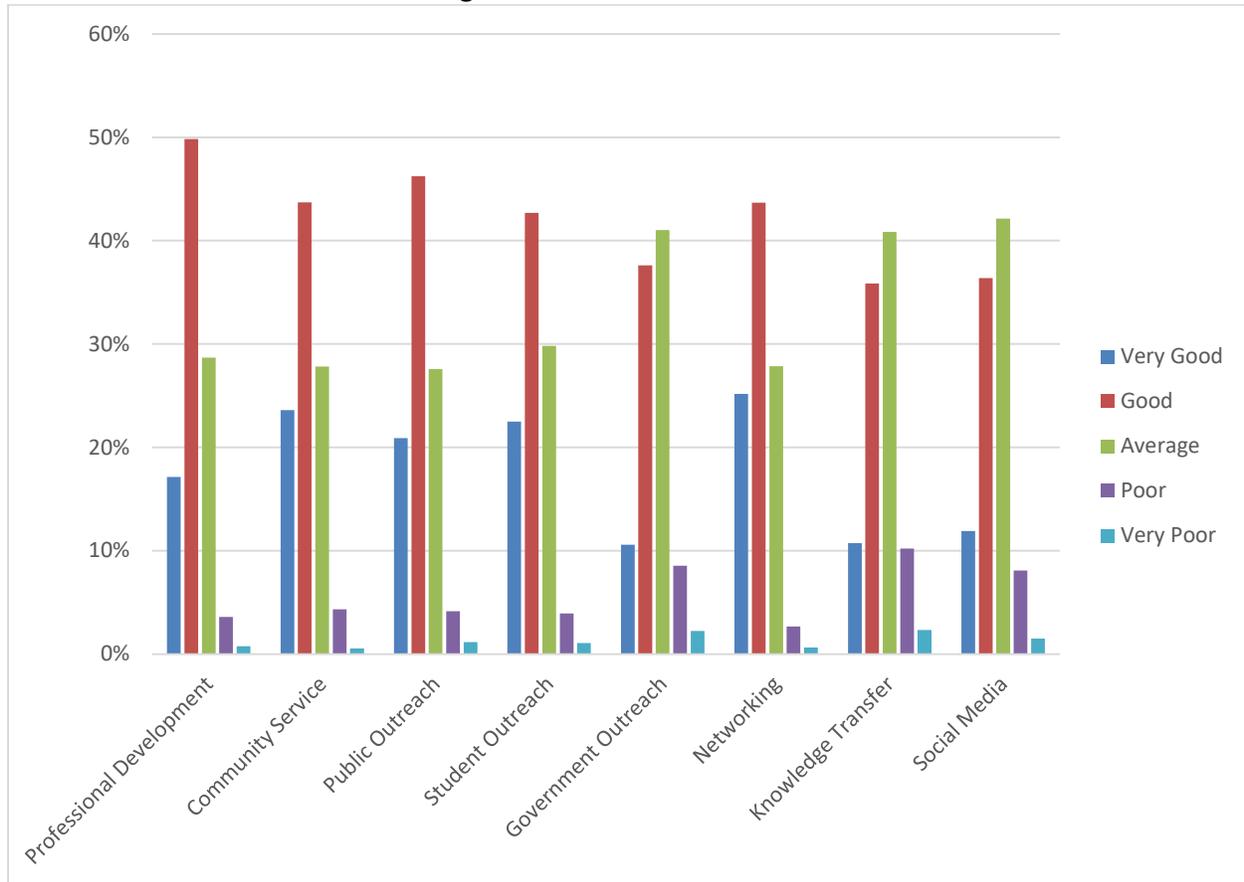


Table 15: NAYGN Pillar Review

	Very Good	Good	Average	Poor	Very Poor
Professional Development	17.1%	49.8%	28.7%	3.6%	0.7%
Community Service	23.6%	43.7%	27.8%	4.3%	0.5%
Public Outreach	20.9%	46.2%	27.6%	4.1%	1.2%
Student Outreach	22.5%	42.7%	29.8%	3.9%	1.1%
Government Outreach	10.6%	37.6%	41.0%	8.5%	2.2%
Networking	25.2%	43.7%	27.8%	2.7%	0.6%
Knowledge Transfer	10.7%	35.9%	40.9%	10.2%	2.3%
Social Media	11.9%	36.4%	42.1%	8.1%	1.5%

Figure 49 and Table 15 show the respondents review of the NAYGN pillars of Professional Development, Knowledge Transfer, Networking, and Outreach. Additionally, the respondents were asked to rank Community Service and Social Media. Respondents were not asked to separate local chapter activities from continental activities when providing feedback.

Based on the results, Government Outreach, Knowledge Transfer, and Social Media are the greatest avenues for growth of the organization in the near term.

Figure 50: 2017 NAYGN Events Attended

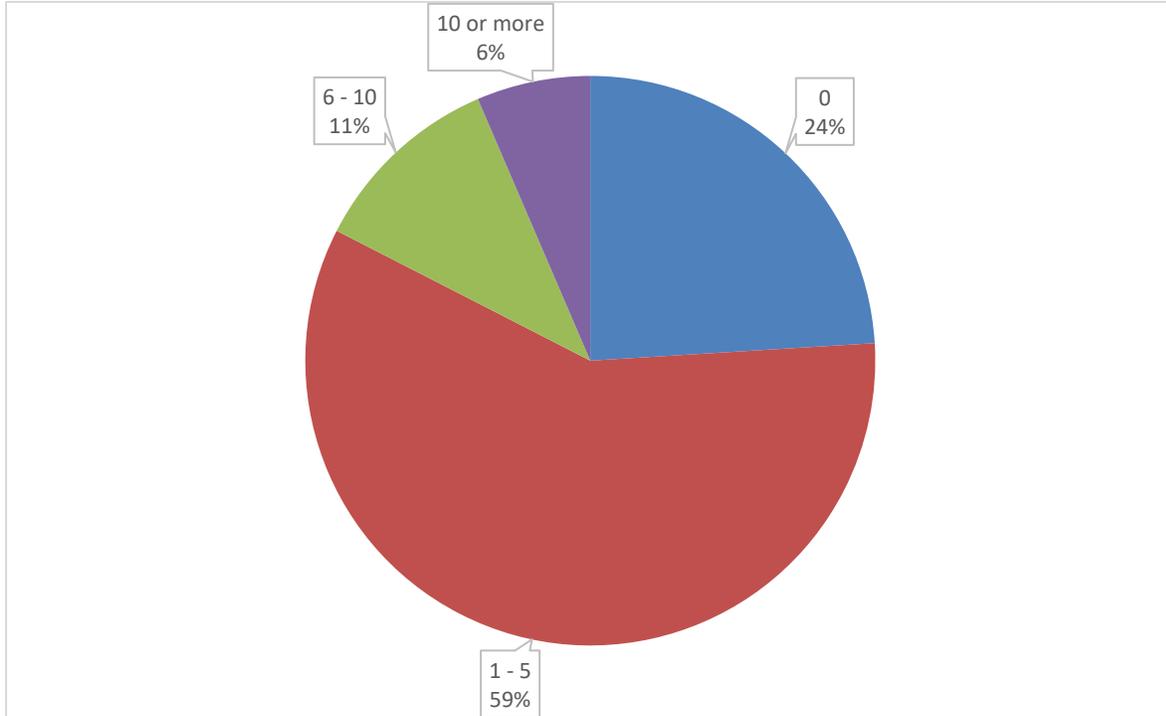


Figure 50 shows how many organized NAYGN events the respondents attended in 2017. 24% of respondents attended 0 events in 2017.

An option to provide feedback through an open-ended response was attached to this question. Respondents who did not attend any NAYGN events in 2017 and provided an open-ended response cited the following reasons for their lack of participation; new to organization, the local chapter is not inclusive of organizations outside of engineering, priority of job responsibilities and increased workload, lack of funding or management support for their local chapter, or lack of management support for respondent's participation in NAYGN.

Table 16: Do you belong to other professional groups? If so, please identify.

Do not belong to any other groups.	33.29%
Women in Nuclear (WiN)	30.48%
American Nuclear Society (ANS) - National	12.63%
American Nuclear Society (ANS) - Local	11.61%
Other (please specify)	9.31%
American Society of Mechanical Engineers (ASME)	8.93%
American Nuclear Society (ANS) - Young Members Group (YMG)	6.25%
Institute of Electrical and Electronics Engineers (IEEE)	5.23%
Society of Women Engineers (SWE)	4.46%
American Society of Civil Engineers (ASCE)	3.44%
National Society of Professional Engineers	2.93%
Veterans in Energy	2.42%
International Youth Nuclear Congress (IYNC)	1.79%
Canadian Nuclear Society (CNS)	1.79%
Engineers Without Borders	1.79%
National Society of Black Engineers (NSBE)	1.66%
American Institute of Chemical Engineers (AIChE)	1.66%
Health Physics Society (HPS)	1.53%
Institute of Nuclear Materials Management (INMM)	1.02%
Society of Hispanic Professional Engineers (SHPE)	0.64%
American Physical Society (APS)	0.38%

Others included:

AABE	Canadian Machinery Vibration Association	Ontario Society of Professional Engineers (OSPE)
Advocates for African Americans	Canadian Radiation Protection Association (CRPA)	Professional Engineers of Ontario (PEO)
AIAA	Canadian Welding Association	Project Management Institute (PMI)
Alberta Society of Professional Biologists	Coordinate Measurement Society(CMS)	Project Management Professional (PMP)
American Academy of Health Physics	Corrective Action Program Owners Group (CAPOG)	PROS (Professional Reactor Operators Society)
American Association of Blacks in Energy (AABE)	Diversity and Inclusion; VOICE	Public Relations Society of America
American Chemical Society	Employee Engagement Committee	PWROG
American Institute of Steel Construction (AISC)	Employee Engagement Council	Saskatchewan Applied Science Technologists & Technicians (SASTT)
American Society of Quality	EPRI, NACE	SEAAK (Structural Engineers Association of Alaska)
American Welding Society	Fiber Optics Association	SMRP - Society of Maintenance and Reliability Professionals

AOPA	HFES	Society of Automotive Engineers (SAE)
ASHRAE	HKN	Society of Fire Protection Engineers (SFPE)
ASQ	International Fluid Power Society	Soroptomist International, Relay for Life
Association for Talent Development	International Society of Automation (ISA)	Toastmasters
ASTE	Local STEM Council	Young Professionals Group
ASTM	MVP - Military Veterans in Power	Young Professionals of Greater Dowagiac
AWS	North American Generator Forum (NAGF)	Ontario Society of Professional Engineers (OSPE)
Bechtel's NextGen	NRRPT	Professional Engineers of Ontario (PEO)

XII. Conclusions and Recommendations

Conclusions

1. Information and awareness plays a crucial role in acceptance of nuclear.

When asked whether the impression of nuclear held by respondents' peers and/or family members had changed since respondents started working in the nuclear industry, 36% of respondents stated that peers/family became more supportive while only 2% were consistently opposed or more opposed. Furthermore, when asked about how members would feel if their children or grandchildren were to work in the nuclear industry, only a small portion were opposed or strongly opposed. These results demonstrate that information and awareness of nuclear are crucial tools to garner public acceptance.

2. Delivering the Nuclear Promise is seen as having a significant impact on the industry, but the progress is not being communicated effectively enough to members.

A majority of members saw Delivering the Nuclear Promise as having either a significant or very significant impact on the nuclear industry. However, when a blank comment box asked requested the respondent's opinion of the Delivering the Nuclear Promise Initiatives over 90% took the time to provide comments (unusually high for a comments question) with many stating they haven't seen the changes implemented or haven't heard updates about the progress. For those respondents familiar with the initiative, they believe it is a good start and an essential initiative for the continued operation and expansion of the nuclear industry. However, many respondents noted that the change has not spread to supporting and regulating organizations. Respondents believe that the initiative can have a greater impact if lean tools and ingenuity are further embraced by the industry.

3. Compared to the general working force defined in the SHRM report [2], survey respondents are satisfied with their "compensation/pay, overall" for their positions. For survey respondents, this rated as the number one most important topic and number seven most satisfied topic. For the general working force, this topic was cited as a top issue and it had one of the largest differences between what was defined as important versus the associated satisfaction (see Table 14).

As evidenced by the Salary and Raise results, employees within the industry are compensated well and average a salary (including bonuses) of \$102,034 and this could attribute to the survey respondent satisfaction.

4. Career advancement opportunities, career development, and the organization's commitment to professional development were identified as top issues in the general responses for Section VIII. Importance vs. Satisfaction. The topic of career advancement opportunities appeared as either the number one or number two top issue for all age ranges and genders.

This shows that survey respondents feel strongly about continuing to improve and have a desire to advance in their career.

5. 71% of respondents strongly agree or agree that they are passion and excitement about their work. While job satisfaction is high, as employees age, their priority of things that are important to them in the workplace change. This also affects how satisfied they are with the things that are important to them.

This information can inform the industry by showing how age plays a role in job satisfaction.

6. There is still a large gap in terms of the ratio of women to men with men accounting for two-thirds of the group. There is also a discernable gap in terms of pay between men and women. Women's starting salary and current total salary are 7% and 11.5% lower than men's, respectively. In specific positions, this gap is as high as 20%.

The results of pay differential are similar to national trends. In the US, the pay gap for women on average is 20% overall, 11% for ages 25 - 34 and 17% for ages 35 - 44. [3] In Canada, the pay gap for women is on average 14%. [4]

7. The most coveted soft skills survey respondents would like to develop are (1) Leadership/Management, (2) software/programing proficiency, (3) Public Speaking and Presentations. The respondents review of the NAYGN pillars showed the greatest opportunities for growth in Government Outreach, Knowledge Transfer, and Social Media.

This information can be used in the future to tailor training programs and NAYGN events to the desires of the NAYGN membership.

Recommendations

The recommendations below are based on the survey team's analysis and interpretation of this data.

For NAYGN:

- Expand public information and political advocacy about nuclear. Review the general regional outlook and government support by region to determine areas that may need the most assistance now.
- Develop programs or initiatives to assist members with career advancement and professional development. These ideas could be a potential avenue for a continued partnership with the industry.
- Seek opportunities to support or enhance industry Knowledge Transfer & Retention efforts.
- Support employee retention and to promote a more positive message for the nuclear industry future, especially in the West and Southeast regions.
- Share gender specific data with Women in Nuclear (WiN) organization. Consider local joint partnerships with WiN due to the high degree of membership overlap between the two organizations.

For the Industry:

- Benchmark government support and public support of the nuclear industry per region and draw conclusions based on social and political differences in such regions.
- Promote cross-training and rotational programs to support the professional development of NAYGN members within the industry.
- The communication method associated with Delivering the Nuclear Promise should be re-evaluated as many members either haven't seen changes or haven't heard updates from the initiative. One-page reports of initiatives that identify the current status, current savings, potential future savings, and next steps could be prepared and shared with the industry on a quarterly basis.
- Be cognizant of the age of the employee and their job satisfaction after being employed for between three and five years with their current company. The results indicate that employees will look for a new career during this time frame. Utilize the job importance vs. satisfaction results to create new programs or initiatives that cater to different groups of employees based upon their age and gender.
- Communication with employees is viewed as an area that can be improved across the board. Whether it be between employees and senior management or between different departments/business units. Explore potential new ways to communicate with employees outside of the normal channels like email and department meetings. Ideas like utilizing a mobile app or sharing quick videos could be useful to a changing workforce.
- Review the current professional development roadmap in place for each employee. Work with the employee to define career steps within the roadmap that are attainable and reachable within a certain time period. Provide the clarity and tools for employees to achieve their next developmental step. This approach will provide a goal for employees to work towards and satisfy the desire to improve as a professional.

XIII. Acknowledgments

The Benchmarking Committee would like to thank the NAYGN Core for their support throughout this project. The Core provided continual timely support and valuable feedback during report development. Our team appreciates the communications support we received with notifications to all NAYGN members as well as chapter lead briefs.

Thank you to the NAYGN members for responding to the survey. Your input is valuable and has helped us form the voice of the young generation in nuclear through the data and this report.

XIII. References

[1] Energy Futures Initiative (EFI) and the National Association of State Energy Officials (NASEO), “U.S. Energy and Employment Report”, May 2018, <https://www.usenergyjobs.org/s/2018-US-Energy-and-Employment-Report-6akj.pdf>

[2] Society for Human Resource Management (SHRM), “2016 Employee Job Satisfaction and Engagement Report”, April 2016, <https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Documents/2016-Employee-Job-Satisfaction-and-Engagement-Report.pdf>

[3] American Association of University Women (AAUW), “The Simple Truth about the Gender Pay Gap”, Spring 2018, https://www.aauw.org/aauw_check/pdf_download/show_pdf.php?file=The-Simple-Truth

[4] Organisation for Economic Co-operation and Development (OECD), (2018), Gender wage gap (indicator), <https://data.oecd.org/earnwage/gender-wage-gap.htm>

Appendix A: Importance vs. Satisfaction Results

Appendix A displays all of the results for importance vs. Satisfaction based upon the tables in Section VIII. Importance vs. Satisfaction.

Table 17: Importance, Satisfaction, and Largest Difference – All Results

	Importance	Satisfaction	Largest difference between Importance vs. Satisfaction
1	Compensation/pay	Relationship with immediate supervisor	Trust between employees and senior management
2	Base rate of pay	Relationship with co-workers	Career advancement opportunities
3	Job security	Defined contribution plans (i.e. 401(k))	Communication between employees and senior management
4	Respectful treatment of all employees at all levels	Benefits, overall	Communication between departments/business units
5	Immediate supervisor's respect for employee's ideas	Paid time off	Career development
6	Relationship with immediate supervisor	Immediate supervisor's respect for employee's ideas	Job-specific training
7	Trust between employees and senior management	Base rate of pay	Organization's commitment to professional development
8	Flexibility to balance life and work issues	Compensation/pay, overall	Opportunities to use skills/abilities
9	Paid time off	Autonomy and independence	Meaningfulness of the job
10	Opportunities to use skills/abilities	Health care/medical benefits	Company's financial stability
11	The work itself	Job security	The work itself

12	Teamwork within department/business unit	Respectful treatment of all employees at all levels	Management's recognition of employee job performance
13	Company's financial stability	Being paid competitively with the local market	Overall corporate culture
14	Benefits, overall	Flexibility to balance life and work issues	Management's communication of organization's goals and strategies
15	Career development opportunities	Teamwork within department/business unit	Teamwork within department/business unit
16	Organization's commitment to professional development	Variety of work	Flexibility to balance life and work issues
17	Meaningfulness of the job	The work itself	Job security
18	Health care/medical benefits	Company's financial stability	Respectful treatment of all employees at all levels
19	Job-specific training	Management's recognition of employee job performance	Company-paid general training
20	Defined contribution plans (i.e. 401(k))	Meaningfulness of the job	Compensation/pay, overall
21	Being paid competitively with the local market	Opportunities to use skills/abilities	Being paid competitively with the local market
22	Career advancement opportunities	Contribution of your work to the company's business goals	Base rate of pay
23	Communication between employees and senior management	Organization's commitment to professional development	Health care/medical benefits

24	Management's recognition of employee job performance	Overall corporate culture	Contribution of your work to the company's business goals
25	Communication between departments/business units	Family-friendly benefits	Immediate supervisor's respect for employee's ideas
26	Overall corporate culture	Management's communication of organization's goals and strategies	Paid time off
27	Relationship with co-workers	Job-specific training	Family-friendly benefits
28	Management's communication of organization's goals and strategies	Wellness program	Networking opportunities
29	Autonomy and independence	Career development	Benefits, overall
30	Contribution of your work to the company's business goals	Company-paid general training	Defined benefit pension plan
31	Variety of work	Defined benefit pension plan	Variety of work
32	Company-paid general training	Networking opportunities	Relationship with immediate supervisor
33	Family-friendly benefits	Communication between employees and senior management	Stock options
34	Networking opportunities	Communication between departments/business units	Defined contribution plans (i.e. 401(k))
35	Defined benefit pension plan	Trust between employees and senior management	Autonomy and independence

36	Wellness program	Career advancement opportunities	Relationship with co-workers
37	Stock options	Stock options	Wellness program

Table 18: Overall Importance by Age – All Results

	<26	26 -30	31 - 35	36 - 40	>40
1	Base rate of pay	Compensation / pay	Compensation /pay	Company's financial stability	Respectful treatment of all employees at all levels
2	Compensation/pay	Flexibility to balance life and work issues	Job security	Respectful treatment of all employees at all levels	Base rate of pay
3	Career advancement opportunities	Base rate of pay	Base rate of pay	Compensation / pay	Compensation / pay
4	Career development opportunities	Job security	Trust between employees and senior management	Base rate of pay	Organization's commitment to professional development
5	Meaningfulness of the job	Immediate supervisor's respect for employee's ideas	Relationship with immediate supervisor	Job security	Defined contribution plans (i.e. 401(k))
6	Flexibility to balance life and work issues	Paid time off	Respectful treatment of all employees at all levels	Job-specific training	Immediate supervisor's respect for employee's ideas
7	Paid time off	Relationship with immediate supervisor	Teamwork within department/business unit	Teamwork within department/business unit	Meaningfulness of the job
9	Opportunities to use skills/abilities	Trust between employees and senior management	Flexibility to balance life and work issues	Meaningfulness of the job	Opportunities to use skills/abilities
8	Trust between employees and senior management	Respectful treatment of all employees at all levels	Paid time off	Immediate supervisor's respect for employee's ideas	Teamwork within department/business unit
10	Job security	Opportunities to use skills/abilities	The work itself	Benefits, overall	Company's financial stability

11	Immediate supervisor's respect for employee's ideas	The work itself	Immediate supervisor's respect for employee's ideas	Opportunities to use skills/abilities	Job security
12	Relationship with immediate supervisor	Benefits, overall	Career development opportunities	The work itself	Relationship with immediate supervisor
13	Organization's commitment to professional development	Company's financial stability	Company's financial stability	Communication between departments/business units	Benefits, overall
14	Respectful treatment of all employees at all levels	Career development opportunities	Benefits, overall	Organization's commitment to professional development	Communication between employees and senior management
15	The work itself	Health care/medical benefits	Opportunities to use skills/abilities	Being paid competitively with the local market	The work itself
16	Being paid competitively with the local market	Career advancement opportunities	Health care/medical benefits	Defined contribution plans (i.e. 401(k))	Trust between employees and senior management
17	Health care/medical benefits	Management's recognition of employee job performance	Organization's commitment to professional development	Career development opportunities	Paid time off
18	Benefits, overall	Defined contribution plans (i.e. 401(k))	Defined contribution plans (i.e. 401(k))	Relationship with immediate supervisor	Management's recognition of employee job performance
19	Company's financial stability	Being paid competitively with the local market	Job-specific training	Health care/medical benefits	Communication between departments/business units
20	Job-specific training	Job-specific training	Communication between employees and senior management	Trust between employees and senior management	Overall corporate culture
21	Teamwork within department/business unit	Organization's commitment to professional development	Being paid competitively with the local market	Paid time off	Flexibility to balance life and work issues
22	Management's recognition of employee job performance	Teamwork within department/business unit	Communication between departments/business units	Communication between employees and senior management	Job-specific training

23	Communication between employees and senior management	Meaningfulness of the job	Career advancement opportunities	Flexibility to balance life and work issues	Being paid competitively with the local market
24	Relationship with co-workers	Communication between employees and senior management	Meaningfulness of the job	Management's recognition of employee job performance	Health care/medical benefits
25	Communication between departments/business units	Communication between departments/business units	Management's recognition of employee job performance	Career advancement opportunities	Management's communication of organization's goals and strategies
26	Defined contribution plans (i.e. 401(k))	Relationship with co-workers	Overall corporate culture	Management's communication of organization's goals and strategies	Career advancement opportunities
27	Management's communication of organization's goals and strategies	Overall corporate culture	Management's communication of organization's goals and strategies	Overall corporate culture	Career development opportunities
28	Overall corporate culture	Management's communication of organization's goals and strategies	Relationship with co-workers	Autonomy and independence	Relationship with co-workers
29	Variety of work	Autonomy and independence	Autonomy and independence	Relationship with co-workers	Contribution of your work to the company's business goals
30	Contribution of your work to the company's business goals	Variety of work	Family-friendly benefits	Contribution of your work to the company's business goals	Company-paid general training
31	Company-paid general training	Company-paid general training	Variety of work	Company-paid general training	Family-friendly benefits
32	Autonomy and independence	Contribution of your work to the company's business goals	Contribution of your work to the company's business goals	Variety of work	Autonomy and independence
33	Networking opportunities	Family-friendly benefits	Company-paid general training	Defined benefit pension plan	Variety of work
34	Family-friendly benefits	Networking opportunities	Networking opportunities	Family-friendly benefits	Defined benefit pension plan
35	Defined benefit pension plan	Defined benefit pension plan	Defined benefit pension plan	Networking opportunities	Networking opportunities
36	Wellness program	Wellness program	Wellness program	Wellness program	Stock options
37	Stock options	Stock options	Stock options	Stock options	Wellness program

Table 19: Overall Satisfaction by Age - All Results

	<26	26 -30	31 - 35	36 - 40	>40
1	Relationship with immediate supervisor	Benefits, overall	Relationship with co-workers	Relationship with immediate supervisor	Defined contribution plans (i.e. 401(k))
2	Relationship with co-workers	Relationship with immediate supervisor	Relationship with immediate supervisor	Relationship with co-workers	Relationship with co-workers
3	Benefits, overall	Defined contribution plans (i.e. 401(k))	Defined contribution plans (i.e. 401(k))	Defined contribution plans (i.e. 401(k))	Immediate supervisor's respect for employee's ideas
4	Immediate supervisor's respect for employee's ideas	Paid time off	Base rate of pay	Benefits, overall	Relationship with immediate supervisor
5	Paid time off	Health care/medical benefits	Compensation/pay, overall	Paid time off	Autonomy and independence
6	Compensation/pay, overall	Relationship with co-workers	Paid time off	Immediate supervisor's respect for employee's ideas	Base rate of pay
7	Respectful treatment of all employees at all levels	Immediate supervisor's respect for employee's ideas	Immediate supervisor's respect for employee's ideas	Compensation/pay, overall	Benefits, overall
9	Job security	Base rate of pay	Benefits, overall	Base rate of pay	Paid time off
8	Base rate of pay	Compensation/pay, overall	Being paid competitively with the local market	Autonomy and independence	Respectful treatment of all employees at all levels
10	Health care/medical benefits	Autonomy and independence	Job security	Being paid competitively with the local market	Variety of work
11	Autonomy and independence	Being paid competitively with the local market	Flexibility to balance life and work issues	Flexibility to balance life and work issues	Compensation/pay, overall
12	Teamwork within department/business unit	Respectful treatment of all employees at all levels	Autonomy and independence	Respectful treatment of all employees at all levels	Meaningfulness of the job
13	Flexibility to balance life and work issues	Job security	The work itself	Opportunities to use skills/abilities	Job security

14	Defined contribution plans (i.e. 401(k))	Teamwork within department/business unit	Respectful treatment of all employees at all levels	Health care/medical benefits	The work itself
15	Being paid competitively with the local market	Company's financial stability	Health care/medical benefits	Job security	Flexibility to balance life and work issues
16	Company's financial stability	Variety of work	Teamwork within department/business unit	The work itself	Health care/medical benefits
17	Organization's commitment to professional development	Flexibility to balance life and work issues	Variety of work	Variety of work	Teamwork within department/business unit
18	Management's recognition of employee job performance	The work itself	Company's financial stability	Meaningfulness of the job	Wellness program
19	Job-specific training	Management's recognition of employee job performance	Opportunities to use skills/abilities	Teamwork within department/business unit	Opportunities to use skills/abilities
20	Overall corporate culture	Organization's commitment to professional development	Meaningfulness of the job	Family-friendly benefits	Management's communication of organization's goals and strategies
21	Company-paid general training	Career development	Management's recognition of employee job performance	Company's financial stability	Being paid competitively with the local market
22	Variety of work	Contribution of your work to the company's business goals	Family-friendly benefits	Management's recognition of employee job performance	Management's recognition of employee job performance
23	Contribution of your work to the company's business goals	Meaningfulness of the job	Contribution of your work to the company's business goals	Wellness program	Contribution of your work to the company's business goals
24	Networking opportunities	Opportunities to use skills/abilities	Organization's commitment to professional development	Contribution of your work to the company's business goals	Company's financial stability
25	Family-friendly benefits	Overall corporate culture	Overall corporate culture	Company-paid general training	Overall corporate culture
26	Career development	Management's communication of	Wellness program	Job-specific training	Defined benefit pension plan

		organization's goals and strategies			
27	The work itself	Defined benefit pension plan	Job-specific training	Overall corporate culture	Family-friendly benefits
28	Management's communication of organization's goals and strategies	Family-friendly benefits	Management's communication of organization's goals and strategies	Organization's commitment to professional development	Communication between employees and senior management
29	Meaningfulness of the job	Job-specific training	Company-paid general training	Defined benefit pension plan	Trust between employees and senior management
30	Wellness program	Wellness program	Networking opportunities	Management's communication of organization's goals and strategies	Communication between departments/business units
31	Communication between departments/business units	Company-paid general training	Defined benefit pension plan	Career development	Networking opportunities
32	Opportunities to use skills/abilities	Trust between employees and senior management	Career development	Networking opportunities	Career development
33	Trust between employees and senior management	Communication between employees and senior management	Communication between departments/business units	Communication between employees and senior management	Organization's commitment to professional development
34	Career advancement opportunities	Networking opportunities	Communication between employees and senior management	Career advancement opportunities	Job-specific training
35	Communication between employees and senior management	Career advancement opportunities	Trust between employees and senior management	Communication between departments/business units	Company-paid general training
36	Defined benefit pension plan	Communication between departments/business units	Career advancement opportunities	Trust between employees and senior management	Career advancement opportunities
37	Stock options	Stock options	Stock options	Stock options	Stock options

Table 20: Largest Difference between Importance vs. Satisfaction by Age – All Results

	<26	26 -30	31 - 35	36 - 40	>40
1	Career advancement opportunities	Trust between employees and senior management	Trust between employees and senior management	Trust between employees and senior management	Career advancement opportunities
2	Opportunities to use skills/abilities	Career advancement opportunities	Career advancement opportunities	Communication between departments/business units	Organization's commitment to professional development
3	Trust between employees and senior management	Communication between departments/business units	Communication between employees and senior management	Communication between employees and senior management	Job-specific training
4	Communication between employees and senior management	Communication between employees and senior management	Career development	Career development	Communication between employees and senior management
5	Career development	Job-specific training	Communication between departments/business units	Career advancement opportunities	Trust between employees and senior management
6	Meaningfulness of the job	Opportunities to use skills/abilities	Job-specific training	Job-specific training	Communication between departments/business units
7	The work itself	Flexibility to balance life and work issues	Organization's commitment to professional development	Organization's commitment to professional development	Career development
9	Communication between departments/business units	Career development	Overall corporate culture	Company's financial stability	Company's financial stability
8	Organization's commitment to professional development	Meaningfulness of the job	Teamwork within department/business unit	Teamwork within department/business unit	Company-paid general training
10	Job-specific training	Organization's commitment to professional development	Management's communication of organization's goals and strategies	Meaningfulness of the job	Overall corporate culture
11	Management's communication of organization's goals and strategies	The work itself	Company's financial stability	Management's communication of organization's goals and strategies	Opportunities to use skills/abilities

12	Management's recognition of employee job performance	Management's recognition of employee job performance	Respectful treatment of all employees at all levels	Job security	Teamwork within department/business unit
13	Company's financial stability	Company's financial stability	Opportunities to use skills/abilities	Management's recognition of employee job performance	Stock options
14	Flexibility to balance life and work issues	Job security	Job security	Respectful treatment of all employees at all levels	Management's recognition of employee job performance
15	Being paid competitively with the local market	Overall corporate culture	The work itself	Overall corporate culture	Job security
16	Variety of work	Company-paid general training	Management's recognition of employee job performance	The work itself	The work itself
17	Overall corporate culture	Teamwork within department/business unit	Meaningfulness of the job	Opportunities to use skills/abilities	Being paid competitively with the local market
18	Contribution of your work to the company's business goals	Management's communication of organization's goals and strategies	Health care/medical benefits	Health care/medical benefits	Meaningfulness of the job
19	Base rate of pay	Respectful treatment of all employees at all levels	Flexibility to balance life and work issues	Base rate of pay	Management's communication of organization's goals and strategies
20	Teamwork within department/business unit	Compensation/pay, overall	Family-friendly benefits	Contribution of your work to the company's business goals	Flexibility to balance life and work issues
21	Compensation/pay, overall	Being paid competitively with the local market	Contribution of your work to the company's business goals	Compensation/pay, overall	Family-friendly benefits
22	Job security	Base rate of pay	Compensation/pay, overall	Being paid competitively with the local market	Respectful treatment of all employees at all levels
23	Company-paid general training	Immediate supervisor's respect for employee's ideas	Company-paid general training	Company-paid general training	Compensation/pay, overall

24	Defined benefit pension plan	Networking opportunities	Base rate of pay	Flexibility to balance life and work issues	Health care/medical benefits
25	Respectful treatment of all employees at all levels	Paid time off	Being paid competitively with the local market	Defined benefit pension plan	Defined benefit pension plan
26	Health care/medical benefits	Relationship with immediate supervisor	Paid time off	Immediate supervisor's respect for employee's ideas	Contribution of your work to the company's business goals
27	Defined contribution plans (i.e. 401(k))	Contribution of your work to the company's business goals	Immediate supervisor's respect for employee's ideas	Family-friendly benefits	Base rate of pay
28	Paid time off	Family-friendly benefits	Benefits, overall	Networking opportunities	Benefits, overall
29	Immediate supervisor's respect for employee's ideas	Health care/medical benefits	Variety of work	Benefits, overall	Networking opportunities
30	Networking opportunities	Defined contribution plans (i.e. 401(k))	Stock options	Paid time off	Paid time off
31	Benefits, overall	Variety of work	Autonomy and independence	Variety of work	Immediate supervisor's respect for employee's ideas
32	Relationship with immediate supervisor	Benefits, overall	Defined benefit pension plan	Defined contribution plans (i.e. 401(k))	Relationship with immediate supervisor
33	Family-friendly benefits	Stock options	Relationship with immediate supervisor	Autonomy and independence	Defined contribution plans (i.e. 401(k))
34	Stock options	Relationship with co-workers	Networking opportunities	Stock options	Variety of work
35	Relationship with co-workers	Defined benefit pension plan	Defined contribution plans (i.e. 401(k))	Relationship with immediate supervisor	Relationship with co-workers
36	Autonomy and independence	Autonomy and independence	Relationship with co-workers	Relationship with co-workers	Autonomy and independence
37	Wellness program	Wellness program	Wellness program	Wellness program	Wellness program

Table 21: Female; Importance, Satisfaction, and Largest Difference – All Results

	Importance	Satisfaction	Largest difference between Importance vs. Satisfaction
1	Job security	Defined contribution plans (i.e. 401(k))	Career advancement opportunities
2	Immediate supervisor's respect for employee's ideas	Relationship with immediate supervisor	Trust between employees and senior management
3	Respectful treatment of all employees at all levels	Paid time off	Communication between departments/business units
4	Compensation/pay	Benefits, overall	Career development
5	Relationship with immediate supervisor	Relationship with co-workers	Communication between employees and senior management
6	Flexibility to balance life and work issues	Immediate supervisor's respect for employee's ideas	Job-specific training
7	Base rate of pay	Base rate of pay	Overall corporate culture
8	Benefits, overall	Health care/medical benefits	Organization's commitment to professional development
9	Opportunities to use skills/abilities	Compensation/pay, overall	Opportunities to use skills/abilities
10	The work itself	Autonomy and independence	Respectful treatment of all employees at all levels
11	Organization's commitment to professional development	Job security	Company's financial stability
12	Teamwork within department/business unit	Flexibility to balance life and work issues	Meaningfulness of the job

13	Trust between employees and senior management	Being paid competitively with the local market	Teamwork within department/business unit
14	Company's financial stability	The work itself	Management's recognition of employee job performance
15	Health care/medical benefits	Teamwork within department/business unit	Job security
16	Career development opportunities	Respectful treatment of all employees at all levels	The work itself
17	Paid time off	Management's recognition of employee job performance	Flexibility to balance life and work issues
18	Communication between employees and senior management	Variety of work	Management's communication of organization's goals and strategies
19	Management's recognition of employee job performance	Opportunities to use skills/abilities	Company-paid general training
20	Job-specific training	Company's financial stability	Being paid competitively with the local market
21	Communication between departments/business units	Organization's commitment to professional development	Compensation/pay, overall
22	Career advancement opportunities	Meaningfulness of the job	Immediate supervisor's respect for employee's ideas
23	Being paid competitively with the local market	Wellness program	Family-friendly benefits
24	Defined contribution plans (i.e. 401(k))	Contribution of your work to the company's business goals	Base rate of pay

25	Meaningfulness of the job	Management's communication of organization's goals and strategies	Health care/medical benefits
26	Overall corporate culture	Networking opportunities	Contribution of your work to the company's business goals
27	Relationship with co-workers	Company-paid general training	Relationship with immediate supervisor
28	Management's communication of organization's goals and strategies	Family-friendly benefits	Benefits, overall
29	Autonomy and independence	Defined benefit pension plan	Networking opportunities
30	Company-paid general training	Overall corporate culture	Variety of work
31	Contribution of your work to the company's business goals	Job-specific training	Paid time off
32	Variety of work	Career development	Defined benefit pension plan
33	Family-friendly benefits	Communication between employees and senior management	Defined contribution plans (i.e. 401(k))
34	Networking opportunities	Trust between employees and senior management	Relationship with co-workers
35	Defined benefit pension plan	Communication between departments/business units	Autonomy and independence
36	Wellness program	Career advancement opportunities	Stock options

37	Stock options	Stock options	Wellness program
----	---------------	---------------	------------------

Table 22: Male; Importance, Satisfaction, and Largest Difference – All Results

	Importance	Satisfaction	Largest difference between Importance vs. Satisfaction
1	Compensation/pay	Relationship with co-workers	Trust between employees and senior management
2	Base rate of pay	Relationship with immediate supervisor	Career advancement opportunities
3	Job security	Benefits, overall	Communication between employees and senior management
4	Paid time off	Defined contribution plans (i.e. 401(k))	Communication between departments/business units
5	Trust between employees and senior management	Immediate supervisor's respect for employee's ideas	Career development
6	Respectful treatment of all employees at all levels	Compensation/pay, overall	Job-specific training
7	Relationship with immediate supervisor	Base rate of pay	Organization's commitment to professional development
8	Flexibility to balance life and work issues	Paid time off	Opportunities to use skills/abilities
9	Immediate supervisor's respect for employee's ideas	Respectful treatment of all employees at all levels	Meaningfulness of the job
10	Opportunities to use skills/abilities	Autonomy and independence	The work itself
11	Meaningfulness of the job	Job security	Management's recognition of employee job performance

12	The work itself	Being paid competitively with the local market	Company's financial stability
13	Company's financial stability	Health care/medical benefits	Management's communication of organization's goals and strategies
14	Teamwork within department/business unit	Flexibility to balance life and work issues	Teamwork within department/business unit
15	Career development opportunities	Teamwork within department/business unit	Flexibility to balance life and work issues
16	Benefits, overall	Variety of work	Job security
17	Organization's commitment to professional development	Company's financial stability	Overall corporate culture
18	Defined contribution plans (i.e. 401(k))	The work itself	Company-paid general training
19	Being paid competitively with the local market	Meaningfulness of the job	Compensation/pay, overall
20	Job-specific training	Management's recognition of employee job performance	Health care/medical benefits
21	Career advancement opportunities	Opportunities to use skills/abilities	Respectful treatment of all employees at all levels
22	Health care/medical benefits	Contribution of your work to the company's business goals	Base rate of pay
23	Communication between employees and senior management	Overall corporate culture	Being paid competitively with the local market

24	Management's recognition of employee job performance	Family-friendly benefits	Contribution of your work to the company's business goals
25	Communication between departments/business units	Organization's commitment to professional development	Paid time off
26	Relationship with co-workers	Job-specific training	Immediate supervisor's respect for employee's ideas
27	Management's communication of organization's goals and strategies	Management's communication of organization's goals and strategies	Defined benefit pension plan
28	Overall corporate culture	Career development	Networking opportunities
29	Autonomy and independence	Company-paid general training	Family-friendly benefits
30	Contribution of your work to the company's business goals	Wellness program	Stock options
31	Variety of work	Defined benefit pension plan	Defined contribution plans (i.e. 401(k))
32	Company-paid general training	Networking opportunities	Variety of work
33	Family-friendly benefits	Communication between departments/business units	Benefits, overall
34	Defined benefit pension plan	Career advancement opportunities	Relationship with immediate supervisor
35	Networking opportunities	Communication between employees and senior management	Autonomy and independence

36	Wellness program	Trust between employees and senior management	Relationship with co-workers
37	Stock options	Stock options	Wellness program

Appendix B: Survey Questions

Thanks for participating in the NAYGN Career Survey. The results collected herein will be summarized in the 2018 Career Report. This report will be available for the 2018 NAYGN National Conference. All responses are kept anonymous.

This survey should take approximately 15 minutes to complete.

*** 1. What NAYGN region do you work in? ([Click here to see the Local Chapters by Region](#))**

- Canada
- Mexico
- USA - Atlantic
- USA - Carolinas
- USA - Midwest
- USA - Northeast
- USA - Southeast
- USA - West

*** 2. Gender:**

- Female
- Male

*** 3. What is your age? (integers only)**

*** 4. Total years of full-time work experience in: (integers only, enter 0 for less than 1 year)**

Current Company	<input type="text"/>
Nuclear Industry	<input type="text"/>
Total throughout Career	<input type="text"/>

*** 5. What is the highest level of school you have completed or the highest degree you have received?**

- High School
- 2 Year Diploma
- Bachelor Degree
- Graduate Degree

*** 6. What level in the organization are you?**

- Intern/Co-op/Student
- Individual Contributor (non-supervisory employee)
- Senior Employee (non-supervisory employee)
- Supervisor (First-line)
- Manager (Director)

*** 7. What category best describes the company you currently work for?**

- Utility
- Vendor / Supplier / Consultant
- Government Organization/Laboratory
- Academic Organization
- Industry Group (INPO, NEI, EPRI, ANS, CNA, CNS etc.)
- Other (please specify)

*** 8. What best describes your current job function?**

- Science (health physics, radiation protection, chemistry, environmental, etc.)
- Engineering
- Operations
- Maintenance
- Security
- Quality Assurance
- Administrative / Non-technical
- HR/Communications
- Organizational effectiveness / Performance Improvement
- Other (please specify)

*** 9. Please answer these questions in integers only. All answers are strictly confidential. (e.g. 50000)**

Starting annual base salary in nuclear industry

Current annual base salary

Current annual **additional** pay (overtime, bonuses, etc.) *Do not combine with base salary*

*** 10. What type of engineering work do you perform?**

- Nuclear
- Electrical
- Mechanical
- Civil
- Chemical
- Software
- Other (please specify)

*** 11. What type of operations position do you perform?**

- Non-licensed
- Licensed

*** 12. Please rank the following work arrangements in your order of preference (regardless of availability to you, 1 being best)**

<input type="text"/>	Standard - Working five 8 hour days in a week
<input type="text"/>	9/80 - Working 80 hours over 9 days (instead of 10)
<input type="text"/>	4/10 - Working four 10 hour days in a week (instead of five 8 hour days)
<input type="text"/>	Part-time Employment
<input type="text"/>	Telecommuting
<input type="text"/>	Flex Hours (flexibility to choose work schedule)

*** 13. How many hours do you work in an average week?**

- <40
- 40 - 45
- 45 - 50
- 50 - 55
- >55

*** 14. In the past two years my average weekly work hours have...**

- Increased
- Stayed the same
- Decreased

*** 15. Do you Agree or disagree with the following?**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I am confident I can meet my work goals.	<input type="radio"/>				
I am determined to accomplish my work goals.	<input type="radio"/>				
I have a clear understanding of my organization's vision/mission.	<input type="radio"/>				
I am highly motivated by my work goals.	<input type="radio"/>				
While at work, I'm almost always completely focused on my work projects.	<input type="radio"/>				
I am provided with the resources to do my job well.	<input type="radio"/>				
I have passion and excitement about my work.	<input type="radio"/>				
I am provided opportunities to support and participate in NAYGN activities.	<input type="radio"/>				

*** 16. Overall, how satisfied are you with your job?**

- I'm very satisfied
- I'm satisfied
- I'm dissatisfied
- I'm very dissatisfied

*** 17. Are you looking for a new job?**

- Yes, I am actively looking
- Yes, I am passively looking
- No

*** 18. Where are you looking for a new job?**

- Outside and inside of the nuclear industry
- Outside of the nuclear industry
- Outside of my company but still within the nuclear industry
- Inside of my company
- N/A

*** 19. How soon would you like to change jobs?**

- 0 – 6 months
- 6 months - 1 year
- 1 - 2 years
- 2 - 5 years

20. Do you have any additional comments on topics discussed above?

*** 21. What could be the top reason that makes you leave the nuclear industry?**

- Momentum against innovative solutions
- Pursuit of higher compensation
- Lack of advancement / growth opportunities
- Location
- Work is not challenging enough
- Corporate Culture / Leadership Style Differences
- Uncertainty Around the Future of Nuclear

*** 22. In 5 years, do you still see yourself working in the nuclear industry?**

- Yes, I am satisfied with my career in the nuclear industry
- Yes, if there are leadership opportunities
- No, my career goals will take me outside of the nuclear industry
- No, I have concerns about the future of our industry

23. Do you have any additional comments on topics discussed above?

*** 24. How important are the following job benefits to you?**

	Very Important	Important	Neutral	Unimportant	Very Unimportant
Base rate of pay	<input type="radio"/>				
Compensation/pay, overall	<input type="radio"/>				
Being paid competitively with the local market	<input type="radio"/>				
Paid time off	<input type="radio"/>				
Health care/medical benefits	<input type="radio"/>				
Benefits, overall	<input type="radio"/>				
Flexibility to balance life and work issues	<input type="radio"/>				
Family-friendly benefits	<input type="radio"/>				
Defined contribution plans (i.e. 401(k))	<input type="radio"/>				
Defined benefit pension plan	<input type="radio"/>				
Wellness program	<input type="radio"/>				
Stock options	<input type="radio"/>				

*** 25. How satisfied are you with the following job benefits?**

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Base rate of pay	<input type="radio"/>				
Compensation/pay, overall	<input type="radio"/>				
Being paid competitively with the local market	<input type="radio"/>				
Paid time off	<input type="radio"/>				
Health care/medical benefits	<input type="radio"/>				
Benefits, overall	<input type="radio"/>				
Flexibility to balance life and work issues	<input type="radio"/>				
Family-friendly benefits	<input type="radio"/>				
Defined contribution plans (i.e. 401(k))	<input type="radio"/>				
Defined benefit pension plan	<input type="radio"/>				
Wellness program	<input type="radio"/>				
Stock options	<input type="radio"/>				

*** 26. How important are the following to you?**

	Very Important	Important	Neutral	Unimportant	Very Unimportant
Job security	<input type="radio"/>				
Company's financial stability	<input type="radio"/>				
The work itself	<input type="radio"/>				
Opportunities to use skills/abilities	<input type="radio"/>				
Meaningfulness of the job	<input type="radio"/>				
Relationship with co-workers	<input type="radio"/>				
Variety of work	<input type="radio"/>				
Autonomy and independence	<input type="radio"/>				
Career development opportunities	<input type="radio"/>				
Career advancement opportunities	<input type="radio"/>				
Contribution of your work to the company's business goals	<input type="radio"/>				

*** 27. How satisfied are you with each of the following?**

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Job security	<input type="radio"/>				
Company's financial stability	<input type="radio"/>				
The work itself	<input type="radio"/>				
Opportunities to use skills/abilities	<input type="radio"/>				
Meaningfulness of the job	<input type="radio"/>				
Relationship with co-workers	<input type="radio"/>				
Variety of work	<input type="radio"/>				
Autonomy and independence	<input type="radio"/>				
Career development opportunities	<input type="radio"/>				
Career advancement opportunities	<input type="radio"/>				
Contribution of your work to the company's business goals	<input type="radio"/>				

*** 28. How important are the following to you?**

	Very Important	Important	Neutral	Unimportant	Very Unimportant
Relationship with immediate supervisor	<input type="radio"/>				
Management's recognition of employee job performance	<input type="radio"/>				
Immediate supervisor's respect for employee's ideas	<input type="radio"/>				
Management's communication of organization's goals and strategies	<input type="radio"/>				
Trust between employees and senior management	<input type="radio"/>				
Communication between employees and senior management	<input type="radio"/>				

*** 29. How satisfied are you with each of the following?**

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Relationship with immediate supervisor	<input type="radio"/>				
Management's recognition of employee job performance	<input type="radio"/>				
Immediate supervisor's respect for employee's ideas	<input type="radio"/>				
Management's communication of organization's goals and strategies	<input type="radio"/>				
Trust between employees and senior management	<input type="radio"/>				
Communication between employees and senior management	<input type="radio"/>				

*** 30. How important are the following to you?**

	Very Important	Important	Neutral	Unimportant	Very Unimportant
Organization's commitment to professional development	<input type="radio"/>				
Overall corporate culture	<input type="radio"/>				
Respectful treatment of all employees at all levels	<input type="radio"/>				
Teamwork within department/business unit	<input type="radio"/>				
Communication between departments/business units	<input type="radio"/>				
Company-paid general training	<input type="radio"/>				
Job-specific training	<input type="radio"/>				
Networking opportunities	<input type="radio"/>				

*** 31. How satisfied are you with each of the following?**

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Organization's commitment to professional development	<input type="radio"/>				
Overall corporate culture	<input type="radio"/>				
Respectful treatment of all employees at all levels	<input type="radio"/>				
Teamwork within department/business unit	<input type="radio"/>				
Communication between departments/business units	<input type="radio"/>				
Company-paid general training	<input type="radio"/>				
Job-specific training	<input type="radio"/>				
Networking opportunities	<input type="radio"/>				

*** 32. What types of soft skill (communication, presentation, etc.) training options are available at your company?**

- Classroom
- Online
- Reading Material, Handouts, etc.
- None Available

33. How effective is the classroom training?

- Very Effective
- Effective
- Ineffective
- Very Ineffective
- Do Not Utilize
- Not Available

34. How effective is the online training?

- Very Effective
- Effective
- Ineffective
- Very Ineffective
- Do Not Utilize
- Not Available

35. How effective is the reading material/handout training?

- Very Effective
- Effective
- Ineffective
- Very Ineffective
- Do Not Utilize
- Not Available

*** 36. What types of soft skill skills would you like to develop?**

- Public Speaking & Presentations (Material, Layout, Organization, etc.)
- Communication
- Leadership / Management
- Networking
- Teamwork
- Software / Programming Proficiency
- None

*** 37. Does your company offer rotational programs in nuclear? If so, do you believe it is valuable?**

- Yes, valuable
- No, not valuable
- Not offered

*** 38. How has your peers/family impression of nuclear changed since you started working in the industry?**

- More supportive
- Consistently supportive
- Consistently opposed
- More opposed

*** 39. How would you feel if your children/grandchildren were to work in the nuclear industry?**

- Strongly in favor
- In favor
- Neutral
- Opposed
- Strongly opposed

*** 40. What type of impact do you think the Delivering the Nuclear Promise initiatives will have on the industry?**

- Very Significant
- Significant
- No Impact
- Detrimental
- Very Detrimental

*** 41. What are your general thoughts on the Delivering the Nuclear Promise initiatives?**

*** 42. What nuclear technology do you think will be the most successful in North America in the next 10 years?**

- New Builds
- Extending life of existing plants
- SMRs
- Advanced Reactor Technology (Molten Salt, fusion, etc.)
- Other (please specify)

*** 43. How would you rate the outlook of the nuclear industry in your region?**

- Very Positive
- Postive
- Neutral
- Negative
- Very Negative

Please provide a reason for your rating.

*** 44. How would you rate government support for the nuclear industry in your region?**

- Very supportive
- Supportive
- Neutral
- Opposed
- Very Opposed

Please provide a reason for your rating.

*** 45. How many NAYGN sponsored events (local chapter and national) have you attended in the last 12 months?**

- 0
- 1 - 5
- 6 - 10
- 10 or more

*** 46. How do you believe NAYGN has performed in the following areas this year?**

	Very Good	Good	Average	Poor	Very Poor
Professional Development	<input type="radio"/>				
Community Service	<input type="radio"/>				
Public Outreach	<input type="radio"/>				
Student Outreach	<input type="radio"/>				
Government Outreach	<input type="radio"/>				
Networking	<input type="radio"/>				
Knowledge Transfer	<input type="radio"/>				
Social Media	<input type="radio"/>				

47. What key areas can NAYGN improve upon?

48. Do you belong to other professional groups? If so, please identify.

- Do not belong to any other groups.
- American Nuclear Society (ANS) - Local
- American Nuclear Society (ANS) - National
- American Nuclear Society (ANS) - Young Members Group (YMG)
- Health Physics Society (HPS)
- Veterans in Energy
- Women in Nuclear (WiN)
- International Youth Nuclear Congress (IYNC)
- Institute of Nuclear Materials Management (INMM)
- National Society of Professional Engineers
- Institute of Electrical and Electronics Engineers (IEEE)
- American Society of Civil Engineers (ASCE)
- American Physical Society (APS)
- American Society of Mechanical Engineers (ASME)
- Society of Women Engineers (SWE)
- National Society of Black Engineers (NSBE)
- Society of Hispanic Professional Engineers (SHPE)
- American Institute of Chemical Engineers (AIChE)
- Canadian Nuclear Society (CNS)
- Engineers Without Borders
- Other (please specify)

*** 49. The length of this survey was:**

- Too short
- Just right
- Too long

50. Please provide your feedback or comments on any of the topics addressed in this survey.

51. Lastly, thank you for your participation in this survey! Before you complete it, please navigate to the following survey link to keep your responses anonymous and to be entered into a random drawing to win one of three prizes below!

[CLICK HERE TO ENTER YOUR CONTACT INFORMATION](#)

1) Travelpro Platinum Magna Carry

2) Amazon Fire HD 8 Tablet

3) Beats Solo3 Wireless On-Ear Headphones



Email: info@naygn.org

Web: www.naygn.org

North American Young Generation in Nuclear

P.O. Box 32642

Charlotte, NC 28232-2642