NAYGN

NORTH AMERICAN YOUNG GENERATION IN NUCLEAR

2020 NAYGN

Career Report

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2020 NAYGN Benchmarking Committee

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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.

This survey was conducted in the fall of 2019 (prior to any impact to employment from COVID-19). As in previous surveys, this report addresses several main topics relevant to NAYGN members and their career, including demographic information, salary, work hours, job satisfaction, job importance vs. satisfaction, professional development and training, and nuclear outlook. Participants were also asked to rate their satisfaction with NAYGN and the opportunities NAYGN offers. Analysis of the collected data provided new insights and confirmed existing conclusions about the young generation in the nuclear industry.

In total, 933 employees of the nuclear industry responded to the survey. The survey responses were diverse in regions and age, as results spanned across seven different regions in North America and six different age brackets. The results were not as diverse in ethnicity as nearly 77% of respondents were Caucasian / White. Job positions were diverse from students and individual contributors, to managers and senior leaders. The broad range of experience assisted with multi-layered analysis based on the questions asked within the survey.

The results show that of the respondents, 57% of employees have been with their current company for less than five years. For the total data analyzed, 63% of respondents have spent their entire careers in nuclear with 95% of respondents having some form of higher education post high school. Nearly 66% of respondents indicated they work 40-45 hours per week and only ~7.2% working less than 40 or part time hours.

Starting salaries were above $50,000 annually for 83% of respondents with careers in Operations, Quality / Oversight, Training and Project Management providing the highest current salaries. Similarly, to previous surveys, there is a significant gender-based difference with females having a lower salary in both starting and current salaries. Some of the pay gap may be attributed to differences in years of experience, however, the individual contributor job function as the largest sample size showed that men's salary averaged more than women even after the average compensation is normalized by years of experience. Overall the results were more favorable than previous surveys. There are significant statistical differences from the average current salaries for Black or African American (-2.35) and Hispanic/Latino (-1.36) respondents.

18.8% of respondents indicated organizational level of Supervisors, Managers, and Senior Leaders, however, this drops to 13.6% for non-Caucasian / White respondents compared to 20% for Caucasian / White respondents. This may indicate an area for companies to review opportunities for minorities in leadership roles.

For overall job satisfaction, the results indicate that 87% of respondents are Satisfied or Very Satisfied with their job. The most important aspects of the workplace were cited as Compensation / Pay, Flexibility to Balance Life and Work Issues, and Paid Time Off. The aspects with the lowest levels of satisfaction were cited as Trust Between Employees and Senior Leadership, Career Development / Advancement Opportunities, and their Organization's Financial Stability.

While a majority of young professionals report high levels of satisfaction with their jobs, the analysis shows a larger population of employees willing to seek new employment despite their current satisfaction levels. Of the respondents, 47% are looking for new employment (actively or passively) with 18% looking solely outside of the nuclear industry. Respondents indicated that their top reasons for leaving the nuclear industry would be attributed to Uncertainty Around the Future of Nuclear (19.24%); Lack of Advancement / Growth Opportunities (14.49%); and Lack of Work / Life Balance (12.11%).

Respondents provided clarity on how they viewed the general outlook of the nuclear industry and government support within their region. The results show a generally positive perspective; however, the USA-Midwest and USA-Northeast regions have the least positive support in their community. General outlook and government support were perceived to be the highest in the Canadian region while lowest in the USA-Northeast and USA-West regions.

Respondents demonstrated that they were most interested in Leadership and Management skill development and least interested in Software / Programming Proficiency regardless of position in the company.

NAYGN chapters remaining actively engaged was a uniform trend across the regions. This is a positive sign of a healthy organization. Members of NAYGN continue to be actively engaged in their career and have a passion for their industry.

II. Introduction

As the nuclear 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. A significant portion of the 2020 survey was kept similar to previous years' surveys to allow for trending between reports.

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

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

III. Methodology and Data Collection

The development of the 2020 NAYGN Career Report occurred in three phases from August 2019 to May 2020. The first two phases, survey creation and analysis, focused on establishing survey methodology, data collection, and analysis of the responses. The final phase was report writing, which used the data analysis to gather conclusions and make recommendations accordingly.

During survey creation, the Benchmarking Committee agreed to use similar survey questions from the previous Career Reports, but also include new questions based upon feedback from previous surveys. In particular, the 2020 survey expanded its questions regarding regional nuclear outlook and respondents' views on various initiatives designed to improve the efficiency of industry operations. Additionally, the Committee added new questions regarding ethnicity and household makeup.

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 37 questions (plus 2 questions requesting feedback regarding the survey length and topics) 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 conclusions are included in the report.

The survey was open from October 21, 2019 to December 20, 2019. 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 933 respondents and all survey responses collected were anonymous.

Analysis was prepared in a similar manner to the 2018 Career Report [1]. When applicable, trends between the current and 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 933 survey respondents.

IV. Demographic Information

This section defines the demographics of the survey respondents. The demographic data is used in multiple sections to provide an additional layer to the analysis of the response data.

FIGURE 1: DISTRIBUTION OF AGE

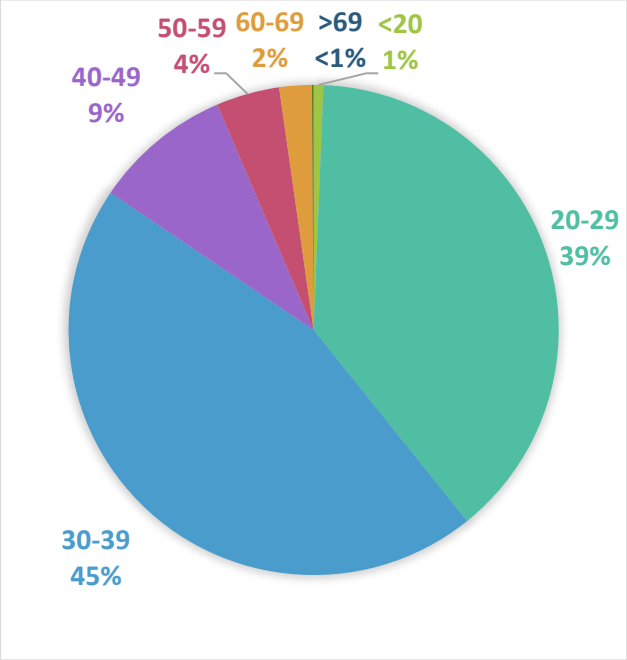


FIGURE 2: DISTRIBUTION OF GENDER

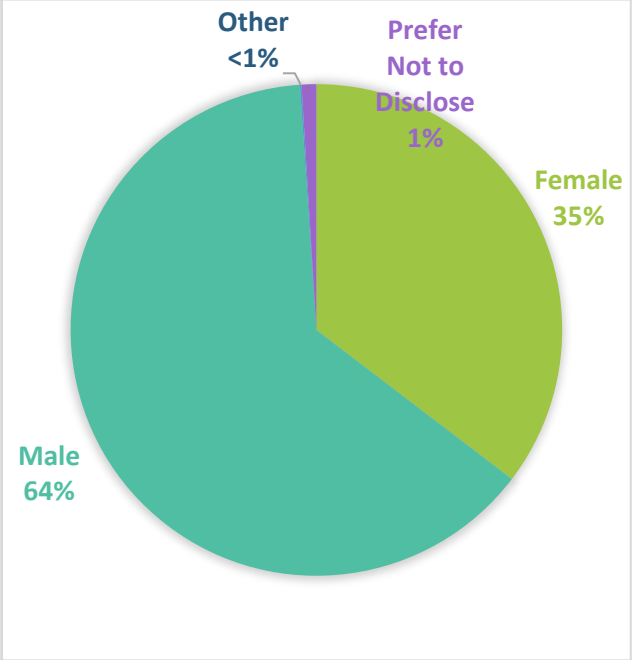


Figure 1 shows the age distribution of respondents. This year the survey was broken down into a wider age range for responses but achieved results similar to previous surveys with the majority of responders < age 40.

Figure 2 defines the distribution of male and female survey respondents. This year's distribution aligns with the gender distribution of nuclear employees defined in the 2019 US Energy and Employment Report [2]. The 2019 US Energy and Employment Report shows that in 2019, approximately 62% of nuclear industry employees were male and 38% were female.

TABLE 1: DISTRIBUTION OF RESPONSES BY NAYGN REGIONS

Canada	USA-Atlantic	USA-Carolinas	USA-Midwest	USA-Northeast	USA-Southeast	USA-West
14.3%	8.3%	10.8%	22.4%	16.7%	22.2%	5.3%

Table 1 shows the breakdown by region of NAYGN responders. NAYGN regions are divided and contain chapters in the following states/provinces:

- Canada (Ontario, Saskatchewan, and New Brunswick)
- USA-Atlantic (Virginia, Maryland, and District of Columbia)
- USA-Carolinas (South Carolina 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 3: Distribution of Ethnicity

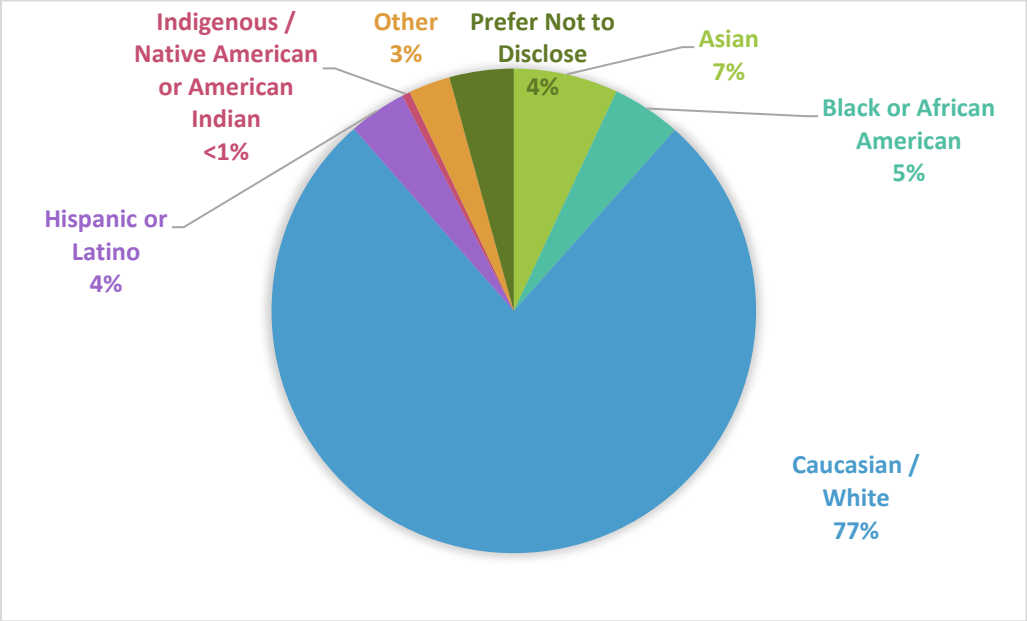


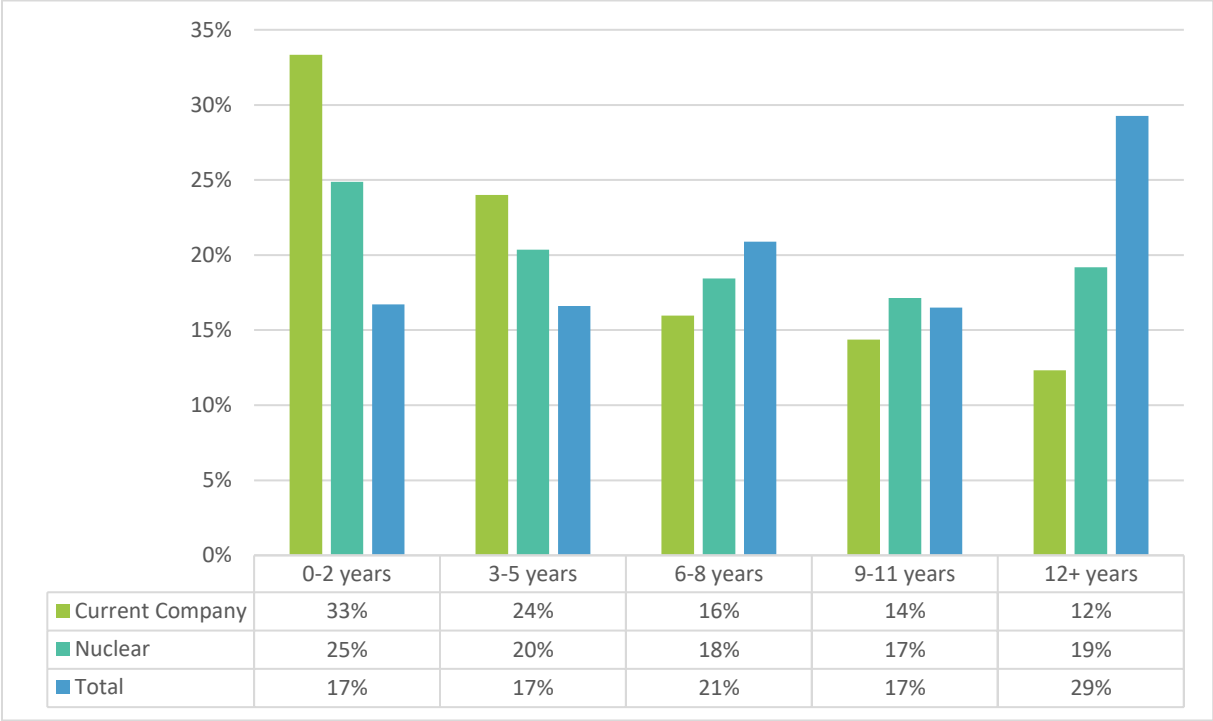
Figure 3 shows the ethnic distribution of respondents, which differed considerably from the distribution of ethnicities in the nuclear industry defined in the 2019 US Energy and Employment Report [2]. 5% of survey respondents identified as Black or African American vs a 12% industry average published in the 2019 US Energy and Employment Report [2]. Additionally, 4% of survey respondents identified as Hispanic or Latino vs a 15% published industry average, and only 7% of respondents identified as Asian vs an 11% published industry average.

Table 2: Type of Household

Single	**40%**
Single with Children	5%
Single with No Children	20%
Single, But Did Not Respond with Parental Status	75%
Married	**57%**
Married with Children	36%
Married with No Children	14%
Married, But Did Not Respond with Parental Status	50%

This year's survey introduced a question regarding the makeup of respondents' households and Table 2 displays these results. The question requested that each respondent to check all options that apply, so the results reflect accordingly. Table 2 shows that 57% of total respondents indicated they were married, and 40% indicated they were single (3% did not select either option). The subsequent rows in Table 2 then show the subsets of those populations broken down by parental status (i.e. 57% of total respondents selected Married, and 36% of that population selected Parent). Overall, 24% of respondents indicated they were parents.

FIGURE 4: YEARS OF EXPERIENCE

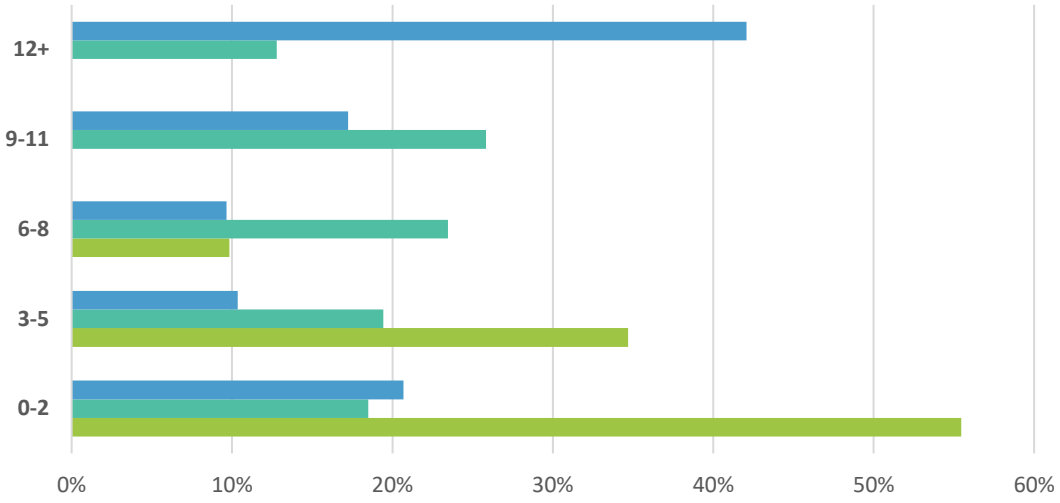


	0-2 years	3-5 years	6-8 years	9-11 years	12+ years
Current Company	33%	24%	16%	14%	12%
Nuclear	25%	20%	18%	17%	19%
Total	17%	17%	21%	17%	29%

Figure 4 defines the amount of experience of the survey respondents. The survey asked how long respondents have been working at their current company, how long they have been working in the nuclear industry, and how long they have been working in the professional workforce.

It can be noted that approximately 57% of employees have been with their current company for less than five years, which is appreciably less than the 68% of 2018 Career Survey respondents who had been with their current company for the same amount of time [1]. Additionally, 64% of respondents have been in the nuclear industry for 8 years or less, which is less than the 68% from the 2018 Career Report, continuing the trend of employees remaining in the nuclear industry identified in the 2018 report. For the total data analyzed, 63% of respondents have spent their entire careers in the nuclear industry.

Figure 5: Years At Current Company By Age Group



	0-2	3-5	6-8	9-11	12+
40 and Over	21%	10%	10%	17%	42%
30-39	18%	19%	23%	26%	13%
Under 30	55%	35%	10%	0%	0%

Figure 5 shows total years spent at each respondent's current company broken down by age group. Respondents age 40 and over have the highest number of people who have worked 12+ years at their current company (42%); however, interestingly, ~20% of the same age group have only been at their current company for 2 or less years. The majority (69%) of respondents age 30-39 have been at their current company for 3-11 years vs only 37% of respondents 40+ years old who have been there 3-11 years.

Figure 6: Highest Level of Education

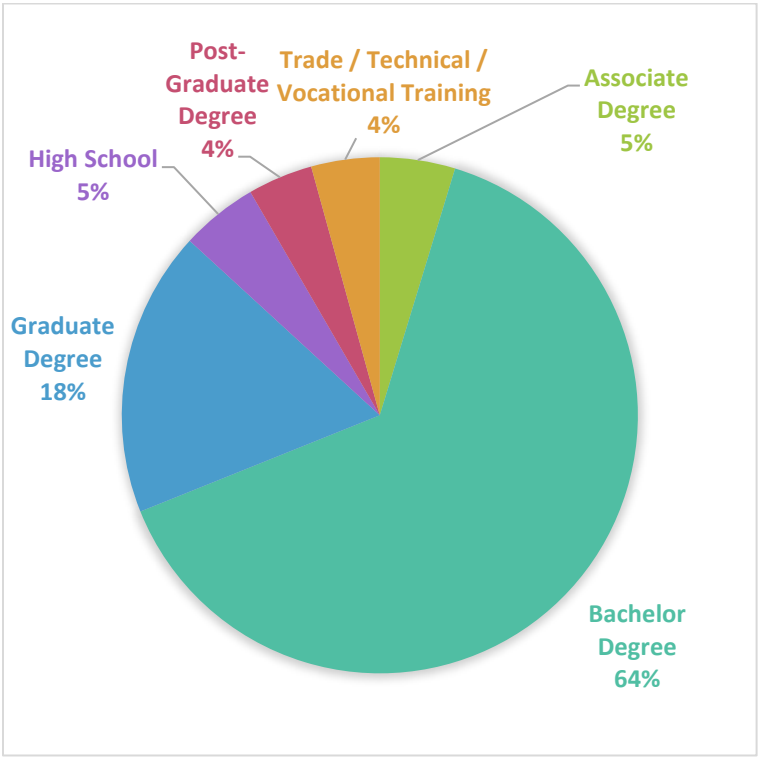


Figure 6 displays the highest level of education of the survey respondents. These numbers match those obtained by the 2018 Career Report [1]; however, this year's survey provided the additional responses of "Post-Graduate Degree" and "Trade / Vocational / Technical Training." The following results are identical to those obtained in the 2018 Career Report: High School as highest level of education (5%), Bachelor Degree as highest level of education (64%), and Associate's Degree as highest level of education (5%).

FIGURE 7: HIGHEST LEVEL OF EDUCATION BY AGE GROUP

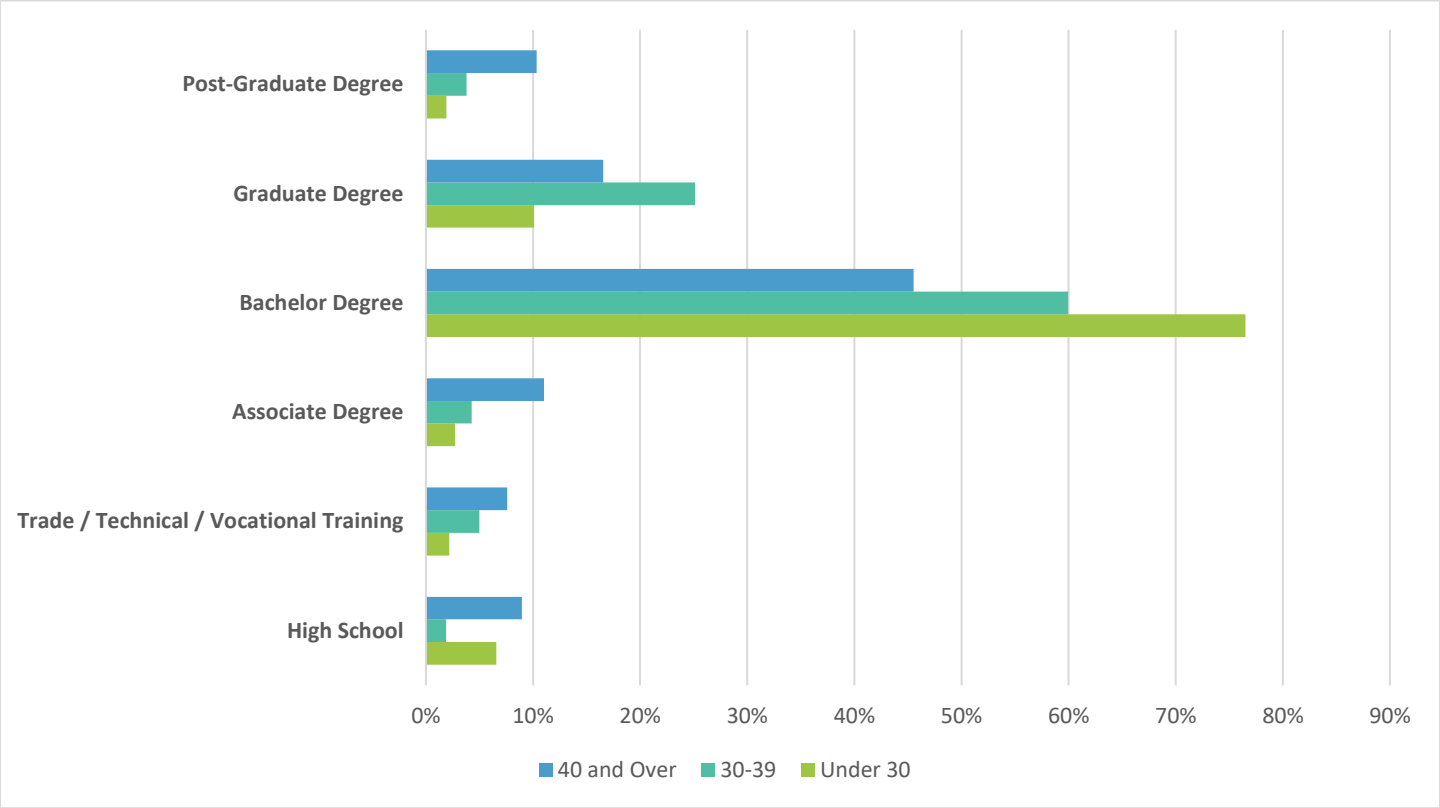


Figure 7 shows the breakdown of respondents' highest level of education by age group. Respondents 40+ years old have a much more varied level of education, with 55% having completed a level of education other than a Bachelor Degree. Conversely, 77% of respondents under 30 years old pursued a Bachelor Degree, with only 23% taking a different path (either additional education beyond a Bachelor's or a different path altogether).

FIGURE 8: CURRENT POSITION

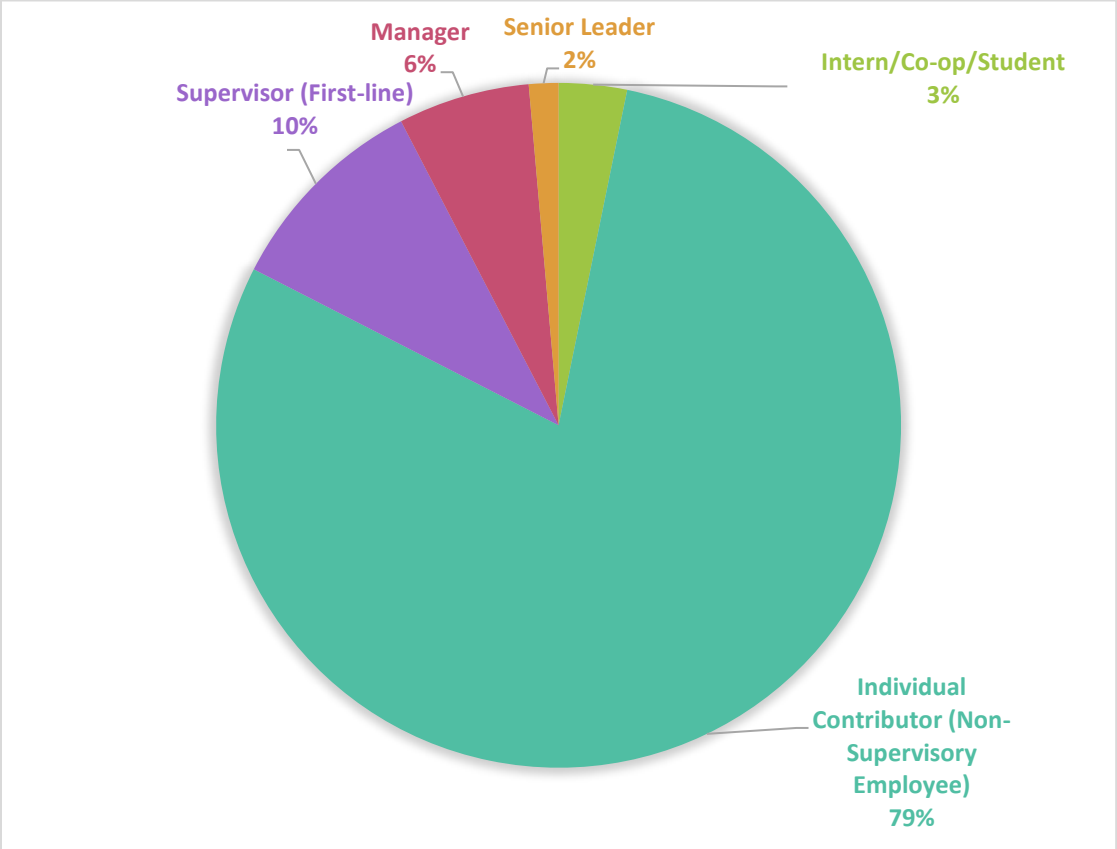
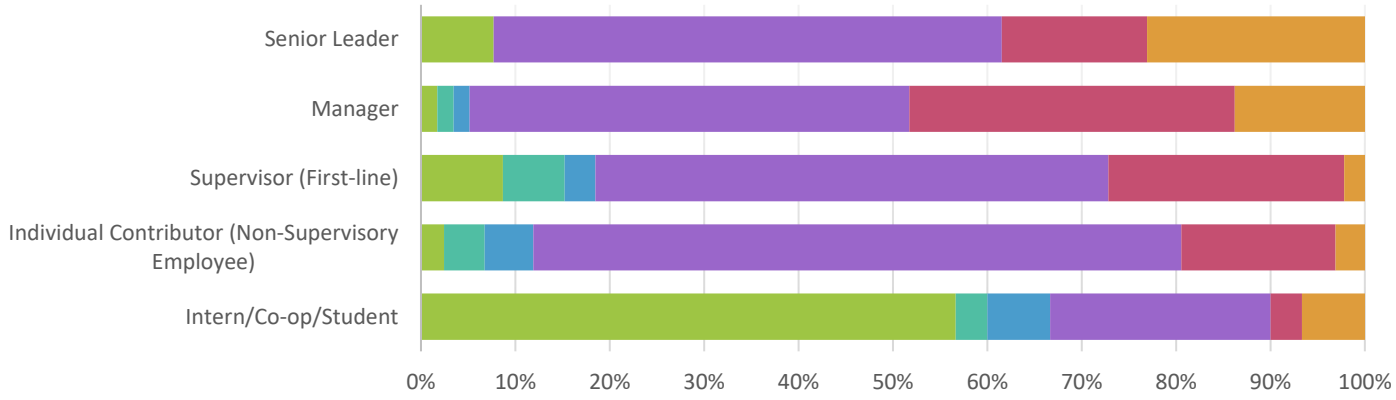


Figure 8 displays the current role of survey respondents. It can be noted that an overwhelming number of respondents occupy a role of individual contributor. Interestingly, no respondents selected "Senior Employee (Non-Supervisory Employee);" however, 25% of respondents selected that option in the 2018 Career Report [1]. There was a ~18% increase in the percentage of respondents who selected "Individual Contributor (Non-Supervisory Employee)" for the current survey vs the prior survey, suggesting that respondents who had previously selected "Senior Employee" selected "Individual Contributor" for this survey. This year's responses displayed the following increases from the 2018 responses: Intern / Co-op / Student (up to 3% from 1%), Supervisor (up to 10% from 9%), and Manager (up to 6% from 3%).

FIGURE 9: CURRENT POSITION VS. HIGHEST LEVEL OF EDUCATION



	Intern/Co-op/Student	Individual Contributor (Non-Supervisory Employee)	Supervisor (First-line)	Manager	Senior Leader
High School	57%	2%	9%	2%	8%
Trade / Technical / Vocational Training	3%	4%	7%	2%	0%
Associate Degree	7%	5%	3%	2%	0%
Bachelor Degree	23%	69%	54%	47%	54%
Graduate Degree	3%	16%	25%	34%	15%
Post-Graduate Degree	7%	3%	2%	14%	23%

Figure 9 displays respondent's current position vs highest level of education. It can be noted that Supervisors and Managers have a larger percentage of employees with Graduate Degrees (25% and 34%, respectively).

FIGURE 10: COMPANY TYPE

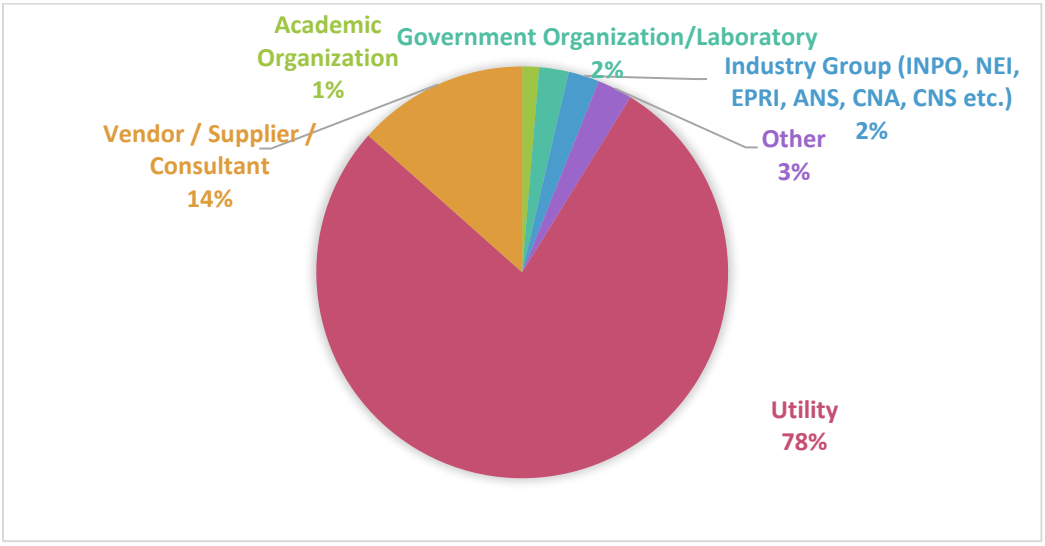


Figure 10 shows that 78% of respondents work in nuclear utilities, 14% work for a Vendor / Supplier / Consultant, and 5% work for an industry group, academic organization, or government organization. These results are consistent with those in the 2018 Career Report [1] and with NAYGN membership.

FIGURE 11: JOB FUNCTION

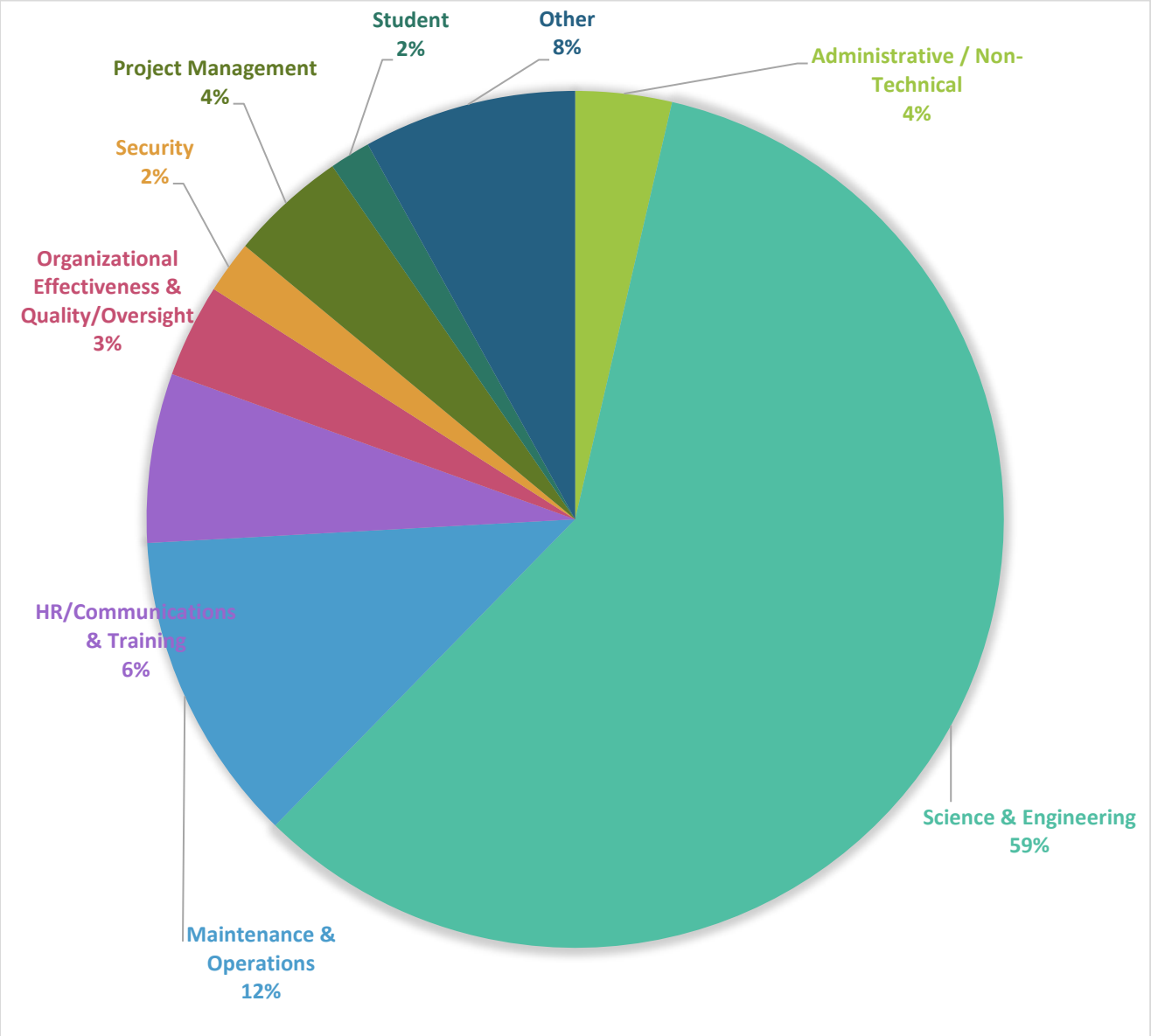


Figure 11 displays respondents' job functions. This year's survey offered more specific responses to allow for more accurate data analysis; however, the responses in Figure 11 have been grouped for simplicity. These responses align with those in the 2016 [3] and 2018 [1] Career Reports.

FIGURE 12: YEARS AT CURRENT COMPANY VS JOB FUNCTION

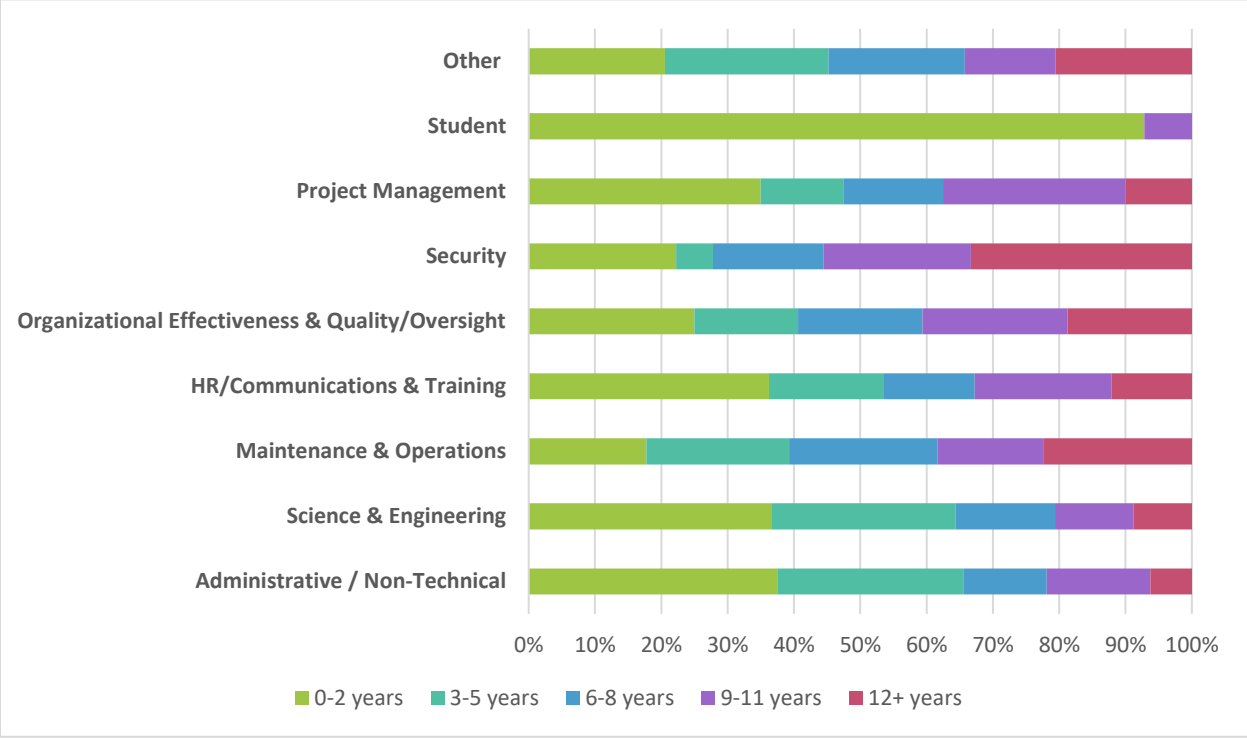


Figure 12 shows the relationship between respondents' job functions and years of experience at their current company. 33% of respondents who work in Security have been at their current company for 12+ years vs an average of 13% for all other job functions.

FIGURE 13: JOB FUNCTION BY ETHNICITY

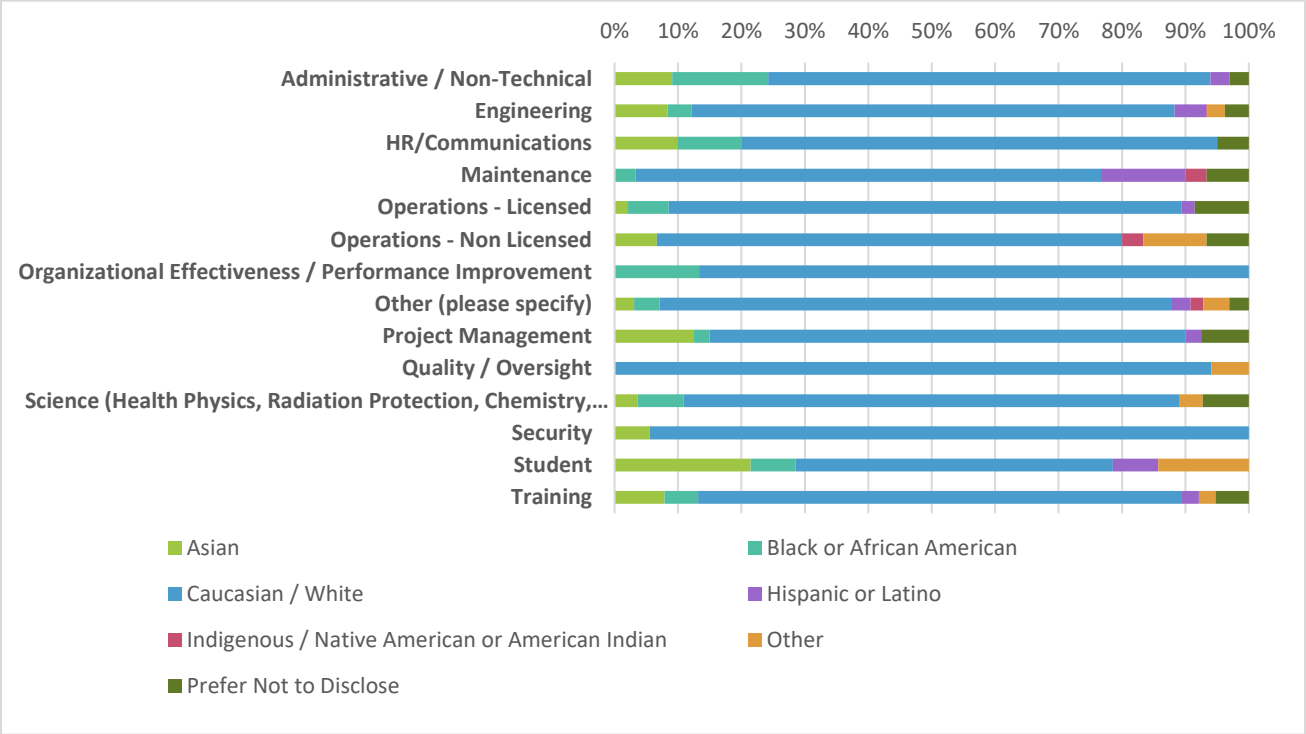


Figure 13 shows the ethnic distribution of each job function. It can be noted that Maintenance has the largest percentage of respondents who identify as Hispanic or Latino (13%), students have the largest percentage of respondents who identify as Asian (21%), and Administrative / Non-Technical has the largest percentage of respondents who identify as Black or African American (15%); however, that is closely followed by Organizational Effectiveness / Performance Improvement (13%). Security and Quality / Oversight have the highest percentage of respondents who identify as Caucasian / White at 94% for both job functions.

FIGURE 14: JOB FUNCTION BY GENDER

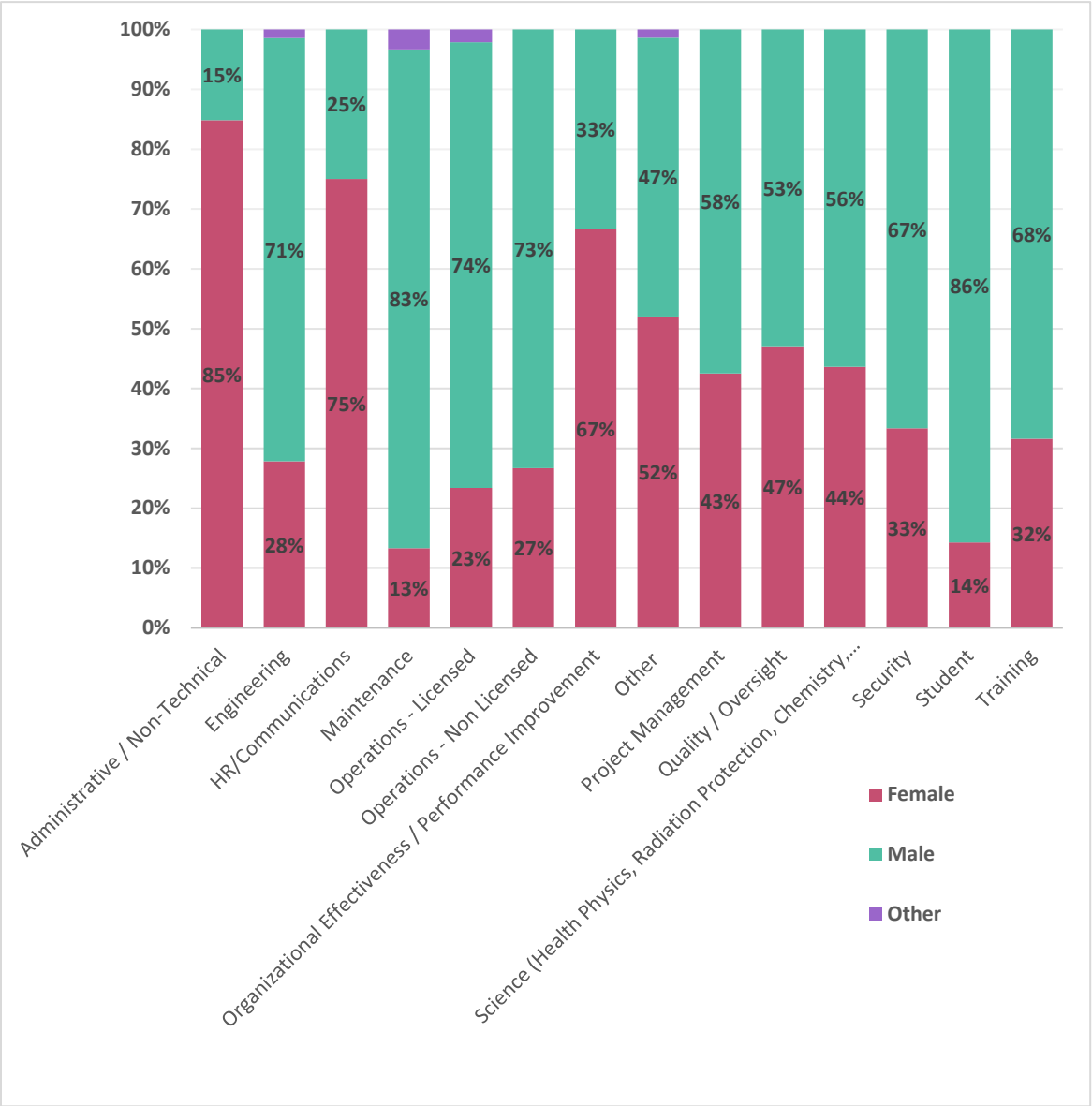


Figure 14 shows the relationship between respondent's gender and job function. There is a substantial difference between the number of men (83%) and women (13%) who work in Maintenance. Similarly, there is a considerable disparity between the number of men (74% Licensed, 73% Non-Licensed) and women (23% Licensed, 27% Non-Licensed) in Operations. This trend is also observed in Engineering, with 71% of respondents identifying as male and 28% identifying as female. Conversely, there are substantially more women in Administrative / Non-Technical roles than men (85% vs 15%, respectively).

V. Salary and Raise Results

This section examines the average and salary trends of survey respondents. These are further examined in detail based on demographics, job function, and job experience.

NOTES:

- All significance determined at α=0.1. The t-score is reported in parenthesis after.
- All salaries reported in US dollars.
- Inflation is not accounted for in responses unless explicitly noted.
- On gender analyses: "Other" and "Prefer Not to Disclose" are not included due to too few responses to analyze

FIGURE 15: SALARY DISTRIBUTIONS IN THE NUCLEAR INDUSTRY

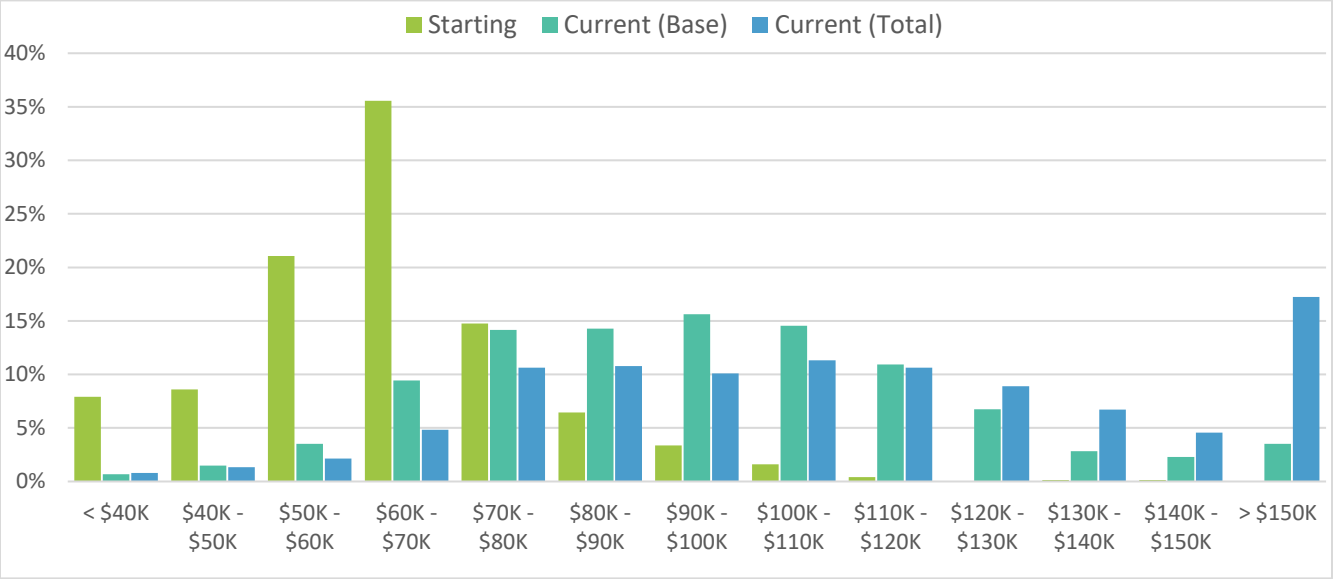


Figure 15 shows that the distribution of starting salaries is more clustered than current base salaries and total compensation. 83% of respondents indicated their starting salaries were above $50,000. The average starting salary is $64,704, a 3% increase since the 2018 Career Report [1], above the 2018-2019 inflation rate (1.76%), but in line with the average inflation rate (2.5%).

Current salaries average $96,646 (an increase of 7.3% from the 2018 Career Report) and total current compensation averages $117,884 (up 15.5%).

Regarding current annual additional pay (bonuses and other additional pay), the median is $15,000, while the average is $26,485, a noteworthy discrepancy that was not significant for starting or current base salaries.

The average years of experience are 9.83, therefore, comparing starting to current total compensation, the average compensation increase per year of experience is $5,410.

FIGURE 16: SALARY AVERAGES BY JOB FUNCTION

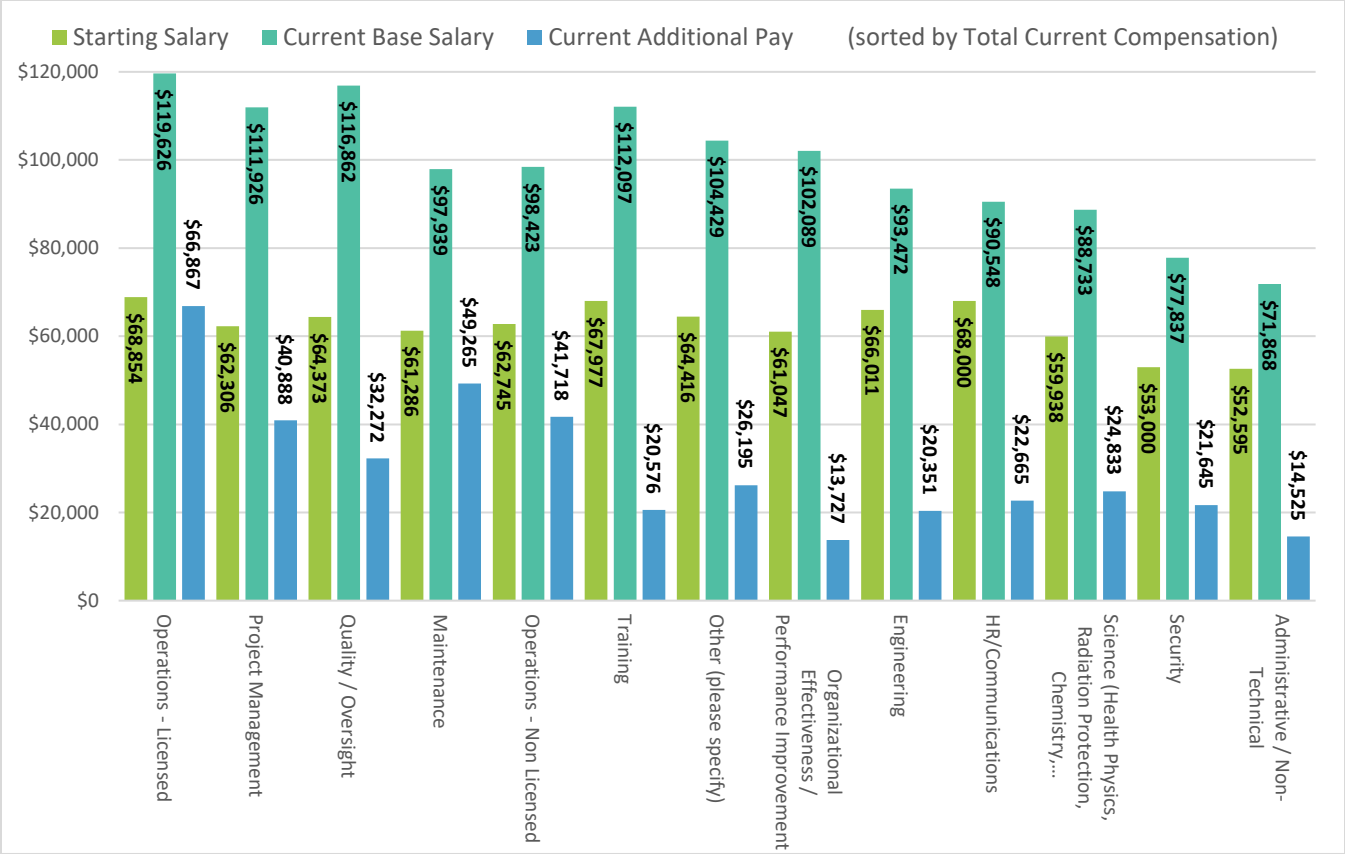


FIGURE 17: SALARY AVERAGES BY NUMBER OF HOURS WORKED

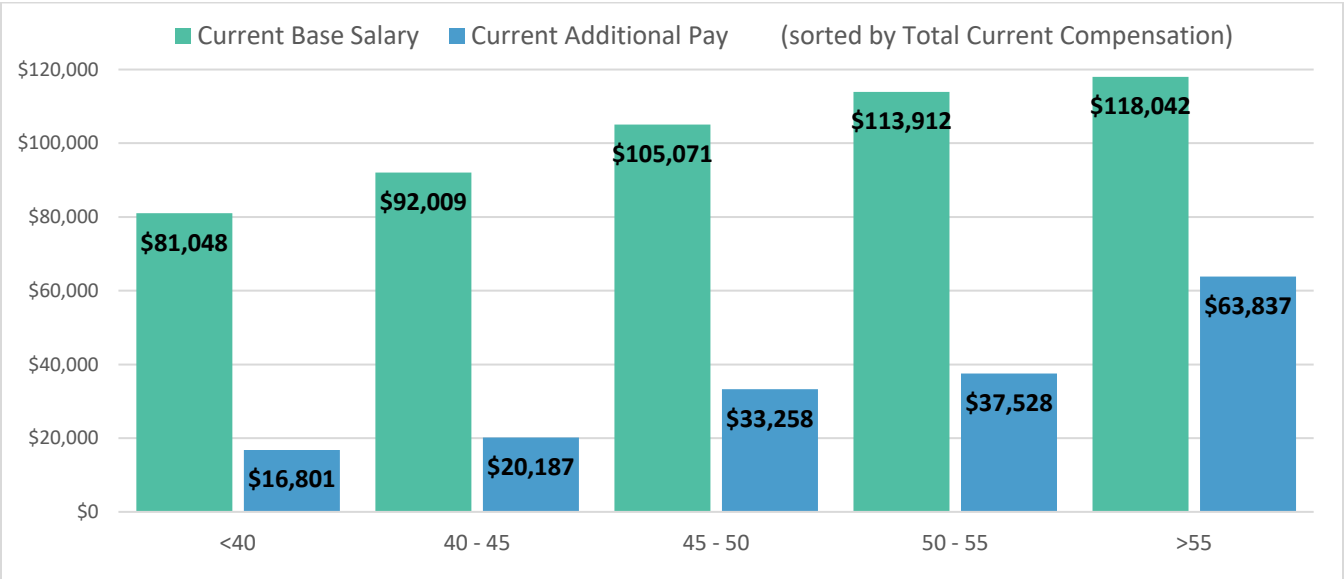
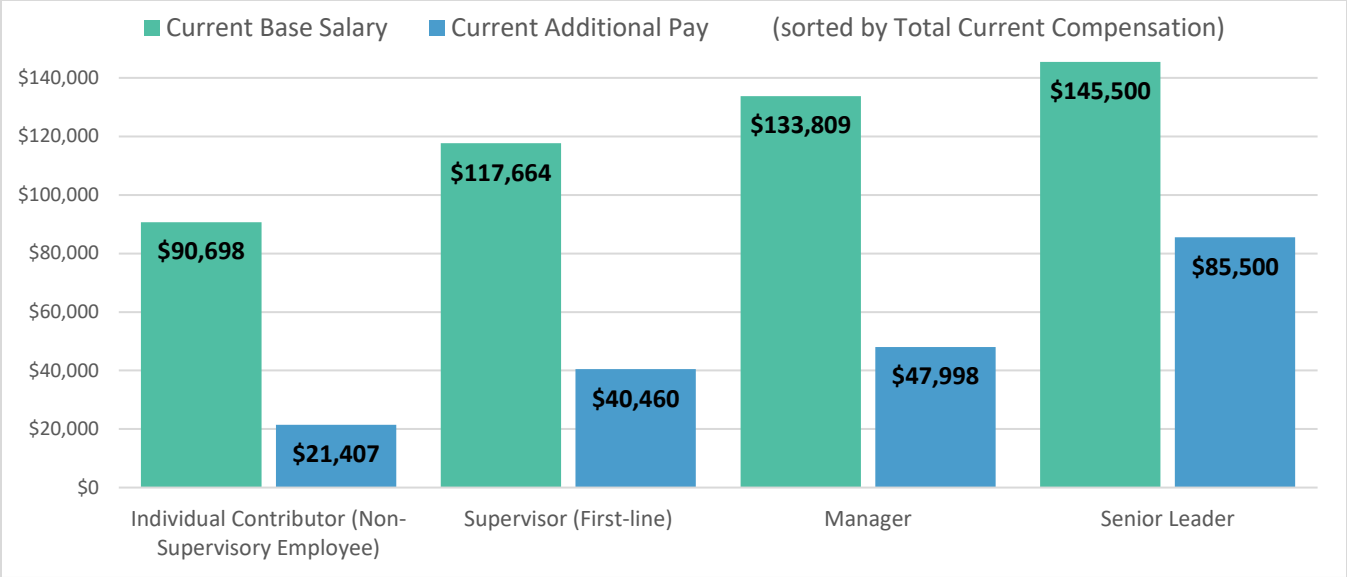


Figure 16 shows the salary averages by job function. Licensed Operators have the largest salary followed by Quality / Oversight, Training and Project Management. Figure 17 indicates that working more hours per week results in higher pay. It is worth noting that the larger gains come in the <40 to 40-45 jump and the 40-45 to 45-50 jump, with progressively diminishing returns for additional hours worked.

FIGURE 18: SALARY AVERAGES BY ROLE IN THE ORGANIZATION

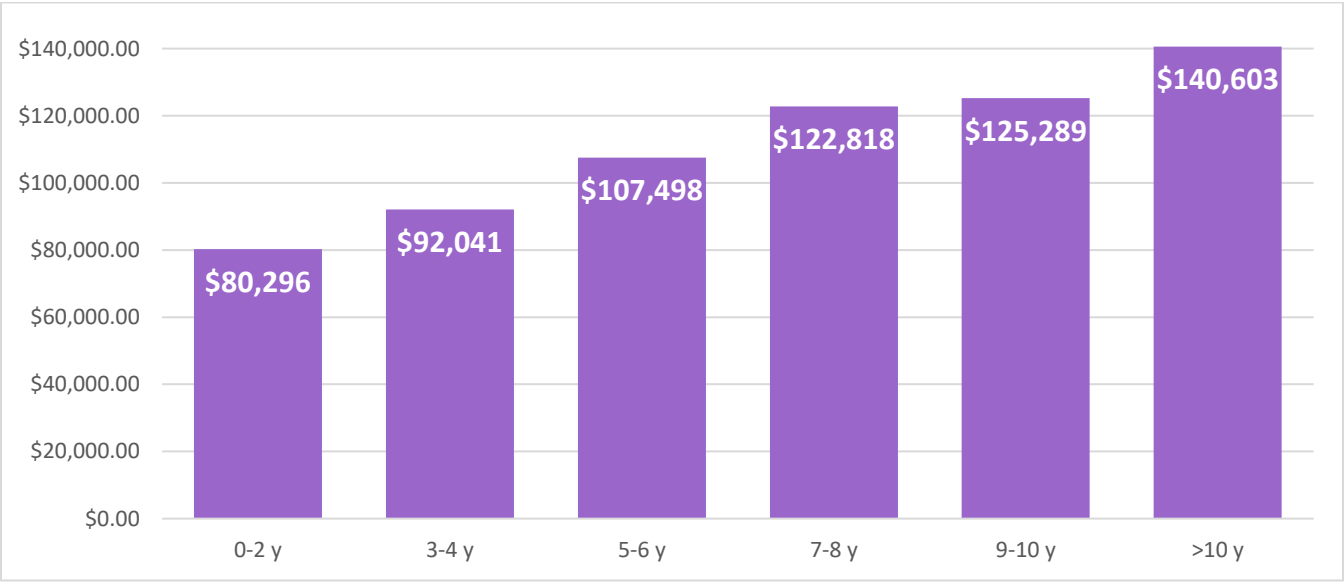


Unsurprisingly, Figure 18 shows the higher levels in the organization have higher average pay. It is worth considering two other items in the context of organization level: (1) Average hours worked & (2) Average total years of experience:

TABLE 3: AVERAGE HOURS AND EXPERIENCE BY LEVEL

	Average Hours Worked	Average Years of Experience
Individual Contributor (Non-Supervisory Employee)	44	8.8
Supervisor (First-line)	46	13.3
Manager	48	15.9
Senior Leader	49	18.4

FIGURE 19: AVERAGE CURRENT SALARY BY YEARS OF EXPERIENCE



The trend of average salary based on years of experience show a general upward trend, though the rate at which pay increases seems to decrease as experience is gained.

There are not sufficient responses to warrant meaningful analysis of years of experience vs current job function. Additionally, this would not account for people switching job functions within the industry.

FIGURE 20: SALARY AVERAGES BY HIGHEST LEVEL OF EDUCATION

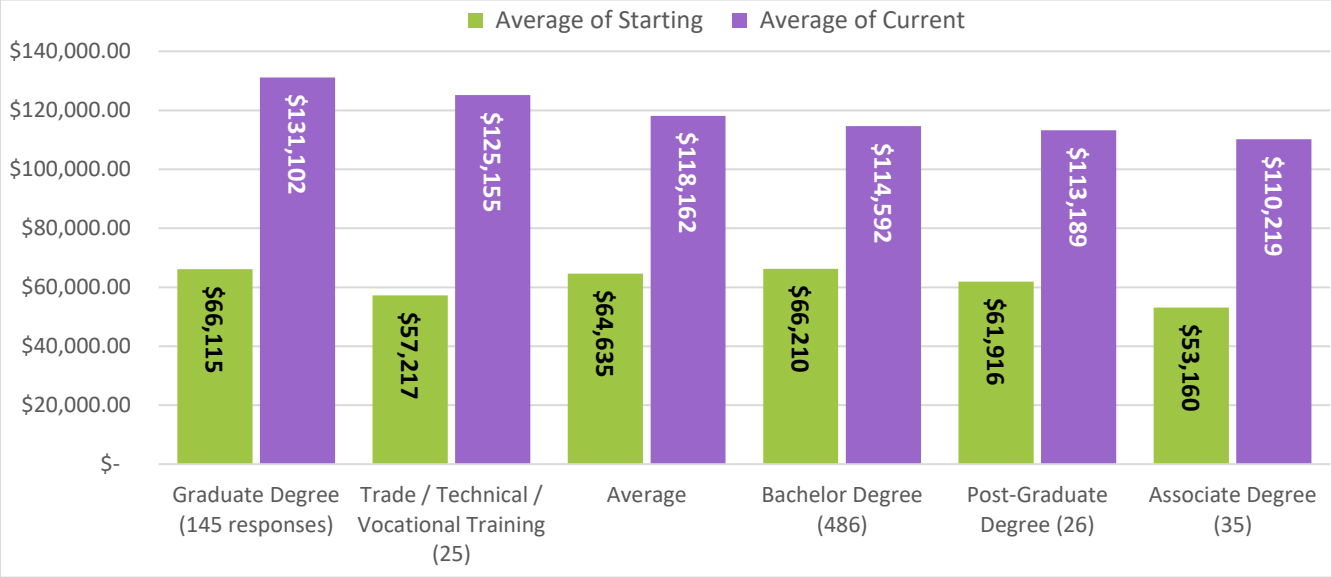
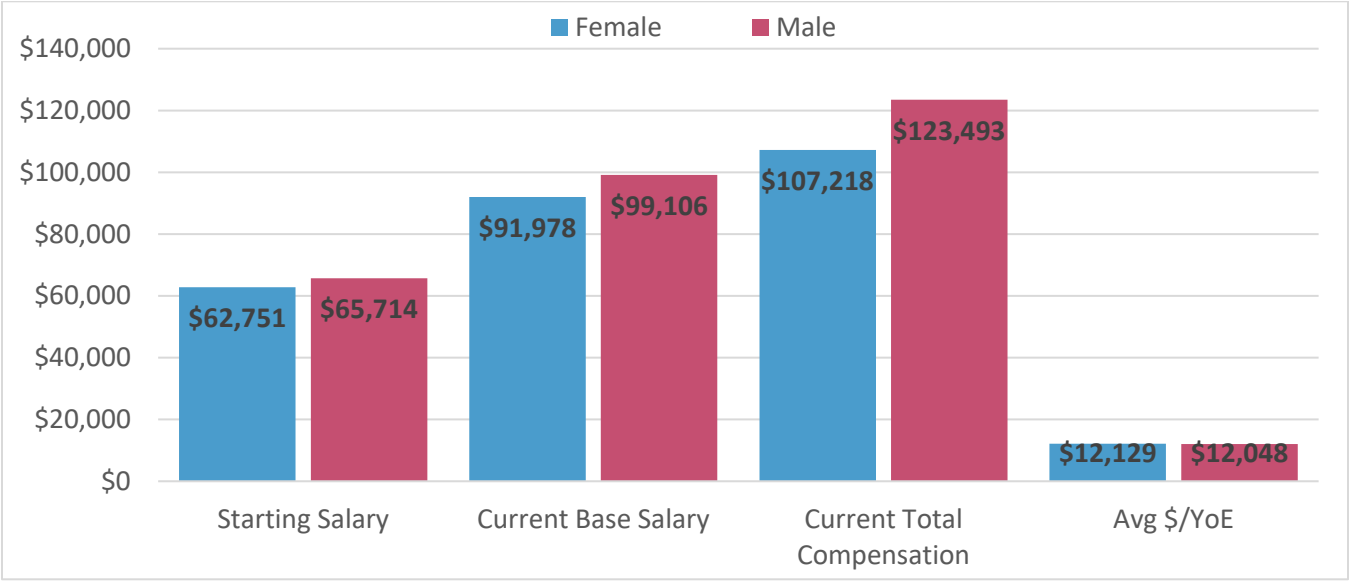


Figure 20 shows significant difference from the average current salaries for Graduate Degrees (10.95% higher) than the average. This contrasts with the starting salaries, for which degrees beyond a bachelors don't have a significant impact.

It is also worth noting that for current salaries, there is not a significant difference based on education except for the prior noted graduate degrees.

FIGURE 21: SALARY AVERAGES BY GENDER



As shown in Figure 21 above, there is a significant gender-based difference in both the starting and current salaries with female starting salary 4.7% less than male starting salary and female current salary 7.7% percent less than male current salary. This is an improvement from the 2018 Career Report [1] which showed female starting salary at 7% less and female current salary at 11.5% less.

There does seem to be a gender-based significant difference in starting salaries, however current salaries require further examination. Some of the differences in current salaries are likely explained by the difference in average years of experience, which is 8.8 years for females compared to 10.3 years for males. The "Avg $/YoE" value shows the average current salary divided by the average number of years of experience for each gender group. There is not a statistical difference in current compensation when accounting for years of experience, with females making slightly more when normalized for experience. This is broken down further by position and experience in Figure 23.

FIGURE 22: SALARY AVERAGES AND YEARS OF EXPERIENCE BY GENDER AND ORGANIZATION LEVEL

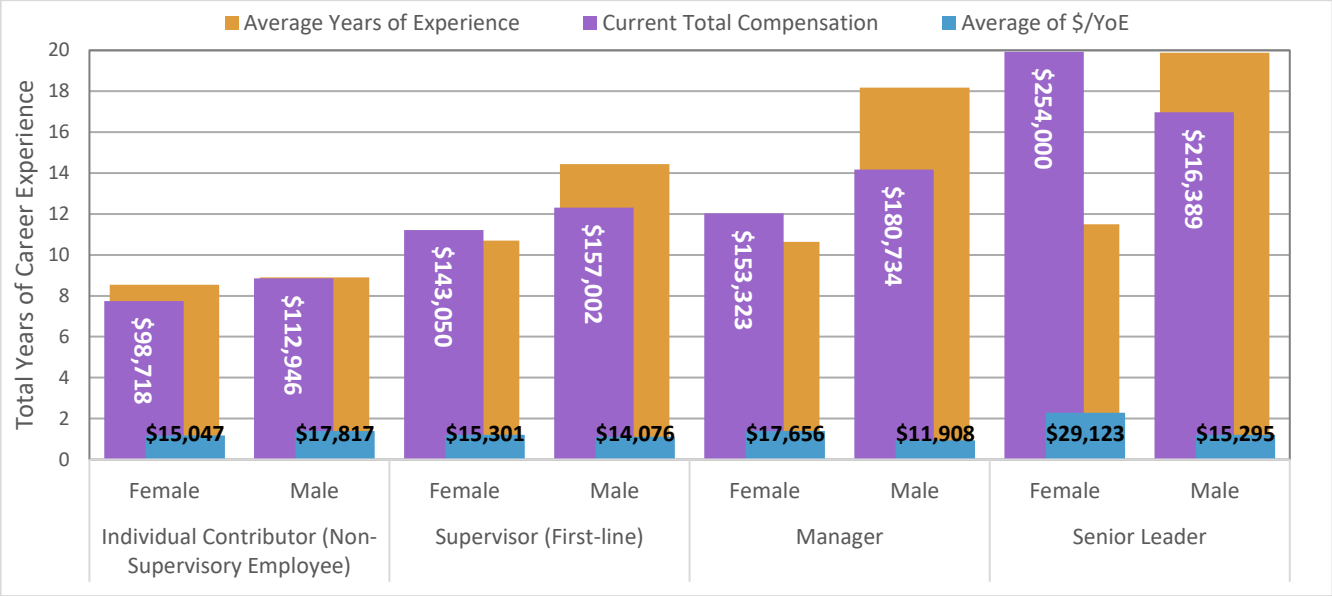
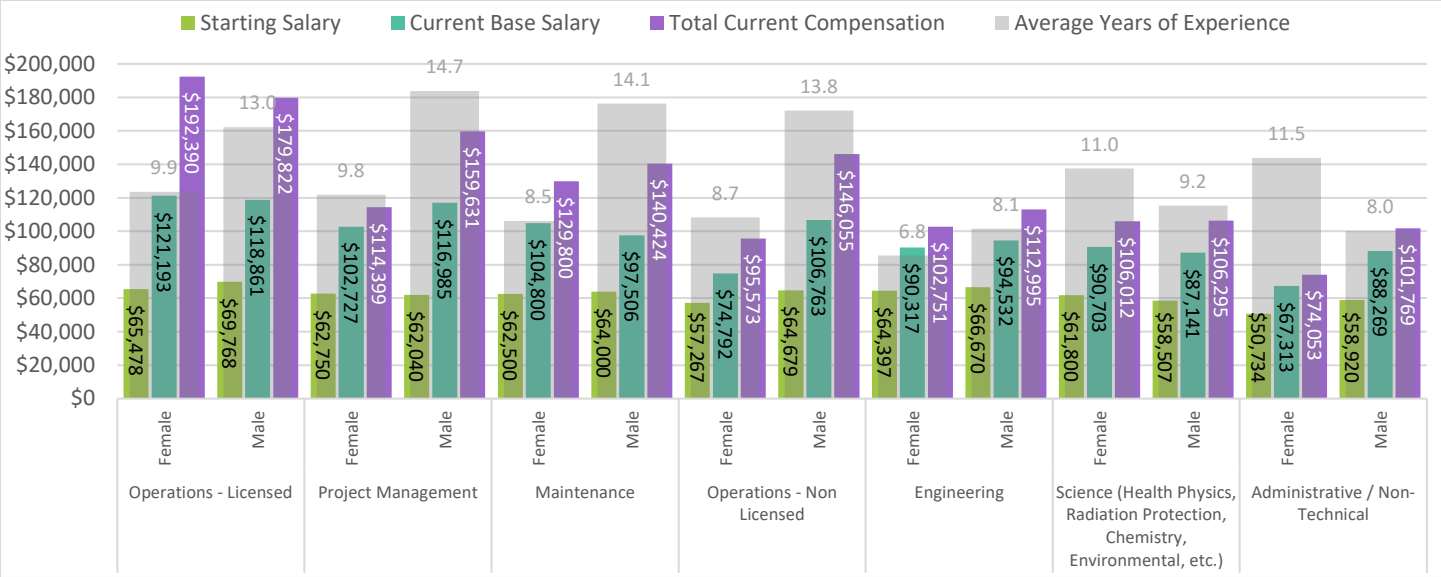


Figure 22 shows the years of experience gap between each organization level indicates women may progress to higher levels with less total experience than their male counterparts, but continue to make less at equivalent levels, except in the case of senior leaders, of which the sample size is small. Alternatively, or additionally, this may indicate that some of the salary gender discrepancy could be attributed to a greater number of years of experience on average for men.

When average compensation is normalized by years of experience, females make more than males in all categories but individual contributor. The sample size is sufficiently large to determine that years of experience does not account for the full gender pay discrepancy for Individual Contributors (margin of error for years of experience is 3.6%, but gendered percent difference is 6.4% below the expected given equal experience; with 90% certainty) and Supervisors (YoE MoE = 6.9%, gendered difference 13.4% above expected). The samples are too small to make any conclusions about Manager or Senior Leader.

FIGURE 23: SALARY AVERAGES BY GENDER, JOB FUNCTION, AND YEARS OF EXPERIENCE



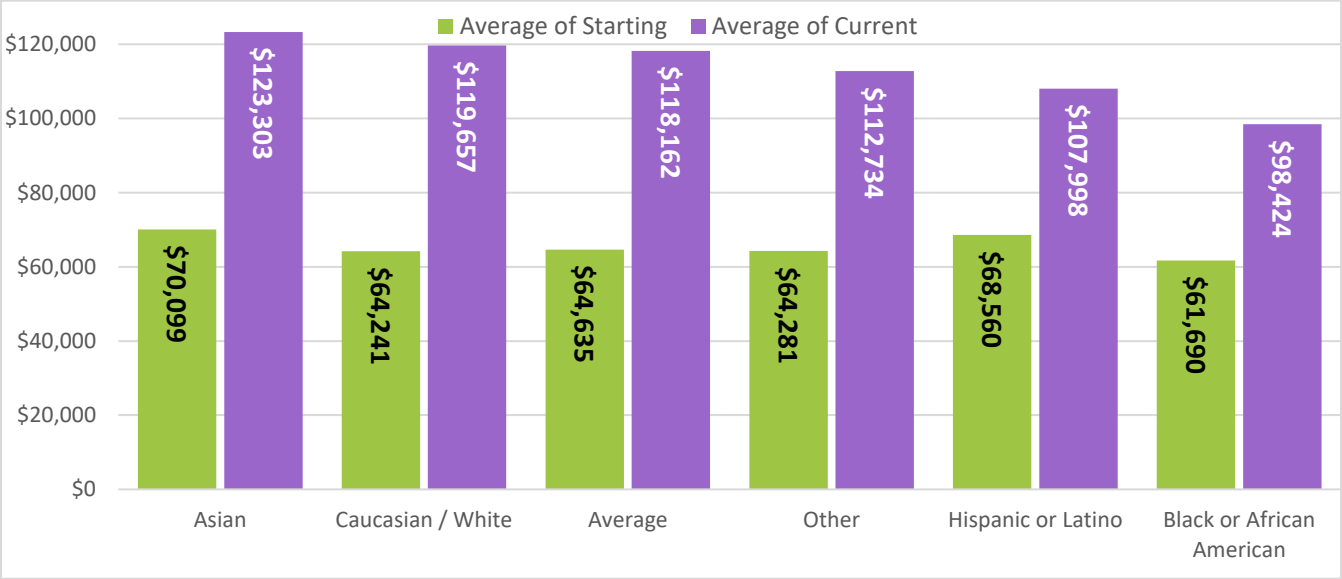
Data in Figure 23 is arranged in order of average total current compensation (non-gendered). Other Categories not shown due to small sample size include HR / Communications (13), Organizational Effectiveness / Performance Improvement (14), Quality / Oversight (15), Security (11), Training (4), and Other (54). These results are displayed in a table below.

TABLE 4: CATEGORIES NOT SHOWN IN FIGURE 23 DUE TO SMALL SAMPLE SIZE

	Starting Salary	Current Base Salary	Current Total Compensation	Average Total Years of Experience
HR/Communications				
Female	$65,600	$92,613	$116,444	10.6
Male	$76,000	$83,667	$87,333	9
Organizational Effectiveness / Performance Improvement				
Female	$62,667	$96,417	$105,528	9.4
Male	$58,132	$112,300	$126,100	13.4
Other (please specify)				
Female	$64,819	$99,426	$112,856	12
Male	$64,138	$111,992	$142,229	14.1
Quality / Oversight				
Female	$58,371	$112,419	$138,950	10.4
Male	$69,625	$120,750	$137,875	18.5
Security				
Female	$60,000	$74,000	$85,000	6
Male	$50,375	$79,116	$99,500	15.7
Training				
Female	$60,429	$94,561	$100,132	10.6
Male	$70,274	$117,677	$139,286	17.9

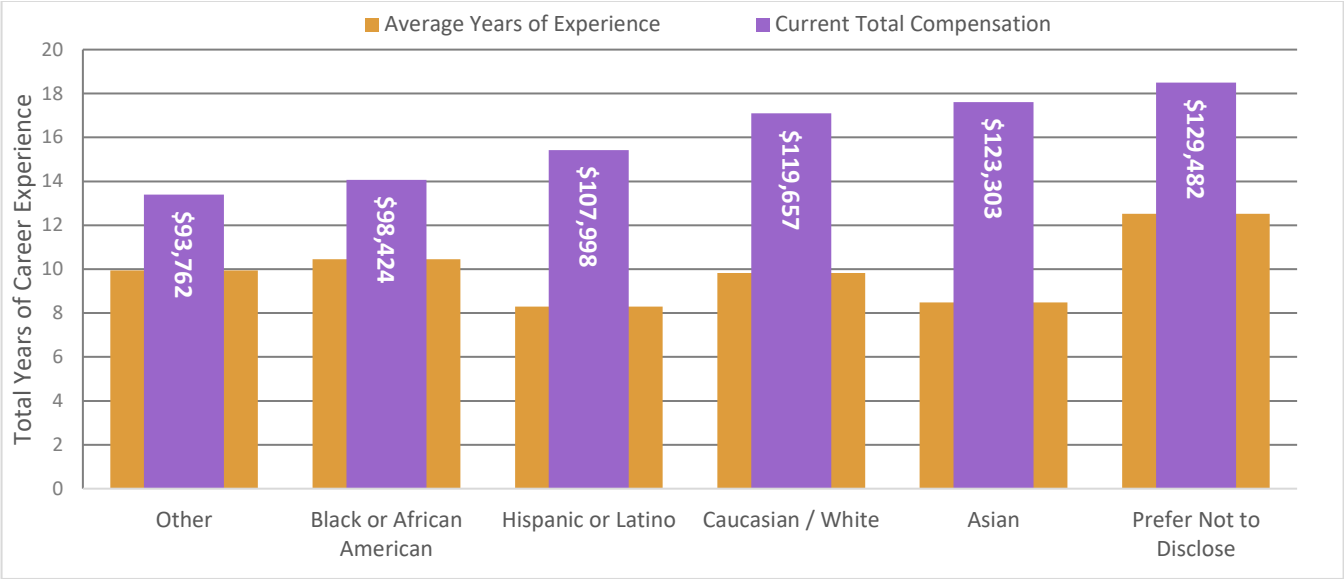
Based on survey results There are significant statistical differences in current pay based on gender in Engineering (-2.75), Operations Non-Licensed (-2.51), Project Management (-2.10), and Training (-2.83). The only Job Function in which females make significantly more than males is HR / Communication (1.48). As in Figure 22, the higher salary typically trends with higher experienced gender, with notable exceptions of Operations Licensed & Administration / Non-Technical showing the opposite and Science showing similar salaries regardless of the nearly 2 year experience gap. Again, this overall trend may indicate that some of the salary gender discrepancy could be attributed to a greater average of years of experience. Indeed, females outperform males in experience normalized compensation in all job functions except for Science and Administration. Unfortunately, most job functions sample sizes were too small to definitively determine if this accounts for the gap; only for Engineering can we conclude the compensation gap is primarily due to years of experience.

FIGURE 24: SALARY AVERAGES BY ETHNICITY



In Figure 24, Other is defined as Indigenous / Native American or American Indian, Other, and Prefer Not to Disclose. There are significant differences from the average current salaries for Black or African American (-2.35) and Hispanic/Latino (-1.36) respondents.

FIGURE 25: SALARY AVERAGES AND YEARS OF EXPERIENCE BY ETHNICITY



Indigenous / Native American responses are not shown in Figure 25 as the sample size was too small to analyze. There does not seem to be a trend of years of experience and total compensation based on race, however this does not eliminate potential racial bias in organization level or job function. Unfortunately, there were insufficient responses to warrant analysis by job function or level within the organization.

Grouping into larger categories for analysis, it is worth noting that for the population, 18.8% of respondents indicated organizational level of Supervisors, Managers, & Senior Leaders, however, this drops to 13.6% for non-Caucasian/White respondents compared to 20% for Caucasian/White respondents. This may indicate that minorities are not being considered equally for promotion when compared to Caucasian/white colleagues.

VI. Work Hours Results

FIGURE 26: AVERAGE WORK HOURS PER WEEK

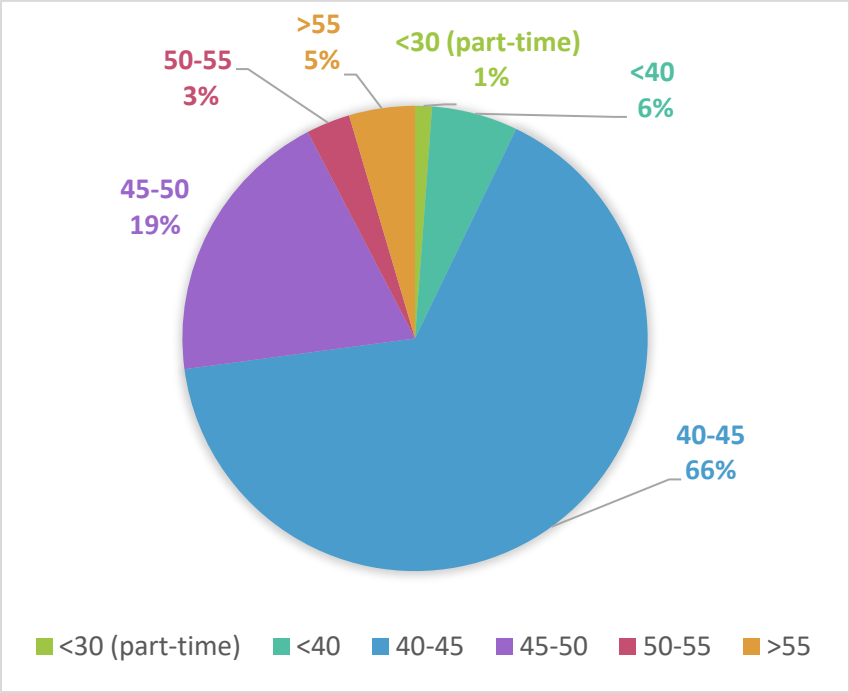
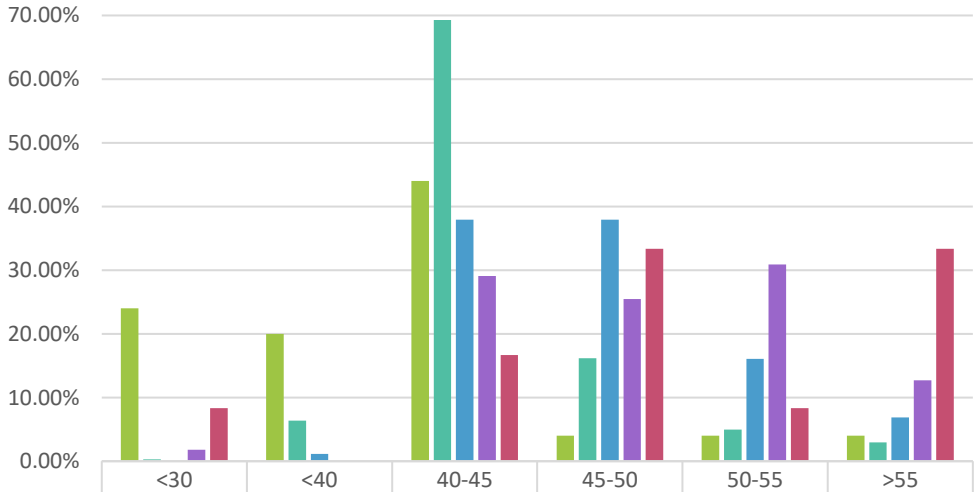


Figure 26 shows that, on average, the majority of respondents work 40-45 hours per week. These figures line up almost exactly with the data collected in the 2018 Career Report [1]. However, we see a slight increase in those who are working >55 hours in a week, with a corresponding decrease in those who reported 50-55 work hours per week. (Note: the 2018 Career Report did not differentiate between <30 and <40 hours per week.)

FIGURE 27: AVERAGE WORK HOURS PER WEEK VS. LEVEL WITHIN ORGANIZATION



	<30	<40	40-45	45-50	50-55	>55
Intern/Co-Op	24.00%	20.00%	44.00%	4.00%	4.00%	4.00%
Individual Contributor	0.28%	6.37%	69.26%	16.15%	4.96%	2.97%
Supervisor	0.00%	1.15%	37.93%	37.93%	16.09%	6.90%
Manager	1.82%	0.00%	29.09%	25.45%	30.91%	12.73%
Senior Leader	8.33%	0.00%	16.67%	33.33%	8.33%	33.33%

Figure 27 further breaks down the distribution of hours worked based upon respondent's level within the organization. This shows the continued trend from 2018 of a vast majority of individual contributors generally working 40-45 hours a week on average. Also similar to the 2018 results, the more senior levels in our organizations see a higher rate of work hours over 50 per week.

FIGURE 28: AVERAGE WORK HOURS PER WEEK VS. AVERAGE OF CURRENT ANNUAL SALARY

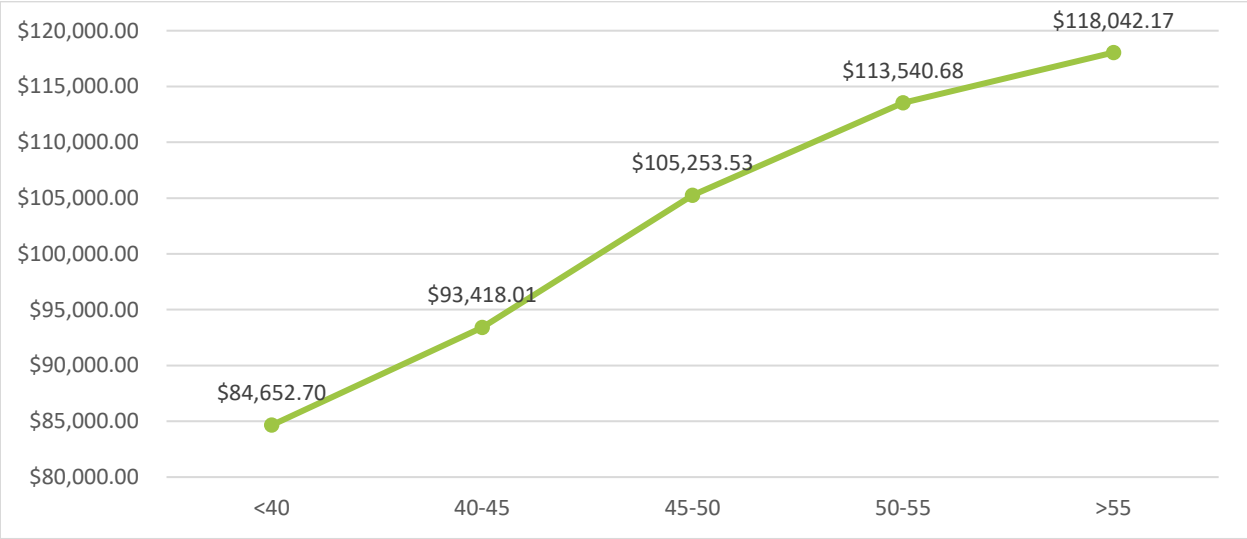


Figure 28 represents the relationship between average work hours in a week and average of current annual salary. Note that the relationship of increased working hours translating to increased salary is a change from the data collected in 2018. Almost all groups saw a significant change in average salaries. Both <40 and 40-45 hour averages dropped significantly (by ~$9,000/year), while average salaries for 45-50 hours saw a moderate increase (by ~$2,500/year). 50-55 and >55 hours saw significant increases on average salary (by over $10,000/year) from the 2018 Career Report [1].

FIGURE 29: GENERAL WORK HOUR PREFERENCES

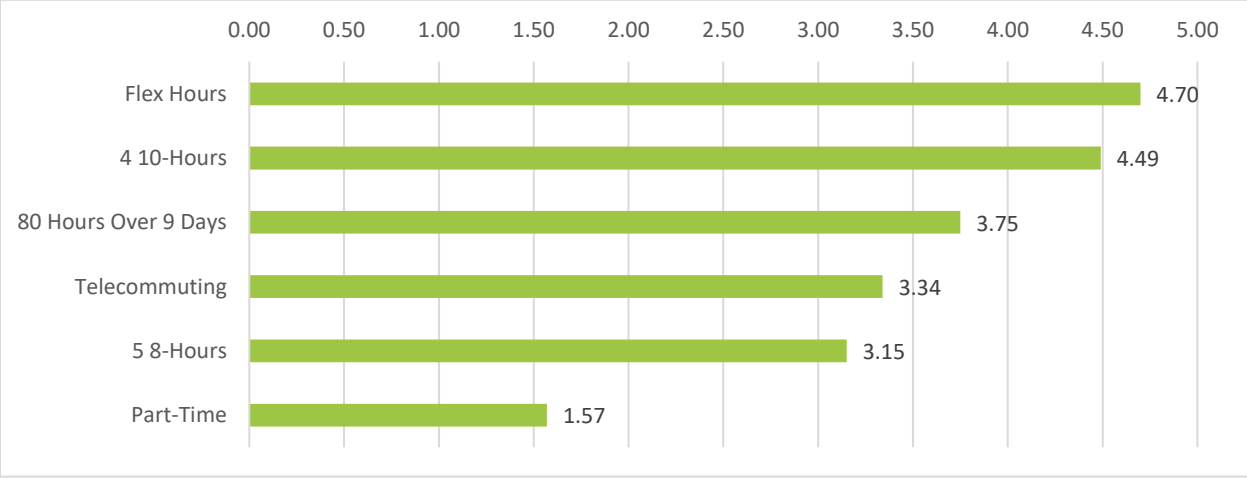


Figure 29 shows the survey ranking results for a variety of alternative work hour arrangements. Respondents were asked to rank their preference in order from 1 to 6, with 1 being the best. The results are displayed based on a weighted scale, with 1 being assigned a point value of 6, and so on. The strongest preferences are for Flex Hours (flexibility to choose work schedules) and 4/10 (working four 10-hour days in a week). Figure 29 shows purely a ranking of preferences and remains consistent with responses in both the 2016 Career Report [3] and 2018 Career Report [1].

Table 5: Work Hour Preference by Age

	Flex Hours	4 10-Hours	80 Hours Over 9 Days	Telecommuting	5 8-Hours	Part-Time
<26 yrs.	4.68	4.69	4.14	2.78	3.24	1.46
26-30 yrs.	4.89	4.33	3.83	3.30	3.16	1.50
31-35 yrs.	4.84	4.36	3.62	3.53	3.11	1.54
36-40 yrs.	4.70	4.35	3.44	3.72	3.20	1.59
41-50 yrs.	3.94	5.14	3.89	3.26	3.07	1.69
>50 yrs.	4.22	4.78	3.30	3.54	3.08	2.08

Table 5 displays work hour preference by age. This data generally aligns with the 2018 Career Report [1]. (Note: the 2018 data did not differentiate 41-50 years and >50 years as separate categories in its corresponding graph.)

Table 6: Work Hour Preference by Job Category

	Flex Hours	4 10-Hours	80 Hours Over 9 Days	Telecommuting	5 8-Hours	Part-Time
Administrative / Non-Technical	4.67	4.58	3.12	3.88	3.33	1.42
Engineering	4.67	4.48	4.00	3.28	3.03	1.54
HR / Communications	4.89	4.37	3.84	3.47	3.00	1.42
Maintenance	4.13	5.23	3.73	2.50	3.67	1.73
Operations - Licensed	4.91	4.84	3.58	2.98	3.07	1.63
Operations - Non Licensed	4.44	4.59	3.38	3.24	3.38	1.97
Organizational Effectiveness / Performance Improvement	4.67	4.67	3.93	3.40	3.27	1.07
Other (Total)	4.94	4.21	3.40	3.82	3.13	1.57
Other - Information Technology	5.20	4.13	3.67	3.40	3.20	1.73
Project Management	4.70	4.00	3.83	3.68	3.23	1.58
Quality / Oversight	5.06	3.65	3.59	3.83	3.29	1.59
Science	5.02	4.58	3.24	3.05	3.40	1.71
Security	4.24	5.24	3.18	3.29	3.88	1.18
Student	5.14	4.36	3.50	2.36	4.14	1.50
Training	4.63	4.53	3.18	4.03	2.92	1.71

Table 6 shows work hour preference by job category. Generally, most groups line up with the general work hour preference results. However, jobs more likely to be shift work (Maintenance, Security, and Non-Licensed Operator) seem less receptive to flex hours, preferring four 10-hour shifts. Many of these same groups also expressed a lower preference for telecommuting, likely due to the nature of their work. Conversely, several job categories, including Administrative / Non-Technical, Quality / Oversight, Security, and Training prefer telecommuting over 80 work hours across nine days. Students stood out for having a higher than average preference for a standard five-day, eight-hour schedule.

Table 7: Work Hour Preference by Household Situation

	Flex Hours	4 10-Hours	80 Hours Over 9 Days	Telecommuting	5 8-Hours	Part-Time
Single	4.75	4.53	3.88	3.13	3.18	1.51
Married	4.66	4.47	3.68	3.46	3.13	1.59
Without Children	4.93	4.53	3.78	3.21	3.07	1.47
With Children	4.64	4.28	3.58	3.61	3.17	1.73
Single With Children	5.13	4.38	3.50	3.19	3.31	1.50
Married With Children	4.60	4.29	3.60	3.63	3.18	1.69

Table 7 displays work hour preference by household situation. Each of the data sets (Single, Married, Without Children, With Children, Single With Children, and Married With Children) was determined by voluntary responses given to the question, "What best describes your household?", where the respondent was instructed to select all that apply. This means that many respondents' data is represented multiple times in the above graph. For example, if a respondent selected "Married" and "Parent", then their data is included in three data sets above: Married, With Children, and Married With Children. These results generally line up with the generic preference data. However, preferences for telecommuting and flex hours see a greater variance by household situation that other categories.

Figure 30: At Your Work Place, an Open Concept Workspace

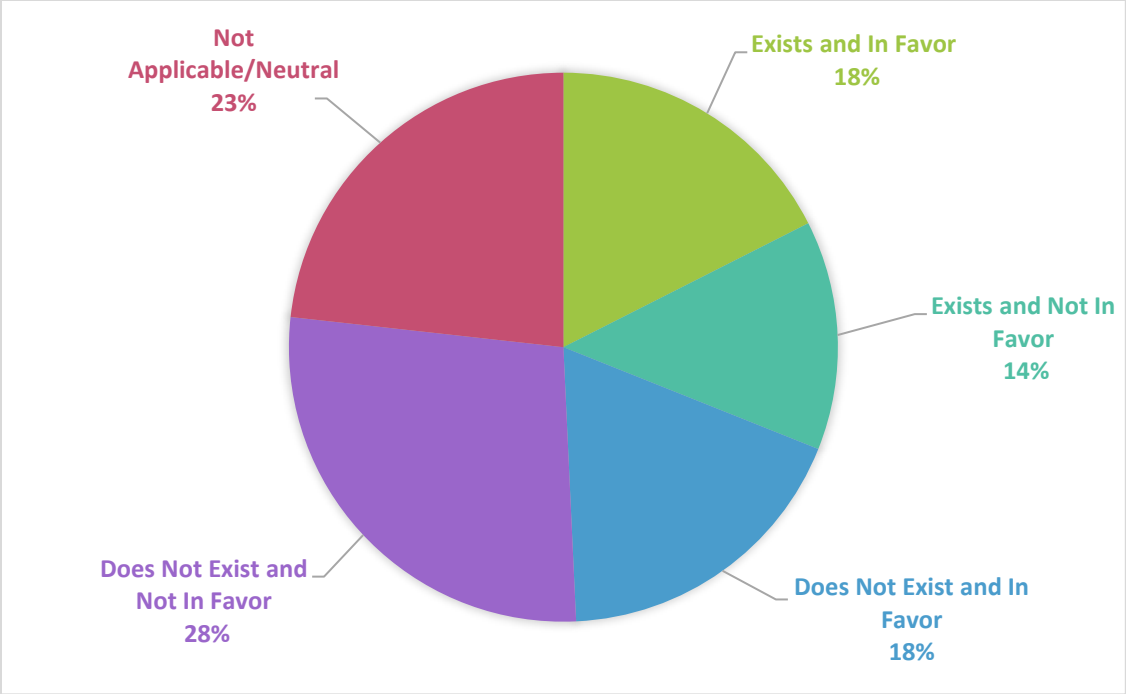
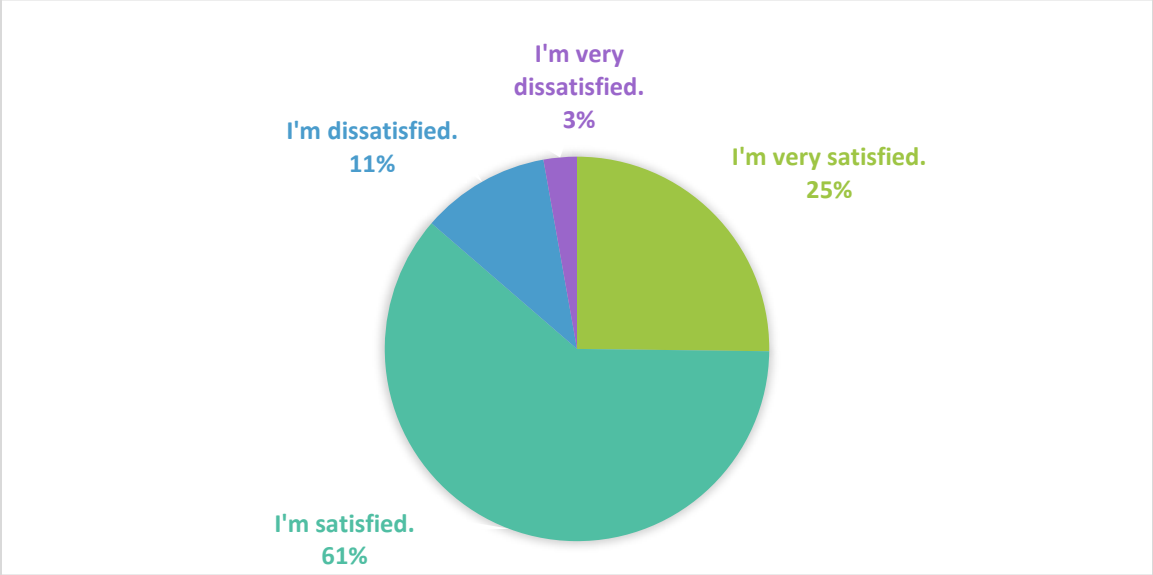


Figure 30 shows both data on existence of an open concept workspace and opinion on preference for this workspace setup. 41.04% of respondents were not in favor of open concept workspaces, while 35.79% of respondents were in favor and 23.27% were either neutral or felt that it did not apply to their work situation. However, open concept workspaces only exist at work locations for 31.08% of respondents.

VII. Job Satisfaction Results

FIGURE 31: OVERALL JOB SATISFACTION



Overall job satisfaction is shown in Figure 31. Responses for satisfied or very satisfied totaled 87%, showing very little change from the 2018 Career Report [1] survey responses (86%). These figures are comparable to data published in the Society for Human Resources Management (SHRM)'s 2017 Employee Job Satisfaction and Engagement report, which indicated that 89% of U.S. employees are satisfied or very satisfied with their jobs. [4]

Job satisfaction levels are relatively consistent across gender, marital status, and family structure based on "satisfied" and "very satisfied" responses.

FIGURE 32: JOB SEARCH

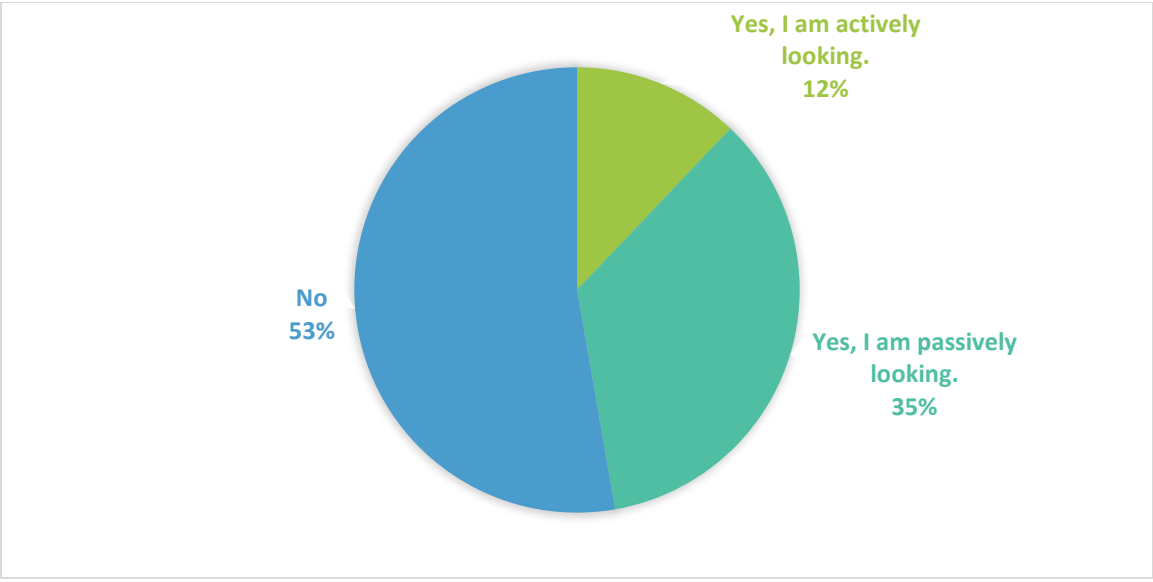
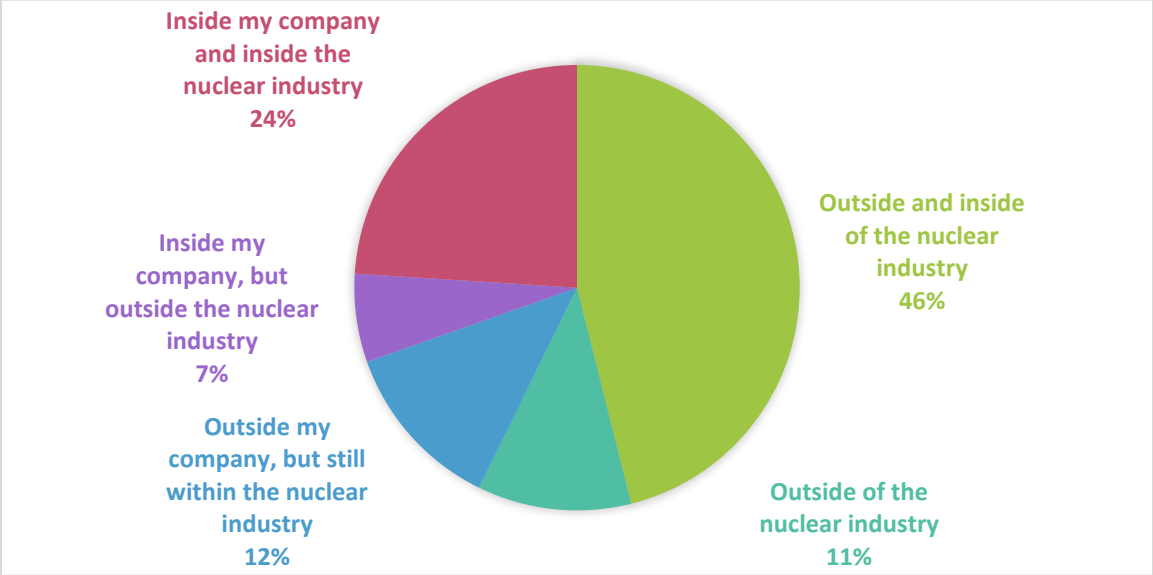


Figure 32 pertains to NAYGN members' job search activities. The 2020 results are identical to 2018 responses [1], with 47% of respondents looking for new employment (actively or passively) versus 53% of respondents not seeking a new job. It is worth noting that 41% of respondents who selected "satisfied" or "very satisfied" for Overall Job Satisfaction, also stated that they are actively (7%) or passively (34%) looking for a new job.

Survey results suggest a marginal difference in job search activity across ethnic groupings. Among Caucasian / White respondents, 45% stated that they are actively or passively looking for a new job. Among respondents who selected other ethnicities, 54% stated that they are actively or passively looking for a new job.

FIGURE 33: JOB SEARCH INDUSTRIES



Among respondents citing job search activities, a total of 18% are seeking opportunities solely outside the nuclear industry. This percentage is identical to the 2018 Career Report [1] survey data (18%), which was an increase from the 2016 Career Report [3] data (6%).

FIGURE 34: REASONS FOR LOOKING OUTSIDE NUCLEAR INDUSTRY

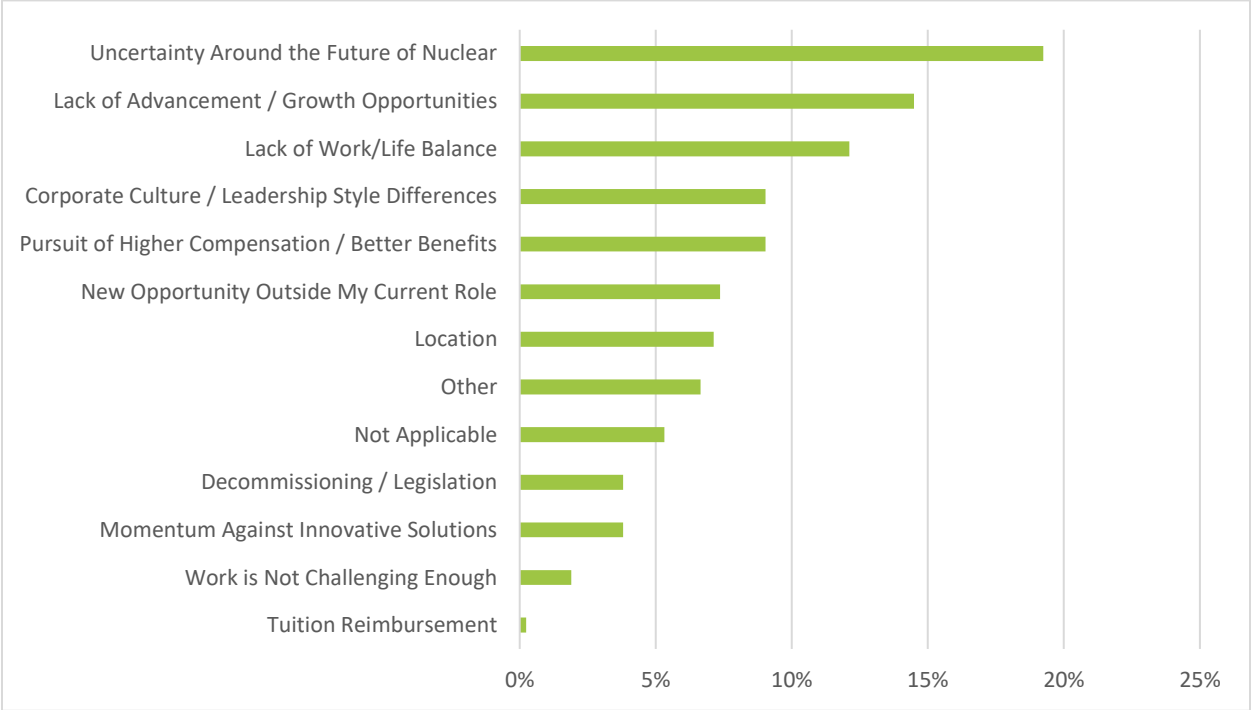


Figure 34 identifies different reasons why respondents would choose to seek employment outside the nuclear industry. The top three responses (in order of popularity) were: Uncertainty Around the Future of Nuclear (19.24%); Lack of Advancement / Growth Opportunities (14.49%); and Lack of Work / Life Balance (12.11%). Uncertainty Around the Future of Nuclear and Lack of Advancement / Growth Opportunities also topped the list in 2018, with 33.9% and 20.1% of the responses respectively [1]. Lack of Work / Life Balance (12.11%) – a newly-added answer option – replaced Corporate Culture / Leadership Style Differences (13.1% in 2018) in the top three responses, with Corporate Culture / Leadership Style Differences now the fourth most common response (9.03%).

Among respondents citing Uncertainty Around the Future of Nuclear as a possible reason for leaving the industry, 31% reported a Positive or Very Positive community outlook on nuclear, while 35% reported a Negative or Very Negative community outlook. Based on survey data, no significant correlation exists between Community Outlook of the Nuclear Industry and the top reason for leaving the nuclear industry.

The survey data shows common themes among open-ended responses cited as Other (6.65%). Work culture and management related topics represent approximately 32% of the Other responses. Some of these respondent answers are provided below.

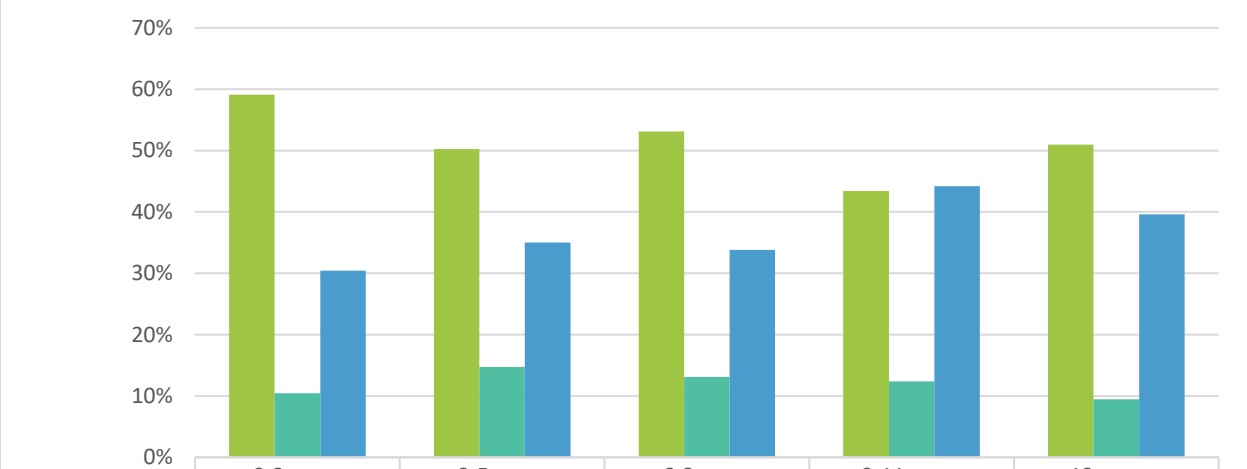
"Work Environment"

"Senior management leadership style (micromanaging) is not conducive to productivity"

"unrealistic expectations of work being completed, with not enough resources"

Other common themes related to nuclear outlook and a lack of the opportunities in the workplace, which represent 18% and 11% of the responses, respectively.

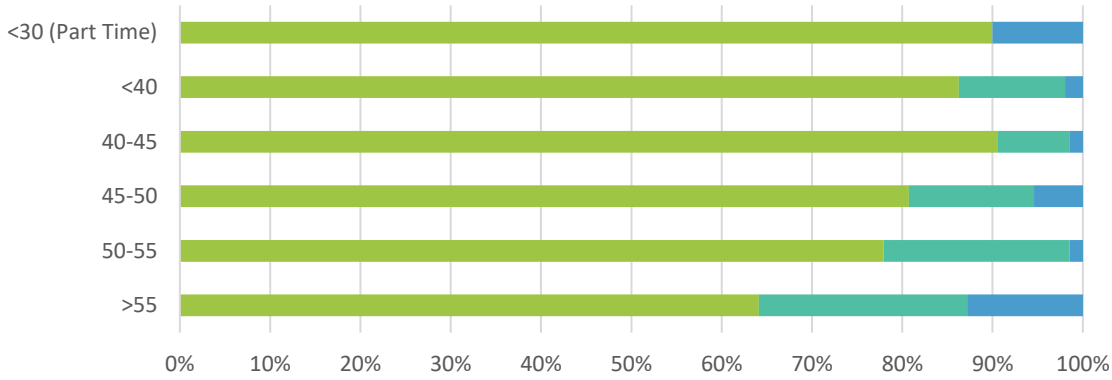
FIGURE 35: JOB SEARCH ACTIVITIES VS. TIME WITH CURRENT COMPANY



	0-2 years	3-5 years	6-8 years	9-11 years	12+ years
No	59.12%	50.23%	53.10%	43.41%	50.94%
Yes, Active	10.47%	14.75%	13.10%	12.40%	9.43%
Yes, Passive	30.41%	35.02%	33.79%	44.19%	39.62%

As shown in Figure 35, respondents with 0-2 years' tenure at their current companies showed the least amount of interest in seeking new opportunities, with almost 60% stating that they are not currently looking for a different job. Respondents with 9-11 years' tenure at their current companies expressed the highest amount of job search activity, with over 55% actively or passively looking for new opportunities.

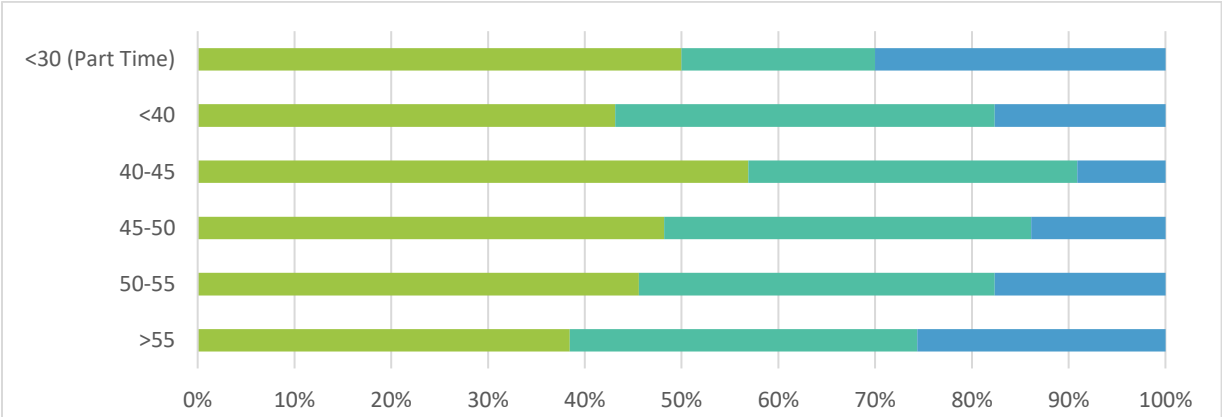
FIGURE 36: JOB SATISFACTION VS. AVERAGE HOURS PER WEEK



	>55	50-55	45-50	40-45	<40	<30 (Part Time)
Very Satisfied/Satisfied	64.10%	77.94%	80.72%	90.52%	86.27%	90.00%
Dissatisfied	23.08%	20.59%	13.86%	8.05%	11.76%	0.00%
Very Dissatisfied	12.82%	1.47%	5.42%	1.43%	1.96%	10.00%

The survey data indicates a decrease in job satisfaction as hours increase above 45 weekly as shown in Figure 36. Among this subset, which represents 30.5% of respondents, 22.3% expressed dissatisfaction with their jobs. Respondents citing 55+ average hours per week reported the highest levels of dissatisfaction (35.9%); although this subset represents only 4.4% of survey responses.

FIGURE 37: SEEKING NEW EMPLOYMENT VS. AVERAGE HOURS PER WEEK



	>55	50-55	45-50	40-45	<40	<30 (Part Time)
No	38.46%	45.59%	48.19%	56.89%	43.14%	50.00%
Yes, passively	35.90%	36.76%	37.95%	33.99%	39.22%	20.00%
Yes, actively	25.64%	17.65%	13.86%	9.12%	17.65%	30.00%

A majority of survey respondents citing an average of 45 hours or more worked weekly (52.6%) reported that they are actively or passively looking for new job opportunities as shown in Figure 37. This group represents 26% of survey respondents. This trend appears to shift in the opposite direction for respondents citing an average of 40-45 work hours weekly. Among this grouping, which represents the largest subset of survey respondents (62.6%), nearly 57% are not seeking a change in employment.

VIII. Importance vs. Satisfaction

Survey respondents were asked to rank 11 aspects of job satisfaction based on personal importance and level of satisfaction at their current organizations.

- *Immediate Supervisor's Respect for Employees*
- *Relationship with Immediate Supervisor*
- *Benefits, Overall*
- *Compensation / Pay*
- *Paid Time Off*
- *Respectful Treatment of All Employees*
- *Flexibility to Balance Life and Work Issues*
- *Job Security*
- *Organization's Financial Stability*
- *Career Development / Advancement Opportunities*
- *Trust Between Employees and Senior Leadership*

The selection of job satisfaction metrics was influenced by the 2016 Employee Job Satisfaction and Engagement Report developed by the SHRM [5] and is similar but paired down to less than a third of the aspects available in the same section in the 2018 Career Report [1] based on the most popular results from that report.

The survey asked respondents to rate the job satisfaction aspects on importance, ranging from Very Important to Very Unimportant. The following question asked respondents to rate their level of satisfaction with the same job satisfaction aspects at their current organizations; options ranged from Very Satisfied to Very Dissatisfied. Both questions included Not Applicable (N/A) response options.

The results of these questions will be summarized by gender sub-groups (female and male) in addition to the complete set of responses.

FIGURE 38: JOB SATISFACTION ASPECTS, IMPORTANCE (ALL RESPONDENTS)

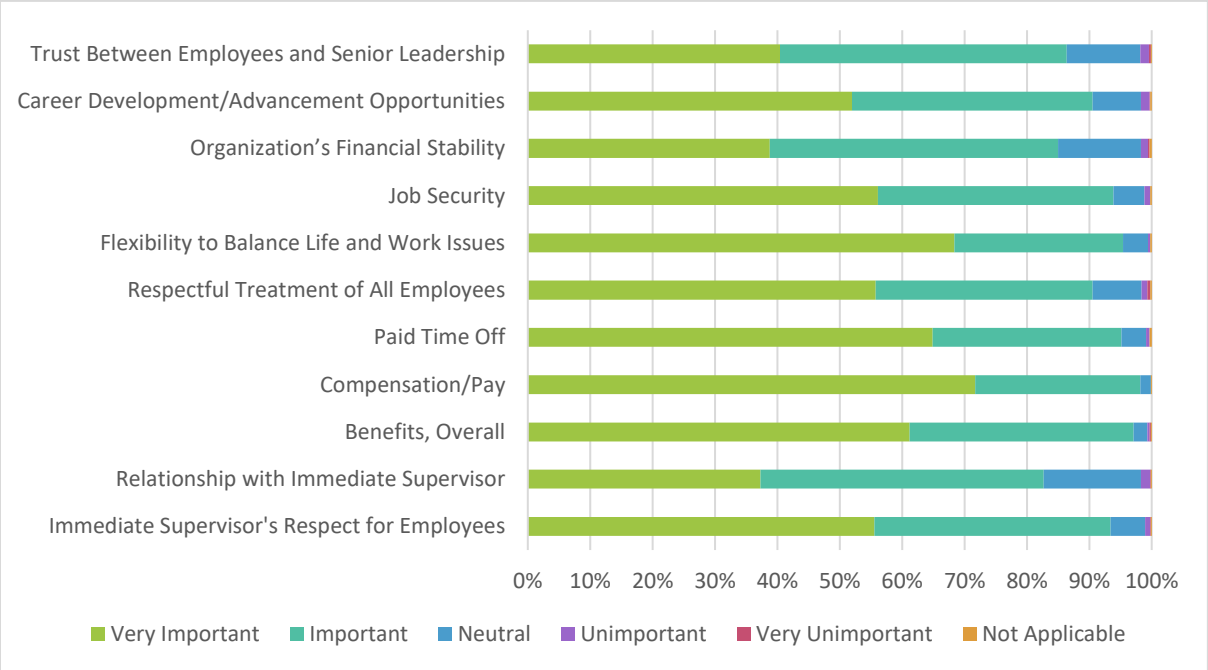


FIGURE 39: JOB SATISFACTION ASPECTS, SATISFACTION (ALL RESPONDENTS)

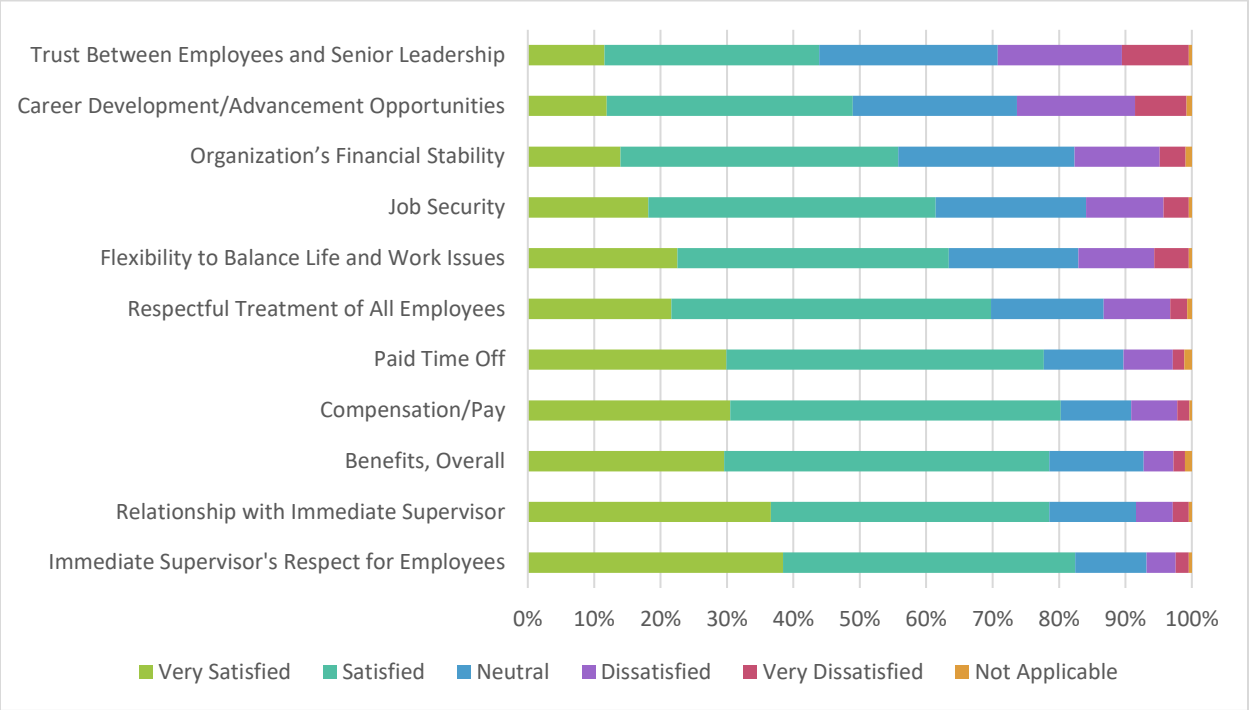


Figure 38 shows the importance of each aspect of job satisfaction by all respondents and Figure 39 shows the satisfaction of each aspect of job satisfaction by the respondents.

To determine the delta between overall importance and satisfaction for each workplace aspect, values of 0-5 were assigned to the response options as follows:

- **5:** Very Important, Very Satisfied
- **4:** Important, Satisfied
- **3:** Neutral
- **2:** Unimportant, Dissatisfied
- **1:** Very Unimportant, Very Dissatisfied
- **0:** Not Applicable

Figures 40 and 41 illustrate the weighted values for importance and satisfaction, and the delta between the two.

FIGURE 40: IMPORTANCE AND SATISFACTION (ALL RESPONDENTS)

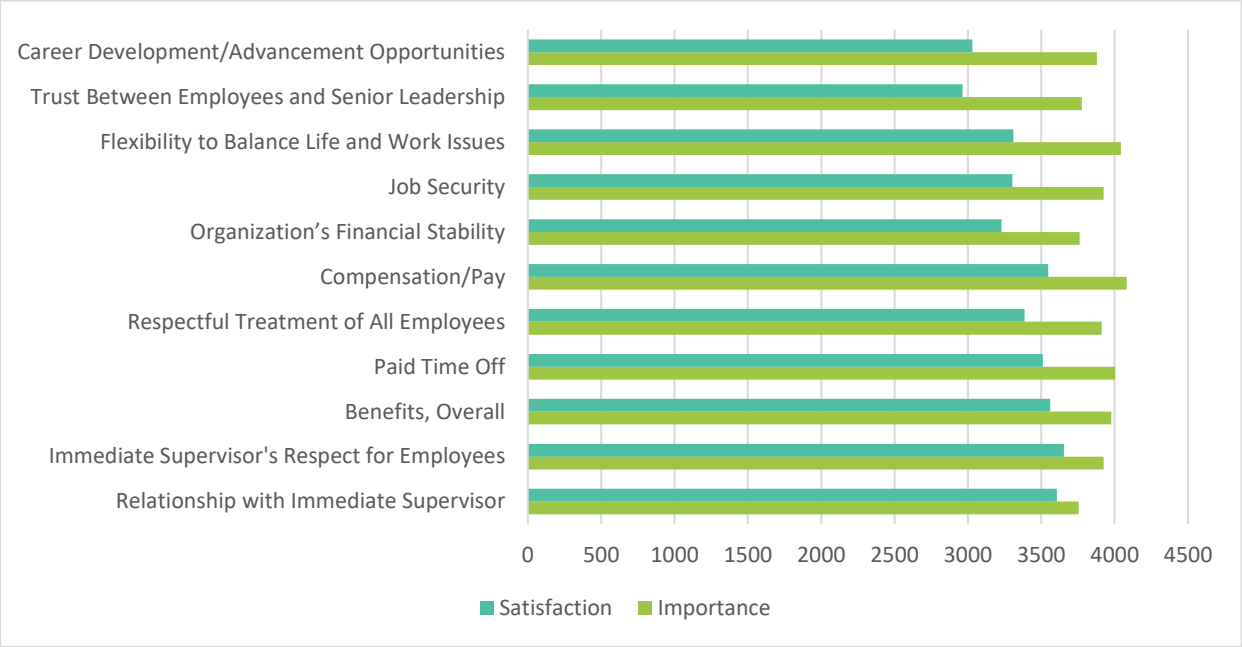
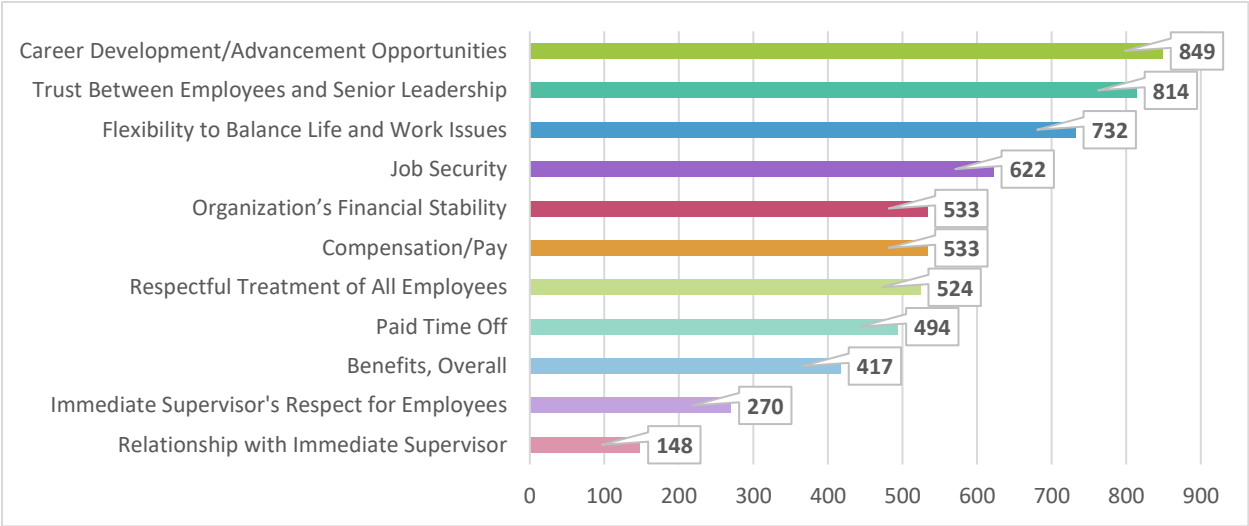


FIGURE 41: IMPORTANCE AND SATISFACTION DELTA (ALL RESPONDENTS)

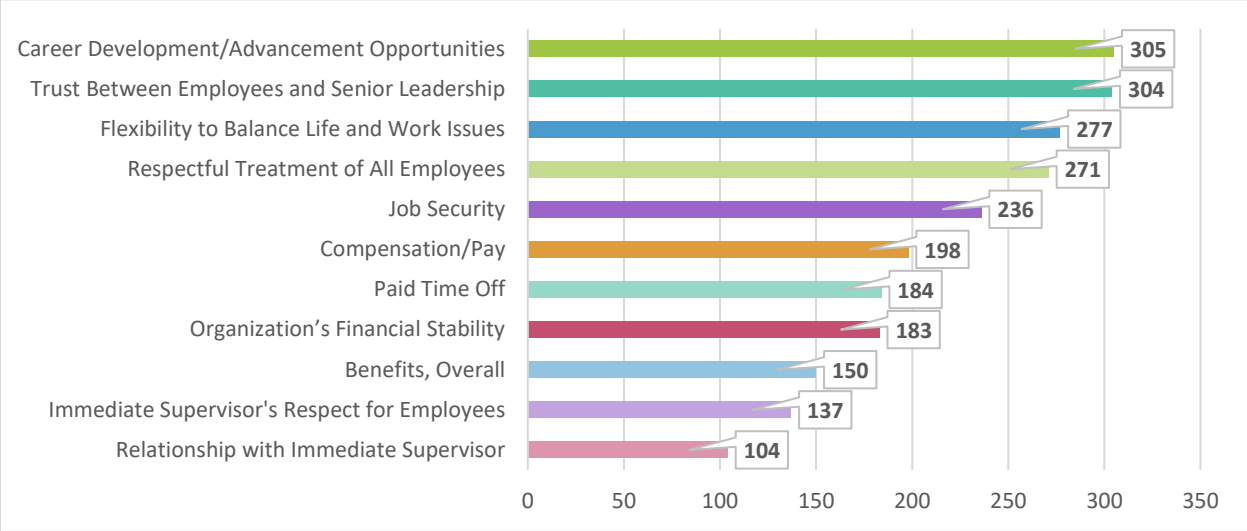


Based on the weighted values, respondents cited the following (in descending order) as the top three most important aspects of the workplace: Compensation / Pay (4,081), Flexibility to Balance Life and Work Issues (4,042), and Paid Time Off (4,004) as shown in Figure 40.

The aspects with the three lowest levels of satisfaction are (in ascending order): Trust Between Employees and Senior Leadership (2,963), Career Development / Advancement Opportunities (3,030), and Organization's Financial Stability (3,229); however, these aspects were also rated as lower in the list of importance levels, ranking 9th, 8th, and 10th on the list, respectively.

Figure 41 shows the importance and satisfaction between all the aspects. The respondents' reported levels of importance exceed satisfaction levels for all defined workplace aspects. The data indicate that the largest discrepancies in levels of importance and satisfaction are: Career Development / Advancement Opportunities (Δ 849), Trust Between Employees and Senior Leadership (Δ 814), and Flexibility to Balance Life and Work Issues (Δ 732).

FIGURE 42: IMPORTANCE AND SATISFACTION DELTA (FEMALE)



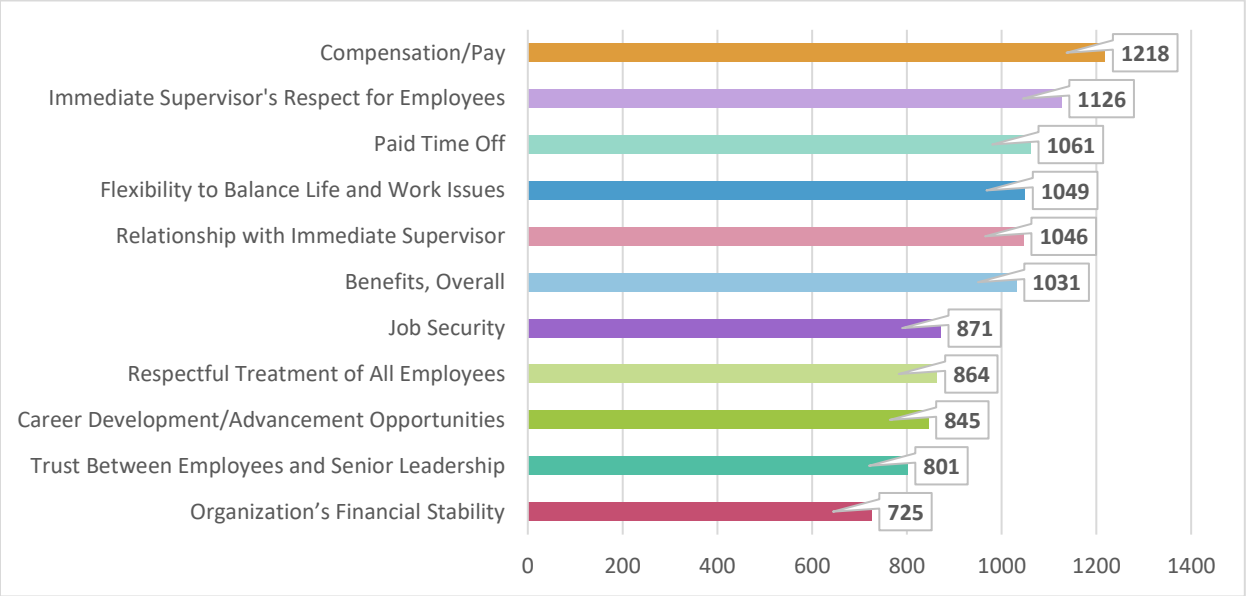
The data for female respondents as shown in Figure 42, indicates that the largest discrepancy in levels of importance and satisfaction are: Career Development / Advancement Opportunities (Δ 305), Trust Between Employees and Senior Leadership (Δ 304), and Flexibility to Balance Life and Work Issues (Δ 277). The top discrepancies mirror the results for all respondents.

Based on the weighted values, female respondents cited the following (in descending order) as the top three most important aspects of the workplace: Flexibility to Balance Life and Work Issues (1,442), Compensation / Pay (1,433), and Paid Time Off (1,430).

It is worthwhile to note that 98% of female respondents cited Respectful Treatment of All Employees as either Important or Very Important, compared to 87% of male respondents. This data is similar to findings in the 2017 SHRM report [4], which showed that 78% of female employees cited this as an important factor to job satisfaction vs. only 57% of male employees.

The aspects with the three lowest levels of satisfaction are (in ascending order): Trust Between Employees and Senior Leadership (1,048), Career Development/Advancement Opportunities (1,073), and Organization's Financial Stability (1,155).

FIGURE 43: IMPORTANCE AND SATISFACTION DELTA (MALE)



The data for male respondents indicates that the largest discrepancies in levels of importance and satisfaction are: Compensation / Pay (Δ 1,218), Immediate Supervisor's Respect for Employees (Δ 1126), and Paid Time Off (Δ 1061).

Based on the weighted values, male respondents cited the following (in descending order) as the top three most important aspects of the workplace: Compensation / Pay (2,605), Flexibility to Balance Life and Work Issues (2,557), and Paid Time Off (2,531). Compensation / Pay, the most important job satisfaction factor cited by male respondents, is similarly ranked by the SHRM as the top determining factor influencing employees' decisions to leave or stay at their current jobs [4].

The aspects with the three lowest levels of satisfaction are (in ascending order): Relationship with Immediate Supervisor (1,317), Immediate Supervisor's Respect for Employees (1,340), and Compensation / Pay (1,387). It is worthwhile to note that the grouping of male respondents cited a low level of satisfaction for Compensation / Pay despite higher salary averages (i.e., Starting, Current, and Total Compensation) than female respondents. The lowest satisfaction areas are completely different for males when compared to females.

IX. Nuclear Outlook Results

Nuclear Technology Opportunities

The future of Nuclear Technology is also of great interest to NAYGN. Survey responders were asked their opinion about which technology would be the most impactful, and the resulting data is shown in Table 8. Respondents were asked to rank the options in order of importance, with 1 being most important.

TABLE 8: WHAT NUCLEAR TECHNOLOGY DO YOU THINK IS THE MOST IMPACTFUL?

Job Role	New Builds	Extending Life of Existing Plants	SMRs	Advanced Reactor Technology (Molten Salt, Fusion, etc.)	Water Desalination	Use of Radioisotopes in Medicine
Administrative / Non-Technical	3.45	2.23	3.42	3.42	4.65	3.84
Engineering	3.23	2.31	2.98	3.58	4.71	4.18
HR / Communications	3.47	1.73	2.53	3.47	5.07	4.73
Maintenance	3.11	2.46	3.00	3.18	4.43	4.82
Operations	3.29	2.44	2.90	3.56	4.60	4.21
Org Eff / Perf Imp	2.47	1.73	3.67	3.87	4.67	4.60
Project Management	3.54	2.16	2.95	3.78	4.59	3.97
Quality / Oversight	2.41	2.12	3.06	3.76	4.82	4.82
Science (HP, RP, Chem, Env)	3.00	2.57	3.08	3.69	4.96	3.69
Security	2.85	2.08	3.46	2.92	4.69	5.00
Student	3.38	4.31	2.46	2.62	5.08	3.15
Training	3.09	2.21	2.73	3.55	5.00	4.42
Other	3.79	2.20	3.01	3.44	4.70	3.86
Combined	**3.20**	**2.43**	**3.02**	**3.40**	**4.67**	**4.28**

There is inconsistency in perception based on responders' job role. Overall, the most impactful technology is thought to be to Extending the Life of Existing Plants, and the next three ranked selections were very close between New Builds, Small Modular Reactors (SMRs), and Advanced Reactor Technology. Organization Effectiveness, Performance Improvement, Quality, and Oversight believe in New Builds more than other responders while Students believe the most in SMRs and Advanced Reactors.

Comparing this data to the 2018 Career Report [1], there is consistency in responses to those in 2020. The data below shows what percent of responses ranked the technology as the most impactful in 2020. This question was asked differently in 2018, with responders being asked which technology would be the most successful.

TABLE 9: COMPARING TECHNOLOGY OUTLOOK TO 2018 DATA

Report Year	New Builds	Extending Life of Existing Plants	SMRs	Advanced Reactor Technology (Molten Salt, Fusion, etc.)	Water Desalination	Use of Radioisotopes in Medicine
2018	11%	**62%**	17%	10%	N/A	N/A
2020	18%	**41%**	18%	11%	1%	10%

In 2020, Extending the Life of Existing Plants was still the number one response, but there were two new options, lowering the percentages for this option. New Builds increased in responders' opinion of what technology would be the most impactful. The increase in belief in new builds is seen in the data from responders in the USA-Southeast Region as seen in Table 10. The USA-Southeast Region responded strongly in belief of New Builds, relative to the other regions and technologies other than Extending Life of Existing Plants and with far more people than in the USA-West Region. The USA-West region believes the priority to be SMRs whereas the Canadian region believes there will be a large impact in the Use of Radioisotopes in Medicine.

TABLE 10: REGIONAL BREAKDOWN OF #1 RANKINGS OF FUTURE NUCLEAR TECHNOLOGY FROM 2020 DATA

	New Builds	Extending Life of Existing Plants	SMRs	Advanced Reactor Technology (Molten Salt, Fusion, etc.)	Water Desalination	Use of Radioisotopes in Medicine
Canada	15.3%	29.7%	17.1%	11.7%	1.8%	24.3%
USA - Atlantic	19.4%	47.8%	20.9%	4.5%	1.5%	6.0%
USA - Carolinas	20.4%	50.5%	15.1%	6.5%	3.2%	4.3%
USA - Midwest	12.2%	48.7%	19.6%	12.7%	2.1%	4.8%
USA - Northeast	18.8%	43.1%	13.9%	13.9%	0.0%	10.4%
USA - Southeast	24.6%	35.5%	18.0%	14.2%	1.1%	6.6%
USA - West	14.0%	25.6%	37.2%	4.7%	0.0%	18.6%

How Successful is Advocating for the Nuclear Industry?

Advocating for the nuclear industry is a major role and opportunity for the members of NAYGN. The survey included questions relevant not only to how many of its members advocate for the industry, but how successfully they advocate, and how supportive of the industry their region and government are. Table 11 demonstrates how successful people believe their advocacy conversations and interactions are.

TABLE 11: ADVOCACY SUCCESSFULNESS BY JOB ROLE

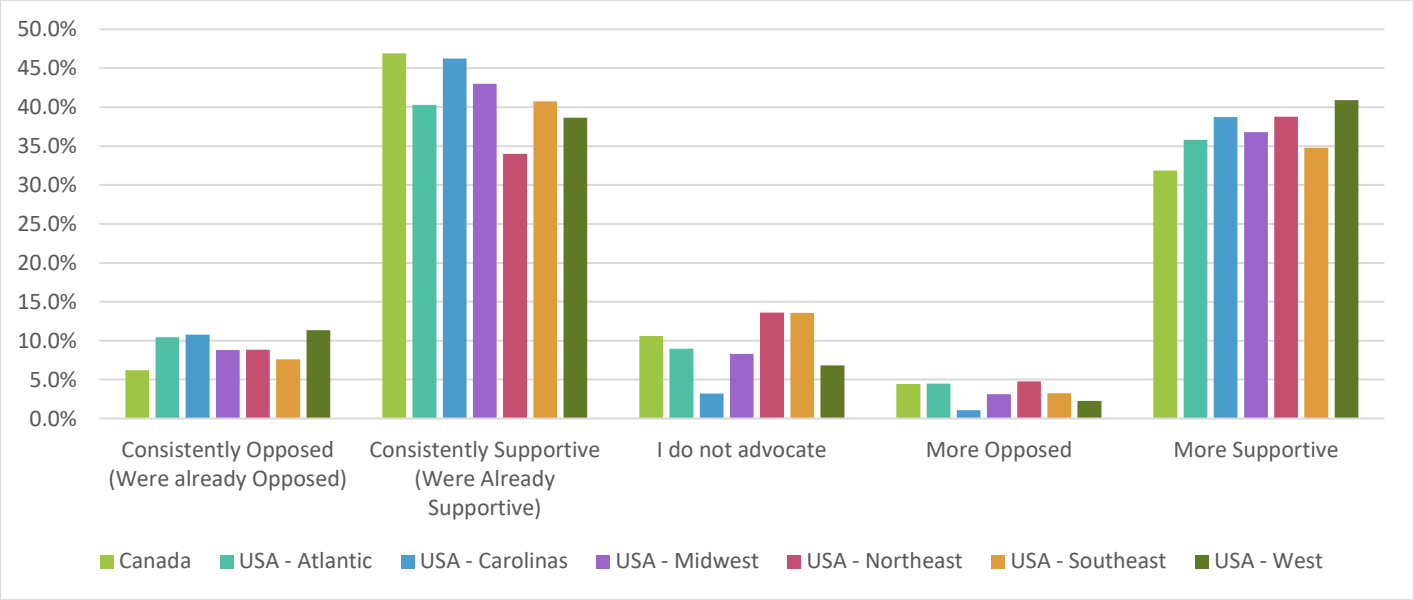
Job Role	Consistently Opposed (Were already Opposed)	Consistently Supportive (Were Already Supportive)	I do not advocate	More Opposed	More Supportive
Administrative / Non-Technical	6.5%	41.9%	19.4%	0.0%	32.3%
Engineering	9.8%	41.5%	9.6%	3.6%	35.5%
HR / Communications	12.5%	56.3%	12.5%	0.0%	18.8%
Maintenance	3.6%	60.7%	3.6%	0.0%	32.1%
Operations	13.2%	42.6%	7.4%	1.5%	35.3%
Org Eff / Perf Imp	0.0%	33.3%	6.7%	6.7%	53.3%
Project Management	8.1%	32.4%	16.2%	5.4%	37.8%
Quality / Oversight	5.9%	41.2%	23.5%	5.9%	23.5%
Science (HP, RP, Chem, Env)	0.0%	45.1%	9.8%	3.9%	41.2%
Security	0.0%	69.2%	15.4%	0.0%	15.4%
Student	15.4%	38.5%	15.4%	0.0%	30.8%
Training	9.1%	33.3%	6.1%	12.1%	39.4%
Other	8.5%	31.0%	8.5%	2.8%	49.3%
Combined	**8.7%**	**41.4%**	**10.1%**	**3.4%**	**36.4%**

Broken down by job role, responders in Organization Effectiveness and Performance Improvement believe they are most successful with 53.3% of people believing people are more supportive of the nuclear industry after their interaction. Personnel in the training department believe their interactions are the least successful with a 12.1% rate of people becoming more opposed to the industry. Personnel in the Administrative / Non-Technical and Quality / Oversight fields advocate at the lowest rates of approximately 20% of people saying they do not advocate. Students believe they are the least successful in the advocacy with 15.4% of responders unable to change the minds of their advocacy subjects in a positive direction after the interaction.

TABLE 12: ADVOCACY SUCCESS BY REGION

Region	Consistently Opposed (Were already Opposed)	Consistently Supportive (Were Already Supportive)	I do not advocate	More Opposed	More Supportive
Canada	6.2%	46.9%	10.6%	4.4%	31.9%
USA - Atlantic	10.4%	40.3%	9.0%	4.5%	35.8%
USA - Carolinas	10.8%	46.2%	3.2%	1.1%	38.7%
USA - Midwest	8.8%	43.0%	8.3%	3.1%	36.8%
USA - Northeast	8.8%	34.0%	13.6%	4.8%	38.8%
USA - Southeast	7.6%	40.8%	13.6%	3.3%	34.8%
USA - West	11.4%	38.6%	6.8%	2.3%	40.9%

FIGURE 44: ADVOCACY SUCCESS BY REGION



By changing the perspective to a regional analysis, we can see which parts of the continent are more successful in advocating for the nuclear industry. Table 12 and Figure 44 show success by region.

There is significant homogeneity across the regions in this facet. The highest rate of advocacy is in the Carolinas with only 3.2% of responders saying that they do not advocate. The same region also has the lowest rate of people being more opposed to the industry where only 1.1% of responders believed their advocacy resulted in people becoming more

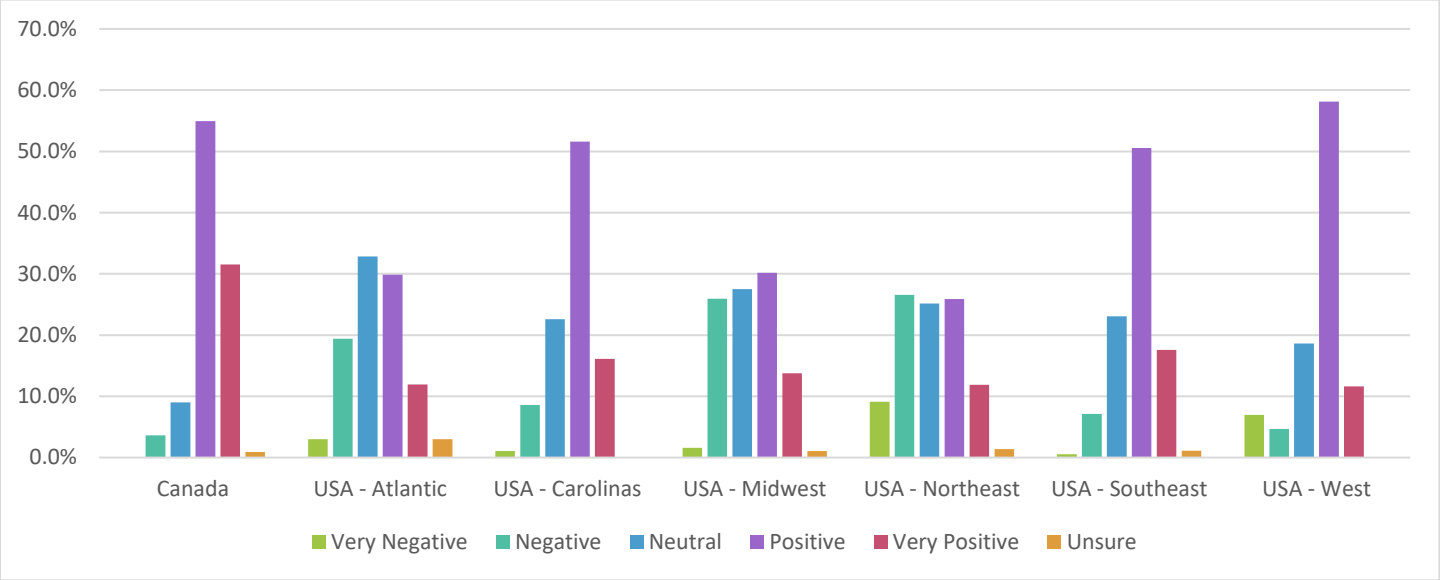
opposed to the industry after their interaction. In general, responders believe their advocacy results in people becoming more supportive of the nuclear industry.

Next, survey participants were asked about how supportive their region/community is of the nuclear industry. Table 13 shows how participants responded, with the highest percentages highlighted blue and the lowest highlighted purple.

TABLE 13: REGIONAL AND COMMUNITY SUPPORT FOR THE NUCLEAR INDUSTRY

Region	Very Negative	Negative	Neutral	Positive	Very Positive	Unsure
Canada	0.0%	3.6%	9.0%	55.0%	31.5%	0.9%
USA - Atlantic	3.0%	19.4%	32.8%	29.9%	11.9%	3.0%
USA - Carolinas	1.1%	8.6%	22.6%	51.6%	16.1%	0.0%
USA - Midwest	1.6%	25.9%	27.5%	30.2%	13.8%	1.1%
USA - Northeast	9.1%	26.6%	25.2%	25.9%	11.9%	1.4%
USA - Southeast	0.5%	7.1%	23.1%	50.5%	17.6%	1.1%
USA - West	7.0%	4.7%	18.6%	58.1%	11.6%	0.0%
Combined	**2.8%**	**15.3%**	**23.1%**	**41.1%**	**16.7%**	**1.1%**

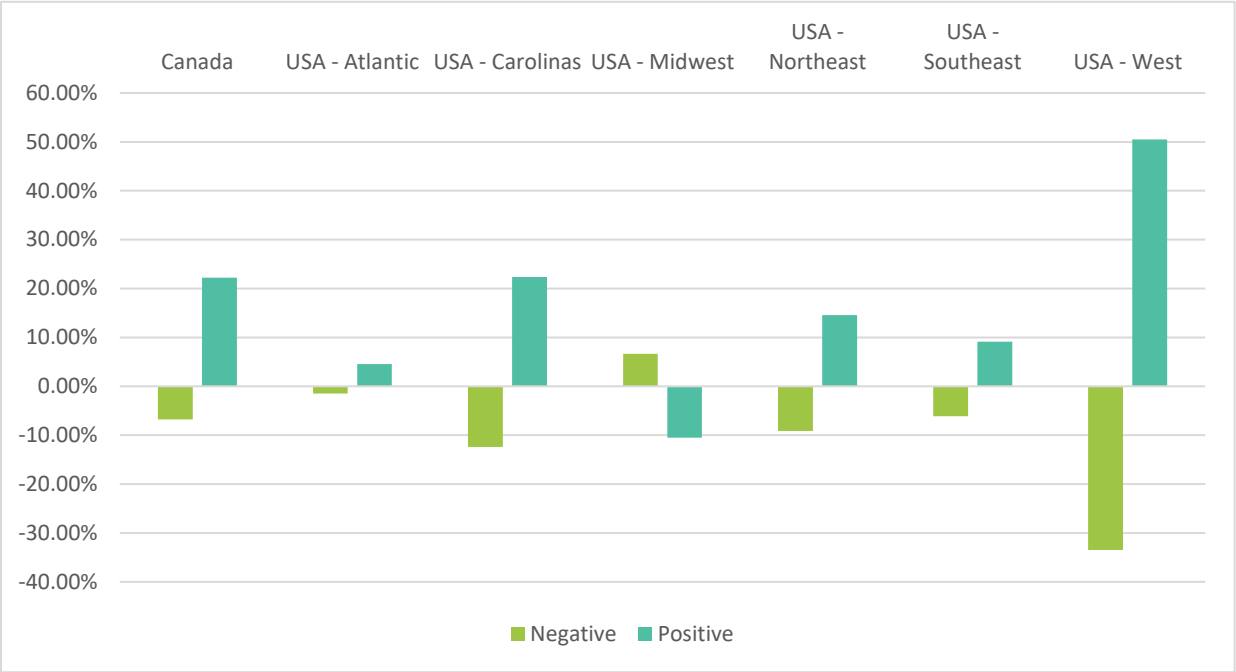
FIGURE 45: REGIONAL/COMMUNITY SUPPORT IN 2020



The results show a general positive perspective, though the USA-Midwest and USA-Northeast regions have the least positive support in their community. Canada believes they have the most Very Positive support at 31.5%, double the rate of the regions in the United States, which have an average Very Positive support of 14.9%. The USA-Northeast has the highest Very Negative support. In general, 64.2% of responders believed their region and community are supportive of the nuclear industry.

A similar survey was taken in 2018, and the data in Figure 46 shows the differences in regional perceptions between the 2018 Career Report [1] and now.

FIGURE 46: CHANGES IN REGIONAL/COMMUNITY SUPPORT 2018-2020



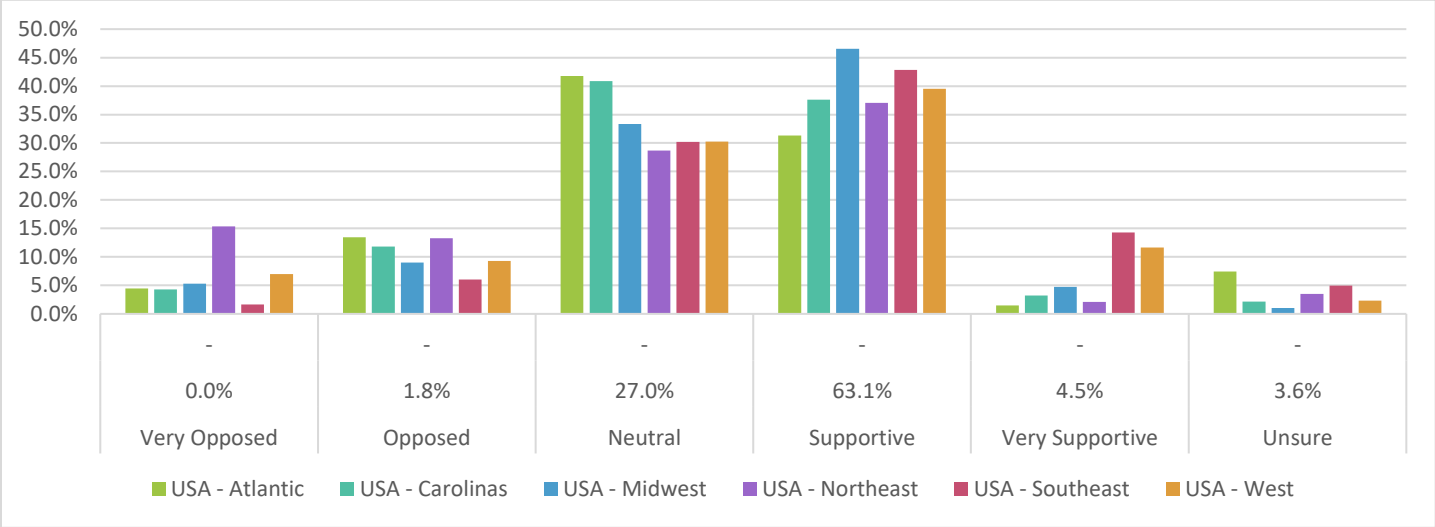
In two years, the greatest change is in the USA-West. In 2018, plant closures were being announced and the wave of small modular reactors and other new reactor technologies was not as widespread as it is in 2020. This funding and innovation are likely having a positive effect on the region. Conversely, the USA-Midwest has experienced the greatest losses in positive support, which is in line with the plant closures in the region.

Finally, survey participants were asked to gauge how supportive their government is of the nuclear industry. The results are show below in Table 14 and Figure 47.

TABLE 14: GOVERNMENT SUPPORT FOR THE NUCLEAR INDUSTRY IN 2020

Region	Very Opposed	Opposed	Neutral	Supportive	Very Supportive	Unsure
Canada	0.0%	1.8%	27.0%	63.1%	4.5%	3.6%
USA - Atlantic	4.5%	13.4%	41.8%	31.3%	1.5%	7.5%
USA - Carolinas	4.3%	11.8%	40.9%	37.6%	3.2%	2.2%
USA - Midwest	5.3%	9.0%	33.3%	46.6%	4.8%	1.1%
USA - Northeast	15.4%	13.3%	28.7%	37.1%	2.1%	3.5%
USA - Southeast	1.6%	6.0%	30.2%	42.9%	14.3%	4.9%
USA - West	7.0%	9.3%	30.2%	39.5%	11.6%	2.3%
Combined	**5.4%**	**8.8%**	**32.4%**	**43.7%**	**6.3%**	**3.4%**

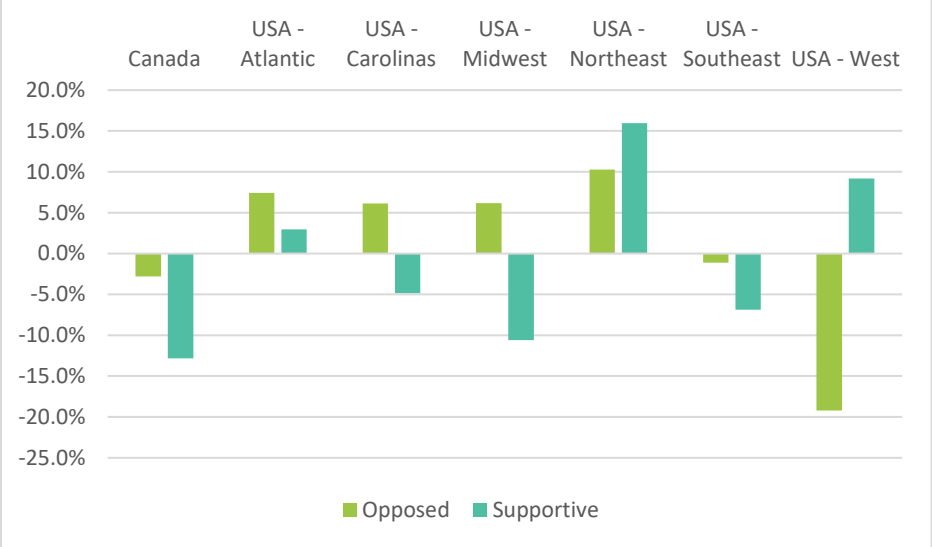
FIGURE 47: GOVERNMENT SUPPORT IN 2020



The percentages published below each section in Figure 47 correspond to the Canadian Regional results, whereas the bar graph displays the US regional responses. Responders from Canada believe they have a supportive government at the highest rate of 63.1% though the USA-Southeast and USA-West have a higher Very Supportive rate at 14.3% and 11.6% respectively. Conversely, the USA-Northeast believes their government to be Very Opposed at the highest rate of 15.4%. In total, 76.1% of responders believed their government is either neutral or supportive of the nuclear industry.

In Figure 48, the data from 2020 is compared to the same survey question from the 2018 Career Report [1].

FIGURE 48: GOVERNMENT SUPPORT CHANGES SINCE 2018



The USA-Northeast believes that their government has improved its support of the nuclear industry the most since 2018, though it has only gone from 18.4% (which was the lowest in the regions) to 37.1% support which is near the lowest rate in the regions, but is still significantly better than before. The USA-West region believes their government is significantly less opposed than it was in 2018, improving this rate by 18.8% (25.8% believed their government to be Very Opposed in 2018; however, only 7.0% believe it is Very Opposed now). Despite Canada's gains in their community, responders from Canada believe that their support from their government characterized as Very Supportive has gone down 15% from 19.5% to 4.5%, though this movement has been to a neutral position and not to a position of opposition.

Nuclear Outlook: Delivering the Nuclear Promise

Delivering the Nuclear Promise (DNP) has been a polarizing issue in the nuclear industry. In the 2018 Career Report [1], with data collected at the end of 2017, implementation of the DNP was in its early phases of implementation. Data in Table 15 is compared to the results from 2018 in Figure 49 (Figure 49 is a snippet from the 2018 Career Report).

FIGURE 49: *FIGURE 45 FROM 2018 CAREER REPORT - WHAT TYPE OF IMPACT DO YOU THINK THE DELIVERING THE NUCLEAR PROMISE INITIATIVES WILL HAVE ON THE INDUSTRY?*

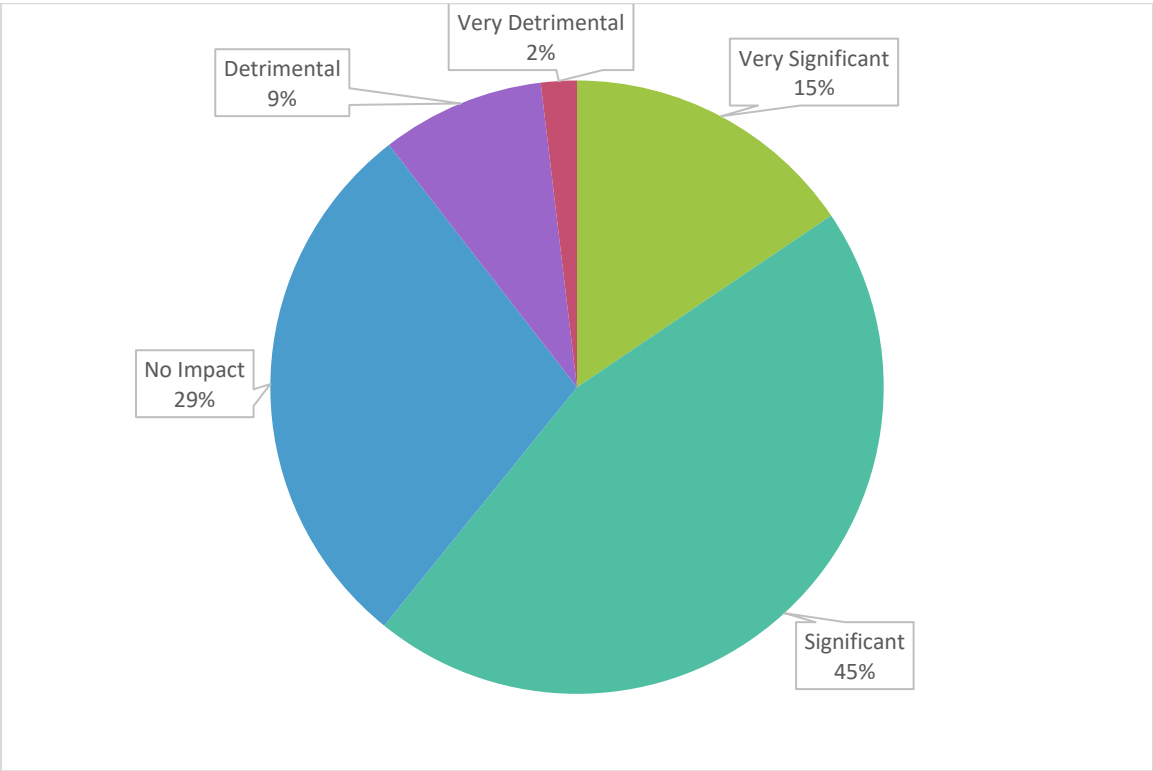


TABLE 15: WHAT ARE YOUR GENERAL THOUGHTS ON THE IMPACT OF THE DELIVERING THE NUCLEAR PROMISE INITIATIVES?

Job Role	Negative Impact	No Impact	Positive Impact
Administrative / Non-Technical	6.45%	12.90%	80.65%
Engineering	6.70%	28.79%	64.51%
HR / Communications	0.00%	18.75%	81.25%
Maintenance	10.71%	32.14%	57.14%
Operations	17.65%	26.47%	55.88%
Org Eff / Perf Imp	6.67%	20.00%	73.33%
Project Management	2.70%	37.84%	59.46%
Quality / Oversight	5.88%	58.82%	35.29%
Science (HP, RP, Chem, Env)	13.73%	23.53%	62.75%
Security	7.69%	15.38%	76.92%
Student	0.00%	23.08%	76.92%
Training	9.09%	27.27%	63.64%
Other	7.04%	28.17%	64.79%
Combined	**7.85%**	**28.06%**	**64.09%**

In 2018, the perception was that DNP would have a significant impact on the industry, with 60% of responders expecting a Significant or Very Significant Impact. By 2020, 64% of responders are calling this impact positive and approximately 8% are calling it negative.

Breaking down the data by job role, it becomes apparent that groups perceive DNP differently. The Quality and Oversight group has not seen an impact from DNP at the highest rate compared with Security who responded that there had been no impact at the lowest rate. Security, HR, and Communications were the most positive about its impact while Operations was the most negative. Quality and Oversight personnel were also the least positive of its impact, with an overwhelming majority of respondents answering No Impact.

X. Training and Professional Development Results

Skill Development Interest

To determine what aspects of professional development NAYGN members were most interested in, the data in Table 16 was compiled. NAYGN members ranked the below options from 1-5 (1 being the most important) and demonstrated that they were most interested in Leadership / Management skill development and least interested in Software / Programming Proficiency. Communication (Verbal and Written), and Negotiation Skills round out the top 3.

TABLE 16: WHAT TYPES OF SKILLS WOULD YOU LIKE TO DEVELOP?

All Responders – 2020 data	Public Speaking	Communication (Verbal and Written)	Leadership / Management	Negotiation Skills	Development of Teams	Software / Programming Proficiency	Time Management
Average Ranking	**4.18**	**3.69**	**2.47**	**4.02**	**4.20**	**4.93**	**4.50**

Comparing this data to the data from the 2018 Career Report [1] as seen in Table 17, Leadership / Management skills have maintained their importance among NAYGN members as the number one choice in both surveys. It is interesting to note that in 2018, Software / Programming Proficiency was the second most desired form of training but in 2020, it is the least desired. Two additional items were added for 2020: Negotiation Skills and Time Management.

TABLE 17: COMPARING TRAINING/PROFESSIONAL DEVELOPMENT INTERESTS TO 2018 DATA

Job Role	Public Speaking	Communication (Verbal and Written)	Leadership / Management	Negotiation Skills	Development of Teams	Software / Programming Proficiency	Time Management
2020 First Choice	4	2	1	3	5	7	6
2018 Interested In	3	4	1	N/A	5	2	N/A

TABLE 18: RANKING OF TRAINING/PROFESSIONAL DEVELOPMENT INTERESTS BY JOB ROLE

Job Role	Public Speaking	Communication (Verbal and Written)	Leadership / Management	Negotiation Skills	Development of Teams	Software / Programming Proficiency	Time Management
Administrative / Non-Technical	4.69	3.38	2.75	3.69	3.78	4.81	4.91
Engineering	4.37	3.68	2.42	4.04	4.22	4.58	4.68
HR / Communications	4.38	4.31	2.13	3.81	3.44	5.88	4.06
Maintenance	4.17	3.34	2.83	3.55	4.21	5.38	4.52
Operations	4.32	3.62	2.07	4.51	3.68	5.49	4.30
Org Eff / Perf Imp	3.87	4.27	2.93	3.33	4.67	4.53	4.40
Project Management	4.08	4.03	2.11	3.62	3.92	5.54	4.70
Quality / Oversight	3.82	3.35	2.65	4.53	4.35	4.53	4.76
Science (HP, RP, Chem, Env)	3.88	3.31	2.75	4.18	4.65	4.69	4.55
Security	4.38	3.46	2.23	4.69	4.15	4.15	4.92
Student	4.15	4.54	1.92	3.69	4.69	4.38	4.62
Training	3.91	4.06	2.15	4.52	4.06	4.76	4.55
Combined	**4.18**	**3.69**	**2.47**	**4.02**	**4.20**	**4.93**	**4.50**

Table 18 shows that responders in each job role demonstrated different preferences for training, although Leadership / Management skill development was still the top ranked option for each job role. It was also noteworthy that Software / Programming Proficiency and Time Management training were consistently ranked as less important.

Rotational Program Offerings

NAYGN member interest in and evaluation of the value of rotational programs is shown in the question posed in Table 19.

TABLE 19: DOES YOUR COMPANY OFFER AN INTER-DEPARTMENTAL ROTATIONAL PROGRAM? DO YOU BELIEVE IT IS VALUABLE?

Job Role	Not offered and believe would be valuable	Not offered and believe would not be valuable	Yes offered and believe is not valuable	Yes offered and believe is valuable	% Offered	% believe valuable of those offered
Administrative / Non-Technical	36.7%	13.3%	3.3%	46.7%	50.0%	93%
Engineering	65.4%	10.3%	4.5%	19.9%	24.3%	82%
HR / Communications	53.3%	0.0%	6.7%	40.0%	46.7%	86%
Maintenance	44.8%	6.9%	10.3%	37.9%	48.3%	79%
Operations	56.5%	5.8%	7.2%	30.4%	37.7%	81%
Org Eff / Perf Imp	46.7%	13.3%	0.0%	40.0%	40.0%	100%
Project Management	56.8%	13.5%	2.7%	27.0%	29.7%	91%
Quality / Oversight	58.8%	0.0%	5.9%	35.3%	41.2%	86%
Science (HP, RP, Chem, Env)	68.0%	12.0%	0.0%	20.0%	20.0%	100%
Security	69.2%	7.7%	7.7%	15.4%	23.1%	67%
Student	38.5%	15.4%	0.0%	46.2%	46.2%	100%
Training	36.4%	15.2%	6.1%	42.4%	48.5%	88%
Other (please specify)	58.6%	5.7%	5.7%	30.0%	35.7%	84%
Combined	**60.0%**	**9.7%**	**4.6%**	**25.7%**	**30.4%**	**85%**
2018 Data	**60%**		**4%**	**36%**		

Overwhelmingly responders either thought that a rotational program would be valuable or is valuable. Only 30.3% of responders noted that they have such a program available to them which is a decrease from the 2018 Career Report [1] when 40% responded that such a program was available. It should be noted that Administrative and Non-Technical personnel reported the highest rate of such a program being offered at 50%, and their perception of it being valuable was also the highest at 46.7%. 100% of Organizational Effectiveness / Performance Improvement, Science, and Student personnel that noted that such a program is offered to them reported it is valuable.

Security, Science, and Engineering personnel responded that they have a rotational program offered to them at the lowest rate of all responders with Security noting that this program provides value at the lowest rate of all responders at 67%. Science personnel are strong believers in the value of the program while engineers responded in line with the total survey average with 82% believing it adds value.

XI. NAYGN Related Results

FIGURE 50: NAYGN EVENTS ATTENDED

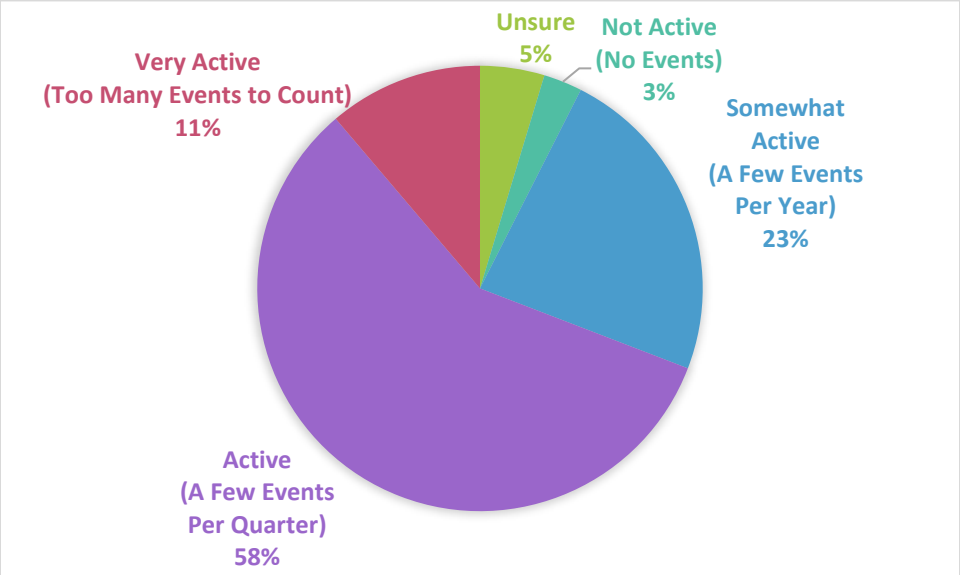


Figure 50 shows how many organized NAYGN events the respondents attended in the last 12 months. Compared with the 2018 Career Report [1], the overall participation in NAYGN has increased ("0 events" went from 24% in 2018 to 22.75% in 2020 and "10 or more" went from 6% to 8.76%).

FIGURE 51: HOW ACTIVE IS YOUR NAYGN CHAPTER

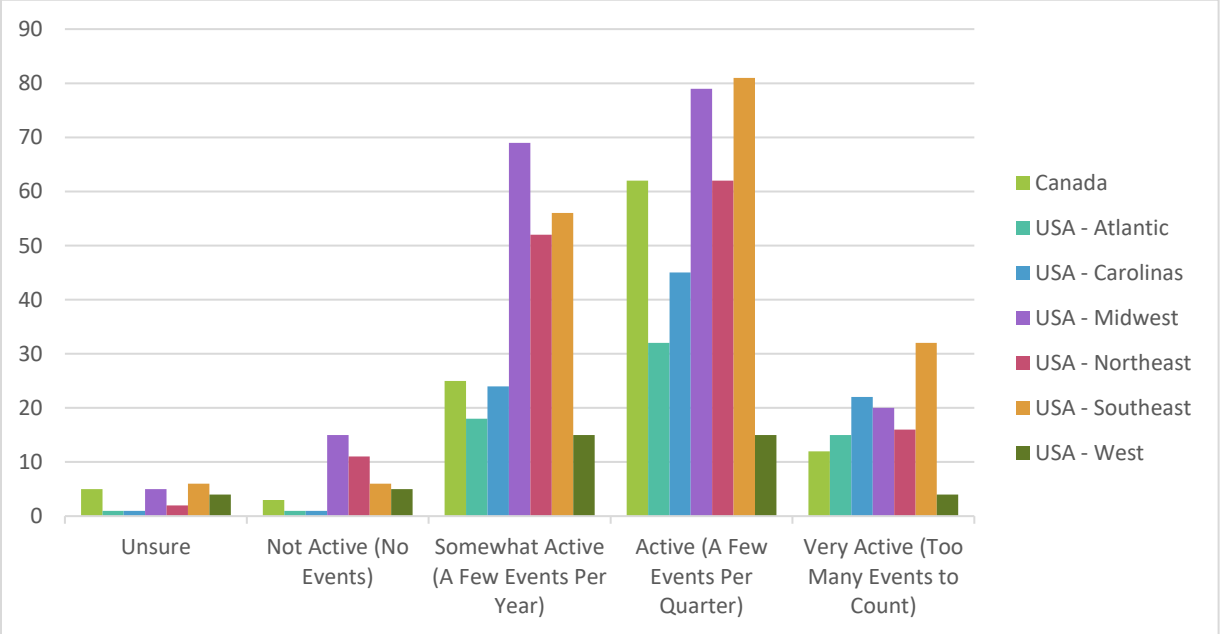


Figure 51 asked respondents to gauge how active their NAYGN chapter is. This data shows a left-skewed bell curve which is a positive result as the number of chapters that are Active or Very Active outweigh the Not Active and Somewhat Active chapters. However, with respondents reporting that they are either Unsure of or do not have an active chapter, there is an opportunity to revitalize and revamp some chapters which may be trending towards lower engagement.

There was also a free form space to provide comments following the answer to the activity level of the chapter. Comments that were provided around Somewhat Active (a few events per year) were mainly centered around difficulty in keeping momentum going during outages, not having enough time to attend events / work load, restarting or reinvigorating the chapter, newer chapters trying to grow, and lack of new employees coming in while seasoned members become less involved.

Comments for Not Active (no events) were centered around being a new chapter or changes and turnover within the company negatively impacting the group.

FIGURE 52: HOW ACTIVE IS YOUR NAYGN CHAPTER - BY REGION

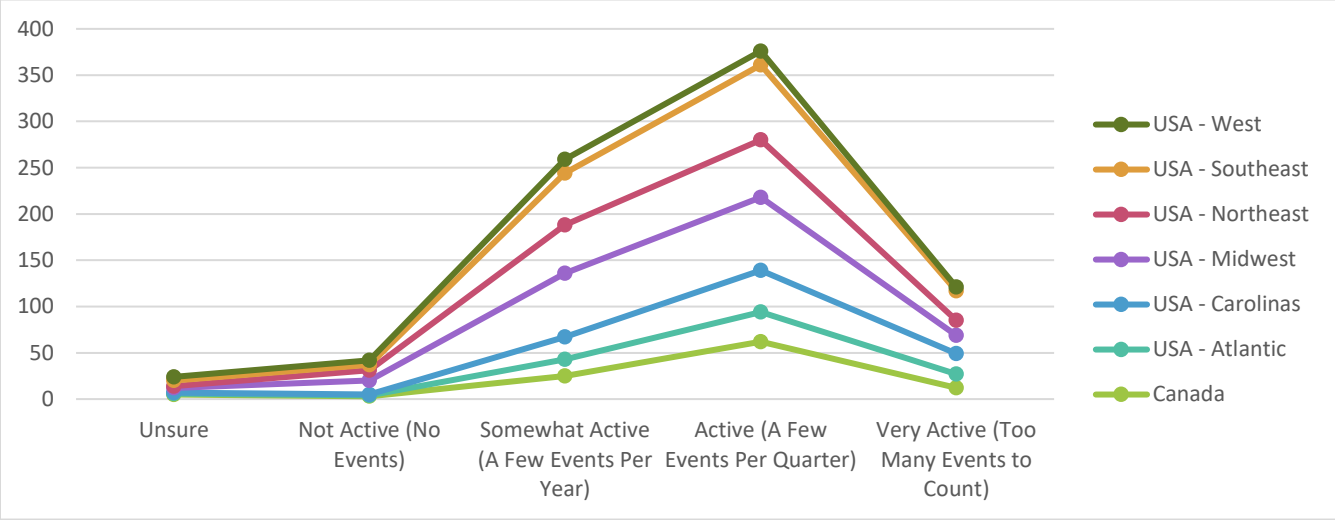


Figure 52 breaks down the same data by region and there is a very uniform trend across the regions for engagement. This is positive sign of a healthy organization with no region having a discrepancy.

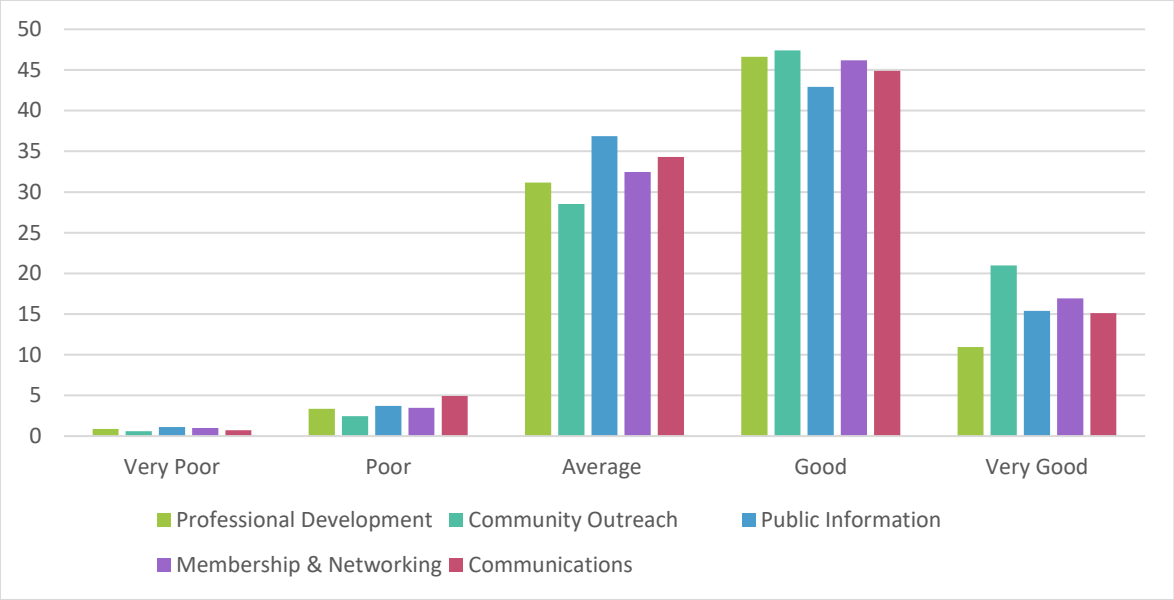
In addition to their membership in NAYGN, many members stated they were involved in other professional groups with the American Nuclear Society (ANS), Women in Nuclear (WIN) and other Engineering Associations (ASME, SWE, etc.) being the top 3 choices.

Table 20 and Figure 53 shows the respondents review of the NAYGN pillars of Professional Development, Membership & Networking, Community Outreach, and Public Information, as well as Communications. Respondents were not asked to separate local chapter activities from continental activities when providing feedback. Overall most areas have decreased in Very Good and increased in Good or Average from the 2018 survey [1].

TABLE 20: WEIGHTED AVERAGE OF PILLAR PERFORMANCE

Professional Development	Community Outreach	Public Information	Membership and Networking	Communications
3.63	3.86	3.68	3.75	3.69

FIGURE 53: NAYGN PERFORMANCE BY AREA



In addition to survey members providing feedback on the various NAYGN pillars, there was a freeform text box in which they could provide feedback. Some common general themes included:

- Continue to improve and promote international communications and help members understand the role of the intercontinental structure
- Focus on providing more opportunities for professional development at the local level
- Provide more help for chapters with standardized approaches and holding chapters accountable
- Provide more materials and resources for public information and advocacy
- Continue the strong use of social media platforms to promote content

Another question was included to ask members, "What key areas can NAYGN (as an international organization) improve upon?" This question was a freeform text box for member feedback. Some common themes included:

- Inclusivity
- Ideas for advocating for nuclear power as well as advocating for our members
- More community outreach events
- Standardizing some operations for accountability of NAYGN leaders
- Career development opportunities
- Make NAYGN more accessible to shift workers
- Younger and more diverse speakers at national conference
- More discussion on new technology, innovations, and what is happening outside the industry
- Develop more PD opportunities including webinars
- More international involvement
- More collaboration between regions and chapters and sharing material and best practices
- Mentor and develop members
- Improve partnerships with outside organizations that align with NAYGN's goals
- Partner with other Pro-Nuclear Advocacy Groups
- Improve member engagement, increase membership, and improve communications
- More university outreach and interest

XII. Conclusions and Recommendations

Conclusions

1. **NAYGN membership shows an underrepresentation of minorities when compared to the industry.**

   The distribution of the ethnicities of respondents differs considerably from the distribution of ethnicities in the nuclear industry defined in the 2019 US Energy and Employment Report [2]. 5% of survey respondents identified as Black or African American vs a 12% industry average published in the 2019 US Energy and Employment Report [2]. Additionally, 4% of survey respondents identified as Hispanic or Latino vs a 15% published industry average, and only 7% of respondents identified as Asian vs an 11% published industry average. In total, 77% of the survey respondents were Caucasian / White compared to the 2019 US Energy and Employment Report average of 66%.

2. **There is a continued lack of gender diversity in specific job roles as well as starting salary disparity.**

   Although the 2019 US Energy & Employment Report [2] cites nuclear as the highest employer of women of any generation technology, there are substantial differences in the number of female employees vs male employees in Maintenance (~13% female), Operations (~25% female), and Engineering (~28% female). Conversely, some job roles remain primarily female dominated roles including Organizational Effectiveness / Performance Improvement (~67% female), and Administrative/Non-Technical roles (~85% female). The overall gender distribution, 62% male and 38% female, closely matched the results published in the 20 US Energy & Employment Report [2], and the five aforementioned groups differed most from the overall distribution.

   Similarly, to previous surveys, there is a significant gender-based difference in both the starting and current salaries with female starting salary 4.7% less than male starting salary and female current salary 7.7% percent less than male current salary which is an improvement from the 2018 Career Report [1]. When accounting for average years of experience by taking the average current salary divided by the average number of years of experience for each gender group, there is not a statistical difference in current compensation, with females making slightly more when normalized for experience. When average compensation is normalized by years of experience, females make more than males in all categories but individual contributor. Unfortunately, most job functions sample sizes were too small to definitively determine if this accounts for the gap; only for Engineering can we confirm the compensation gap is primarily due to years of experience.

3. **Although the workforce ranks compensation as highly important, those who make the highest salaries are the least happy in their current roles.**

   The results in the Importance vs Satisfaction section show that Compensation / Pay was ranked most important by the majority of respondents, and that respondents are generally satisfied with their compensation (5th largest delta between importance and satisfaction). These results align with those of the 2018 NAYGN Career Survey [1].

   Those who work >50 hours per week saw an increase of >$10,000 in average salary from the 2018 survey results; however, ~22% of respondents who work 50-55 hours per week and ~36% of those who work >55 hours per week are dissatisfied with their job. This contrasts with an average of 11.2% of those who work less than 50 hours per week being dissatisfied with their job.

   Over 50% of all respondents who work >40 hours per week are either actively or passively looking for a new job.

4. **The current workforce believes that Subsequent License Renewal is most impactful to the future of nuclear while the next generation believes that Small Modular Reactors and Advanced Reactor Technology will be most impactful.**

   With the "uncertainty around the future of nuclear" overwhelmingly leading as the top reason respondents would leave the nuclear industry, developing technology and how the industry prioritizes the application of that technology is extremely important to today's workforce. Employees in all job roles (except student) identified "Extending Life of Existing Plants" as the being most impactful to the future of nuclear.

   Students deem life extension of existing plants one of the least impactful to the future of nuclear, second only to water desalination. Instead, students see Small Module Reactors and Advanced Reactor Technology as the future of nuclear. This trend could be impacted by the recent momentum in NuScale's SMR design certification by the Nuclear Regulatory Commission.

5. **The outlook on the future of nuclear in communities with new builds is optimistic; however, other communities have changed their perspective.**

   Challenges during the construction of VC Summer Units 2 and 3 increased the importance of the successful construction of Vogtle Units 3 and 4 for the industry. Survey results discussed in the Nuclear Outlook Results section show that although the majority of USA-Southeast region respondents identified the life extension of existing plants as having the largest impact on the future of nuclear, they had the highest number of respondents (24.6%) select "new builds" as being most impactful. Additionally, over 50% of respondents in the USA-Southeast region indicated that their community is supportive of nuclear, which is an increase of ~8% from the results of the 2018 Career Report [1].

   In the two years between surveys, the greatest change is in the USA-West. In 2018, plant closures were being announced and the wave of small modular reactors and other new reactor technologies was not as widespread as it is in 2020. This funding and innovation are having a positive effect on the region.

   Conversely, the USA-Midwest region was the only region to have an increase in respondents who feel the community has a negative perception of nuclear, and a sizeable decrease in respondents who feel the community has a positive perception of nuclear. This trend is most likely driven by recent plant closures.

6. **The workforce demonstrated that they were most interested in Leadership and Management skill development.**

   This was the top ranked choice among every job profession and was the same in the 2018 Career Report [1].

7. **Rotational programs are valuable and desired by the current workforce. This is a potential solution to some of the workforce's dissatisfactions with career development.**

   Of those who have access to a rotational training program, 85% indicated that the program has value; however, there was a decrease of almost 10% in respondents who said a program was available to them from the 2018 Career Survey [1]. Only ~30% said that a rotational program is offered to them – whereas 60% said that a program is not offered but they believe it would be valuable.

   Career development/advancement opportunities had the highest delta overall between importance and satisfaction. Additionally, "lack of advancement/career growth" was the second highest response when respondents were asked the top reason they would leave the nuclear industry.

8. Satisfaction with NAYGN and chapter engagement remains strong.

Chapters continue to have strong attendance in events. Compared with the 2018 Career Report [1], the overall participation in NAYGN has increased ("0 events" went from 24% in 2018 to 22.75% in 2020 and "10 or more" went from 6% to 8.76%).

Respondents reviewed the NAYGN pillars of Professional Development, Membership & Networking, Community Outreach, and Public Information, as well as Communications. Overall, most areas have decreased in "very good" and increased in "good" or "average" from the 2018 survey with weighted averages showing strong scores in all pillars.

Recommendations

For NAYGN:

- Establish a strategic plan initiative to promote diversity, inclusion, and belonging in the membership at large.
- Improve partnerships with outside organizations (including universities and international groups) that align with NAYGN's goals and update the membership on how NAYGN is strategically aligning with partners.
- Develop career development programs or initiatives that are focused on leadership / management skill development and similar soft skills training to members.
- Focus advocacy and public information efforts in areas that have a negative perception of nuclear or negative regional outlook.
- Increase collaboration between regions and chapters and share material and best practices. This was most requested in the freeform comments in which participants suggested improvements for NAYGN.

For the industry:

- Continue to engage NAYGN members in alignment with industry goals. Members are eager to be part of the solution to growing the industry.
- Promote cross-training and rotational programs to support the professional development of NAYGN members within the industry. Many feel that there is a lack of career development and growth opportunities in the industry, and these types of training programs could help remedy that dissatisfaction.
- Provide opportunities to develop leadership / management and other soft skills.
- Review the current professional development roadmaps in place for nuclear professionals. 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.
- Focus advocacy and public information efforts in areas that have a negative perception of nuclear (particularly in the Midwest). Continue to build the positive momentum in public perception of nuclear in areas with existing construction projects.
- Explore employee incentives outside of increased compensation for those in roles where they are working more than 50 hours per week. Compensation alone may not be incentive enough to keep these employees satisfied.
- Industry to analyze the potential minority pay and promotion gap seen in the NAYGN survey.

XIII. Acknowledgements

The Benchmarking Committee would like to thank 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.

The Committee would like to thank the Communications Team for the support we received with notifications to all NAYGN members through newsletters and social media blasts, as well as Local Chapter Lead briefs.

The Committee would like to thank the NAYGN Board of Directors for their support throughout this project. You provided continual, timely support and valuable feedback during report development.

Finally, we would like to thank the volunteers who tirelessly participated on the Benchmarking Committee. You have worked together for several months to make this report a success. Your time spent on team calls, providing feedback, analyzing data, and writing the report is commended. It is always a challenge to participate on a virtual, all-volunteer project team while juggling daily work and family responsibilities. This group of volunteers put their best efforts forward and this is evident through the quality and thoroughness of the report. Many thanks to the committee for your support!

XIV. References

[1] 2018 NAYGN Career Report, August 2018, https://naygn.org/wp-content/uploads/2018/08/2018-NAYGN-Career-Report-Final-Issue.pdf

[2] Energy Futures Initiative (EFI) and the National Association of State Energy Officials (NASEO), "U.S. Energy and Employment Report," 2019, https://www.usenergyjobs.org/

[3] 2016 NAYGN Career Report, May 2016, https://naygn.org/wp-content/uploads/2012/07/2016-NAYGN-Career-Report-Final.pdf

[4] Society for Human Resource Management (SHRM), "2017 Employee Job Satisfaction and Engagement Executive Summary", April 2017, https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/Documents/2017-Employee-Job-Satisfaction-and-Engagement-Executive-Summary.pdf

[5] 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

Thanks for participating in the NAYGN Career Survey. The results collected herein will be summarized in the 2020 Career Report to be distributed throughout the industry. This report will be available for the 2020 NAYGN National Conference. All responses are kept anonymous.

This survey should take approximately 20 minutes to complete.

*** 1. What NAYGN region are you associated with? (Click here to see a list of local chapters by region)**

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

*** 2. Gender:**

- ○ Female
- ○ Male
- ○ Prefer Not to Disclose
- ○ Other

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

*** 4. What is your ethnicity?**

- ○ Caucasian / White
- ○ Hispanic or Latino
- ○ Black or African American
- ○ Indigenous / Native American or American Indian
- ○ Asian
- ○ Other
- ○ Prefer Not to Disclose

*** 5. What best describes your household? (Select all that apply)**

- ☐ Single
- ☐ Married
- ☐ No Children
- ☐ Parent

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

Current Company	
Nuclear Industry	
Total throughout Career	

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

- ○ High School
- ○ Associate Degree
- ○ Trade / Technical / Vocational Training
- ○ Bachelor Degree
- ○ Graduate Degree
- ○ Post-Graduate Degree

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

- ○ Intern/Co-op/Student
- ○ Individual Contributor (Non-Supervisory Employee)
- ○ Supervisor (First-line)
- ○ Manager
- ○ Senior Leader

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

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

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

- ◯ Science (Health Physics, Radiation Protection, Chemistry, Environmental, etc.)
- ◯ Engineering
- ◯ Operations - Non Licensed
- ◯ Operations - Licensed
- ◯ Maintenance
- ◯ Security
- ◯ Quality / Oversight
- ◯ Other (please specify)
- ◯ Administrative / Non-Technical
- ◯ HR/Communications
- ◯ Organizational Effectiveness / Performance Improvement
- ◯ Project Management
- ◯ Training
- ◯ Student

11. Please estimate the answer to these questions in integers only (USD). All answers are strictly confidential. (e.g. 50000) Please enter "0" in each field if you prefer not to disclose salary information.

Starting Annual Base Salary in Nuclear Industry

Current Annual Base Salary

Current Annual **Additional** Pay (Overtime, Bonuses, etc.) *Do not combine with base salary.*

*** 12. Please rank the following work arrangements by order of preference, if they were available to you (1 is your most preferred).**

- [ ] Standard - Working five 8 hour days in a week
- [ ] 9/80 - Working 80 hours over 9 days (instead of 10)
- [ ] 4/10 - Working four 10 hour days in a week (instead of five 8 hour days)
- [ ] Part-time Employment
- [ ] Telecommuting
- [ ] Flex Hours (flexibility to choose work schedule)

*** 13. At your work place, an open concept workspace:**

- ◯ Exists and I'm in favor
- ◯ Exists and I'm not in favor
- ◯ Does not exist and I'm in favor
- ◯ Does not exist and I'm not in favor
- ◯ Not applicable / Neutral

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

- ◯ <30 (Part Time)
- ◯ <40
- ◯ 40 - 45
- ◯ 45 - 50
- ◯ 50 - 55
- ◯ >55

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

I'm very satisfied.	I'm satisfied.	I'm dissatisfied.	I'm very dissatisfied.
◯	◯	◯	◯

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

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

*** 17. 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 a nuclear industry
- ◯ Inside of my company, but outside of the nuclear industry
- ◯ Inside of my company and inside of the nuclear industry

*** 18. What is the top reason you would leave the nuclear industry?**

- ◯ Momentum Against Innovative Solutions
- ◯ Pursuit of Higher Compensation / Better Benefits
- ◯ Lack of Advancement / Growth Opportunities
- ◯ Location
- ◯ Work is Not Challenging Enough
- ◯ Corporate Culture / Leadership Style Differences
- ◯ Other (Please Specify)
- ◯ Uncertainty Around the Future of Nuclear
- ◯ New Opportunity Outside My Current Role
- ◯ Tuition Reimbursement
- ◯ Lack of Work/Life Balance
- ◯ Decommissioning / Legislation
- ◯ Not Applicable

*** 19. What impact has NAYGN had on the following:**

	Positive	No Impact	Negative
My Company Culture	○	○	○
Other or Unsure (Please Specify)			
My Intent to Stay in the Nuclear Industry	○	○	○
Other or Unsure (Please Specify)			
The Future of Nuclear Power	○	○	○
Other or Unsure (Please Specify)			
My Career Advancement / Opportunities	○	○	○
Other or Unsure (Please Specify)			

*** 20. NAYGN has provided me with the following (check all that apply):**

- ☐ Leadership Development
- ☐ Building My Network
- ☐ Advocating for Nuclear in My Community (Either Through Company or Individually)
- ☐ Professional Development
- ☐ Community Outreach Opportunities
- ☐ Career Advancement Opportunities
- ☐ Other or Unsure (Please Specify)

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

*** 22. How important are the following job attributes to you?**

	Very Important	Important	Neutral	Unimportant	Very Unimportant	N/A
Compensation/Pay	○	○	○	○	○	○
Paid Time Off	○	○	○	○	○	○
Benefits, Overall	○	○	○	○	○	○
Flexibility to Balance Life and Work Issues	○	○	○	○	○	○
Job Security	○	○	○	○	○	○
Respectful Treatment of All Employees	○	○	○	○	○	○
Immediate Supervisor's Respect for Employees	○	○	○	○	○	○
Relationship with Immediate Supervisor	○	○	○	○	○	○
Trust Between Employees and Senior Leadership	○	○	○	○	○	○
Organization's Financial Stability	○	○	○	○	○	○
Career Development/Advancement Opportunities	○	○	○	○	○	○

*** 23. How satisfied are you with the following job attributes?**

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	N/A
Compensation/Pay	○	○	○	○	○	○
Paid Time Off	○	○	○	○	○	○
Benefits, Overall	○	○	○	○	○	○
Flexibility to Balance Life and Work Issues	○	○	○	○	○	○
Job Security	○	○	○	○	○	○
Respectful Treatment of All Employees	○	○	○	○	○	○
Immediate Supervisor's Respect for Employees	○	○	○	○	○	○
Relationship with Immediate Supervisor	○	○	○	○	○	○
Trust Between Employees and Senior Leadership	○	○	○	○	○	○
Organization's Financial Stability	○	○	○	○	○	○
Career Development/Advancement Opportunities	○	○	○	○	○	○

*** 24. What types of skills would you like to develop? Rank in order of importance (1 is most important).**

- [ ] Public Speaking
- [ ] Communication (Verbal and Written)
- [ ] Leadership / Management
- [ ] Negotiation Skills
- [ ] Development of Teams
- [ ] Software / Programming Proficiency
- [ ] Time Management

25. Does your company offer an inter-departmental rotational program? Do you believe it is valuable?

- ◯ Yes offered and believe is valuable
- ◯ Yes offered and believe is not valuable
- ◯ Not offered and believe would be valuable
- ◯ Not offered and believe would not be valuable

26. What is the most effective way you advocate for nuclear?

*** 27. When you advocate for nuclear, what impression do others most often have of nuclear following those interactions?**

I Do Not Advocate	More Opposed	Consistently Opposed (Were Already Opposed)	Consistently Supportive (Were Already Supportive)	More Supportive
○	○	○	○	○

*** 28. There are a number of initiatives underway to increase the efficiency of industry operations. These include Delivering the Nuclear Promise, Plant Modernization, Light Water Reactor Sustainability Project, as well as specific innovation initiatives. What type of impact do you think these efforts are having on the industry?**

Positive Impact	No Impact	Negative Impact
○	○	○

Other or Unsure (Please Specify)

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

*** 30. What nuclear technology do you think is the most impactful? Rank in order of importance (1 is most important).**

- [ ] New Builds
- [ ] Extending Life of Existing Plants
- [ ] SMRs
- [ ] Advanced Reactor Technology (Molten Salt, Fusion, etc.)
- [ ] Water Desalination
- [ ] Use of Radioisotopes in Medicine

*** 31. How would you rate the outlook of the nuclear industry in your region/community?**

Very Negative	Negative	Neutral	Positive	Very Positive	Unsure
○	○	○	○	○	○

Please provide a reason for your rating (Optional).

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

Unsure	Very Opposed	Opposed	Neutral	Supportive	Very Supportive
○	○	○	○	○	○

Please provide a reason for your rating.

*** 33. 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

*** 34. How active is your NAYGN chapter?**

Not Active (No Events)	Somewhat Active (A Few Events Per Year)	Active (A Few Events Per Quarter)	Very Active (Too Many Events to Count)	Unsure
◯	◯	◯	◯	◯

Please clarify your answer (optional).

*** 35. How do you believe NAYGN (as an international organization) has performed in the following areas this year?**

	Very Good	Good	Average	Poor	Very Poor
Professional Development	◯	◯	◯	◯	◯
Community Outreach	◯	◯	◯	◯	◯
Public Information	◯	◯	◯	◯	◯
Membership and Networking	◯	◯	◯	◯	◯
Communications (Social Media, Website, Webinars, Newsletters, Emails)	◯	◯	◯	◯	◯

Other or Unsure (Please Specify)

Other or Unsure (Please Specify)

Other or Unsure (Please Specify)

Other or Unsure (Please Specify)

Other or Unsure (Please Specify)

36. What key areas can NAYGN (as an international organization) improve upon?

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

- [ ] Do Not Belong to Any Other Groups
- [ ] International Youth Nuclear Congress (IYNC)
- [ ] American Nuclear Society (ANS) / Canadian Nuclear Society (CNS)
- [ ] Engineering Association (ASME, SWE, etc)
- [ ] Women in Nuclear (WiN)
- [ ] Other Professional Group or Company Resource Group (Please Specify)

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

- ◯ Too short
- ◯ Just right
- ◯ Too long

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

40. Lastly, thank you for your participation in this survey! Before you complete it, please navigate to the following survey link be entered into a random drawing to win a prize! Your responses will remain anonymous even if you enter the drawing.

CLICK HERE TO ENTER PRIZE DRAWING

Email: benchmarking@naygn.org

Web: www.naygn.org

North American Young Generation in Nuclear

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