2022 NAYGN Career Report

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North American Young Generation in Nuclear

NAYGN

2022 NAYGN Benchmarking Committee

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I. Executive Summary

The North American Young Generation in Nuclear (NAYGN) is the voice of the next generation of leaders in the nuclear industry. The biennial career report provides a vital benchmark of the NAYGN membership. The benchmarking committee was charged with analyzing this data and providing recommendations for both the NAYGN organization and, more broadly, the nuclear industry. The world has changed immensely since the previous benchmarking report in early 2020, which was completed *before* the COVID-19 pandemic in North America. Since then, 864 NAYGN members supplied data for this report between November 2021 and February 2022.

Two of the greatest strengths of the nuclear industry presented in this report include (1) the opportunity to obtain high paying jobs with impressive benefits and high-quality management, and (2) a strong community and government support for the technology in Canada and specific regions in the United States. Seventy percent of NAYGN members are either satisfied or very satisfied with their compensation package and 60% are satisfied or very satisfied with their company's universal paid leave policy. Finally, over 70% of NAYGN members are satisfied or very satisfied with their relationship with their supervisor. Positive workplace attributes are bolstered by supportive communities and local governments. Community support for the nuclear industry is particularly strong in the Carolinas and in Canada. Meanwhile, **government support** for the nuclear industry is strongest in Canada, the Carolinas, the Midwest, and the West. [Pages 31, 49]

This report identified several weaknesses in the NAYGN organization. First and foremost, participation has decreased. While the COVID-19 pandemic likely is a major influence on participation, the NAYGN population is older than it was in 2020 indicating that NAYGN is not recruiting new and/or younger members as effectively as it has in previous years. Although only 46% of NAYGN members thought the organization had a positive impact on their career, 63% of NAYGN members believe the organization has helped them build their professional network. This could indicate a gap between typical NAYGN offerings (such as networking, professional development webinars, and advocacy opportunities) and how these offerings have contributed to career advancement. This connection should be illustrated more clearly for NAYGN members. [Pages 9, 11, 45]

NAYGN should leverage opportunities to strengthen and grow the organization. More NAYGN members are in management than in 2020 (an increase from 16% to 25%). These members can be relied on to garner more management support for attending NAYGN events and for company sponsorship of NAYGN. Another noteworthy learning from the survey is that the NAYGN membership is diversifying outside of its typical base of utility workers. Vendor, supplier, and consultant companies are becoming more involved which opens the door for more industry wide networking and sponsorship opportunities. While small gains were made in ethnic diversity of the organization, representation in NAYGN still trails the nuclear industry at large. NAYGN members are most interested in leadership/management training and job-specific technical training. This interest should be leveraged to increase member participation and NAYGN should focus its webinar offerings in these areas. [Pages 13, 14, 45]

The nuclear industry should note the discrepancies in pay by gender and by ethnicity. Males consistently make more than females at every level of experience. Caucasian/White NAYGN members consistently make more than their minority peers at every level of experience. [Pages 24, 27]

NAYGN should be opportunistic in its advocacy efforts. Nuclear advocacy could be particularly effective in the Southeast, Mexico, Carolinas, and Canada. There is strong community support for the nuclear industry in these regions, but the government support is not nearly as strong as the community support in these regions. Therefore, government outreach efforts could have a big impact in these regions. [Page 49]

There are two opportunities for NAYGN to help bridge the gap between individual contributors and company leadership: work schedules and working remotely. Those in higher levels of leadership (executives and managers/directors) prefer a traditional 5-day workweek much more than first-line supervisors and individual contributors who prefer alternate work schedules. Supervisors, management, and executives are more likely to prefer in-office work arrangements. In contrast, individual contributors are much more likely to prefer work formats that include work-from-home at least half the time. Generally, 85% of NAYGN members prefer at least some time working from home and younger NAYGN members (ages 18-39) were more likely to prefer remote work options. These disconnects are industrywide and need to be explored in more depth to buoy vertical organizational alignment. Fixing these disconnects will positively impact recruitment and retention of talent within the nuclear industry. [Pages 35, 38]

The two biggest threats to both NAYGN and the nuclear industry unveiled via this analysis were (1) low morale and (2) retention issues due to increasing workloads. The greatest disconnect between important job attributes and satisfactory job attributes was employee morale with less than 40% satisfaction but 80% importance. Low employee morale results in low participation in NAYGN and less productive employees for companies. In addition, note that while satisfaction with compensation is high, overall job satisfaction has decreased. Seventy-two percent of NAYGN members are satisfied or very satisfied with their jobs. This is a decrease from the 2020 Career Report, in which 86% of NAYGN members reported satisfaction with their jobs. NAYGN and industry executives should work to address waning morale within the industry. Approximately half (49%) of NAYGN members surveyed are job hunting. While 28% of NAYGN members are passively looking for a new job, 21% are actively looking for a job, whereas the 2020 Career Report showed only 12% of NAYGN members actively looking for a new job. Only 32% of NAYGN job seekers are restricting their job search to the nuclear industry. 27% of job seeking NAYGN members are looking to get out of the nuclear industry altogether. The top reason for why an NAYGN member would leave the nuclear industry is a lack of work/life balance. This report shows 31% (4% more than in 2020) of NAYGN members work 45 hours or more per week. Retaining talent is a top priority for both NAYGN and companies in the nuclear industry. NAYGN seeks to retain the nuclear industry workforce to maintain the health and participation level of the organization. Companies wish to retain talent to maintain expertise and performance while minimizing resources spent on training and onboarding. NAYGN and company leaders should collaborate on solutions to address this high priority concern. [Pages 32, 39, 39, 44]

Other observations include (1) the importance of SMR technology and (2) climate change as a motivating force behind what is keeping half of NAYGN members in the industry. Note that utility professionals are less motivated by climate change compared to professionals at other types of companies. Lastly, NAYGN members at government organizations or research laboratories had a less positive outlook on the future of the nuclear industry. [Pages 52, 53, 47]

II. Introduction

Like every other facet of life since 2020, the nuclear industry has changed a lot: remote work, technological breakthroughs, and a "new normal". NAYGN last issued its Career Report in 2020 at the beginning of the COVID-19 pandemic with data surveyed before the pandemic began. Since that time, the world has changed and a return to how the industry worked before 2020 is unlikely. Additionally, there have been significant changes in North America with respect to support of Nuclear Energy. The United States federal government has invested billions of dollars in extending the lives of existing nuclear plants and performing research to develop the next wave of advanced reactors. In May 2022, the US Department of Energy extended the deadline for applications for the $6 billion Civil Nuclear Credit Program. The goal of this program is the continued operation of the nation's largest source of clean, emissions-free electricity. In fall 2020, the Department of Energy selected TerraPower and X-energy to receive $160 million as initial funding for the Advanced Reactor Demonstration Projects to build an operational advanced reactor by 2027.

In Canada, there has also been significant progress made. The $26 billion dollar refurbishment program is now well under way with Ontario Power Generation having completed Darlington unit 2. Units 1 and 3 are in progress, and unit 4 will be starting soon. Bruce Power is currently refurbishing unit 6 and five other units will follow. The Canadian Small Modular Action Plan was completed; four provinces signed an MOU to advance SMRs in Canada, there has been investment from the federal government for innovation in SMRs, and the first on-grid SMR is expected to be built at the Darlington site by 2028 with the GE BWRX-300 design.

The charter for this Career Report was to survey the industry to determine the state of NAYGN membership, learn what their outlook on the nuclear industry is, and determine what our membership wants from the organization to help them develop professionally.

All previous career reports can be found here: https://naygn.org/member-center/resource-library/

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 2022 NAYGN Career Report occurred in three phases from August 2021 to May 2022. 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 to include new questions based on feedback from previous surveys. The committee wanted to expand on questions pertinent to how we work and the status of Diversity, Equity, and Inclusion in NAYGN.

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 45 questions (including 2 questions requesting feedback regarding the survey length and topics). Some questions were branched depending on the response provided. This branching allowed for a deeper analysis. More questions were made 'optional' during this survey iteration to be sensitive to members that may not want to provide an opinion on various topics and to help shorten the time required to complete the survey.

The committee focused on maintaining a survey for NAYGN members to gather data and information that would be useful to the industry. Conclusions made from open response questions are included in the report.

The survey was open from November 16, 2021, to February 8, 2022. The link for the survey was provided to all NAYGN members via e-mail in the NAYGN Membership Announcements and a Local Chapter Lead brief. There were 864 respondents and all survey responses collected were anonymous.

Analysis was prepared in a similar manner to the 2020 Career Report [Reference 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 **864 survey respondents**.

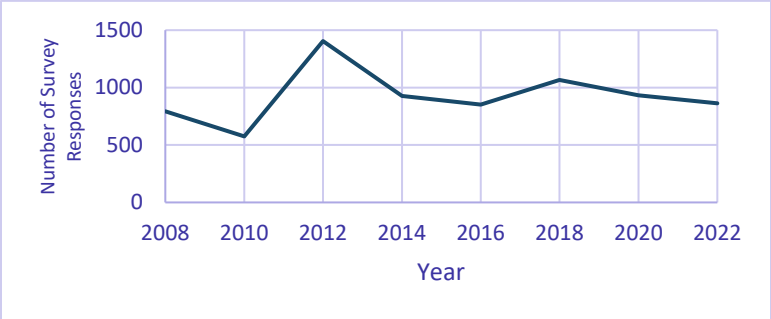

Figure 1: CAREER REPORT SURVEY RESPONSES OVER TIME

IV. Demographic Information

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

The percentage of female NAYGN members increased from 35% (2020 Career Report) to 40%. See Figure 2: GENDER DISTRIBUTION. Compared to the United States Energy and Employment Report (USEER) 2021, NAYGN is outpacing female membership in the Nuclear Electric Power Generation industry where females represent 34% of the industry. (Reference 637)

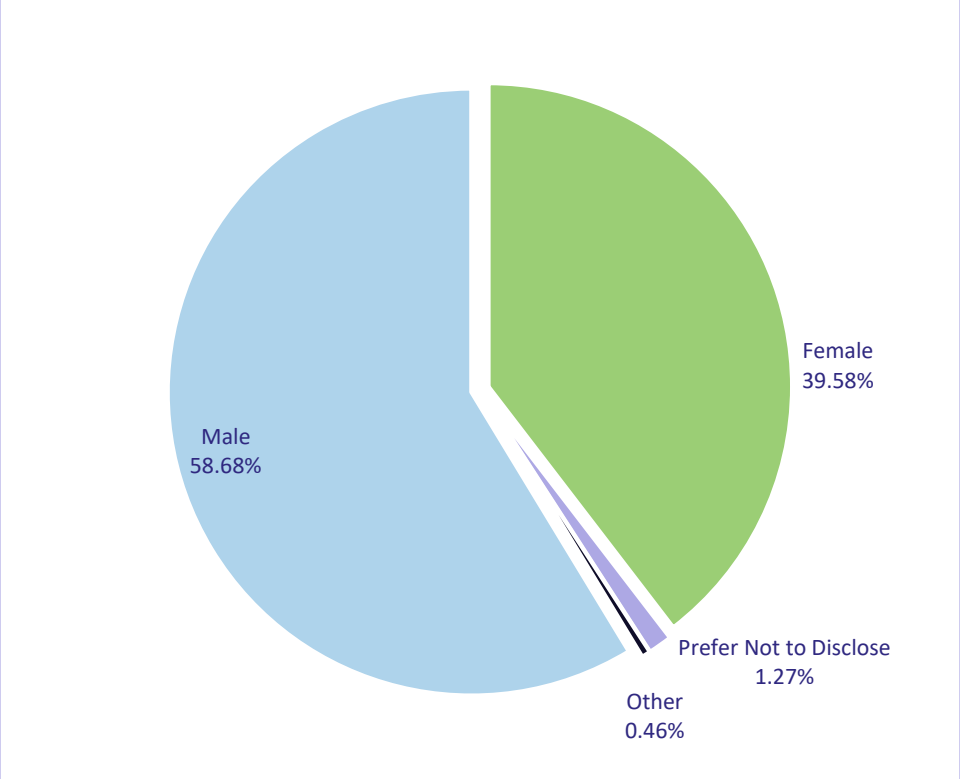

Figure 2: GENDER DISTRIBUTION

Detailed in Table 1: AGE SUMMARY, the average age of NAYGN members increased from 31.3 years to 33.9 years. **This is an indication that NAYGN may not be recruiting new and younger members as well as it has previously** and is illustrated in Figure 3: NAYGN AGE DISTRIBUTION**.**

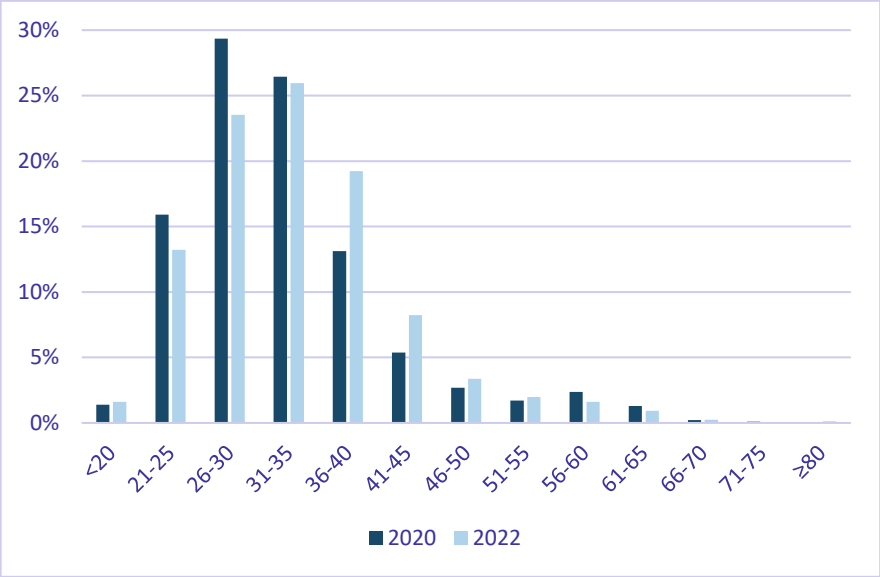

Table 1: AGE SUMMARY

	2020	2022
Average	31.3	33.9
Median	31	33
Max	50	80
Min	18	19

Figure 3: NAYGN AGE DISTRIBUTION

The 2020 Career Report identified a gap between the ethnicity demographics of NAYGN membership and the nuclear industry at large. Since that time, NAYGN has established a goal to diversify its membership and recruit marginalized members of its communities into its membership. The 2022 Career Report shows varying degrees of success in this realm.

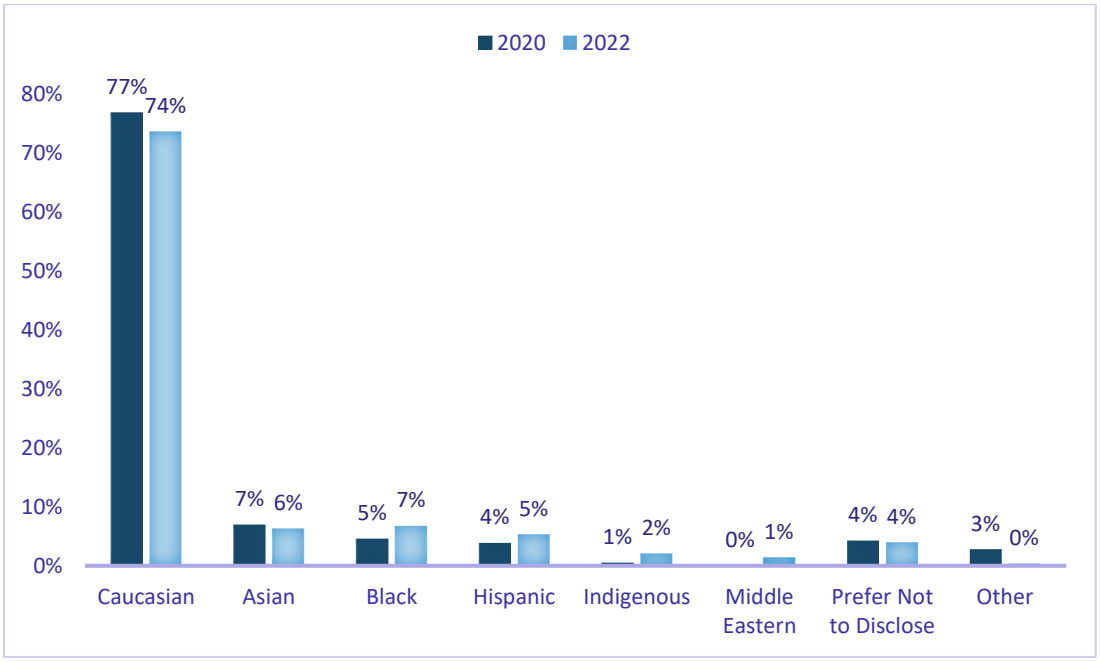

Figure 4: NAYGN ETHNICITY DISTRIBUTION. Note the full category labels: Caucasian/White, Asian/Pacific Islander, Black or African American, Hispanic or Latino, Indigenous / Native American or American Indian, Middle Eastern/North African.

This data was collected using a slightly different method in 2022: members could select multiple ethnicities. While 74% did select Caucasian/White, 27 NAYGN members (or 3%) selected Caucasian/White and another ethnicity. 38 NAYGN members selected multiple ethnicities. Additionally in 2022, the category Asian was renamed to Asian/Pacific Islander and the option of Middle Eastern/North African was added.

Small gains were made in increasing the percentage of members identifying as either Black or African American, Hispanic or Latino, or Indigenous/Native American or American Indian. However, compared to USEER 2021 data, these ethnicity percentages still trail the nuclear power generation data (Reference 7). The USEER report states the nuclear power workforce is 14% Hispanic or Latino, 13% Black or African American, 10% Asian, and 66% White. It is important for NAYGN to appreciate the gains they have made in the realm of enhancing ethnic diversity, but recognize there is still progress to be made.

Figure 5: NAYGN REGIONAL DISTRIBUTION shows the breakdown by region of NAYGN members. There are 6 US NAYGN regions. Canada and Mexico are standalone regions.

- **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)
- **Canada** (New Brunswick, Ontario, Saskatchewan, and Alberta)
- **Mexico**

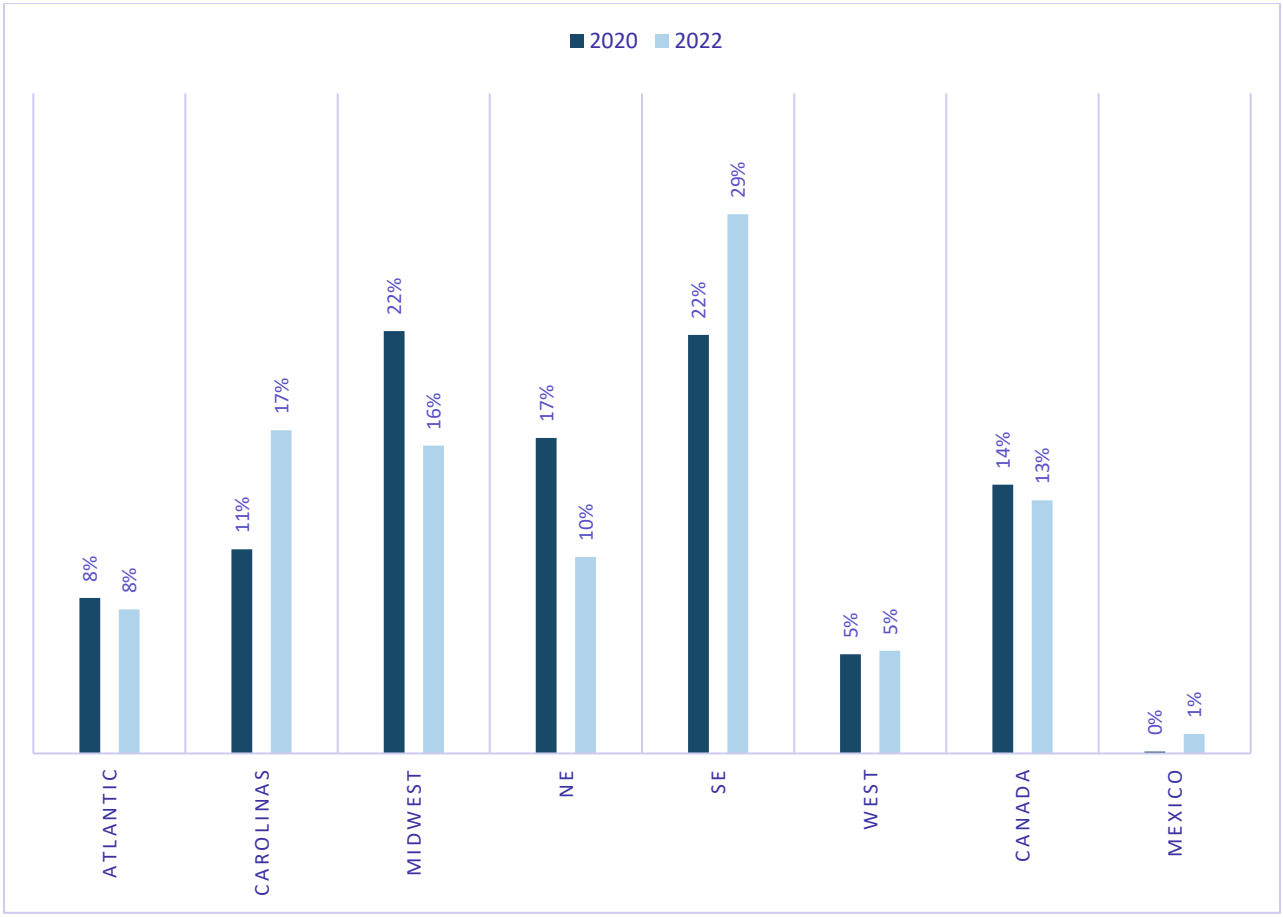

Figure 5: NAYGN REGIONAL DISTRIBUTION

Table 2: TYPE OF HOUSEHOLD details marital and parental status. The prompt requested that each NAYGN member check all options that apply. **This year's Career Report shows that a higher percentage of NAYGN members are married and fewer have no children.** This aligns with the 2022 NAYGN membership population being slightly older than the 2020 membership population.

Table 2: TYPE OF HOUSEHOLD

	2020	2022
Single	**40%**	**35%**
Single with Children	**5%**	**3%**
Single with No Children	**20%**	**11%**
Single, But Did Not Respond with Parental Status[1]	**75%**	**86%**
Married	**57%**	**65%**
Married with Children	**36%**	**36%**
Married with No Children	**14%**	**7%**
Married, But Did Not Respond with Parental Status[1]	**50%**	**56%**

[1] Note that a large percentage of NAYGN members chose not to respond with a parental status.

Table 3 and Figure 6 detail the working years at the current company, in the nuclear industry, and total career experience. **The average NAYGN member has 10.9 years of total experience. This is an increase from the average in 2020 (10.0 years of total experience).**

Table 3: AVERAGE YEARS OF EXPERIENCE

	2020	2022
Current Company	**5.9**	**6.7**
Nuclear Industry	**7.7**	**7.9**
Total Career	**10.0**	**10.9**

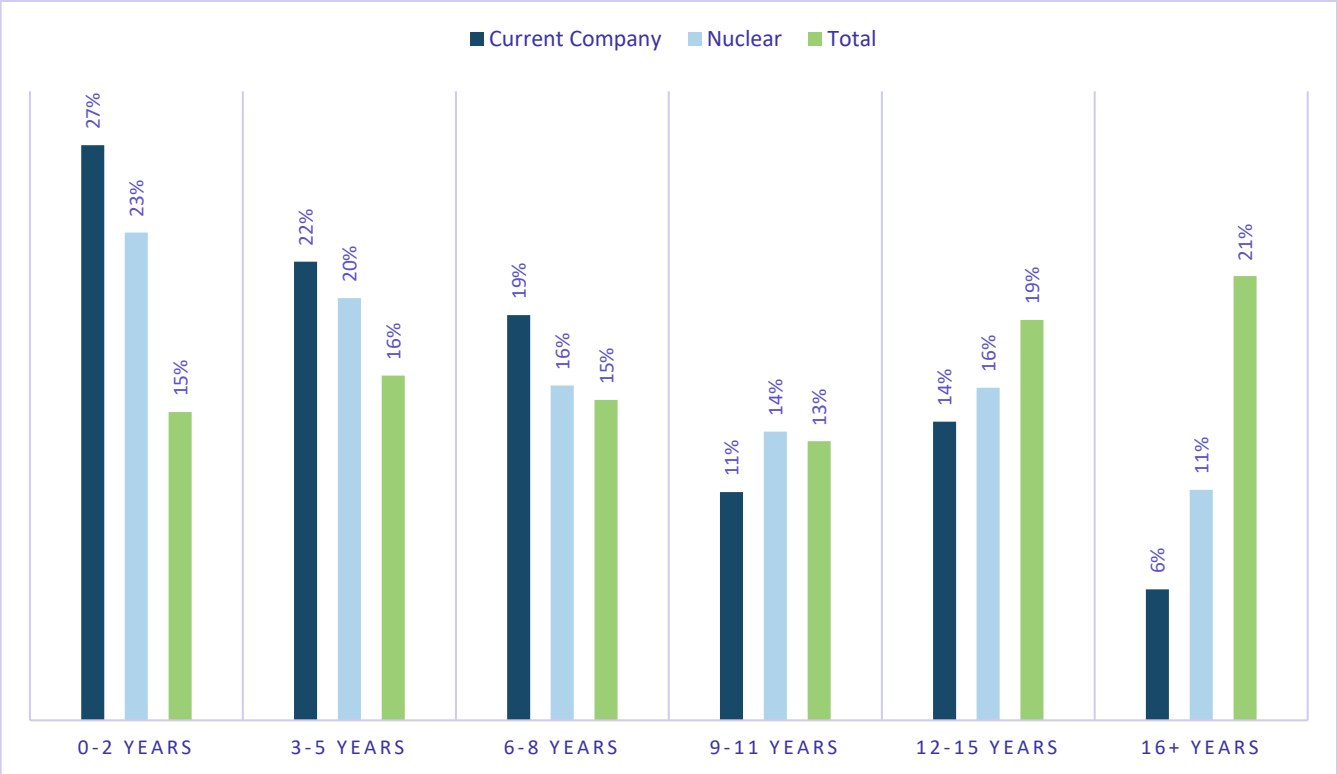

Figure 6: YEARS OF EXPERIENCE

Table 4: YEARS OF EXPERIENCE

	0-2 years	3-5 years	6-8 years	9-11 years	12-15 years	16+ years
Current Company, 2022	**27%**	**22%**	**19%**	**11%**	**14%**	**6%**
Nuclear Industry, 2022	**23%**	**20%**	**16%**	**14%**	**16%**	**11%**
Total Career, 2022	**15%**	**16%**	**15%**	**13%**	**19%**	**21%**
	0-2 years	**3-5 years**	**6-8 years**	**9-11 years**	**12+ years**	
Current Company, 2020	**33%**	**24%**	**16%**	**14%**	**12%**	
Nuclear Industry, 2020	**25%**	**20%**	**18%**	**17%**	**19%**	
Total Career, 2020	**17%**	**17%**	**21%**	**17%**	**29%**	

As seen in Table 4: YEARS OF EXPERIENCE, the percentage of members with 6-8 years of total experience throughout their career has decreased from 21% to 15% compared to data from 2020. Likewise, the percentage of members with 9-11 total years of experience decreased from 17% to 13%.

However, 12+ years Total throughout Career is up by 11%, showing that the NAYGN population has increased in years of experience (Table 4: YEARS OF EXPERIENCE).

The percentage of NAYGN members that are new hires (0-2 years) was down 2%. It is important for NAYGN to continue to recruit new and younger members to fulfill its mission.

Figure 7: HIGHEST LEVEL OF EDUCATION details the educational background of NAYGN members. There was a decrease in the percentage of members with Bachelor's Degree (64% in 2020 to 57% in 2022). The percentage of members with a graduate degree has increased (22% in 2020 had either a graduate or post-graduate degree versus 27% in 2022 have either a Master's or Doctoral Degree). This aligns with more NAYGN involvement at nuclear startups (typically employing graduate degree holders).

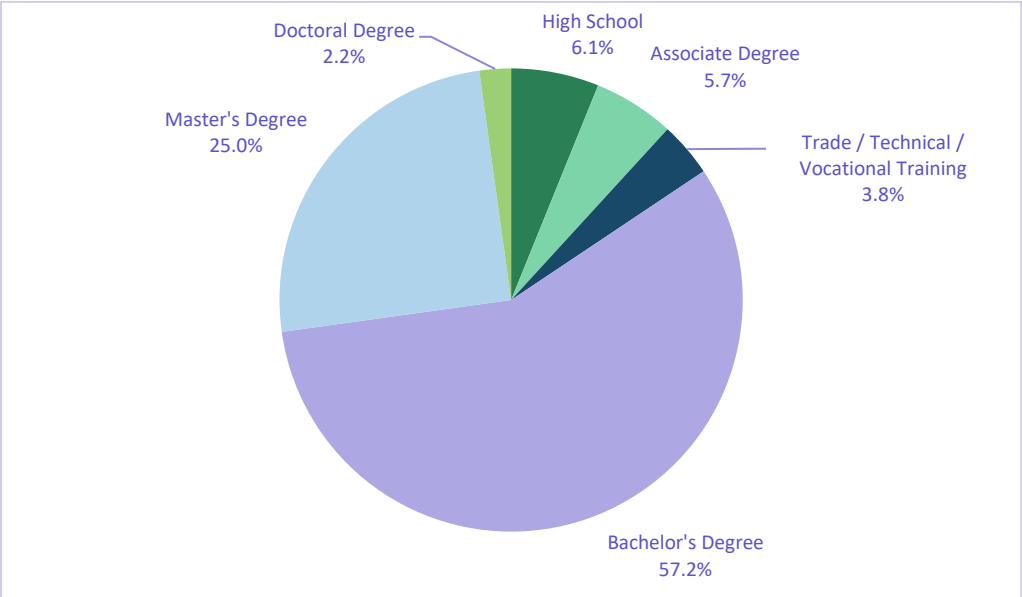

Figure 7: HIGHEST LEVEL OF EDUCATION

In the NAYGN population represented by survey respondents, there is a slightly higher percentage of females with high school and Associate's degrees (compared to males). In contrast, males make up a slightly higher percentage of those nuclear industry workers with a trade/technical/vocational training or Bachelor's and Master's degrees.

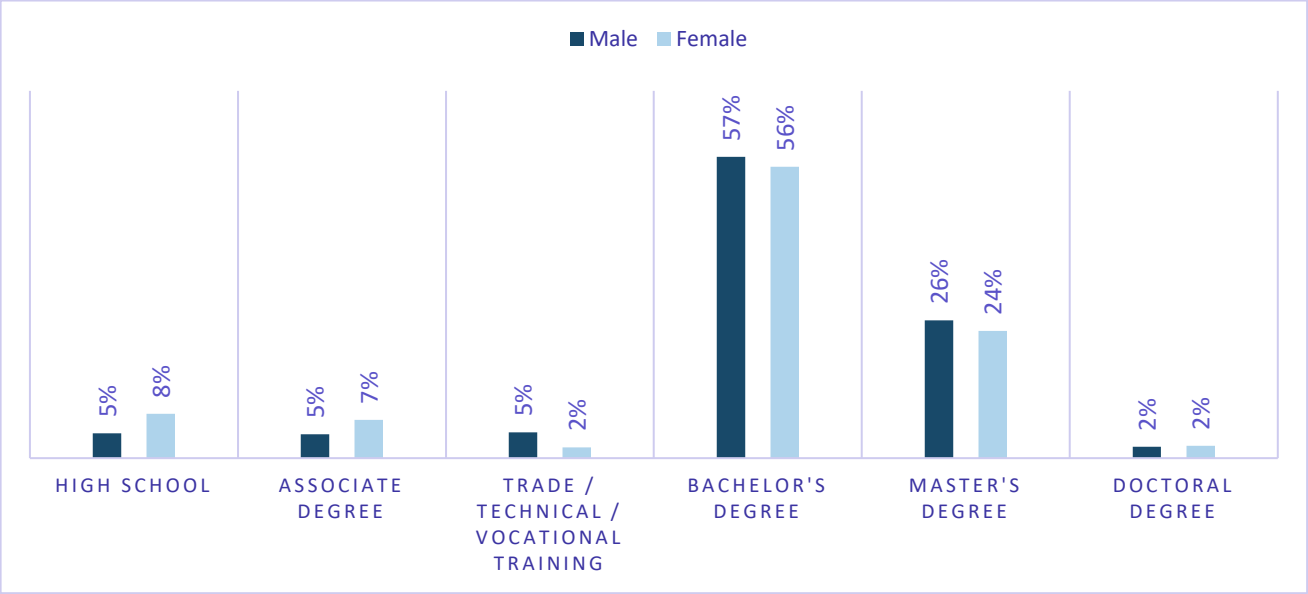

Figure 8: EDUCATION BY GENDER

Figure 9: CURRENT POSITION demonstrates that the majority of NAYGN members are individual contributors (that is, non-supervisory employees). The student category includes interns and co-ops. Fourteen percent of NAYGN members are first line supervisors.

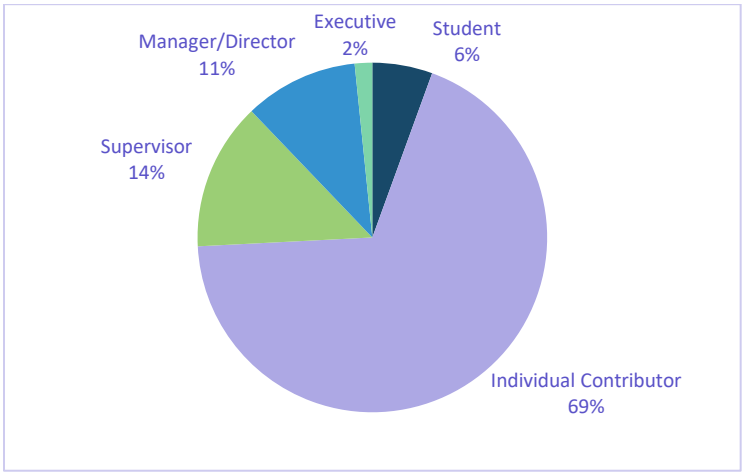

Figure 9: CURRENT POSITION

The percentage of individual contributors decreased from 79% (in 2020) to 69% (in 2022). **Meanwhile, the percentage of Supervisor and Manager/Director roles increased from 16% (in 2020) to 25% (in 2022). A higher percentage of NAYGN members are in management in 2022 than in 2020.** There is not a significant difference between gender and the organizational level as seen in Figure 10: JOB TITLE BY GENDER. The largest difference of 4 percentage points is at the supervisory level (15% of males are supervisors, compared to 11% of females).

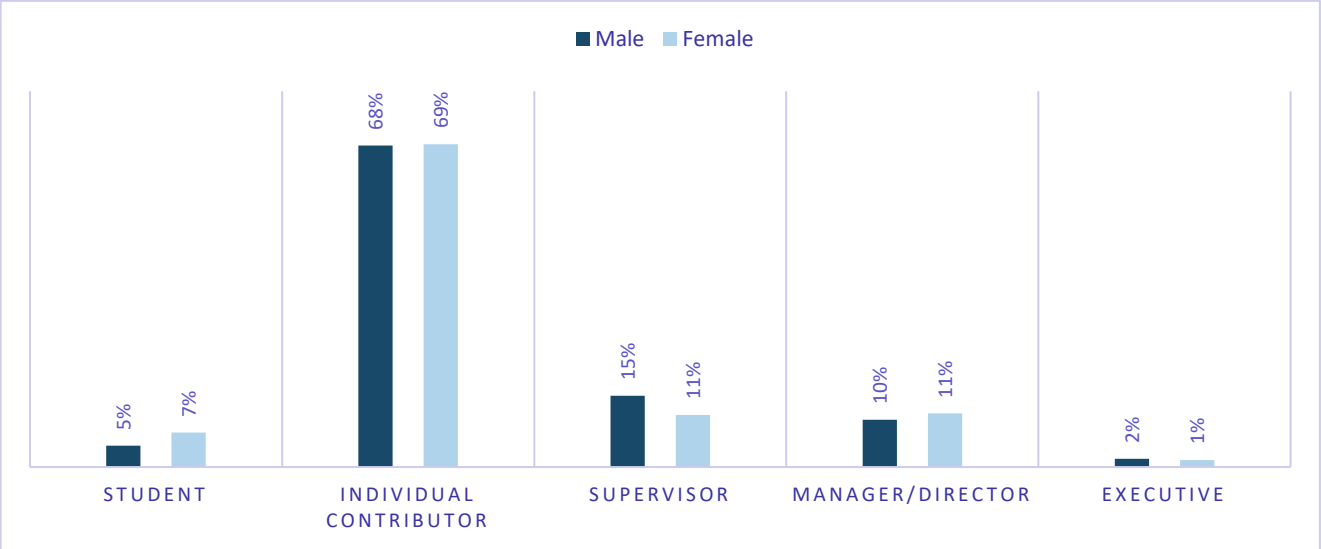

Figure 10: JOB TITLE BY GENDER

The NAYGN organization is more diverse in type of employment in 2022 than in 2020. Two years ago, NAYGN was 78% utility employees but now, as seen in Figure 11: COMPANY TYPE, NAYGN is only 63% utility employees. There was a notable difference in the percentage of NAYGN members employed with a Vendor/Supplier/Consultant (23% in 2022; 14% in 2020). Employment with an Academic Organization increased from 1% in 2020 to 3% in 2022. Employment with Industry Groups increased from 2% in 2020 to 6% in 2022.

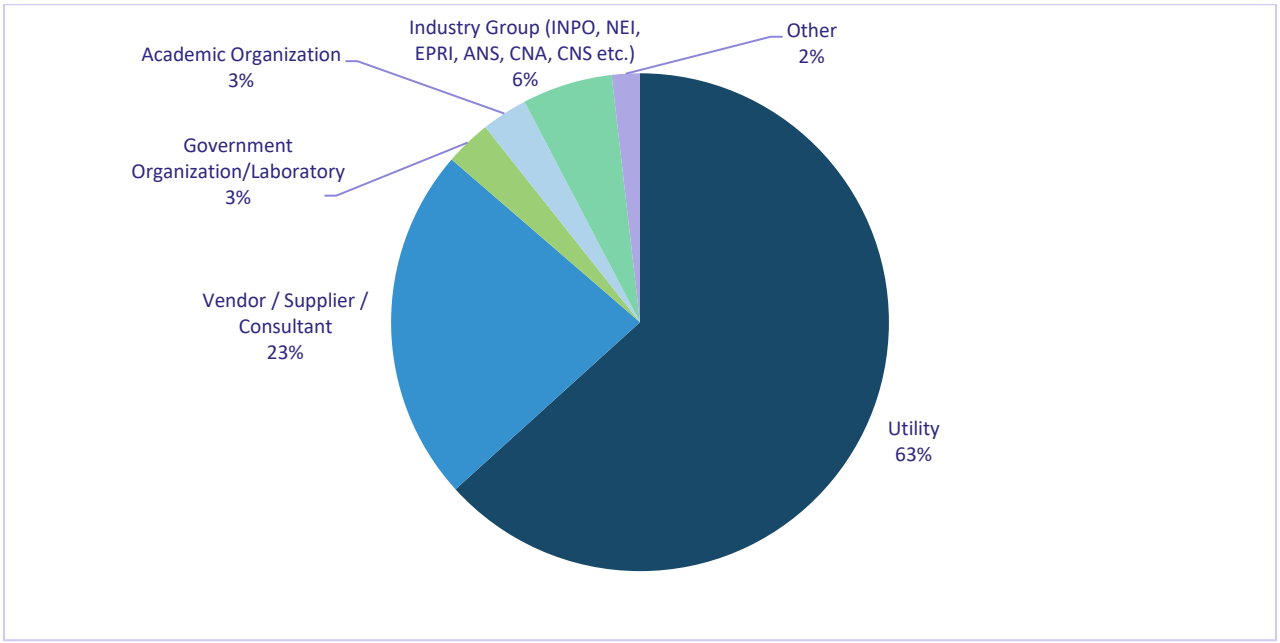

Figure 11: COMPANY TYPE

As expected, engineering makes up the base of NAYGN membership (Table 5: JOB FUNCTION). The percentage of NAYGN membership in engineering decreased from 59% (in 2020) to 50% (in 2022). This is likely because the 2020 job function category lumped science and engineering together. This category was divided in 2022 to separate engineering (50%) and scientific services (6%). Project management increased from 4% to 6%. Maintenance and operations increased from 12% to 13% (if you combine operations and maintenance) compared to 2020 data.

Table 5: JOB FUNCTION

Department	2020	2022
Engineering	59% [1]	50.0%
Operations	12% [2]	9.9%
Project Management	4%	6.4%
Science (Health Physics, Radiation Protection, Chemistry, Environmental, etc.)	--	6.1%
Other	8%	5.7%
Administrative / Nontechnical	4%	4.0%
Information Technology	--	3.4%
Maintenance	--	3.3%
Organizational Effectiveness / Performance Improvement	3% [3]	3.3%
Training	6% [4]	2.1%
Quality / Oversight	--	1.8%
HR/Communications	--	1.8%
Student	2%	1.2%
Security	2%	1.0%

[1] Engineering & Science were grouped together in 2020.

[2] Operations & Maintenance were grouped together in 2020.

[3] Organizational Effectiveness & Quality/Oversight were grouped together in 2020.

[4] HR/Communications & Training were grouped together in 2020.

The 2020 Career Report indicated that certain identities (including sexual orientation) were not accepted at their place of work and were a contributing factor to why NAYGN members would leave the industry. In an effort to raise awareness and strive for a more inclusive nuclear workforce, the Benchmarking Committee started collecting data regarding sexual orientation (Figure 12: SEXUAL ORIENTATION), disability status (Figure 13), languages spoken in one's household, and countries of citizenship.

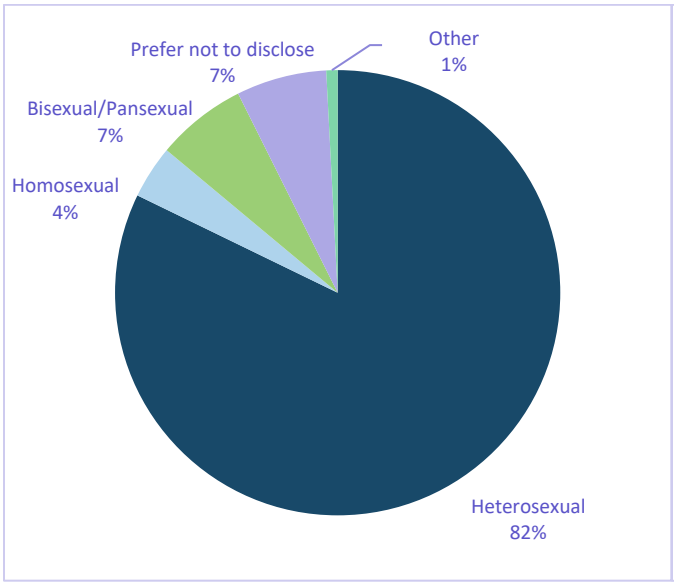

Figure 12: SEXUAL ORIENTATION

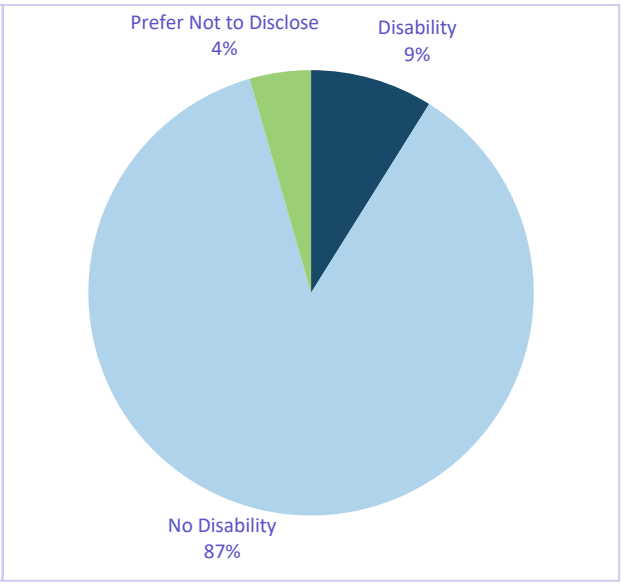

Figure 13: DISABILITY STATUS

According to 2020 Gallup polling [Reference 2], 87% of Americans are heterosexual and 5.6% of Americans are LGBTQ+ (includes homosexual, bisexual, pansexual and others). Only 82% of NAYGN members are heterosexual. According to the Reference 3, 26% of adults in the US have some type of disability. Only 9% of NAYGN members disclosed a disability.

As seen in Figure 14: LANGUAGE SPOKEN IN HOUSEHOLD, 10% of the NAYGN membership speak languages other than English at home. The specified languages were surprisingly diverse with responses indicating 28 distinct languages! The most common languages are listed in Table 6: LANGUAGES SPOKEN IN HOUSEHOLD. All other languages had less than 5 responses.

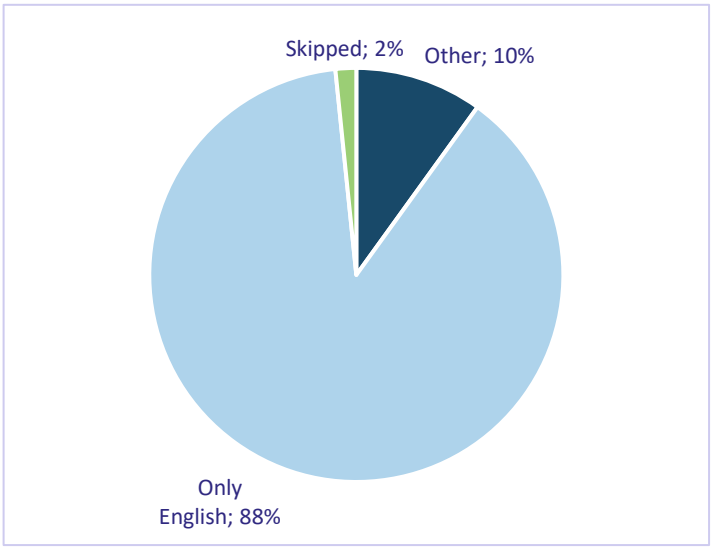

Figure 14: LANGUAGE SPOKEN IN HOUSEHOLD

Table 6: LANGUAGES SPOKEN IN HOUSEHOLD

Language	Number
Spanish	**27**
French	**9**
Arabic	**8**
Hindi	**6**

As seen in Table 7: CITIZENSHIP, 97.5% of NAYGN members have American citizenship. There were over 26 citizenships represented with Brazil and India representing the two largest contingents beyond the North American continent. Note, NAYGN members could select all that apply.

Table 7: CITIZENSHIP

Country of Citizenship	% of Responses
United States	83.4%
Canada	13.2%
Mexico	0.9%
Prefer not to disclose	1.8%
Other	4.6%

V. Salary & Financial Results

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

Items of Note:

1. All salaries are reported in US dollars.
2. Inflation is not considered.
3. A new metric to normalize compensation by regional cost of living was collected and is referred to as cost-of-living adjustment. US NAYGN members were asked to use the Advisor Smith cost of living calculator and Canadian NAYGN members were directed to the Numbeo cost of living calculator (References 5 and 6). Assumptions about cost of living are specified below each figure.
4. Data Cleanup & Outlier Removal:
    a. Interns/Students are not considered in salary/compensation analysis, only full-time equivalent responses were analyzed.
    b. Only US/Canada responses were analyzed. Mexico response size was too small for useful conclusions.
    c. Outliers for full-time employees with $0 or <$10K reported salary were removed.
    d. Data points with typos were removed (i.e., outliers with excessively high salaries for the given job function/organizational role/experience).
    e. A large portion of responses for “additional pay” exceeded base salary indicating that the bonus pay was >100% of base pay. This would be a highly unusual pay structure for most of the nuclear industry (the exception being sales or commission-based fields). In these cases, it was assumed that the individual responded erroneously by providing total pay (i.e. base pay plus additional pay). If additional pay exceeded base salary, the base pay was subtracted from “additional pay”. This difference was used as the new additional pay.

Note: The 2020 data was not normalized for cost of living. Nor was the 2020 data screened thoroughly for outliers. Thus, comparisons to 2020 data are not made in this report.

Figure 15 shows the annual base pay and annual bonus pay grouped by years of experience in the nuclear industry. Both base pay and bonus pay are highly dependent on years of experience. Early career (0-3 years of experience in nuclear) bonuses were approximately 8% of base pay whereas NAYGN members with 14 or more years of experience had bonus pay of approximately 19% of their salary.

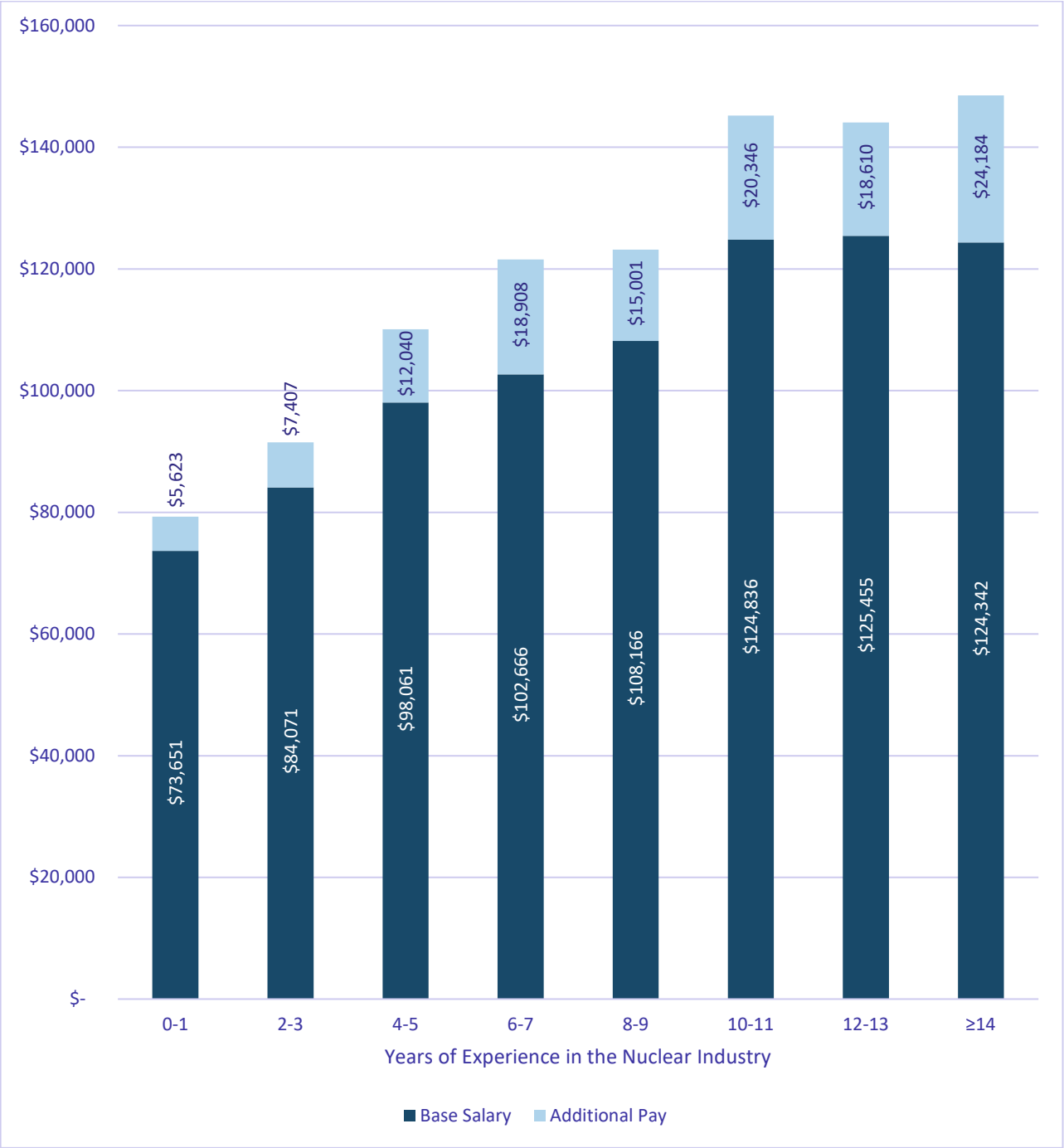

Figure 15: SALARY AND BONUS BY YEARS OF EXPERIENCE [1]

[1] This figure assumes a cost-of-living adjustment of 100 for all responses from Canada.

Figure 16 shows the distribution of base annual salaries and total compensation, adjusted for cost-of-living. The base salary mode is $100k-110k. Current base salaries average $104,862 (median $103,000) and total current compensation averages $120,500 (median $118,000). The average annual additional pay (bonuses and other additional pay) is $15,638 (median $10,000).

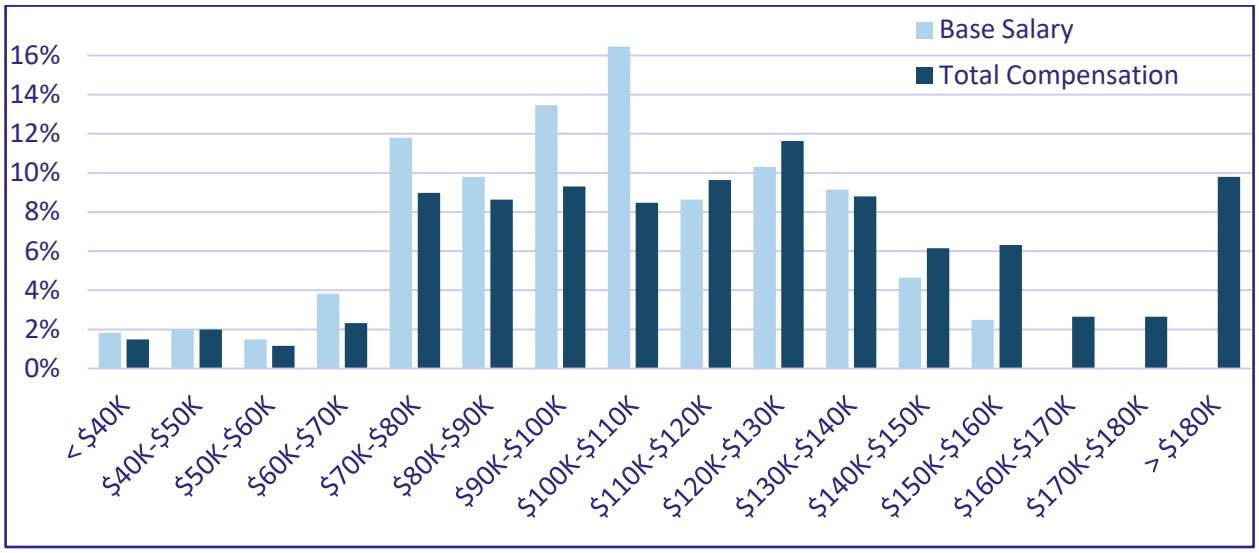

Figure 16: COMPENSATION DISTRIBUTIONS IN THE NUCLEAR INDUSTRY (COST-OF-LIVING NORMALIZED ANNUAL AVERAGE) [2]

[2] This figure assumes a cost-of-living adjustment of 70 for all responses from Canada unless a cost-of-living factor was provided.

Figure 17 shows base and bonus pay by job type arranged in descending order of Total Compensation. As expected, **the pay for those in operations is quite high relative to other job types and a large portion of their total compensation is received as a bonus.**

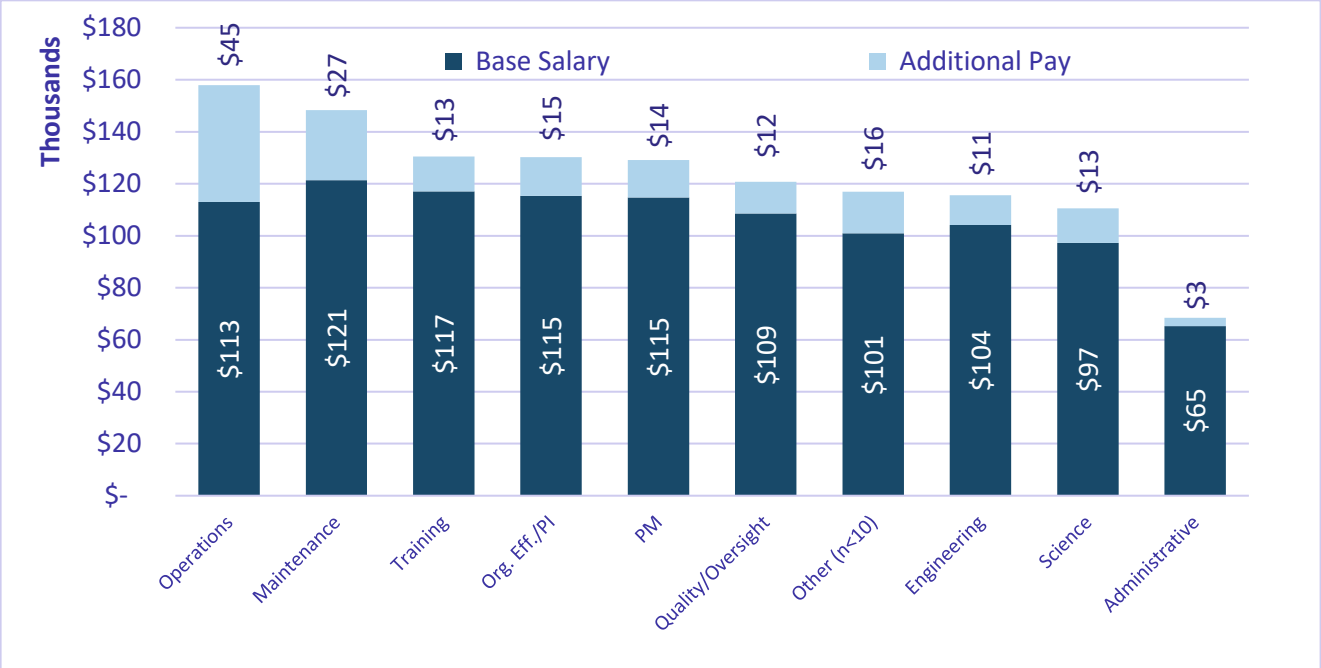

Figure 17: PAY BY JOB FUNCTION [3]

[3] This figure is cost-of-living adjusted. This figure assumes a cost-of-living adjustment of 70 for all responses from Canada unless a cost-of-living factor was provided. Note: some labels were shortened - Organizational Effectiveness / Performance Improvement (Org. Eff./PI), Project Management (PM), Science (Health Physics, Radiation Protection, Chemistry, Environmental, etc), and Administrative / Nontechnical (Administrative).

Figure 18 generally indicates that **working more hours per week results in higher pay**. As seen in Figure 44, 27% of executives work >55 hours per week which likely amplifies this trend. Although <40 hours per week is an exception to the trend noted, there are many factors at play and the driving correlation is increasing years of experience results in increasing pay. Examining by job function, no particular group stood out as working less, ranging from 43-47 hours per week for various job functions (the average was 44.5 hours per week).

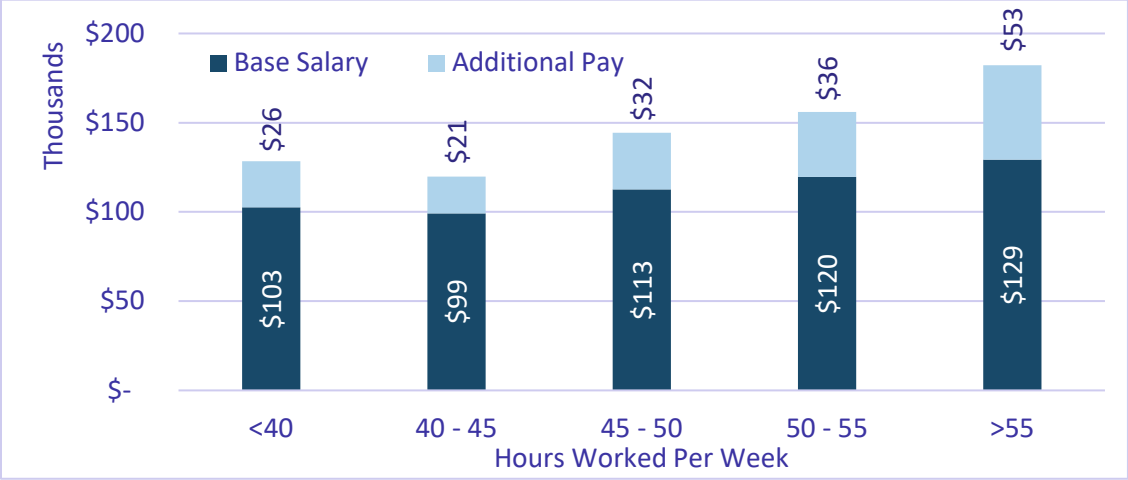

Figure 18: PAY BY HOURS WORKED PER WEEK [4]

[4] This figure is cost-of-living adjusted. This figure assumes a cost-of-living adjustment of 70 for all responses from Canada unless a cost-of-living factor was provided.

Figure 19 shows the compensation by organization role. Comparisons to 2020 are not practical due to cost-of-living adjustment and role reclassifications. While it is unexpected that Managers/Directors make less than Supervisor, there are conflating factors including years of experience and hours worked per week. Manager/Directors have an average of 13 years of experience while supervisors have slightly more experience (13.5 years). Manager/Directors worked less (on average, 43.8 hours per week) than supervisors (on average, 46.8 hours per week).

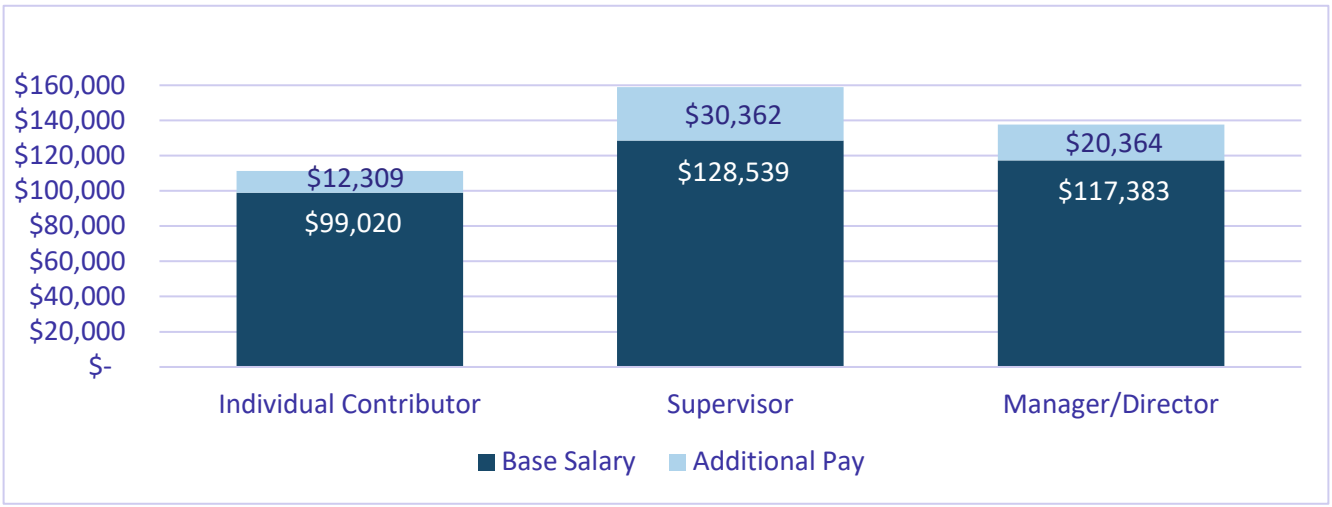

Figure 19: PAY BY ORGANIZATIONAL ROLE [5]

[5] This figure is cost-of-living adjusted. This figure assumes a cost-of-living adjustment of 70 for all responses from Canada unless a cost-of-living factor was provided.

Based on Figure 20, **total compensation does increase with increasing levels of education progressing from Associate's degree to Bachelor's degree to Master's degree**. The exception to this trend is NAYGN members with a high school or trade educational background who, on average, make more than the average Bachelor's degree salary or Associate's degree salary respectively. NAYGN members with a high school or trade background are more likely to be in operations (15%, compared to 9.9% of NAYGN members as a whole group) which is the highest paying job type in the nuclear industry.

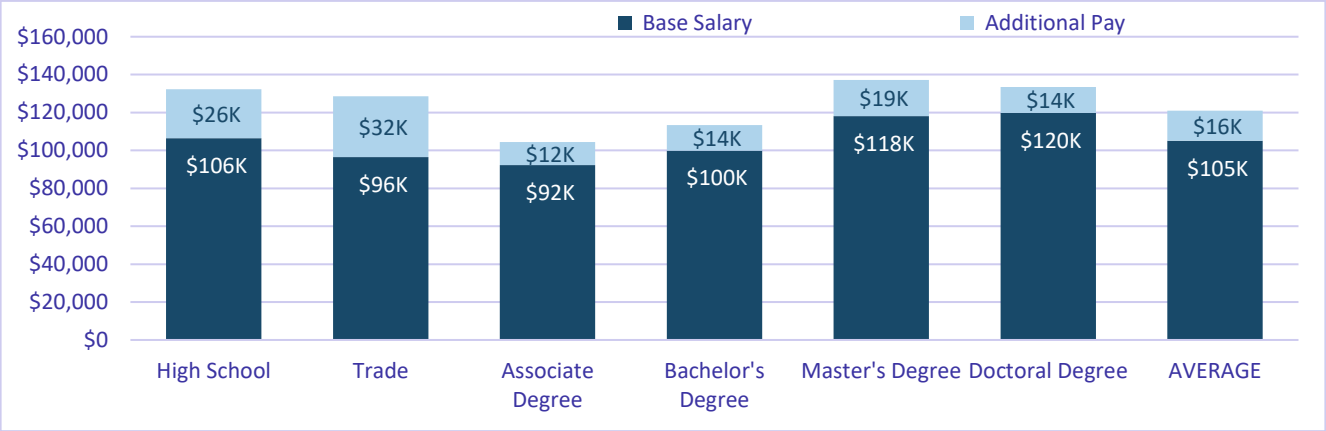

Figure 20: PAY BY LEVEL OF EDUCATION [6]

[6] This figure is cost-of-living adjusted. This figure assumes a cost-of-living adjustment of 70 for all responses from Canada unless a cost-of-living factor was provided. Trade includes those with technical or vocational training.

The link between education and higher pay becomes more apparent when normalized by work experience ("years of experience" or "YoE"). NAYGN members with high School, trade, or Associate's degrees earn approximately the same at around $7.5K/YoE. NAYGN members with Bachelor's or Master's degrees earn approximately the same at about $12K/YoE. NAYGN members with doctoral degrees seem to earn more at $14k/YoE but only 2% of NAYGN members fit this description which makes it hard to draw definitive conclusions.

Total compensation per total career work experience was calculated by subtracting starting salary from current total compensation and dividing by total career work experience. **Nuclear compensation increase per year of experience in the nuclear industry** was calculated by subtracting starting salary from current total compensation and dividing by years in the nuclear industry.

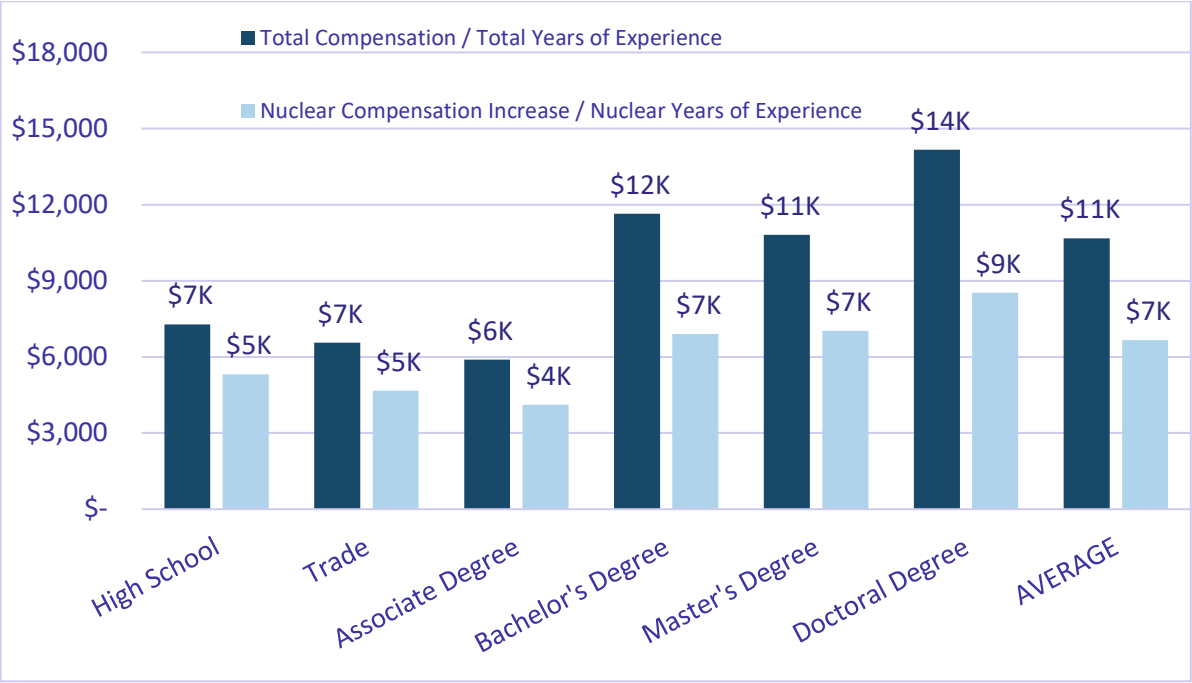

Figure 21: TOTAL COMPENSATION BY EDUCATION AND YEARS OF EXPERIENCE [7]

[7] This figure is cost-of-living adjusted. This figure assumes a cost-of-living adjustment of 70 for all responses from Canada unless a cost-of-living factor was provided. Trade includes those with technical or vocational training.

As seen in Figure 22, **males consistently make more than females at every level of experience.** The gap is most apparent early in career (0-4 years of experience) and late in career (>14 years of experience).

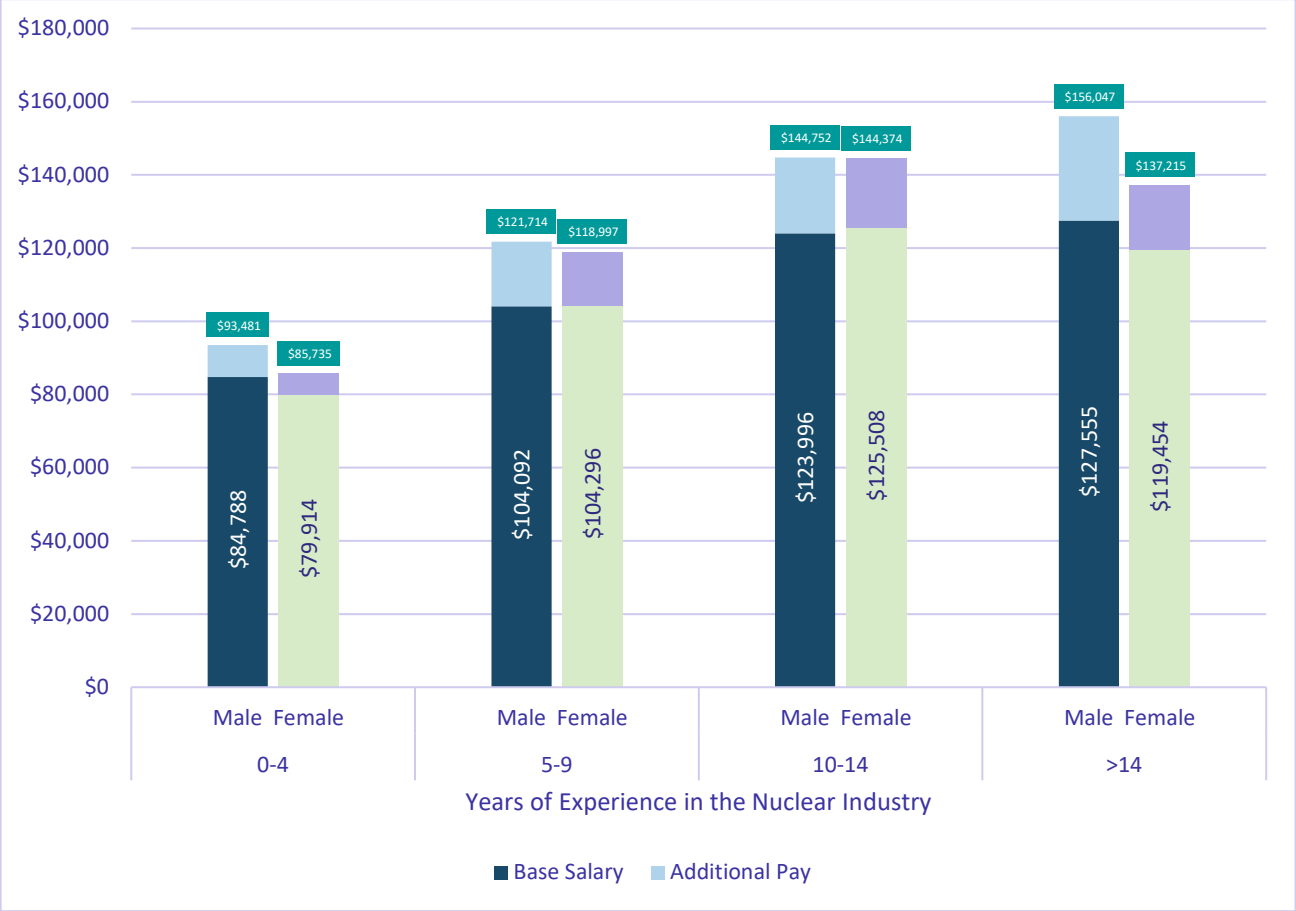

Figure 22: PAY BY GENDER AND YEARS OF EXPERIENCE [8]

[8] This figure is cost-of-living adjusted**.** This figure assumes a cost-of-living adjustment of 100 for all responses from Canada.

When examining pay by organizational level, **females consistently make less than their male peers** (even when considering years of experience). For NAYGN members who are individual contributors, male and females are given similar raises: the compensation increase per year of experience is approximately equal. However, since males have higher entry level salaries (Figure 22), the gender pay gap is perpetuated throughout the careers of NAYGN members.

At the supervisor level, females appear to be closing the gap with slightly higher increases in pay per year of experience. However, even after promotion to a people leader, females are making 8.3% less than their male peers, on average.

The manager/director level has a 7.8% pay gap between males and females. Once at the manager/director level, females revert to receiving approximately equal raises per year of experience as males. Once again, since males have higher entry level salaries (Figure 22), the gender pay gap is perpetuated in middle management.

The rate of increase in salaries

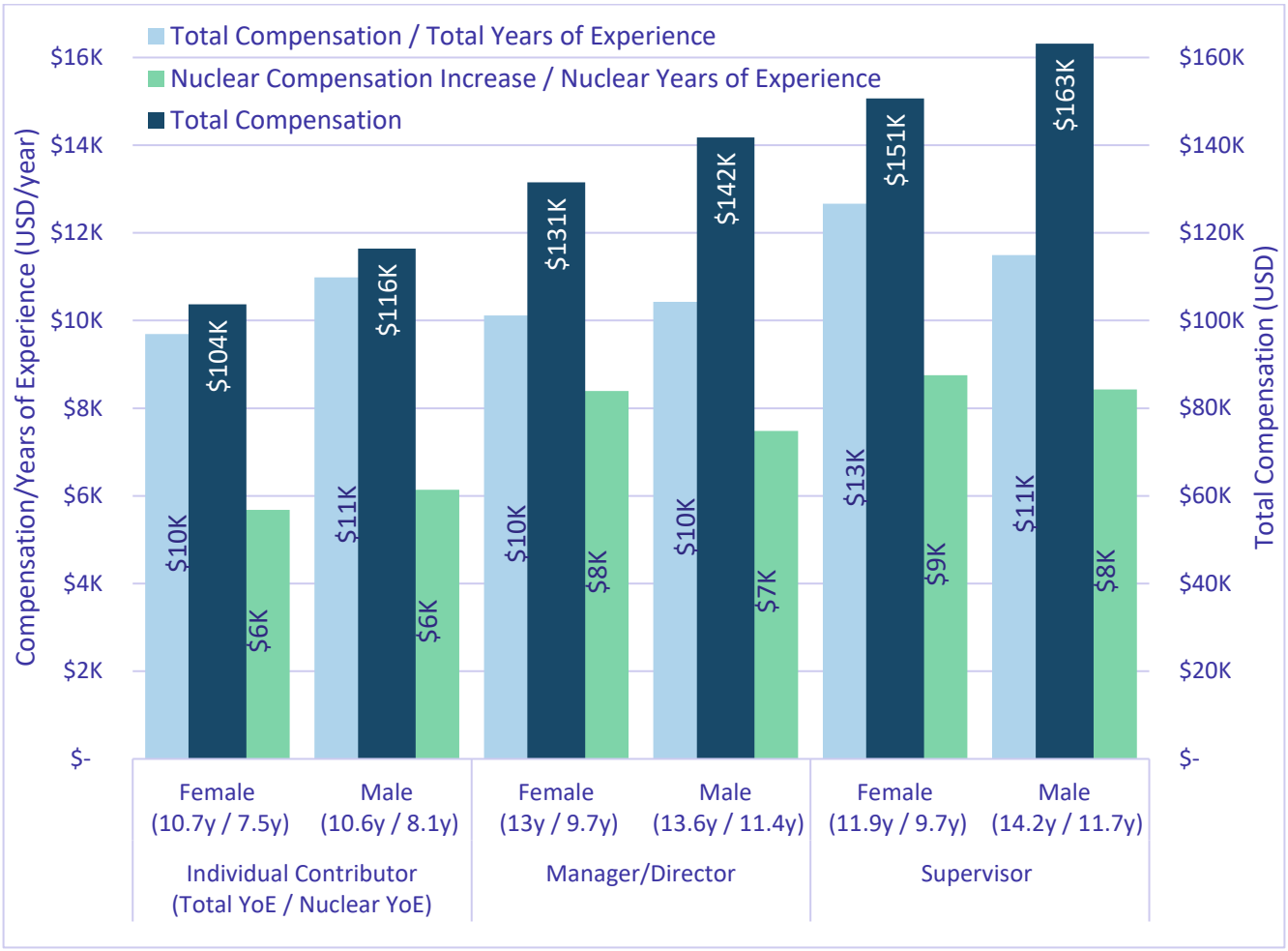

Figure 23: PAY BY GENDER AND ORGANIZATION LEVEL [9]

[9] This figure is cost-of-living adjusted**.** This figure assumes a cost-of-living adjustment of 70 for all responses from Canada.

Figure 24 shows starting salaries by year hired in the nuclear industry. In 12 years, males had a higher average starting salary (in only 4 years was the average starting salary higher for females). **The nuclear industry should offer the same starting salary for entry-level positions regardless of gender. In addition, periodic compensation reviews should be conducted at all organization levels to ensure latent differences (i.e. starting salary discrepancies from years, perhaps decades in the past) can be remedied.**

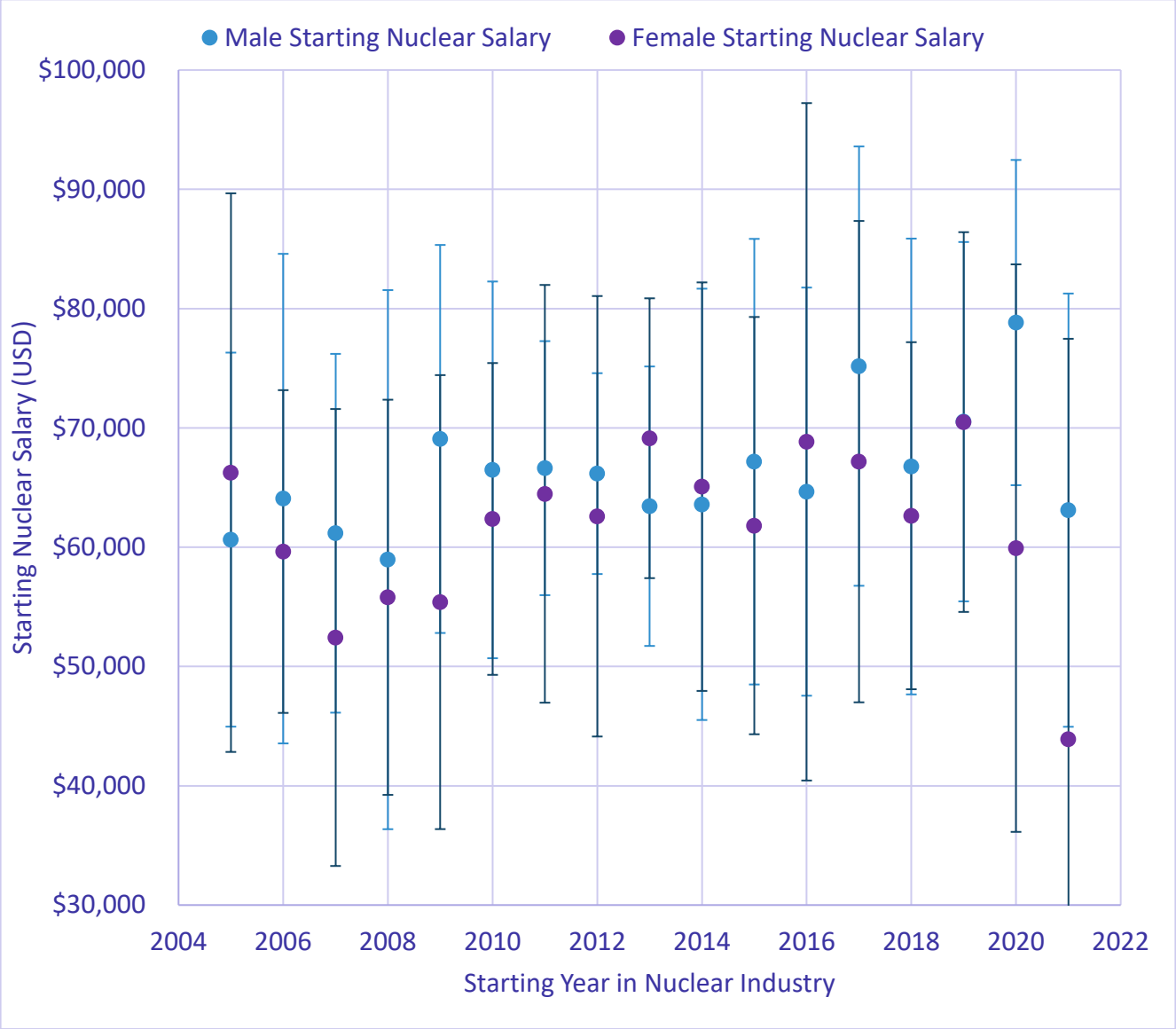

Figure 24: STARTING SALARIES BY GENDER [10]

[10] This figure is cost-of-living adjusted**.** This figure assumes a cost-of-living adjustment of 70 for all responses from Canada. Start year was calculated using the total years of full-time work experience in the nuclear industry. Starting salaries were plotted for recent years (2005-2021). Note: by dividing the data up by start year, the sample size was small and thus the standard deviation is large and was included in the plot.

The NAYGN membership data also uncovered a pay gap based on ethnicity shown in Figure 25. **Caucasian/White NAYGN members are paid more than their minority peers at every experience level.** The gap is most apparent after 14 years of experience in the nuclear industry which indicates this is not the same type of issue as the gender pay gap (where starting salary discrepancies were identified as a major cause).

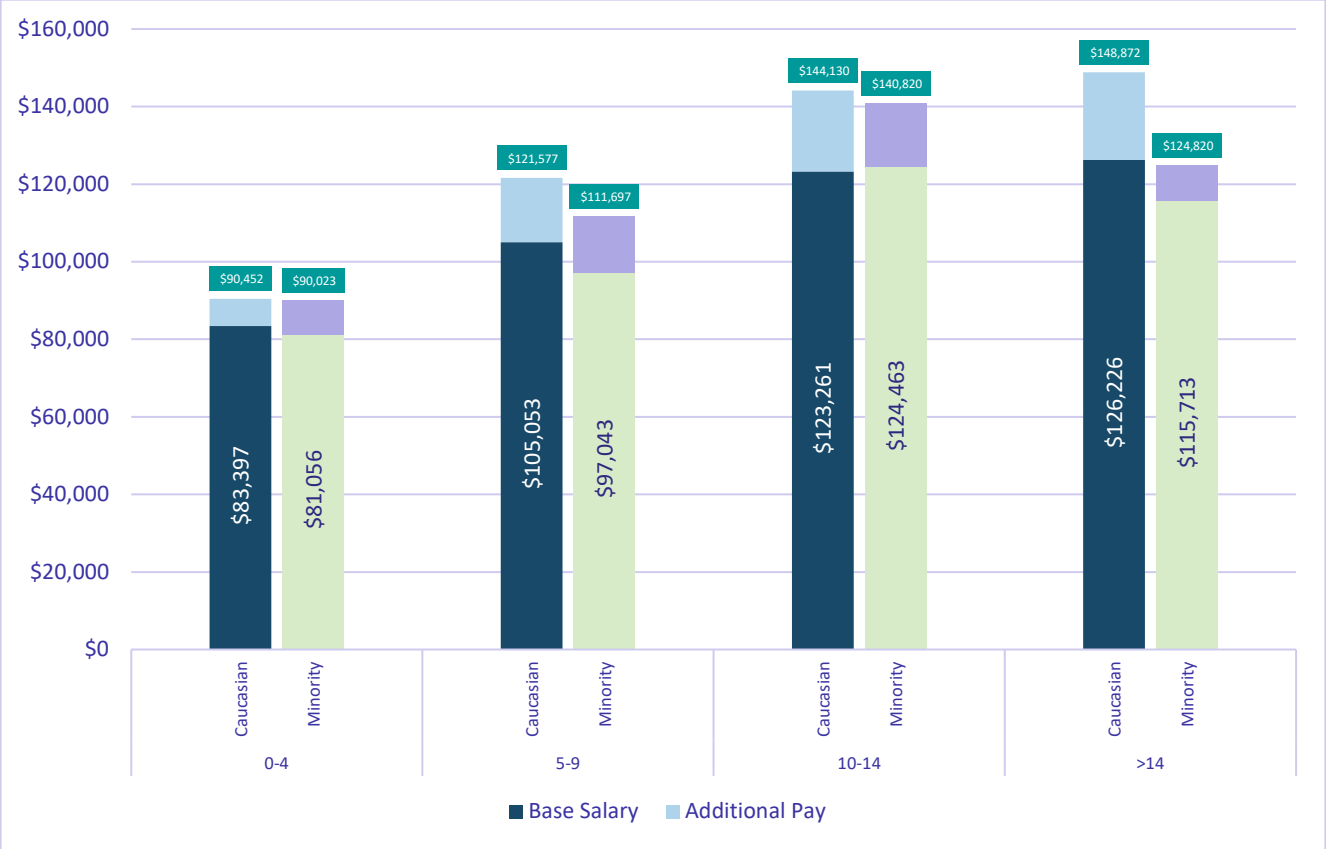

Figure 25: PAY BY ETHNICITY AND YEARS OF EXPERIENCE [11]

[11] This figure is cost-of-living adjusted**.** This figure assumes a cost-of-living adjustment of 100 for all responses from Canada.

While most full-time NAYGN members are utility employees (68%), certain comparisons can be made between company types. This analysis only includes utility (68%), industry groups (5%) (INPO, NEI, EPRI, ANS, CNA, CNS, etc.), and Vendor/Supplier/Consultant (22%), for 95% of full-time responses.

In Figure 26, average years of experience is shown in parenthesis next to company type. Normalization is essential as the cost-of-living is significantly lower for utility employees compared to industry group employees, which makes sense given the typical city locations of industry groups while many power plants are in relatively more rural locations. Interestingly, **utility employees report highest overall compensation when accounting for cost-of-living**, however, normalizing over years of experience as well shows that Vendor/Supplier/Consultant employees earn the most per year of experience even though, on average, they have not been in the industry as long.

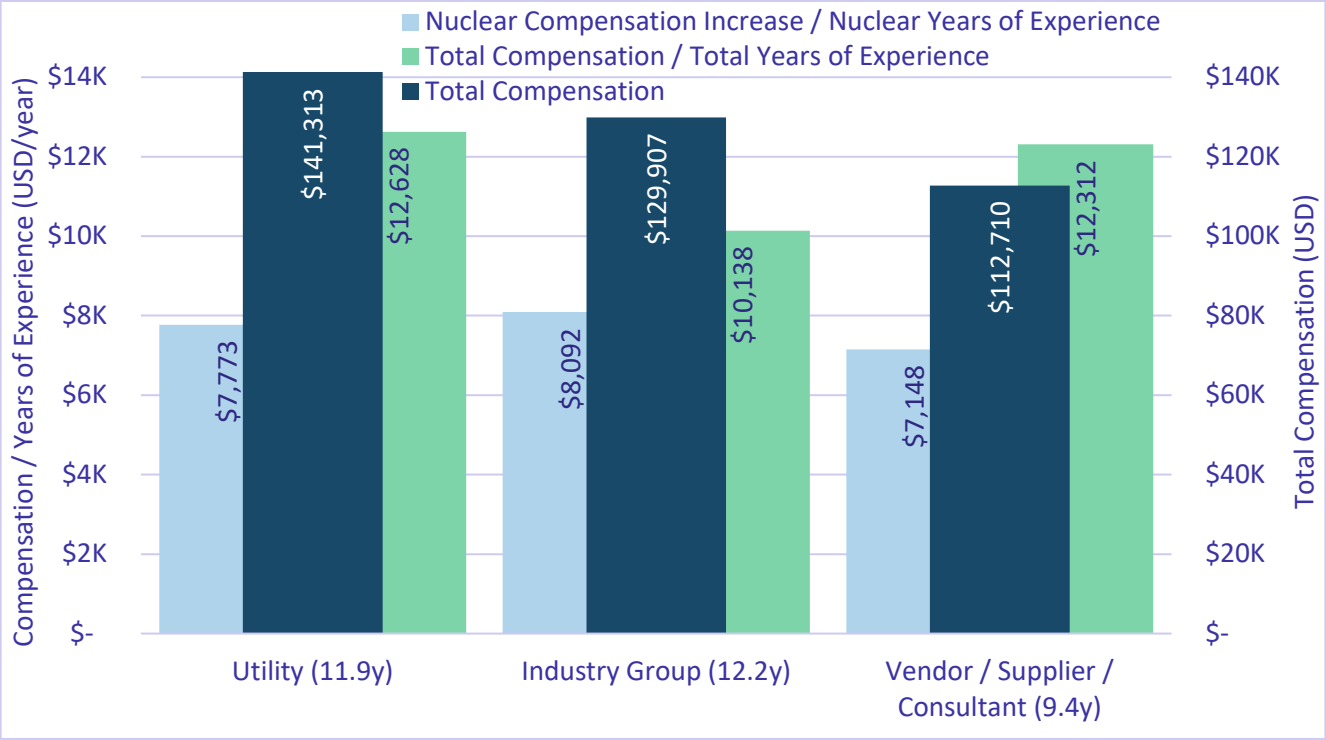

Figure 26: PAY BY COMPANY TYPE [12]

[12] This figure is cost-of-living adjusted**.** This figure assumes a cost-of-living adjustment of 70 for all responses from Canada.

There was no significant difference in pay based on disability status.

VI. Job Duties & Satisfaction Results

Part of NAYGN's mission statement is to ensure that its members are developing professionally and experiencing opportunities for knowledge transfer in their roles. This year's survey investigated some of these ideas including how its members want to work and how satisfied they are with their working conditions.

Job Satisfaction

Seventy-two percent of NAYGN members are satisfied or very satisfied with their jobs (Figure 27: JOB SATISFACTION). This is a decrease from the 2020 Career Report, in which 86% of NAYGN members reported satisfaction with their jobs. For the 2022 Career Survey, an additional option was offered: "I'm neither satisfied nor dissatisfied." Twelve percent of NAYGN members say they are "dissatisfied" or "very dissatisfied", which is similar to the 14% dissatisfaction rate in the 2020 Career Report.

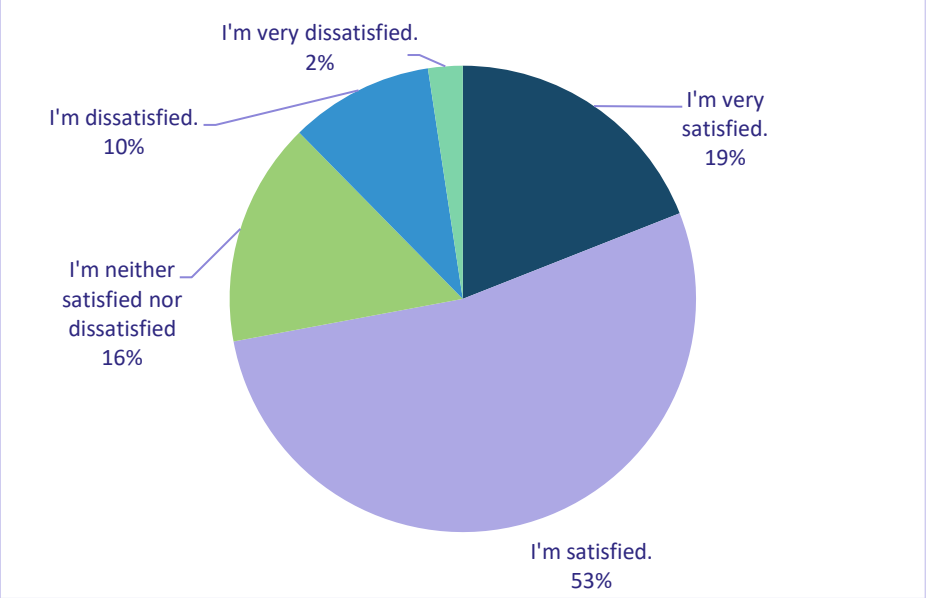

Figure 27: JOB SATISFACTION

There were several patterns of note when correlating company type to job satisfaction (Figure 28: JOB SATISFACTION BY COMPANY TYPE). Utilities and vendors have a bell curve, skewed with most people reporting "satisfied," which is a generally positive result. A range of responses would be expected and thus it is unusual that academic organizations have a much flatter curve and no responses of "dissatisfied" or "very dissatisfied." Note: only 23 NAYGN members who work for an academic organization responded to the survey. There are no correlations between age group, gender, or even weekly hours worked and job satisfaction.

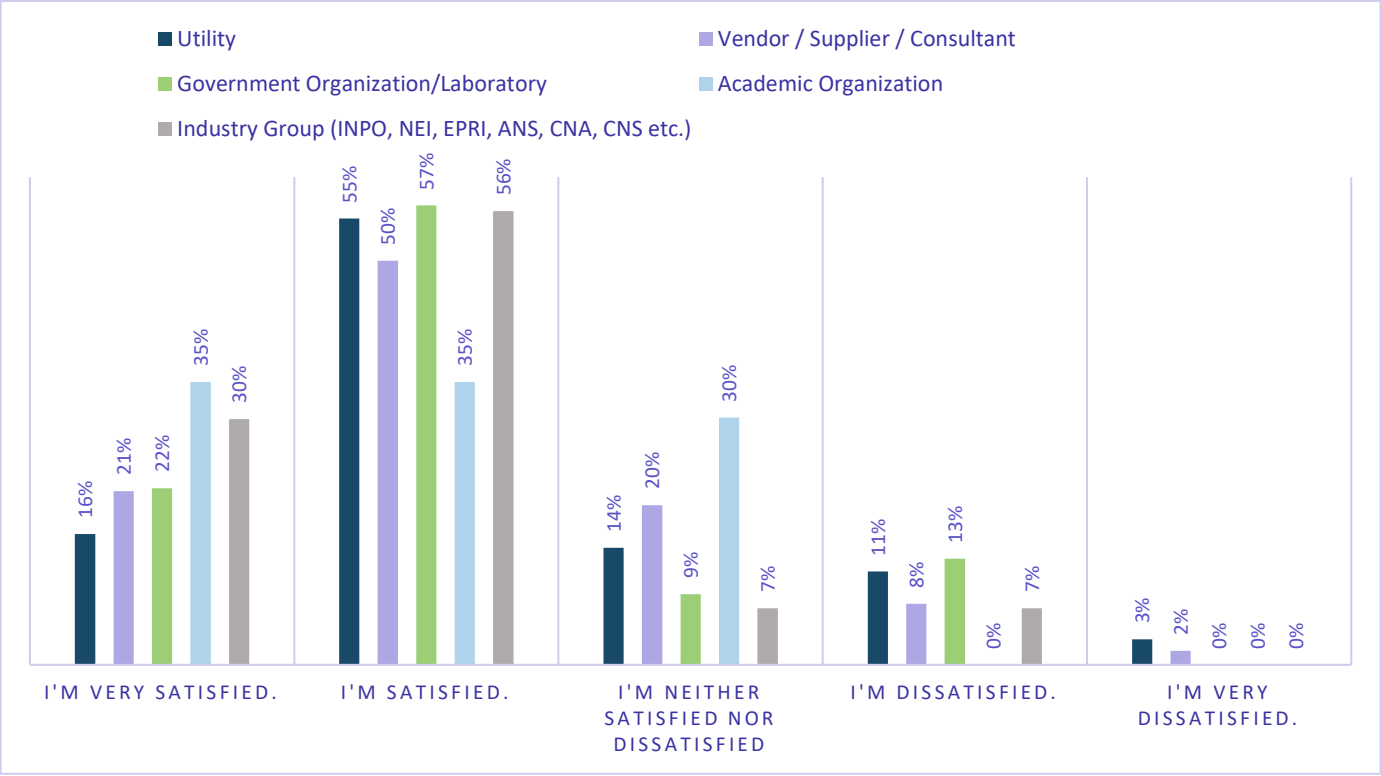

Figure 28: JOB SATISFACTION BY COMPANY TYPE

Job Attributes

NAYGN members ranked the following 10 job attributes based on **how important** those attributes are to them personally in their job. They then ranked the same 10 job attributes based on **how satisfied** they are with those attributes in their current jobs.

- Compensation/Pay/Benefits/Vacation or "Compensation"
- Universal Paid Leave (family, prenatal, sick leave) or "Leave"
- Flexibility to Balance Life and Work Issues or "Flexibility"
- Job Security/Organization's Financial Stability or "Stability"
- Respectful Treatment of All Employees or "Respect"
- Relationship with Immediate Supervisor or "Supervisor"
- Career Development/Advancement Opportunities or "Opportunities"
- Staffing Levels/Volume of Work or "Staffing"
- Employee Morale or "Morale"
- Job Location or "Location"

All job attribute rankings also included "not applicable" as a response.

Over 50% of NAYGN members marked compensation package, flexibility to balance work/life, respectful treatment of employees, and job security as **very important** (Figure 29: IMPORTANCE OF JOB ATTRIBUTES). However, NAYGN members **reported the most satisfaction** for relationship with immediate supervisor and job location (Figure 30: SATISFACTION OF JOB ATTRIBUTES).

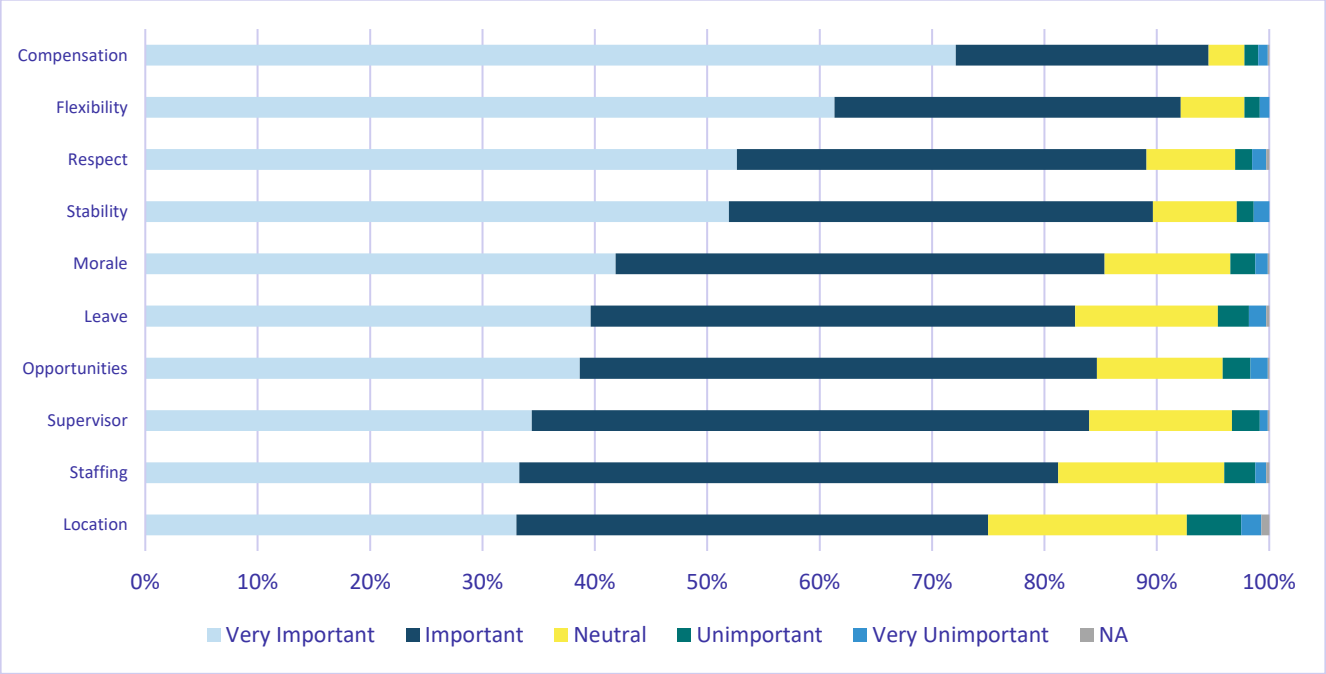

Figure 29: IMPORTANCE OF JOB ATTRIBUTES

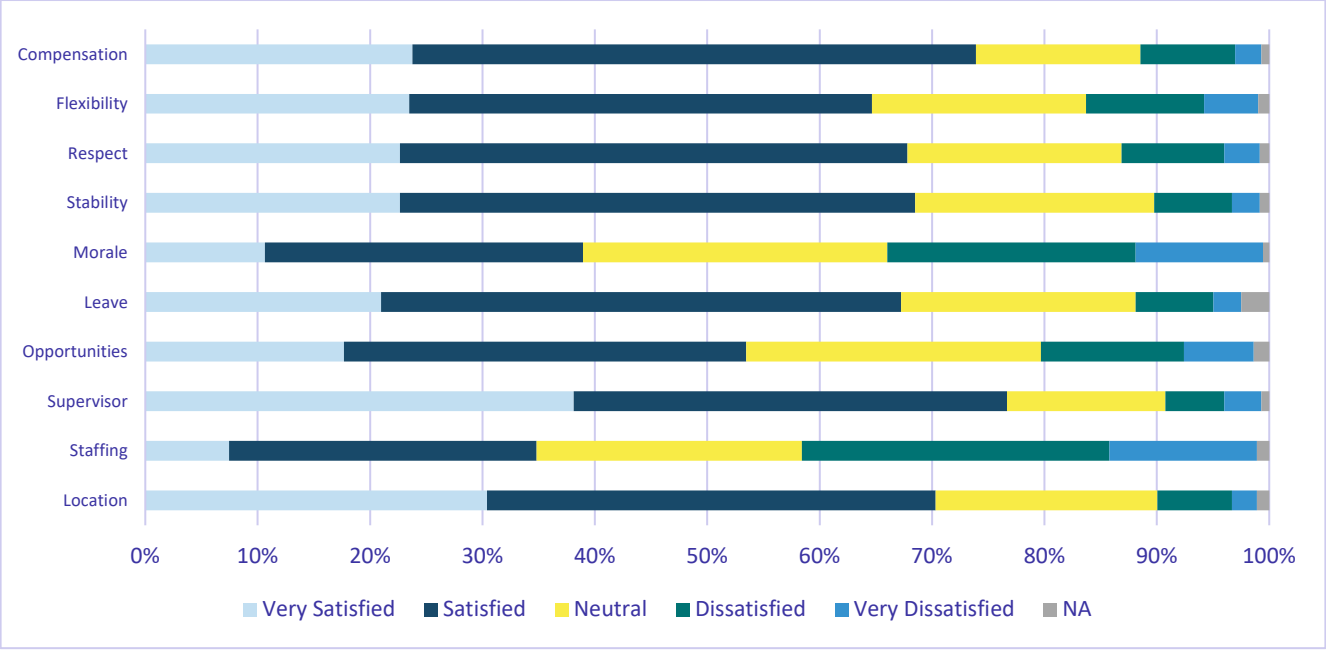

Figure 30: SATISFACTION OF JOB ATTRIBUTES

Only 20% to 30% of NAYGN members are very satisfied with compensation package, flexibility, and respectful treatment of employees, which are the top three attributes for importance. However, when "satisfied" is included with “very satisfied”, **over 70% of NAYGN members are satisfied with their compensation package.**

Between 60 and 70% of NAYGN members are satisfied (“very satisfied” and “satisfied) with flexibility, respectful treatment of employees, and job security. **Additionally, the satisfaction (“very satisfied” and “satisfied”) for universal paid leave is over 60% and relationship with supervisor is over 70%.**

The greatest disconnect between importance and satisfaction is employee morale. Less than 40% of NAYGN members are either very satisfied or satisfied with morale, and over 30% of NAYGN members are dissatisfied or very dissatisfied with morale. Employee morale was very important or important to over 80% of NAYGN members, which makes this an important area for improvement in the industry.

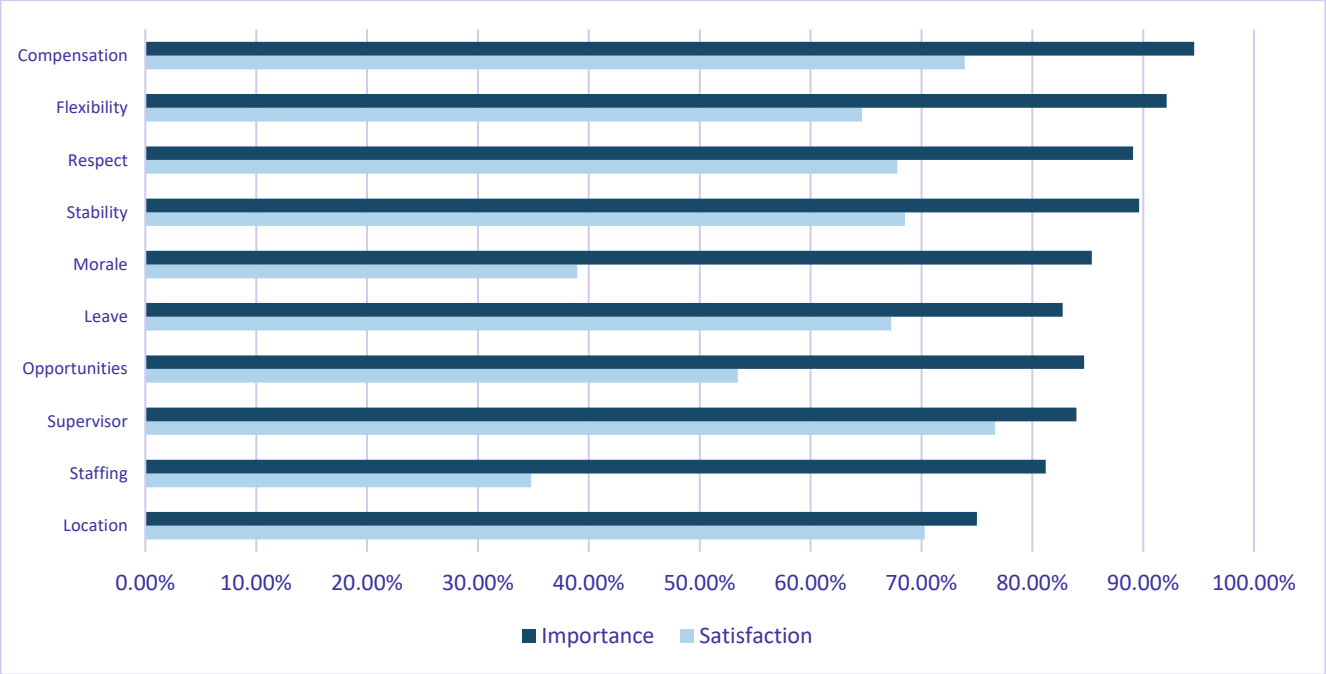

Figure 31: COMPARE SATISFACTION AND IMPORTANCE OF JOB ATTRIBUTES

The job attributes with least satisfactory results, in addition to the aforementioned employee morale, are (1) staffing levels/volume of work and (2) career development/advancement opportunities. 30% of NAYGN members were very satisfied or satisfied with staffing levels/volume of work while 40% of NAYGN members were very dissatisfied or dissatisfied with staffing levels/volume of work. The career development/advancement opportunities had noticeably lower satisfaction than most other job attributes.

Work Schedule

The majority of NAYGN members (81%) preferred some form of alternate work schedule (Figure 32: PREFERRED WORK SCHEDULE**).** The largest group was in support of working four 10-hour days a week. Only 18% of NAYGN members were in favor of traditional five 8-hour days per week.

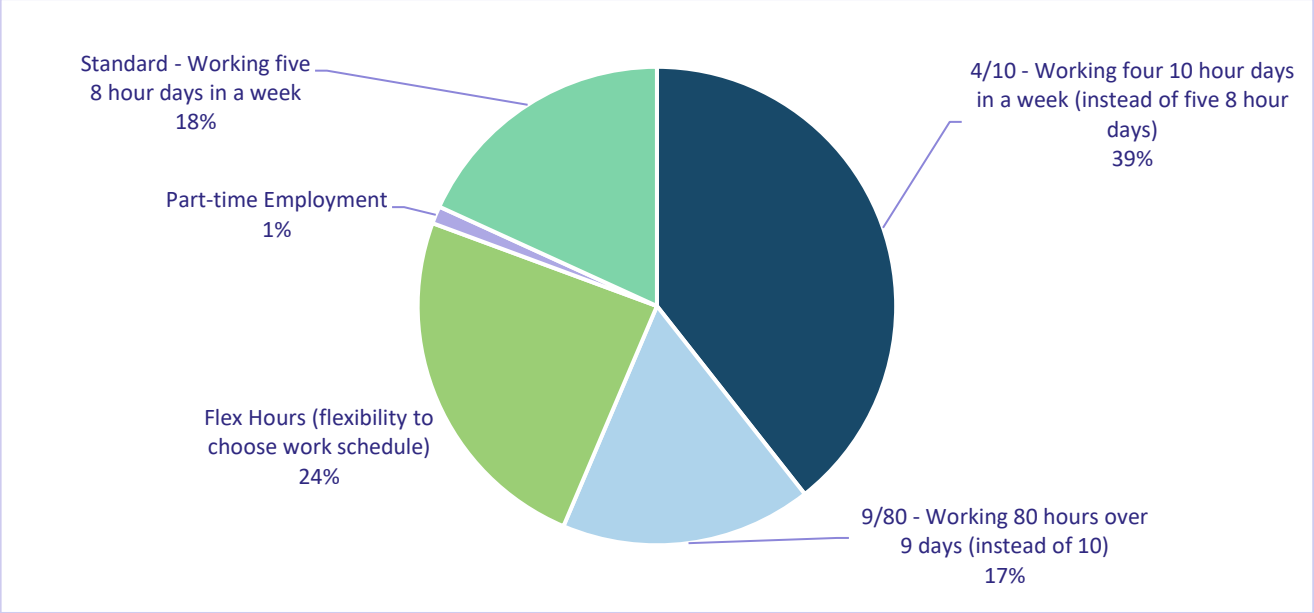

Figure 32: PREFERRED WORK SCHEDULE

Compared to 2020, the preference for four 10-hour days increased. Flex hours was the most favorable work option in 2020. The pandemic did mean that many people had increased work flexibility since work from home dominated 2020-2022. It should be noted the methodology for this question changed since 2020: teleworking was removed as an option and instead of ranking each option, NAYGN members were asked “What is your preferred work timing arrangement, if they were available to you?”.

Work schedule preference parsed by age provided some surprising insights (Figure 33: PREFERRED WORK SCHEDULE BY AGE). Interestingly, the youngest age group is the most in-favor of traditional 5-day workweeks, but overall, the preference for four 10-hour days a week is the strongest preference regardless of age. It is particularly notable, however, that nearly half for NAYGN members aged 40-49 prefer four 10-hour days.

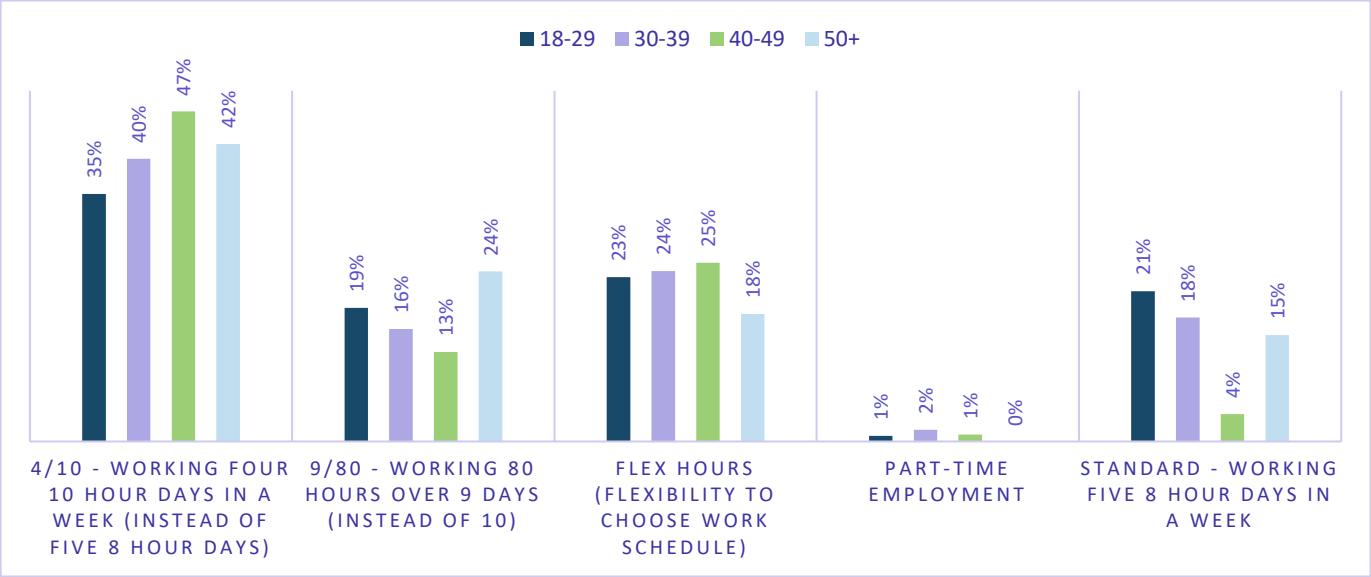

Figure 33: PREFERRED WORK SCHEDULE BY AGE

Canadian NAYGN members prefer a traditional 5-day week much more so than NAYGN members from the United States or Mexico (Figure 34: PREFERRED WORK SCHEDULE BY HOME COUNTRY).

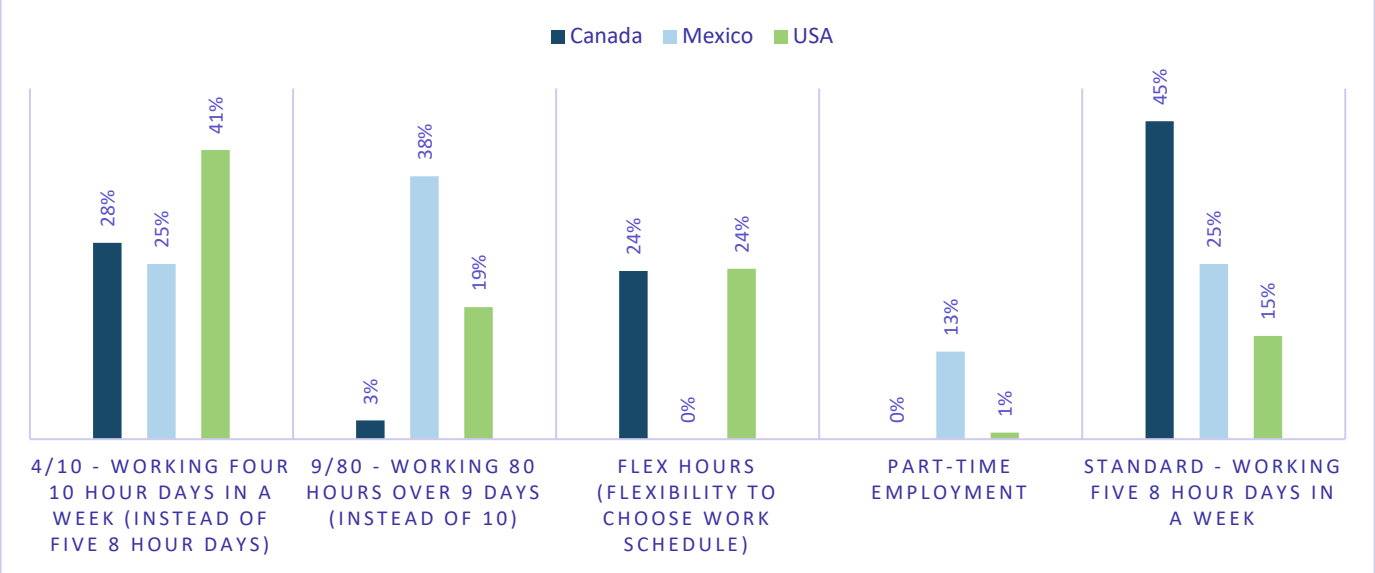

Figure 34: PREFERRED WORK SCHEDULE BY HOME COUNTRY

As seen in Figure 35: PREFERRED WORK SCHEDULE BY JOB TITLE, there are large discrepancies based on level in the organization. **Those in higher levels of leadership (executives and managers/directors) prefer a traditional 5-day workweek much more than other groups. Individual contributors and supervisor (first-line) prefer flexible or alternate work schedules. This indicates a disconnect between leadership and their employees.**

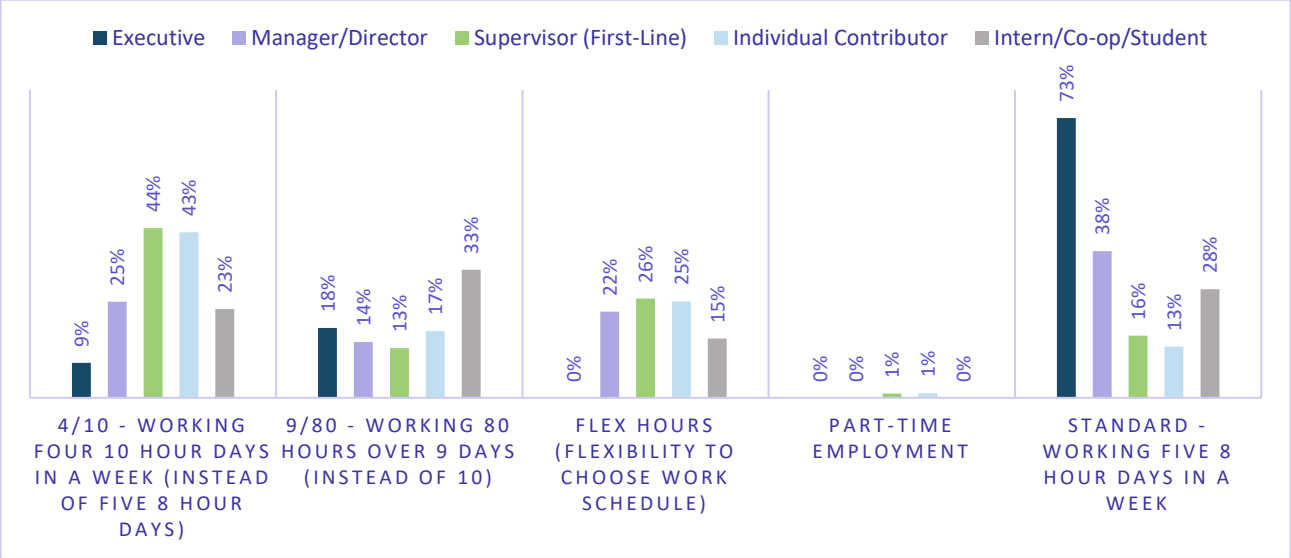

Figure 35: PREFERRED WORK SCHEDULE BY JOB TITLE

Figure 36: PREFERRED WORK SCHEDULE BY JOB TYPE explores differences of opinion between engineering, non-engineers (but still technical), and nontechnical work groups. Still, a majority of NAYGN members prefer a flexible or alternate work schedule. Nontechnical work groups were the most likely to prefer a traditional 5-day workweek. In all cases, however, four 10-hour days is still the most preferred work schedule.

Non-engineering includes: operations, maintenance, organizational effectiveness/performance improvement, science (health physics, radiation protection, chemistry, environmental), and certain applicable write in responses. **Nontechnical is all other responses** (project management, other, administrative, information technology, training, quality/oversight, HR/communications, security).

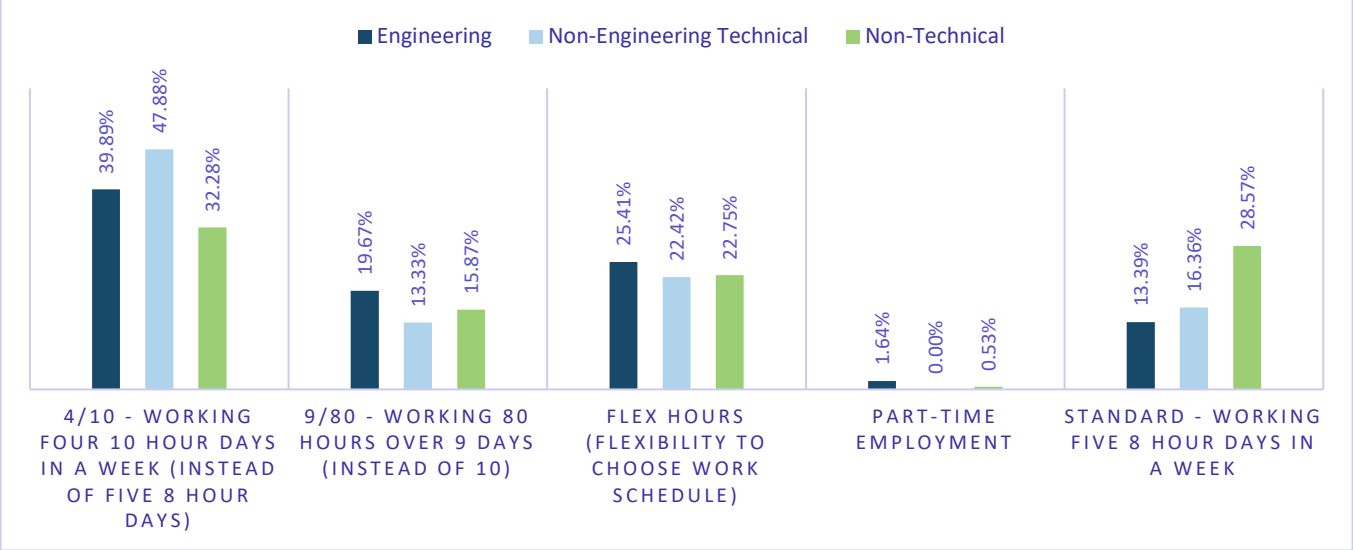

Figure 36: PREFERRED WORK SCHEDULE BY JOB TYPE

Many demographical breakdowns did not lead to significant differences in preferred work schedule, with factors like gender often producing nearly identical results when factored, while others (such as family makeup) seemed to produce a minor swing toward one particular work schedule, but without a notable enough swing to indicate a preference among that group.

Remote Work

Given the popularity of remote work and the hotly debated topic of "return to in-person work", NAYGN sought to provide data about preferred work format: in-person, at home, or various levels of "hybrid" work. This is a new question in 2022. In 2020, NAYGN members were asked to rank work arrangements by preference. Telecommuting was less popular than flex hours, 4/10's, or 9/80's and was only rated 3.34 out of 5 in 2020. The world has indeed changed as only 15% of NAYGN members prefer completely in-person work and **85% of NAYGN members prefer some remote work** (Figure 37: PREFERRED WORK FORMAT).

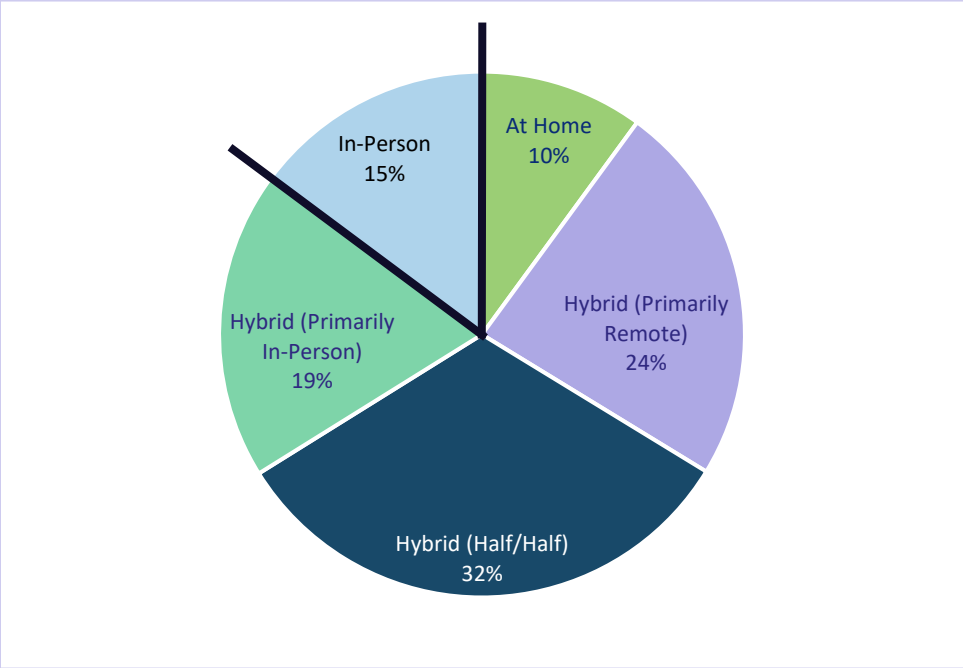

Figure 37: PREFERRED WORK FORMAT

An overwhelming number of NAYGN members (85%) prefer at least some time working from home, with **the largest number of NAYGN members stating that they prefer about half their work time spent at home and half in-person.** This preference was almost identical across different genders.

Older NAYGN members were more likely to prefer in-person work (Figure 38: PREFERRED WORK FORMAT BY AGE). Younger NAYGN members (ages 18-29 and 30-39) were more likely to prefer remote work options. In all age groups, the most preferred work format was half at home and half in-person, but approximately the same number of NAYGN members aged 50+ indicated they prefer fully in-person as half/half.

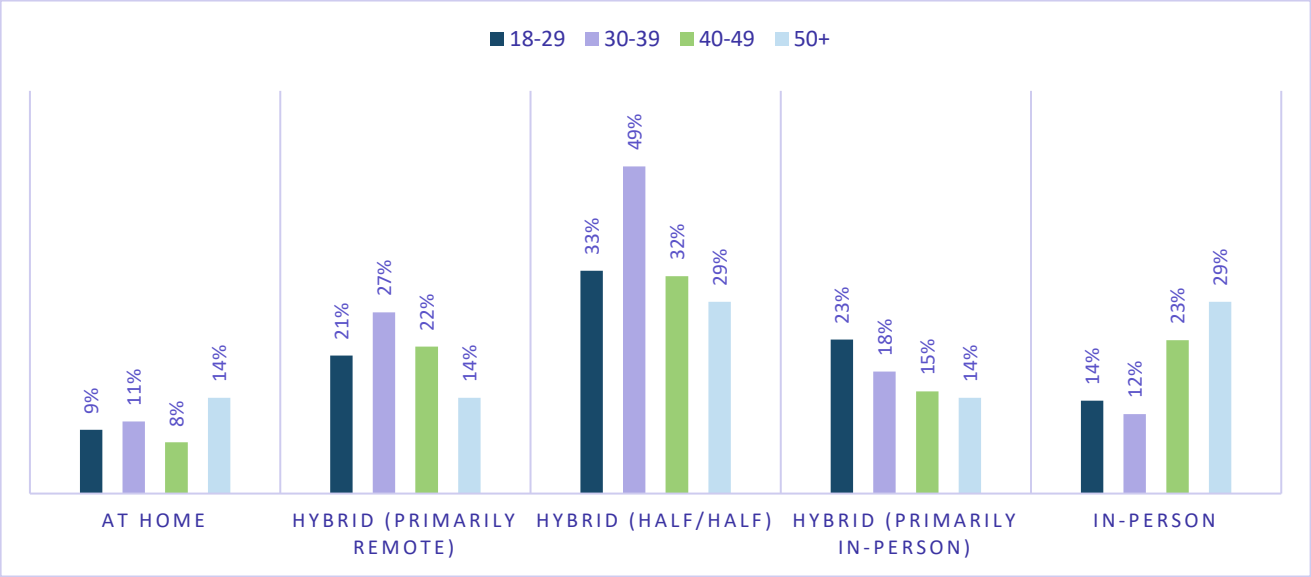

Figure 38: PREFERRED WORK FORMAT BY AGE

Interestingly, when examining disability (Figure 39: PREFERRED WORK FORMAT AND DISABILITY STATUS), NAYGN members who disclosed they had a disability were **more** likely to prefer hybrid (half/half) and hybrid (primarily in-person) than NAYGN members without a disclosed disability. This could indicate that, with reasonable accommodation, those with disabilities do not necessarily need additional assistance such as more time working from home. Alternately, this could indicate that disability accommodations are easier to implement in an office setting versus working at home.

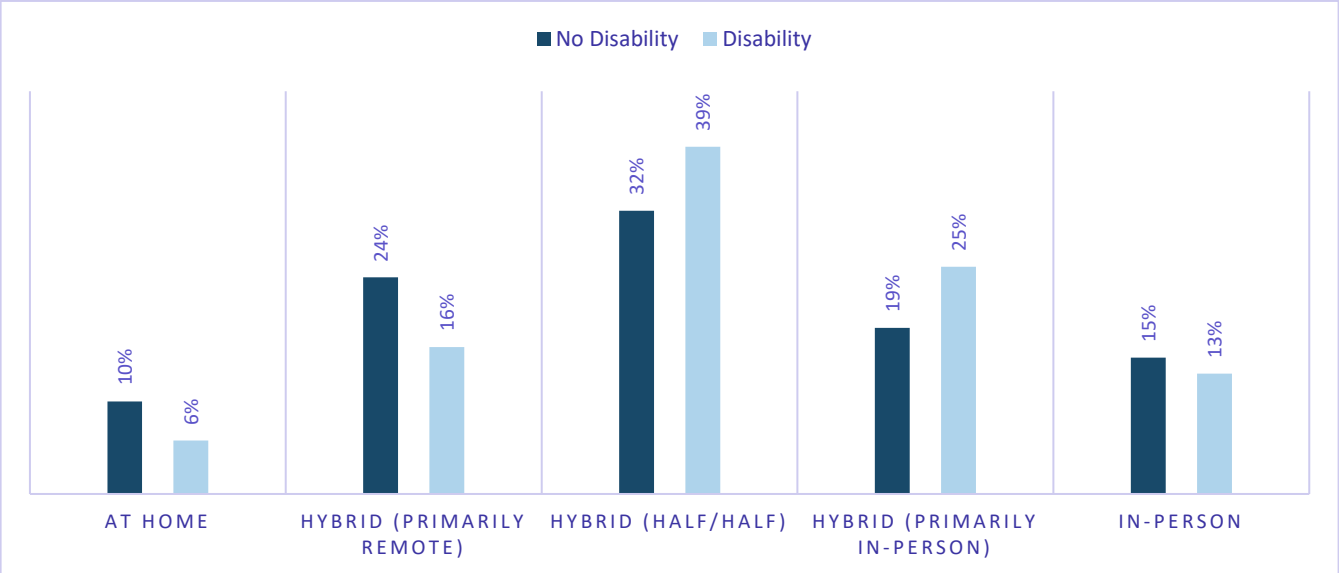

Figure 39: PREFERRED WORK FORMAT AND DISABILITY STATUS

All types of households (single, married/partner, parent, no children) were more likely to prefer remote work formats (Figure 40: PREFERRED WORK FORMAT BY TYPE OF HOUSEHOLD). There is an indication that those who *do not* have children are more likely to prefer working at home over those who do have children. This could be tied to experiences working from home while remote schooling was occurring simultaneously (and co-located!) during the height of the COVID-19 pandemic.

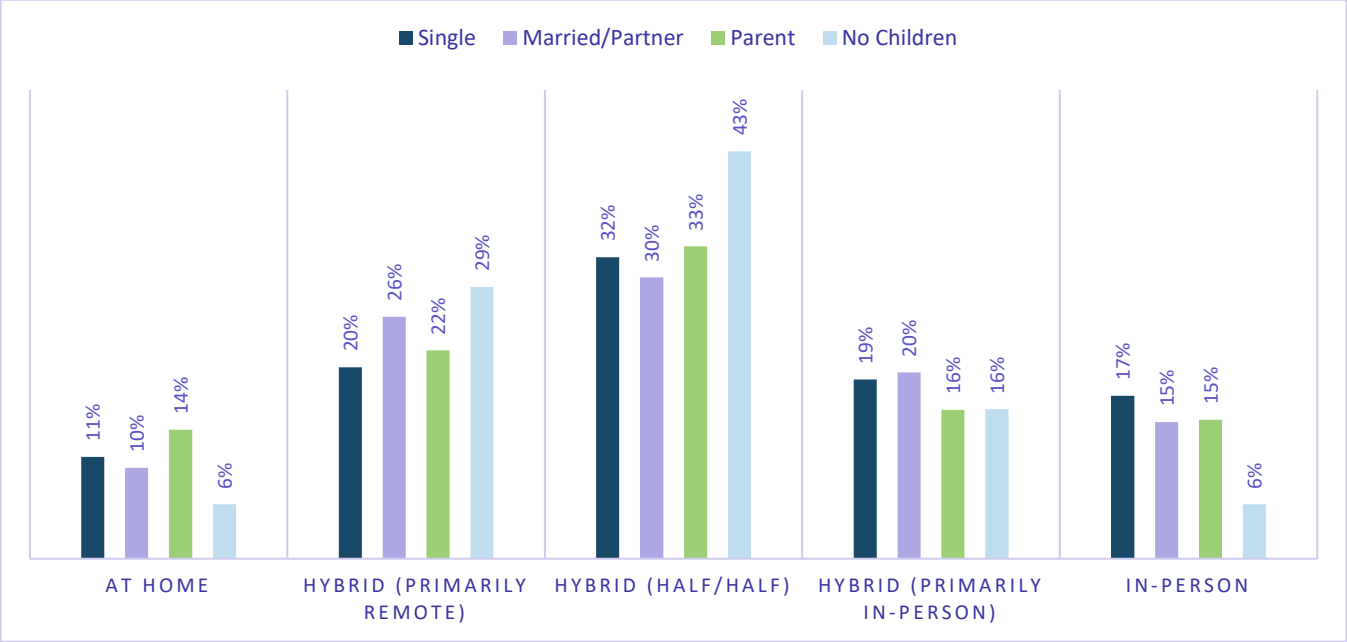

Figure 40: PREFERRED WORK FORMAT BY TYPE OF HOUSEHOLD

There is a difference in opinion for preferred work format based on organizational level (Figure 41: PREFERRED WORK FORMAT BY JOB TITLE). **Leadership (including executives, managers/directors, and supervisors) are more likely to prefer more time in-person. In contrast, individual contributors are much more likely to prefer work formats that include work-from-home at least half the time.**

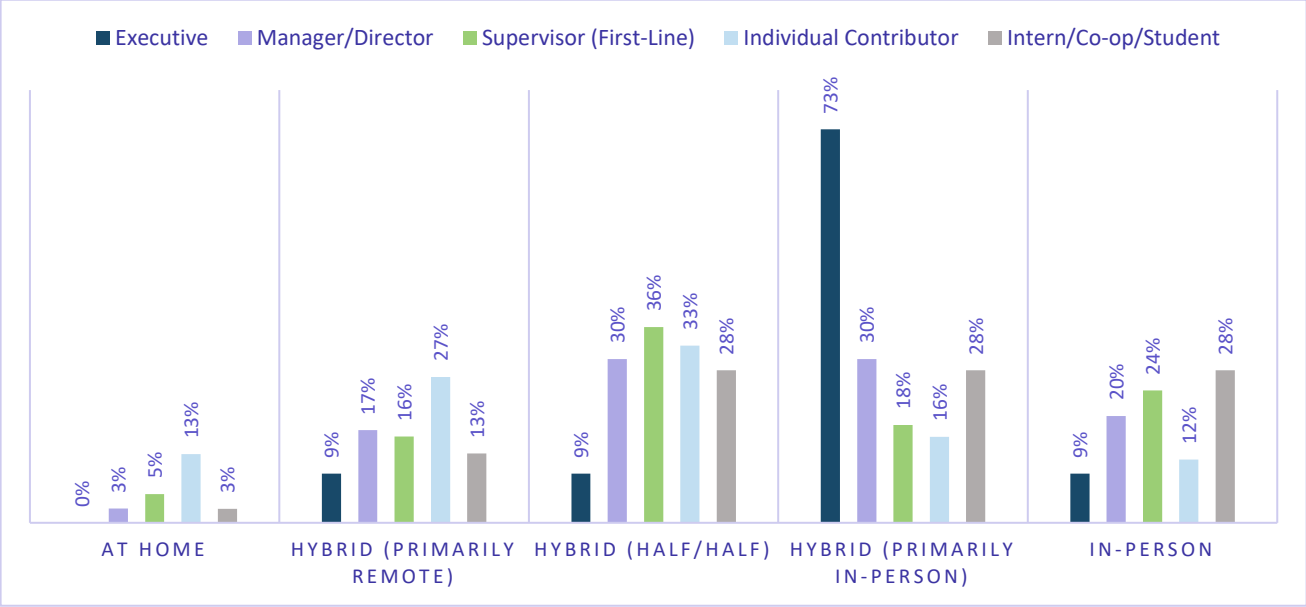

Figure 41: PREFERRED WORK FORMAT BY JOB TITLE

Interns and students favor in-person work (more than other populations). This could be reflective of the e-learning experiences of students and interns during COVID. Thus, this conclusion cannot necessarily be extrapolated to indicate that future generations of nuclear workers will prefer predominantly in-person work formats. In addition, students and interns were a relatively small sample size (6% of total NAYGN members).

Figure 42: PREFERRED WORK FORMAT BY JOB TYPE shows that engineers and nontechnical employees are more likely to prefer remote work formats. Technical workers outside of engineering (such as operations and maintenance) are less likely to prefer remote work formats than engineers or nontechnical employees. Likely, this is due to the hands-on nature of non-engineering technical roles that necessitate fully in-person work activities.

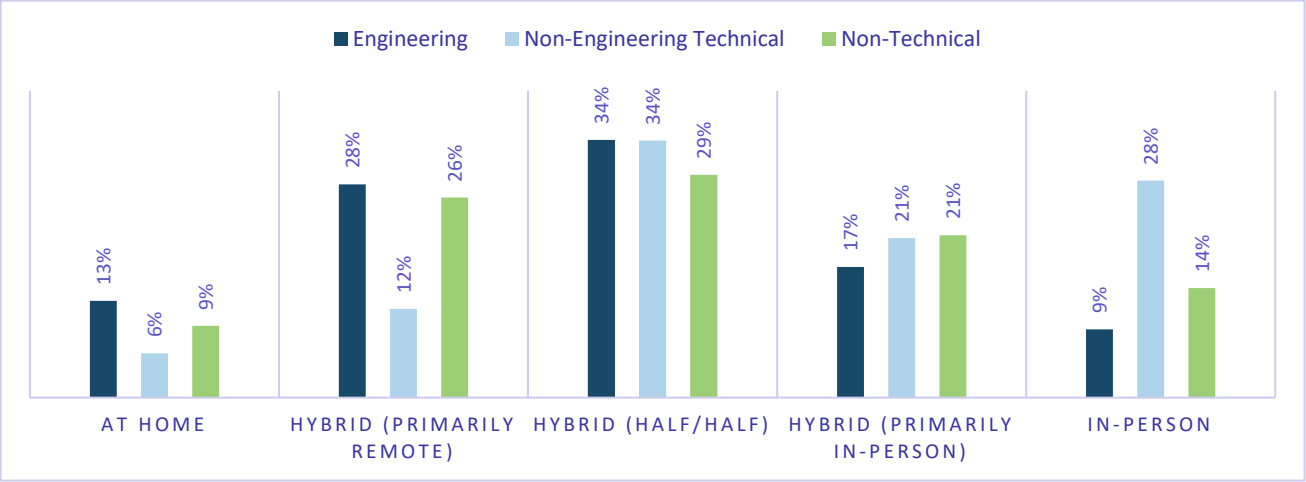

Figure 42: PREFERRED WORK FORMAT BY JOB TYPE

Hours Worked Per Week

An overwhelming majority (81%) of NAYGN members indicated they work between 40 and 50 hours per week (Figure 43: HOURS WORKED IN AVERAGE WEEK). **The percent of NAYGN members who work 45 or more hours per week in 2022 (31%) is more than in 2020 (27%)**. This trend could be indicative of a higher percentage of NAYGN members in management, staffing cuts, increased workload, or a tendency to work longer hours when in a remote work format. Note that average full-time employment is considered between 35-40 hours per week, while part-time employment is usually considered to be less than 30 hours a week.

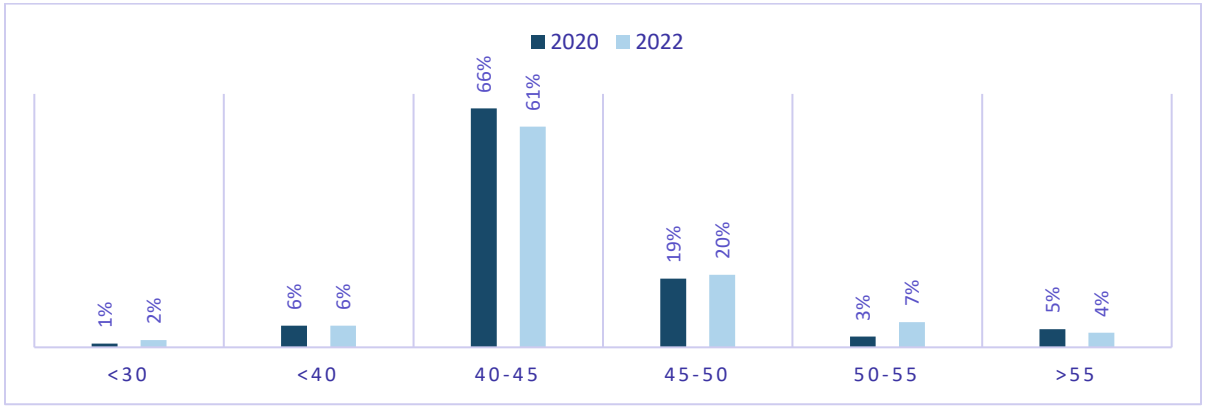

Figure 43: HOURS WORKED IN AVERAGE WEEK

Across all levels in the organization, most NAYGN members work 40-50 hours per week (Figure 44: WORK HOURS PER WEEK BY JOB TITLE). Interestingly, the most common response for manager/director is 45-50 hours per week, while executives typically work 40-45 hours per week. Twenty-seven percent of executives do work more than 55 hours a week which is very uncommon for other job titles.

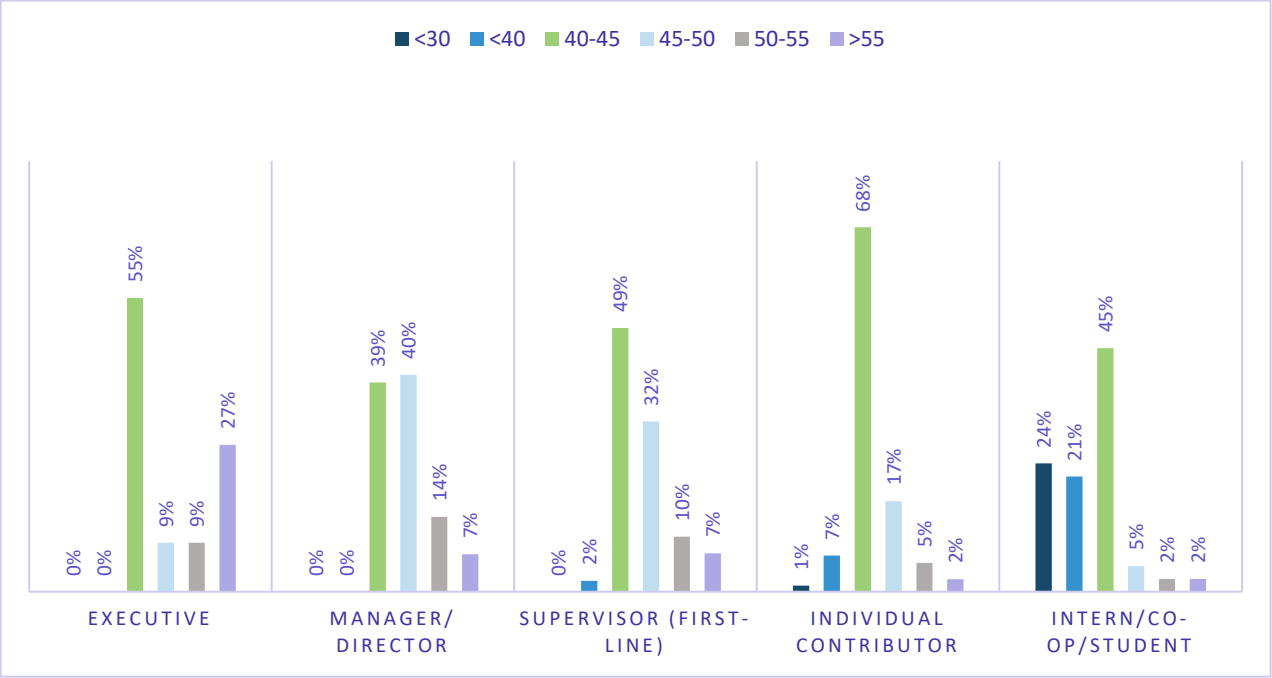

Figure 44: WORK HOURS PER WEEK BY JOB TITLE

NAYGN members in engineering have the least variability in work hours: 73% have a standard 40-hour week without much variance (Figure 45: WORK HOURS PER WEEK BY JOB TYPE). Nontechnical workers have a noticeable trend toward more than 45 hours compared to engineering or non-engineering technical.

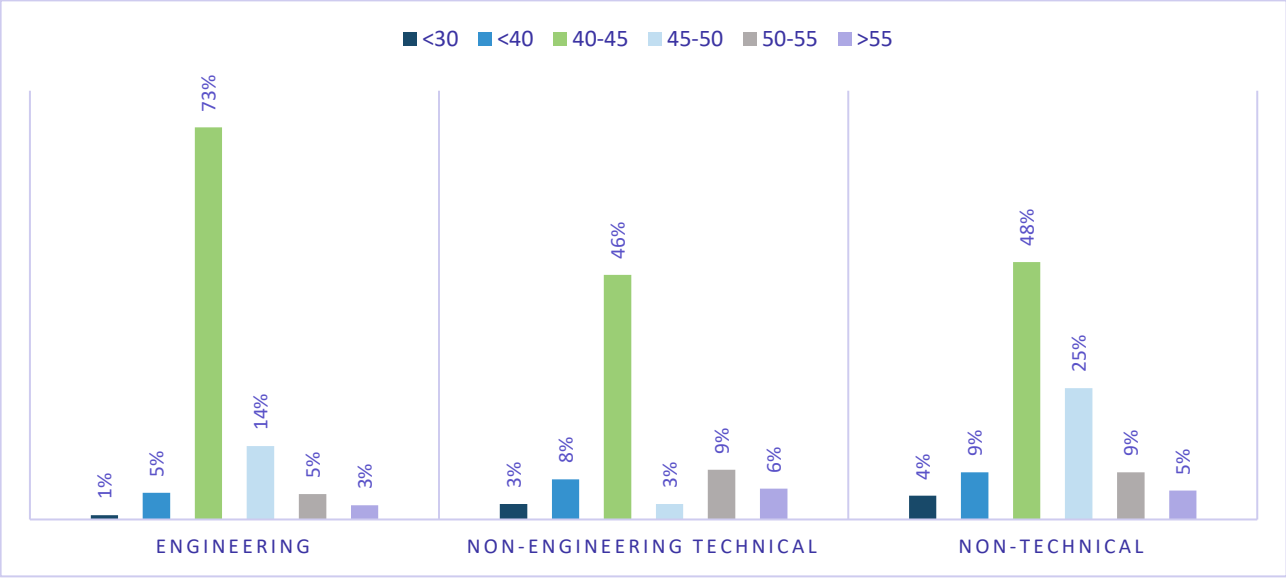

Figure 45: WORK HOURS PER WEEK BY JOB TYPE

Job Searching

Forty-nine percent of NAYGN members are actively or passively looking for a job, which is almost identical to the 2020 Career Report results (Figure 46). However, **20% of NAYGN members are *actively* looking for a job, whereas the 2020 Career Report showed only 12% of NAYGN members actively looking.** The difference between males and females across the three categories (not seeking a new job; passively seeking a new job; actively seeking a new job) is 2 percentage points or less (Figure 47).

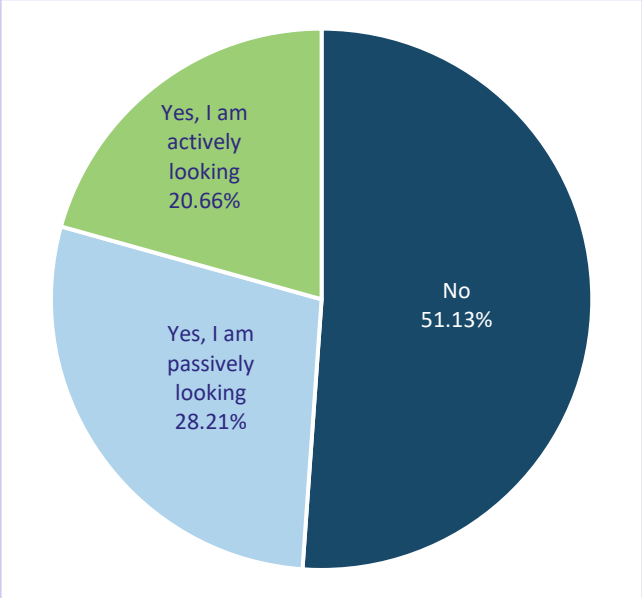

Figure 46: JOB SEARCH STATUS

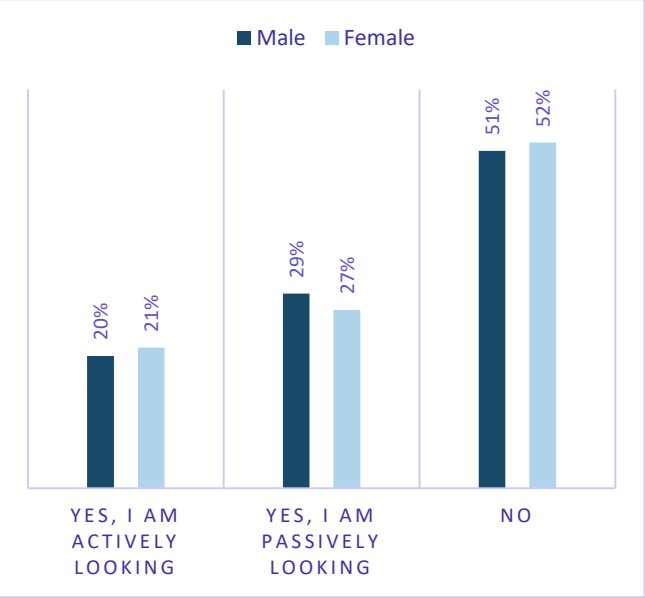

Figure 47: JOB SEEKING "Are you looking for a new job?"

The number of weekly hours worked had a surprising correlation with job searching status, with those who work the least hours being the ones most actively looking for a job (Figure 48: JOB SEARCH BY AVERAGE HOURS WORKED PER WEEK). Twenty-six percent of NAYGN members who work over 50 hours are actively looking for a job, while larger portions of those groups are only passively looking or not looking at all. Utility professionals and those who work for vendors, suppliers, and consultants have the lowest percentage of NAYGN members seeking a job (Figure 49: JOB SEARCH BY COMPANY TYPE). Government organizations and academic organizations have the largest portion of NAYGN members actively seeking a job.

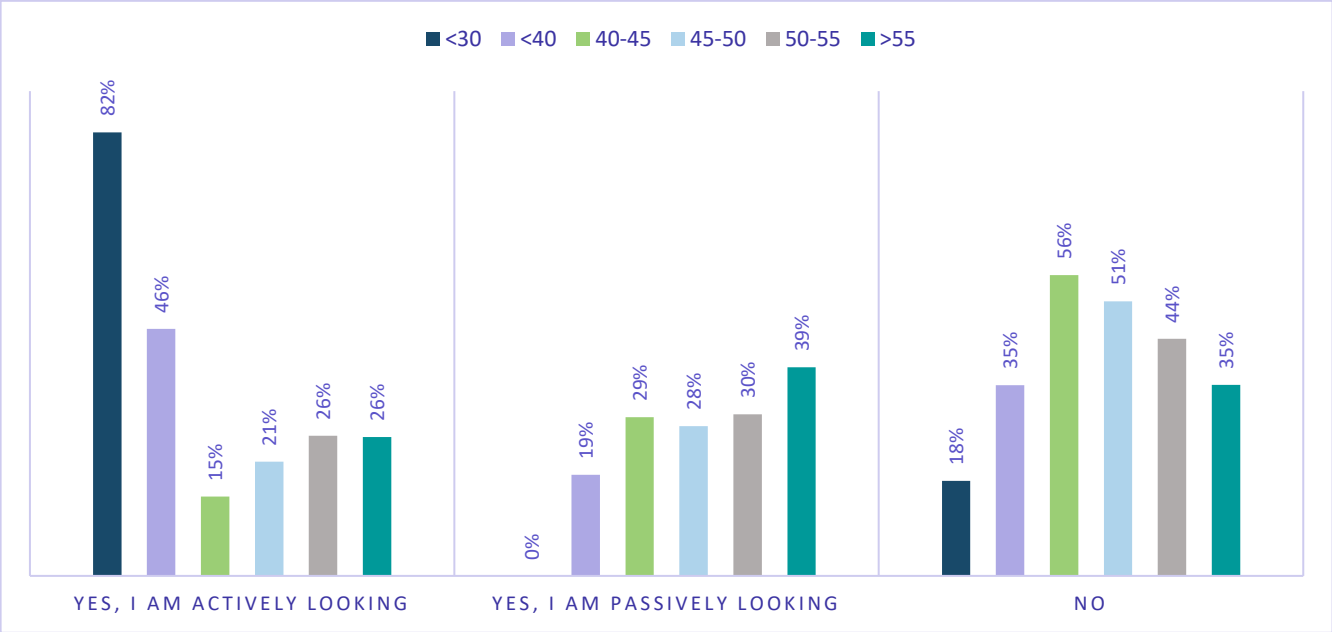

Figure 48: JOB SEARCH BY AVERAGE HOURS WORKED PER WEEK

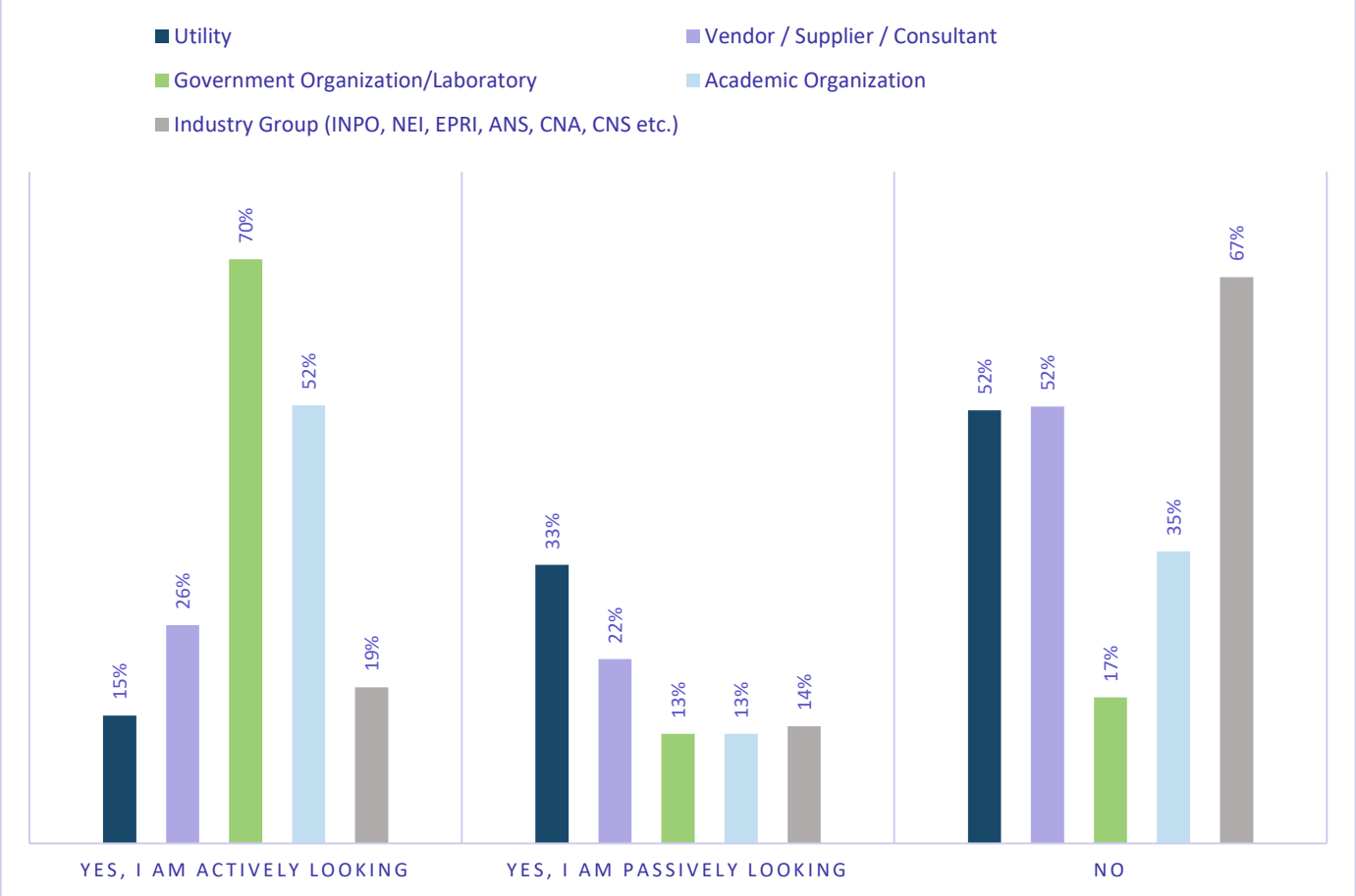

Figure 49: JOB SEARCH BY COMPANY TYPE

NAYGN members who were job searching (either actively or passively) were asked about the type of job they were seeking (Figure 50: JOB SEARCH). The largest portion of job seeking NAYGN members were looking *both outside and inside* of the nuclear industry (41%). A quarter (25%) of job seekers are looking for a job within their company, but fewer NAYGN members are searching for a job within their company that is not in their nuclear department (7%). **Only 32% of NAYGN job seekers are restricting their job search to the nuclear industry. Twenty-seven percent of job seeking NAYGN members are looking to get out of the nuclear industry all together.**

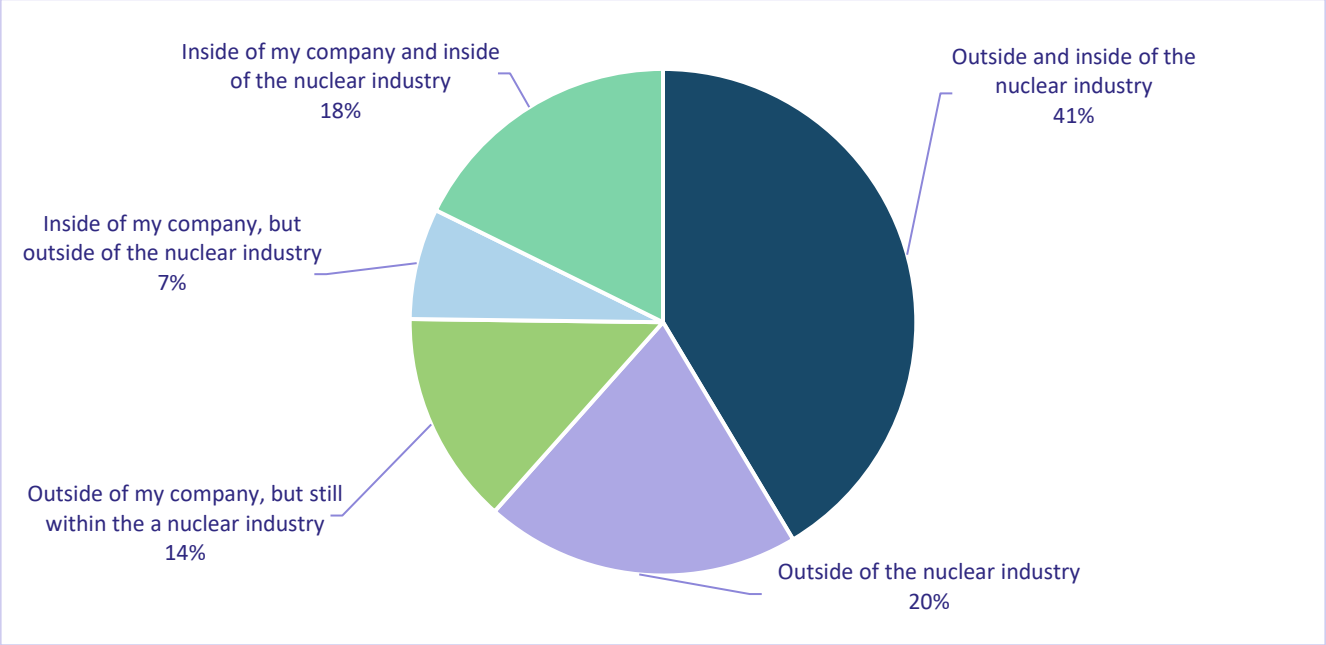

Figure 50: JOB SEARCH

Leaving the Nuclear Industry

NAYGN members were asked what their top reasons would be for leaving the nuclear industry and were given the option to select up to three of the following choices:

- Momentum Against Innovative Solutions
- Pursuit of Higher Compensation / Better Benefits
- Lack of Advancement / Growth Opportunities
- Location
- Corporate Culture / Leadership Style Differences
- Uncertainty Around the Future of Nuclear
- New Opportunity Outside My Current Role
- Tuition Reimbursement / To Further My Education
- Lack of Work/Life Balance
- Decommissioning / Legislation
- Hostile Work Environment
- Work from Home Opportunities or Lack Thereof
- Lack of Diversity, Equity, and Inclusivity Culture
- Not Applicable
- Other

All NAYGN members were able to provide reasons for leaving the nuclear industry, regardless of their job search status. For this larger sample size, **the top reason for leaving the nuclear industry was a lack of work/life balance**, with 13% of NAYGN members selecting it as one of their [up to three] top reasons. Other reasons that were most selected were pursuit of higher compensation/better benefits, corporate culture/leadership style differences, and lack of advancement/growth opportunities.

Table 8: TOP REASONS FOR LEAVING THE NUCLEAR INDUSTRY

Lack of Work/Life Balance	**13.04%**
Pursuit of Higher Compensation / Better Benefits	**11.87%**
Corporate Culture / Leadership Style Differences	**11.87%**
Lack of Advancement / Growth Opportunities	**11.67%**
New Opportunity Outside My Current Role	**9.73%**
Location	**9.34%**
Uncertainty Around the Future of Nuclear	7.39%
Work from Home Opportunities or Lack Thereof	7.00%
Hostile Work Environment	3.31%
Momentum Against Innovative Solutions	3.02%
Lack of Diversity, Equity, and Inclusivity Culture	3.02%
Tuition Reimbursement / To Further My Education	2.53%
Other (Please Specify)	2.43%
Decommissioning / Legislation	2.14%
Not Applicable	1.65%

VII. Training & Professional Development Results

To provide the most relevant training and opportunities to the NAYGN membership, NAYGN members were asked to select any of the following skills they would like to develop:

- Leadership/Management
- Job-Specific Technical
- Negotiation Skills
- Communication (Verbal & Written)
- Development of Teams
- Public Speaking/Remote Presence
- Nuclear Fundamentals
- Diversity, Equity, Inclusion Topics

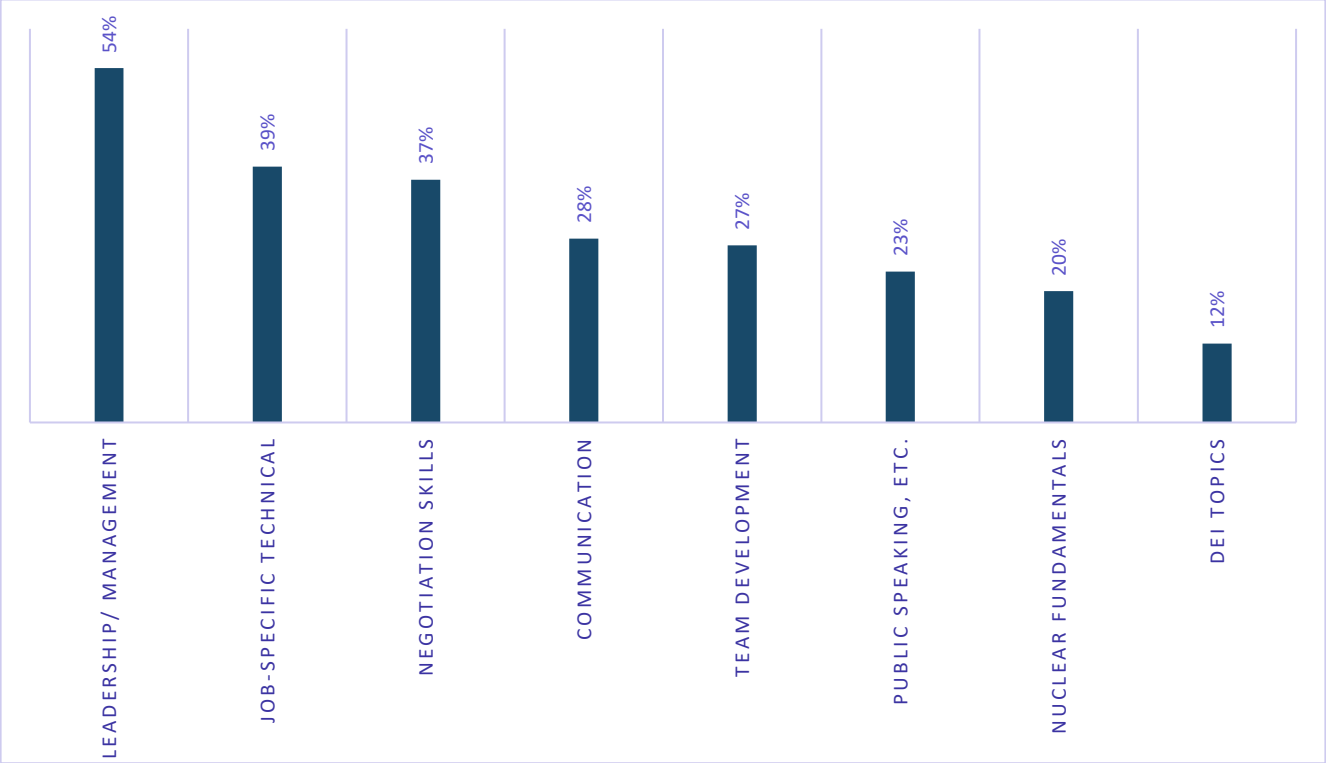

Figure 51: PREFERRED TRAINING TOPICS

Leadership/Management remains the most sought-after skill development, which is consistent with 2020 (Figure 51: PREFERRED TRAINING TOPICS). However, job-specific technical training, a new option for 2022, was also highly desired (chosen by 39% of NAYGN members). **This indicates that NAYGN members were**

committed not only to developing their leadership skills and advancing in their careers, but also committed to improving their knowledge and skill in their current role.

Diversity, equity, and inclusion topics were also a new training type this year and NAYGN members indicated they were least interested in developing this skill. NAYGN performed well in DEI (Table 11: NAYGN INTERNATIONAL ORGANIZATIONAL PERFORMANCE) relative to other key aspects of the organization. This could indicate that NAYGN has effectively provided diversity, equity, and inclusion tools to our members already, which could indicate a lack of desire for more training. Even if that is the case, additional work in diversity, equity, and inclusion is necessary for continued improvement in this area.

Across all job functions, leadership/management training is highly desired (Figure 52: TRAINING TOPIC BY JOB FUNCTION). **Engineers seek to further their engineering/in-job training and expertise, which is notably less favored in the rest of the NAYGN population.**

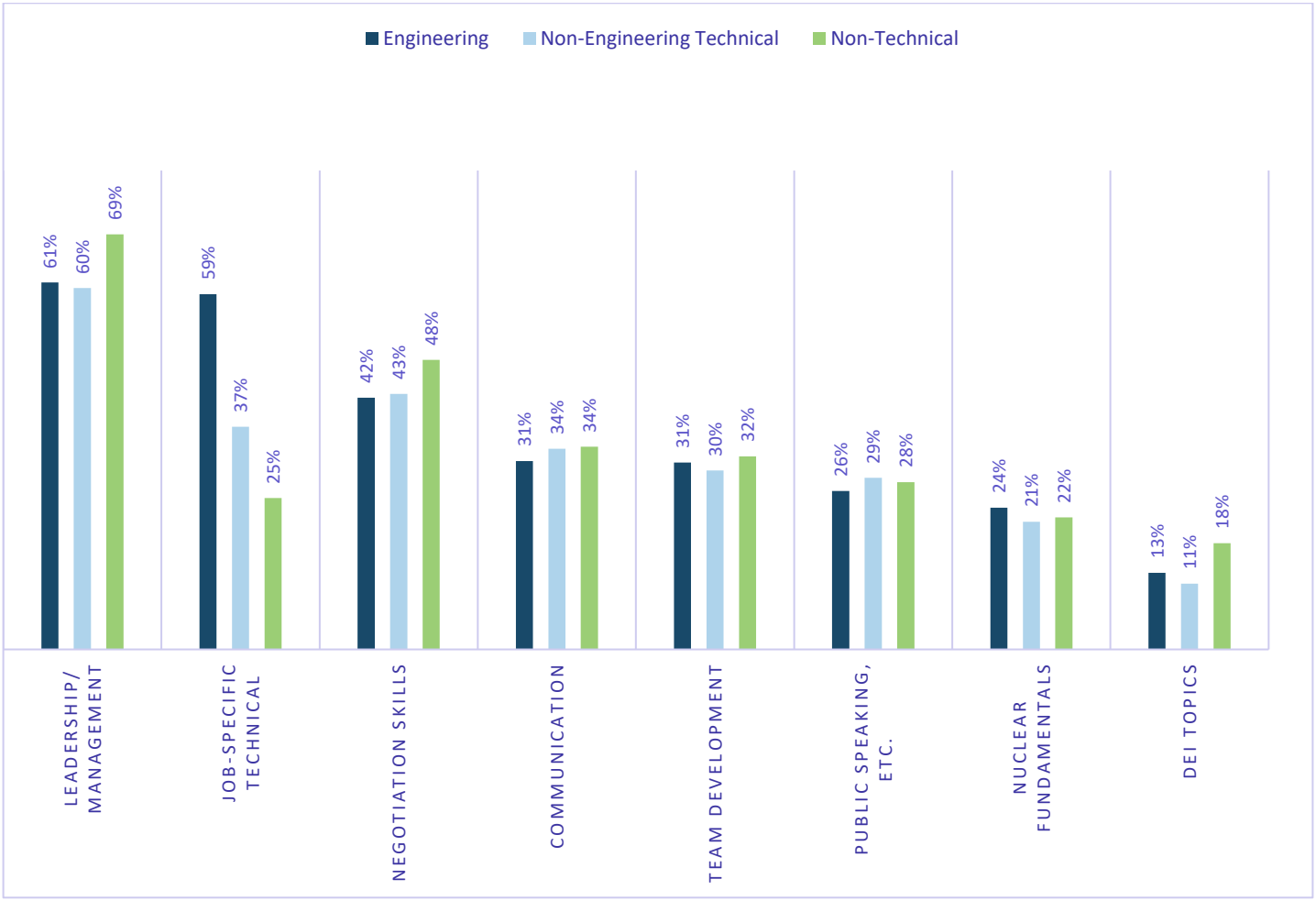

Figure 52: TRAINING TOPIC BY JOB FUNCTION

VIII. Industry Advocacy Results

The ability and skill in advocating for the nuclear industry are strengths of NAYGN. The topic of advocacy was explored to expand upon recent successes and to gain insights into (1) the most effective advocacy techniques, (2) the regions most receptive to the nuclear industry, and (3) the gaps to excellence in advocacy.

Sentiment toward nuclear was compared across the NAYGN regions with the following two inquiries:

(1) How would you rate the future of the nuclear industry in your region/community?
(2) How would you rate government support for the nuclear industry in your region/community?

NAYGN members as a total group view the future of nuclear in their communities as mostly positive (70%) or neutral (18.6%). **NAYGN members employed at government organizations and laboratories had a less positive outlook on the future of the nuclear industry**, compared to NAYGN members at other company types.

Figure 53: FUTURE OF NUCLEAR IN REGION/COMMUNITY BY COMPANY TYPE

Generally, as a total group, NAYGN members perceive government support as positive (50.9%) or neutral (30.5%). Younger NAYGN members perceive less government support for nuclear compared to older NAYGN members (Figure 54: GOVERNMENT SUPPORT FOR NUCLEAR INDUSTRY IN REGION/COMMUNITY BY AGE). NAYGN members employed at government organizations and laboratories perceived less government support for the nuclear industry compared to NAYGN members at other company types. **NAYGN members employed at utilities or industry organizations perceived more government support for the nuclear industry** (Figure 55: GOVERNMENT SUPPORT FOR NUCLEAR INDUSTRY IN REGION/COMMUNITY BY COMPANY TYPE).

Figure 54: GOVERNMENT SUPPORT FOR NUCLEAR INDUSTRY IN REGION/COMMUNITY BY AGE

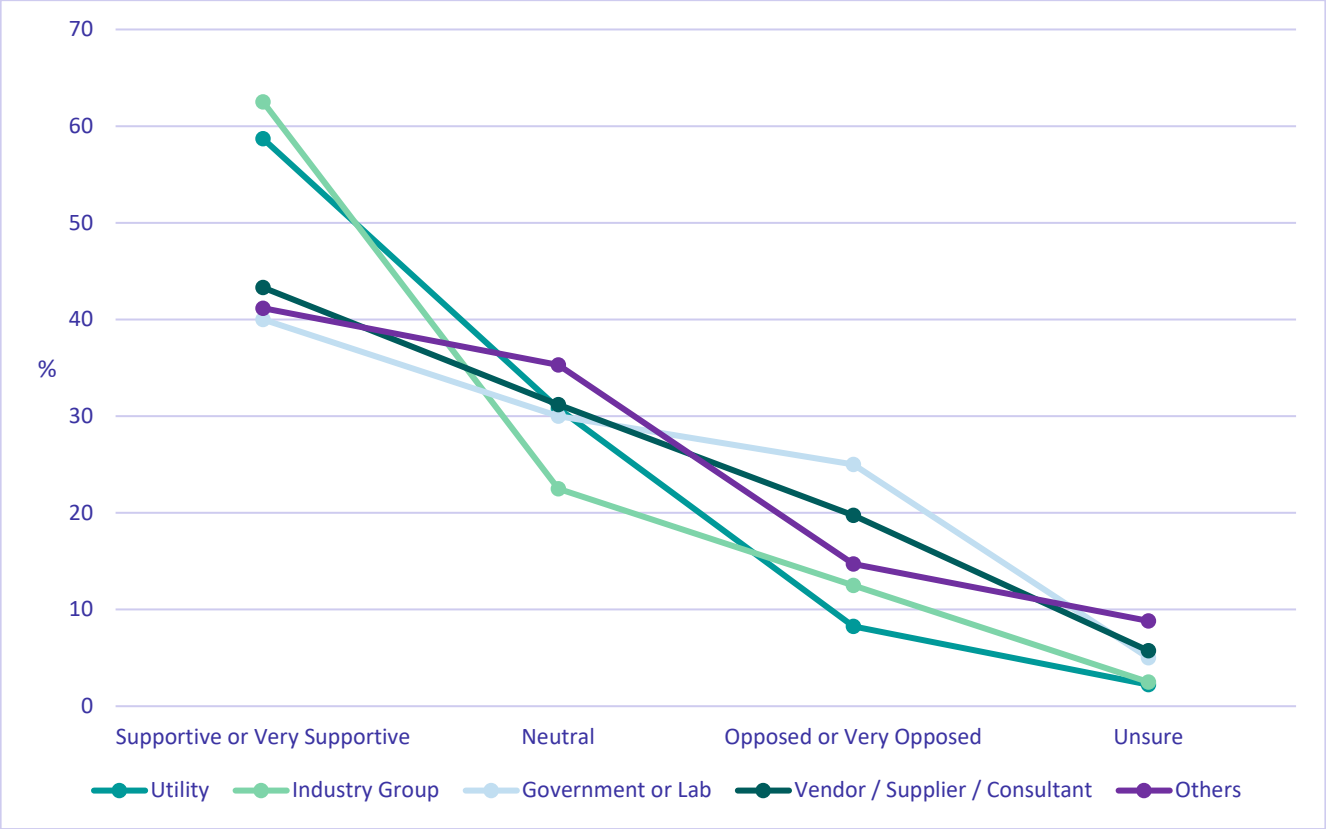

Figure 55: GOVERNMENT SUPPORT FOR NUCLEAR INDUSTRY IN REGION/COMMUNITY BY COMPANY TYPE

Regional sentiment regarding the future of nuclear is least positive in the Northeast United States (Table 9: SUMMARY OF REGIONAL SUPPORT FOR NUCLEAR). This aligns with recent plant closures in New York (Indian Point), Pennsylvania (Three Mile Island), Massachusetts (Pilgrim), New Jersey (Oyster Creek), and Vermont (Vermont Yankee). Still, 41% of NAYGN members in the Northeastern United States think that nuclear has a future in their community. Note: the Palisades closure (Michigan) in May 2022 occurred after this survey was conducted.

Table 9: SUMMARY OF REGIONAL SUPPORT FOR NUCLEAR

Region	Community Support: % Positive or Very Positive
Canada	85%
USA-Carolinas	82%
USA-Southeast	75%
USA-West	72%
USA-Midwest	69%
USA-Atlantic	66%
Mexico	43%
USA-Northeast	41%

Region	Government Support: % Supportive or Very Supportive
Canada	62%
USA-Carolinas	55%
USA-Midwest	54%
USA-West	53%
USA-Atlantic	49%
USA-Southeast	45%
USA-Northeast	37%
Mexico	14%

Region	Difference Between Community & Government Support
USA-Southeast	30%
Mexico	29%
USA-Carolinas	26%
Canada	23%
USA-West	19%
USA-Atlantic	17%
USA-Midwest	15%
USA-Northeast	5%

The sentiments on nuclear were particularly positive in the Carolinas (82% positive or very positive) and Canada (85% positive or very positive). Government support for nuclear is strongest in Canada, Carolinas, Midwest, and the West regions.

The difference between Government Support (% Supportive and Very Supportive) and Community Support (% Positive and Very Positive) offers additional insights. A positive difference indicates that there is a perception of stronger community support than government support for nuclear. **In all regions, NAYGN members perceive that government support is weaker than community support.** This is most apparent in the Southeast region.

Nuclear advocacy could be particularly effective in the Southeast, Mexico, Carolinas, and Canada. There is strong community support for the nuclear industry, but the government support is not as strong as the community support in the region. Therefore, government outreach efforts could have a big impact in these regions. Nuclear advocates in this region should be activated to let their voices be heard!

Advocating for the nuclear industry is a major opportunity for the members of NAYGN. Seventy-eight percent of NAYGN members had a positive interaction when advocating for nuclear (Figure 56: AUDIENCE IMPRESSIONS FROM NUCLEAR ADVOCACY). Their audience was either already supportive of nuclear or became more supportive of nuclear over the course of the conversation. Ten percent of NAYGN members face audiences that are consistently opposed to nuclear. **Interactions in the West, Southeast, and Carolinas had a more supportive impression than other regions.** There was not a significant correlation between age and advocacy interactions.

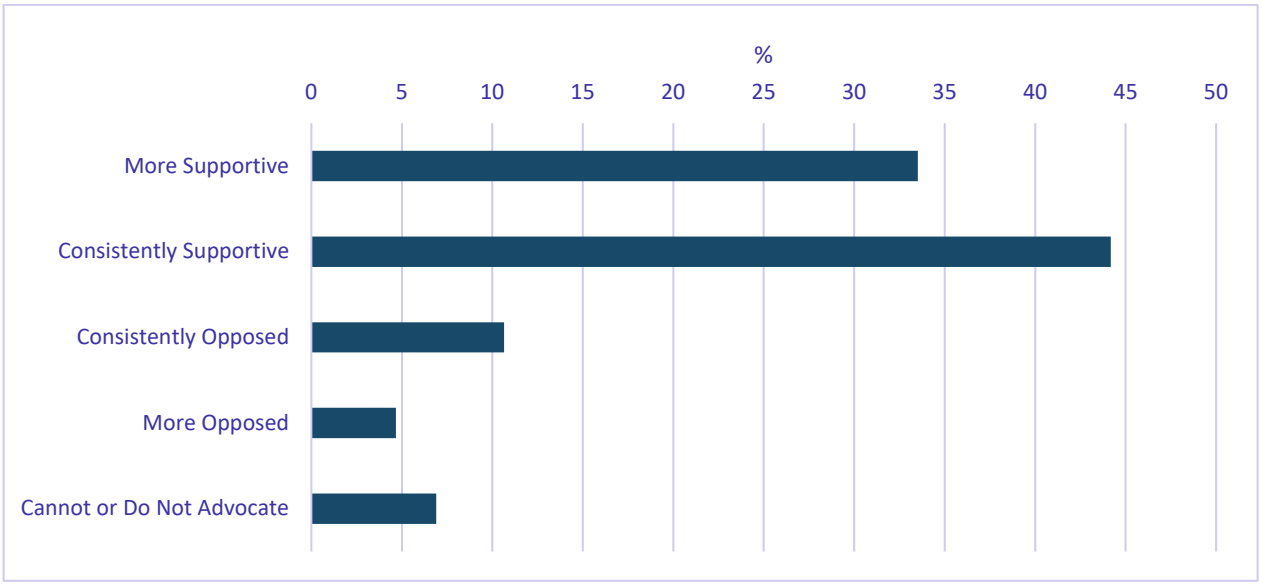

Figure 56: AUDIENCE IMPRESSIONS FROM NUCLEAR ADVOCACY INTERACTIONS

Figure 57: EFFECTIVENESS OF NUCLEAR ADVOCACY STRATEGIES shows the relative impact of various advocacy techniques. NAYGN members were asked to select up to two strategies that they deemed most effective. One on one conversations were the most successful advocacy method, followed closely by student outreach and social media campaigns. Contacting government officials was considered by most NAYGN members to be rather ineffective, likely indicating a lack of support from government officials.

Figure 57: EFFECTIVENESS OF NUCLEAR ADVOCACY STRATEGIES

Nuclear Technology

Figure 58: MOST IMPACTFUL NUCLEAR TECHNOLOGY BY COMPANY TYPE presents NAYGN members' opinion on the relative impact of various nuclear technologies: new builds, license renewal, SMRs, advanced reactors, and industry specific applications. **In general, SMRs were considered important to the foreseeable future.** There were noticeable differences in opinion based on company type.

NAYGN members at utilities and vendors viewed license renewal as the most important issue, but license renewal had lower importance to NAYGN members in industry groups, government organizations and laboratories. **New builds were important only to NAYGN members from government organizations and laboratories.**

Overall, most NAYGN members viewed industry specific applications (such as cryptocurrency mining and hydrogen production) and advanced reactors as having the least impact on future nuclear technology.

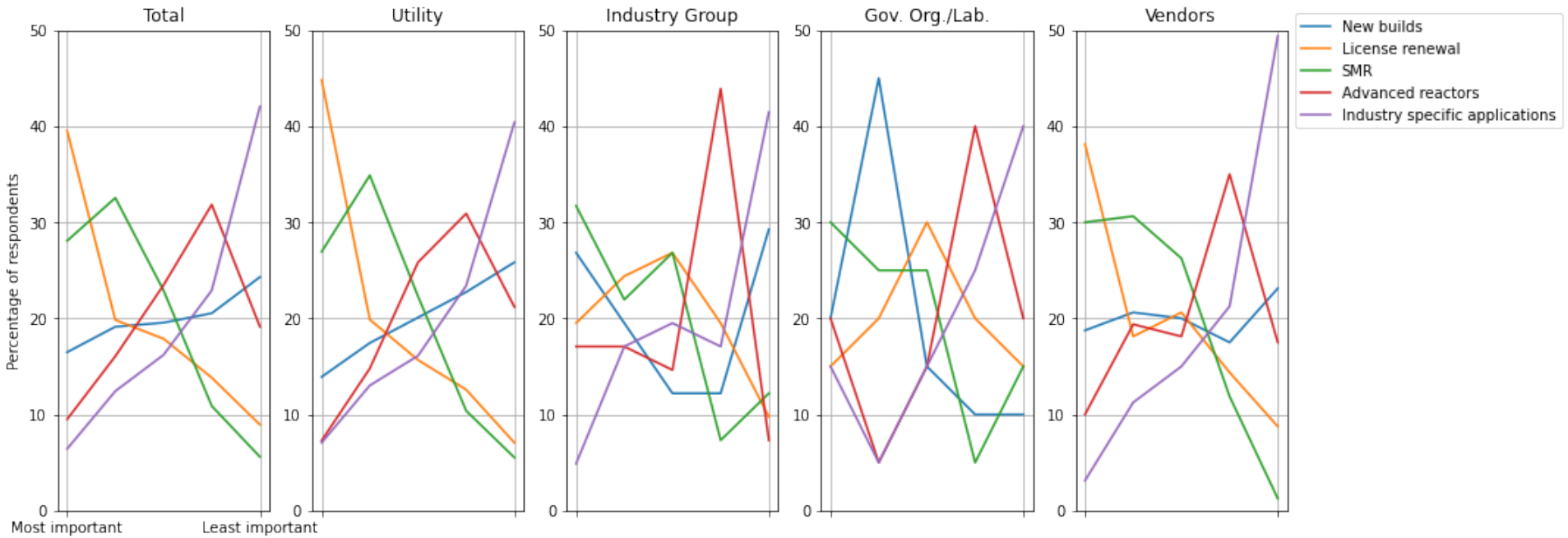

Figure 58: MOST IMPACTFUL NUCLEAR TECHNOLOGY BY COMPANY TYPE

Climate Change

To unravel the motivations driving NAYGN members, a new question was added in 2022 regarding whether climate change is a contributing factor to why NAYGN members joined or remain in the nuclear industry. **Over half of NAYGN members said that climate change is a factor to joining or remaining in the nuclear industry (Figure 59).**

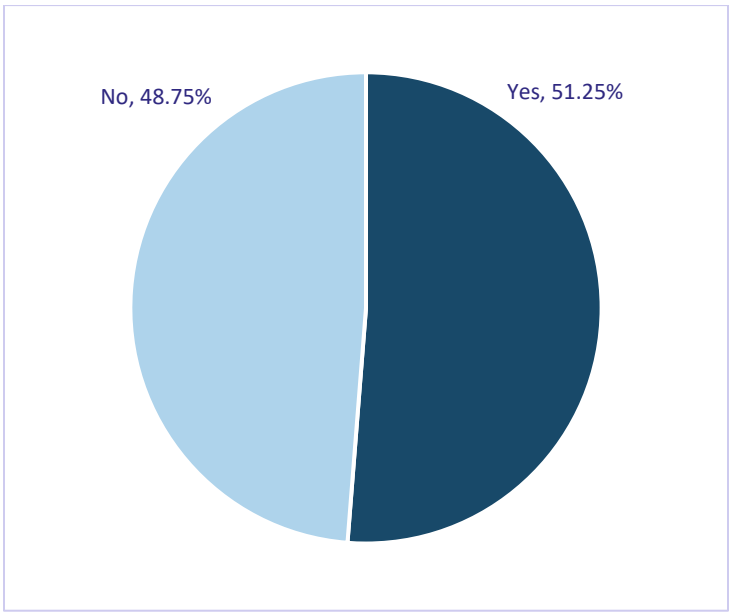

Figure 59: CLIMATE CHANGE AS A CONTRIBUTING FACTOR TO JOINING OR REMAINING IN THE NUCLEAR INDUSTRY

Interestingly, **the majority of utility professionals do not consider climate change as a motivator for their presence in the nuclear industry**, with only 39% of utility professionals answering yes (Figure 60: CLIMATE CHANGE AS A MOTIVATOR BY COMPANY TYPE). Industry groups also have more NAYGN members answering no to this question than yes. Vendors/suppliers or consultants, government organizations, and academic organizations have very high percentages of NAYGN members joining or remaining in the nuclear industry with some motivation of climate change.

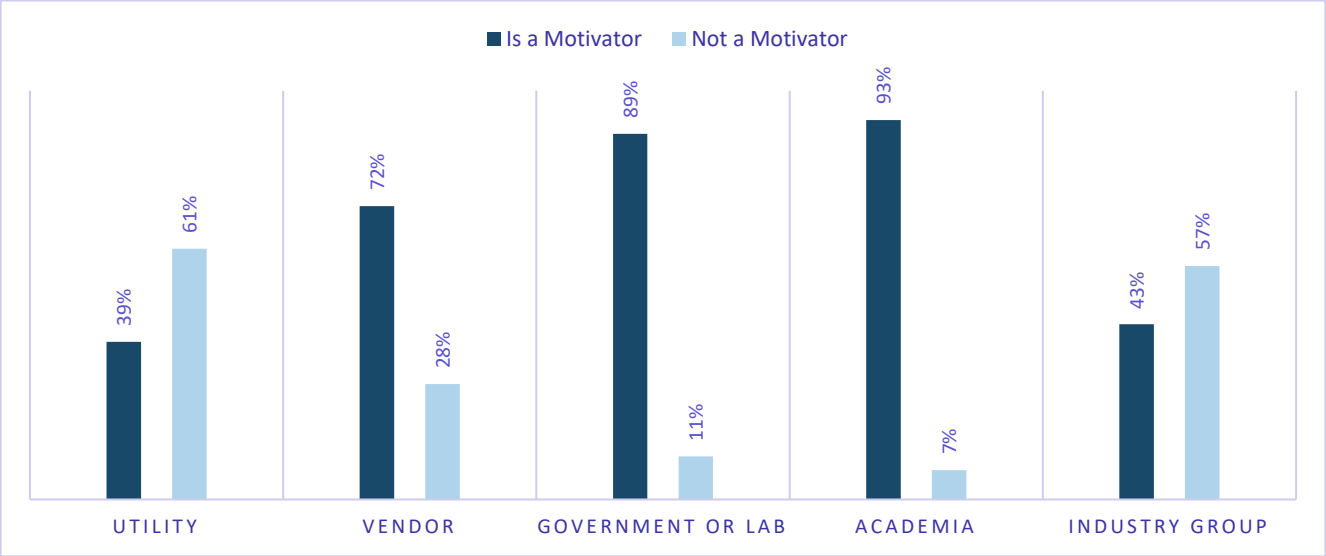

Figure 60: CLIMATE CHANGE AS A MOTIVATOR BY COMPANY TYPE

Females/Non-Binary people were slightly more likely to be in the nuclear industry because of environmental concerns such as climate change (Figure 61: CLIMATE CHANGE AS A CONTRIBUTING FACTOR TO JOINING/REMAINING IN NUCLEAR INDUSTRY).

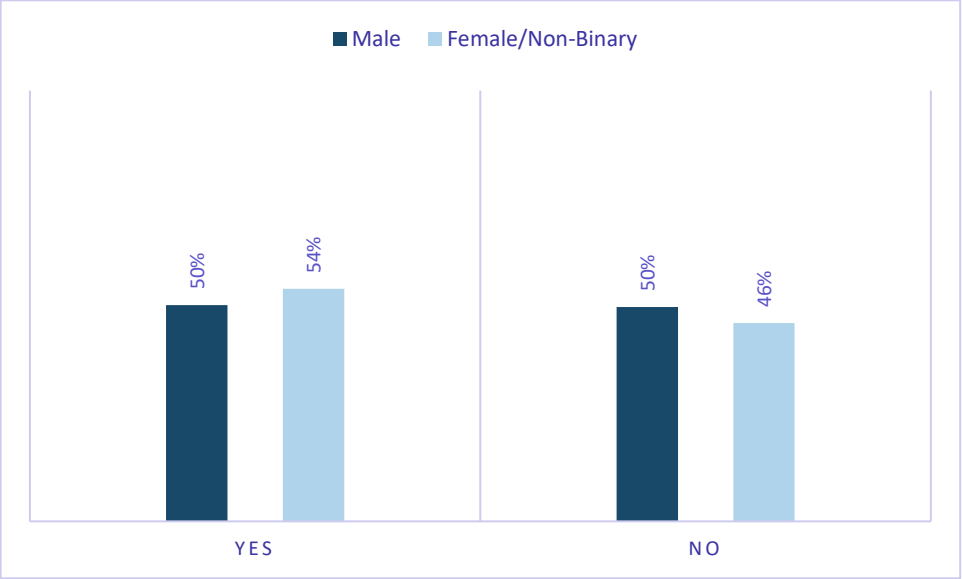

Figure 61: CLIMATE CHANGE AS A CONTRIBUTING FACTOR TO JOINING/REMAINING IN NUCLEAR INDUSTRY

Generally, younger NAYGN members were more likely to be a part of the nuclear industry because of environmental concerns such as climate change (see Figure 62: CLIMATE CHANGE AS A CONTRIBUTING FACTOR TO JOINING/REMAINING IN NUCLEAR INDUSTRY BY AGE). [Note: this trend does not hold true for the 50+ age group but that sample size is very small with only 13 responses.]

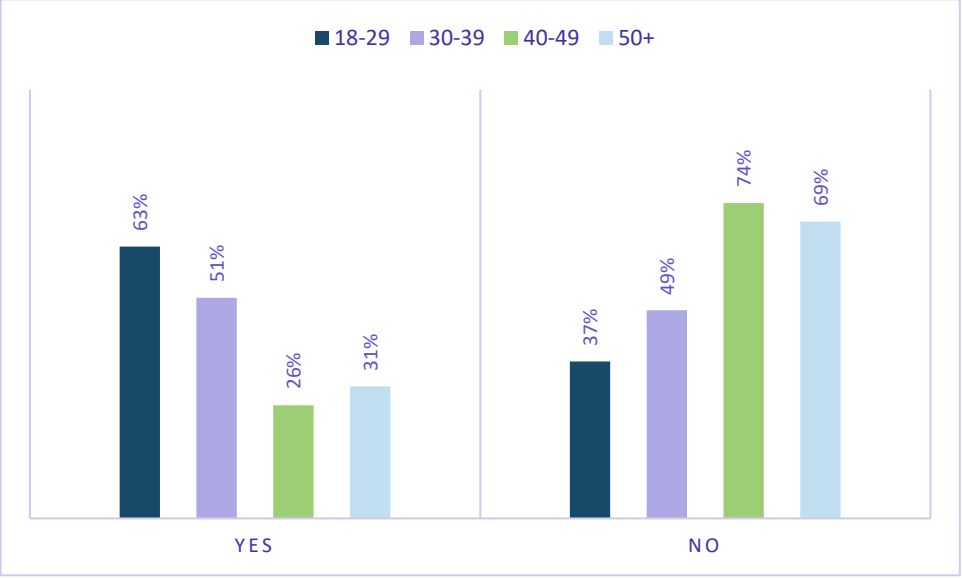

Figure 62: CLIMATE CHANGE AS A CONTRIBUTING FACTOR TO JOINING/REMAINING IN NUCLEAR INDUSTRY BY AGE

IX. NAYGN Activity Results

NAYGN strives to retain talent in the nuclear industry and make a positive impact on the careers of its members. A majority of NAYGN members indicate that NAYGN has been a positive influence on company culture, intent to stay in the industry, and the future of nuclear power. **Improvements must be made in the realm of career advancement, as less than half of NAYGN members indicated that NAYGN had a positive impact on their career advancement or career opportunities.**

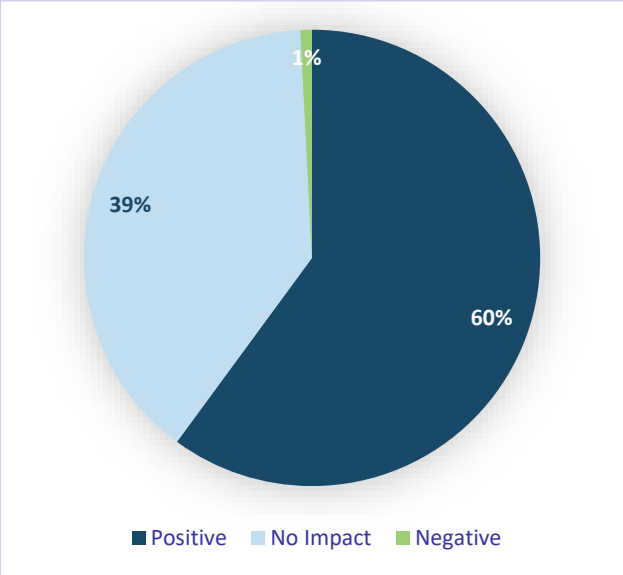

Figure 63: IMPACT OF NAYGN ON COMPANY CULTURE

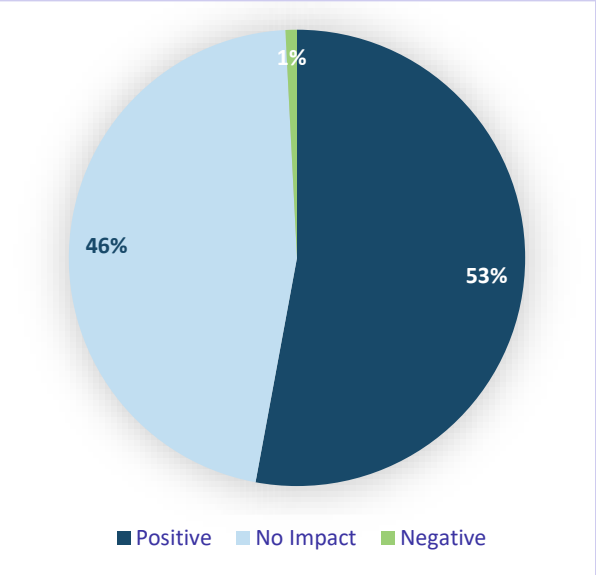

Figure 64: IMPACT OF NAYGN ON INTENT TO STAY IN THE NUCLEAR INDUSTRY

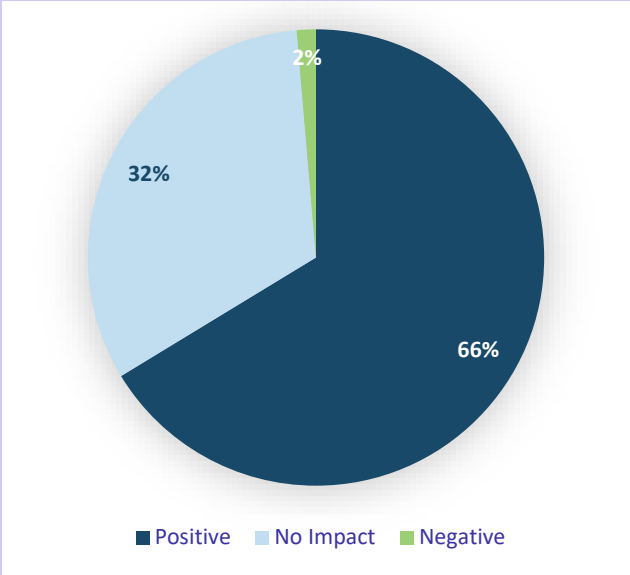

Figure 65: NAYGN IMPACT ON THE FUTURE OF NUCLEAR POWER

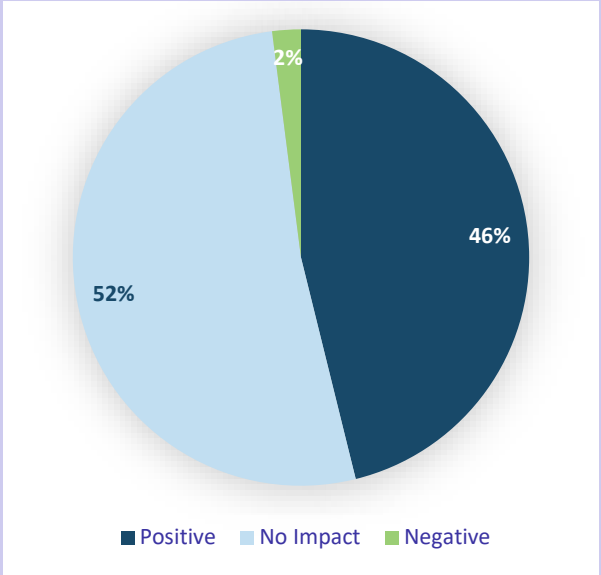

Figure 66: NAYGN IMPACT ON CAREER ADVANCEMENT

While only 46% of NAYGN members thought the organization had a positive impact on their career advancement, 63% of NAYGN members believe the organization has helped them build their professional network (Figure 67). This could imply a gap between NAYGN offerings (networking, professional development webinars, advocacy opportunities, etc) and how these experiences tie into long-term results such as career advancement.

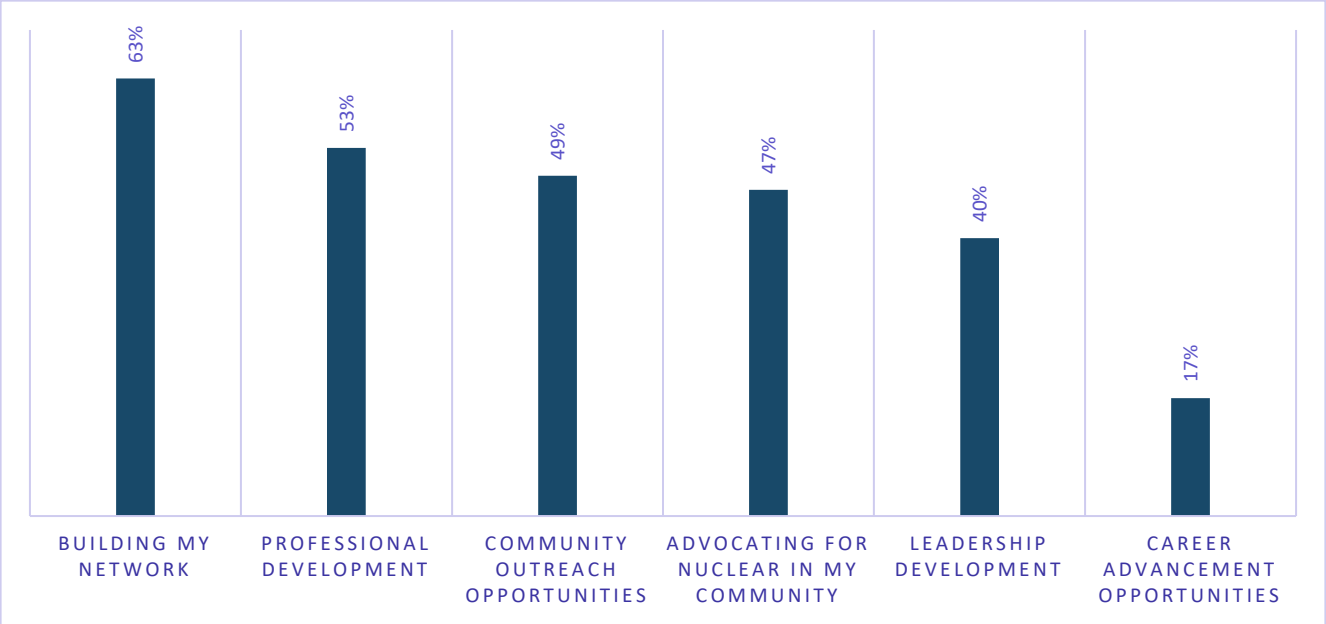

Figure 67: OPPORTUNITIES PROVIDED BY NAYGN (select all that apply)

Figure 68: NAYGN EVENTS ATTENDED IN LAST 12 MONTHS shows how many organized NAYGN events the respondents attended in the last 12 months. **Compared to the 2020 Career Report [Reference 1], the overall participation in NAYGN has decreased.** The percentage of NAYGN members who participated in zero events increased from 22.75% (in 2020) to 30.0% (in 2022). Meanwhile the percentage of most active NAYGN members (attending 10 or more events in the last year) decreased from 8.76% (in 2020) to 4.65% (in 2022) perhaps due to events moving online during the COVID-19 pandemic. NAYGN needs to reinvigorate participation and engagement as an organization.

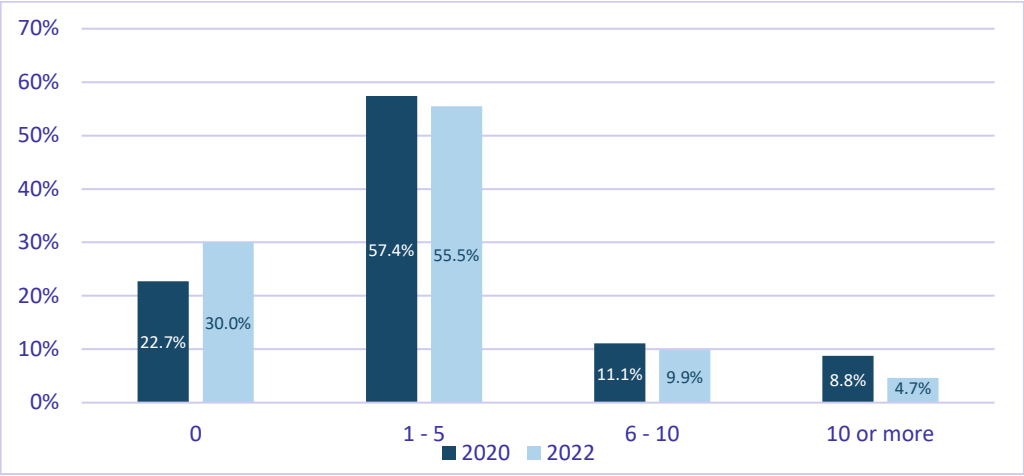

Figure 68: NAYGN EVENTS ATTENDED IN LAST 12 MONTHS

Most NAYGN members are part of active or somewhat active chapters (Table 10: NAYGN CHAPTER ACTIVITY LEVEL). **Nine percent of NAYGN members reported that they were unsure of their chapter activity. Seven percent reported inactive chapters. Clearly, this demonstrates an opportunity to revitalize chapters that are dormant or disengaged.** NAYGN members reported that the COVID-19 pandemic was the primary cause for the decrease in chapter activity level. NAYGN chapters are struggling to maintain engagement during the pandemic (even while offering virtual activities).

Table 10: NAYGN CHAPTER ACTIVITY LEVEL

Not Active (No Events)	Somewhat Active (A Few Events Per Year)	Active (A Few Events Per Quarter)	Very Active (Too Many Events to Count)
7%	**38%**	**36%**	**9%**

The Southeast is the strongest and most active NAYGN region (Figure 69: NAYGN CHAPTER ACTIVITY BY REGION). The Midwest and the Carolinas are also active. **The Canadian, Atlantic, and the Northeast regions should be mentored and cultivated to increase activity. The West and Mexico can be considered nascent regions: NAYGN has a toehold in these areas but there is considerable room for growth.**

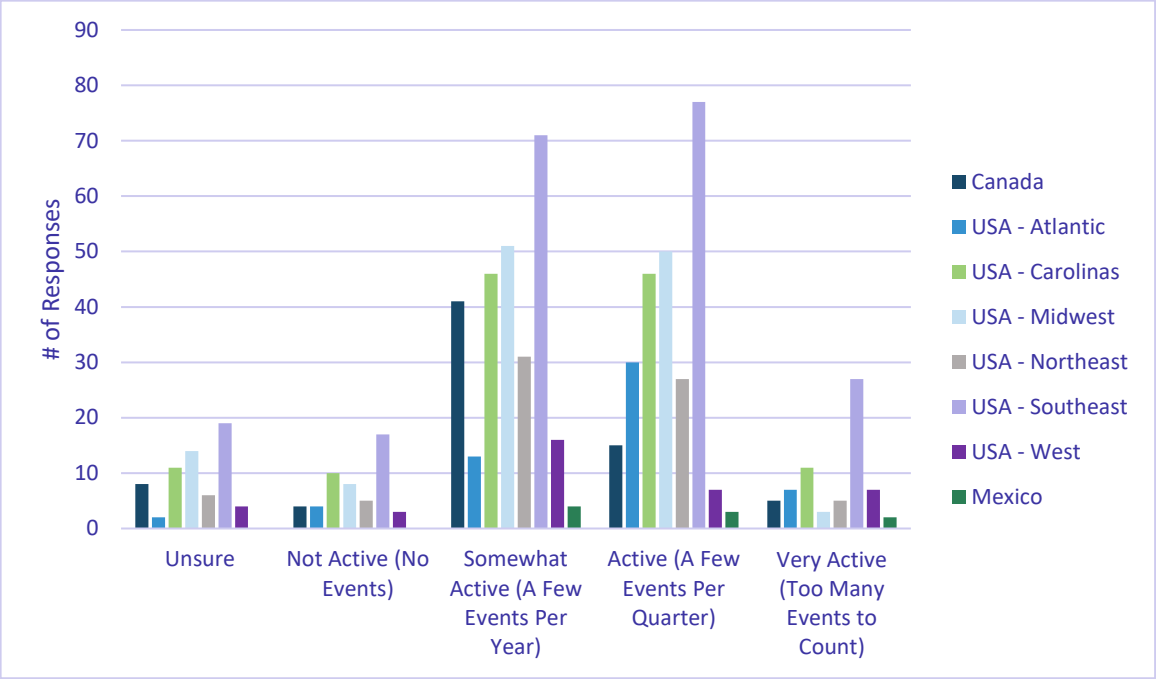

Figure 69: NAYGN CHAPTER ACTIVITY BY REGION

NAYGN Chapters face the following impediments to increasing participation:

- Maintaining momentum during outages
- Increased workload and not enough time to attend events
- Dormant chapters that require restarting or reinvigorating
- Newer or inexperienced chapters just starting out and trying to grow their membership
- Lack of new employees joining companies
- Experienced members becoming less involved over time
- Newer chapters having fewer resources
- Company changes or leadership turnover negatively impacting the chapter

Only 37% of NAYGN members are not involved in other professional organizations. The American Nuclear Society (ANS) or Canadian Nuclear Society (CNS), Women in Nuclear (WIN) and other Engineering Associations (ASME, SWE, etc.) were the most common organizational involvement in addition to NAYGN (Figure 70: INVOLVEMENT IN OTHER PROFESSIONAL ORGANIZATIONS). **NAYGN can leverage these connections for professional development and networking opportunities. In particular, recruiting with certain organizations could increase the diversity of NAYGN.**

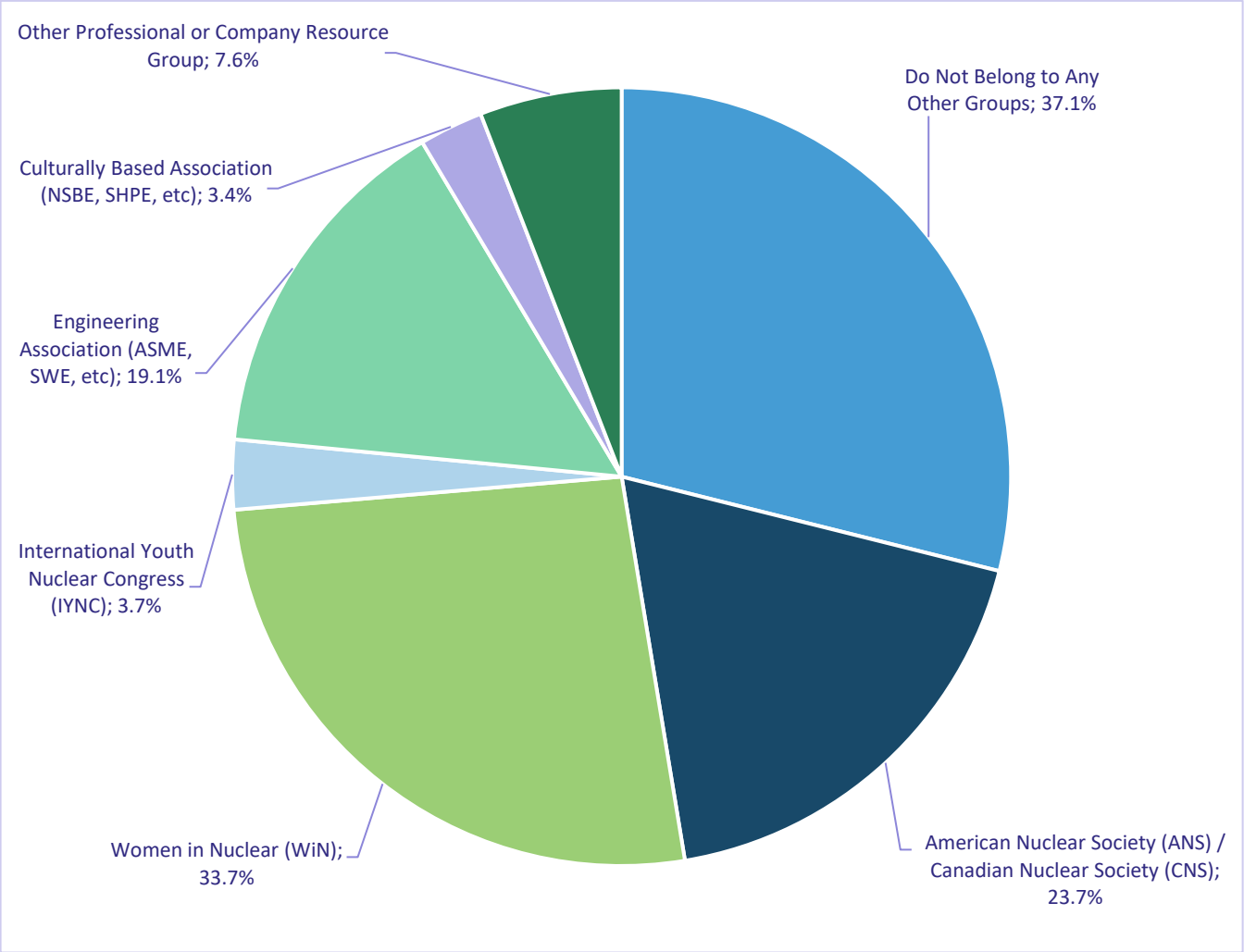

Figure 70: INVOLVEMENT IN OTHER PROFESSIONAL ORGANIZATIONS[1]

[1] NAYGN members could select multiple organizations. The percent is out of total responses and therefore percentages add up to more than 100.

Organizational Performance

NAYGN members are most satisfied with NAYGN's performance regarding Diversity, Equity, and Inclusion (DEI) as seen in Table 11: NAYGN INTERNATIONAL ORGANIZATIONAL PERFORMANCE. Note NAYGN members were not asked to separate local chapter activities from continental activities when providing feedback.

Table 11: NAYGN INTERNATIONAL ORGANIZATIONAL PERFORMANCE

	DEI	Comms	Professional Development	Community Outreach	Membership and Networking	Public Information
2020	--	**3.69**	**3.63**	**3.86**	**3.75**	**3.68**
2022	**3.73**	**3.64**	**3.62**	**3.58**	**3.58**	**3.55**

Overall, NAYGN performance has decreased from 2020. The lowest performing category was Public Information. However, all categories performed above "average". Note: very poor was a 1 while very good was a 5 meaning average was a 3.

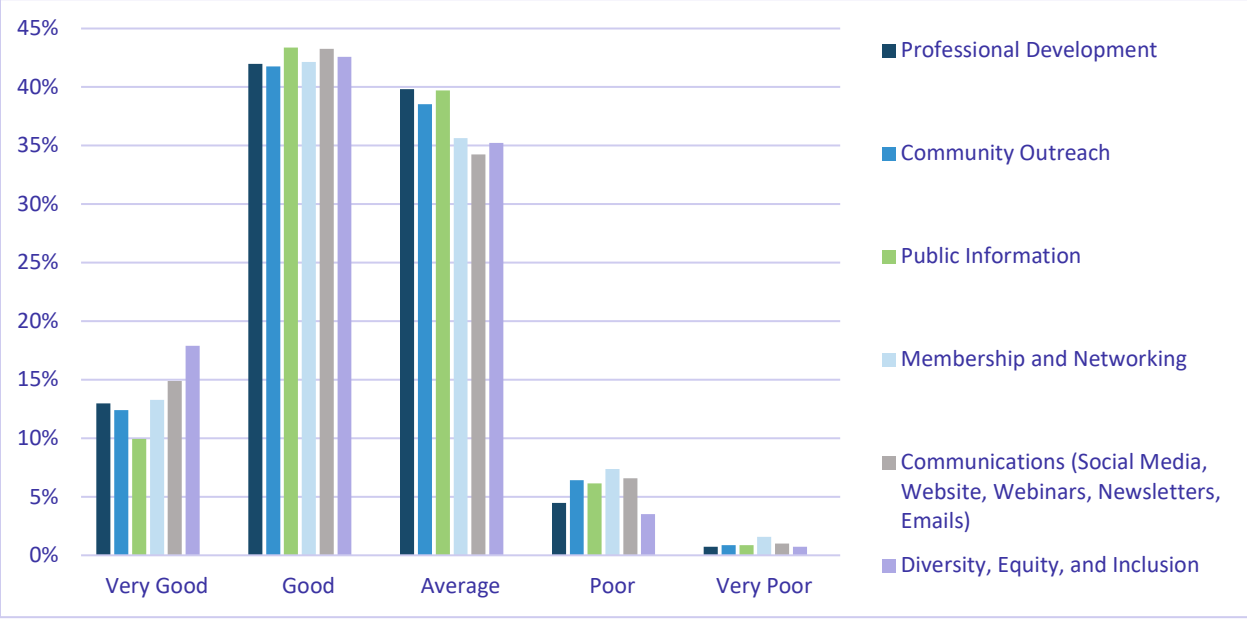

Figure 71: NAYGN INTERNATIONAL ORGANIZATIONAL PERFORMANCE

NAYGN members provided ideas for improvement including:

- Revive engagement post COVID-19 pandemic
- Diversity, Equity, and Inclusion
- Public visibility and ideas for advocating for nuclear power to the public
- More community outreach events
- Make NAYGN events and personnel more accessible on the NAYGN Web site
- Activity on University and College campuses
- 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
- Marketing and social media presence

X. Conclusions & Recommendations

Conclusions

1. **The Great Resignation has come for the nuclear industry.**

Approximately the same percentage of NAYGN members are looking for a job in 2022 as 2020 (49%). The difference is now more NAYGN members are active in their job search (instead of passive). Only 32% of NAYGN job seekers are restricting their job search to the nuclear industry. Twenty-seven percent of job seeking NAYGN members are looking to get out of the nuclear industry altogether. A higher percentage of NAYGN members are working >45 hours per week than in 2020. The top four reasons given to leave the nuclear industry were: (1) lack of work/life balance, (2) higher compensation or better benefits, (3) corporate culture or leadership style differences, and (4) lack of advancement opportunities. Turnover and retention are a major concern at Government Organizations or Labs and at Academic Organizations (83% and 65% job seeking respectively). However, utilities and vendor/supplier/consultant companies each had 48% of NAYGN members job seeking. The nuclear industry should expect significant turnover in the coming years.

2. **NAYGN age, family status, and organizational role demographics have shifted.**

NAYGN members are older, more are parents, and a higher percentage are in management than in 2020. To engage the current membership, NAYGN chapters should consider incorporating family-friendly networking events when possible. In addition, it is vital that NAYGN redouble its efforts to recruit new hires in the nuclear industry as members. The percentage of NAYGN members that are new hires (0-2 years in the industry) was down 2% from 2020.

3. **NAYGN is at a pivotal moment regarding participation**.

While 83% of NAYGN members are part of an active local chapter, 7% are in inactive chapters and 9% are not sure of their chapter activities. NAYGN activity metrics (collected annually) noted a significant decrease in 2020 and 2021 year-end totals. This was expected since the pandemic eliminated in person events for most of those two years. However, if NAYGN is to survive and thrive in a post-pandemic world, participation must be revived. Sixty-nine percent of NAYGN members spend two hours or less per month engaged in NAYGN activities. Approximately 86% of NAYGN members attend 5 or fewer NAYGN events per year. NAYGN is a grassroots organization. Activity and engagement (including event planning) fall to a small subset of NAYGN members. However, every effort should be made to engage more thoroughly the 85.5% of NAYGN members peripherally involved in the organization. Based on preferred training topics, the continental organization should focus on regular offerings of: leadership/management, job-specific technical, and negotiation skills training to increase participation. In addition, participation in the national and regional conferences should be encouraged since in-person networking is a proven engagement technique.

4. **Nuclear advocacy is changing the outlook of nuclear.**

When NAYGN members advocate for nuclear, 33.5% of audiences leave the interaction more supportive of nuclear (note, an additional 44% are supportive before the interaction). Nuclear in the United States saw a significant increase in favorability in 2021 (76% favor, an increase from 60% in 2020) [Reference 2]. In particular, nuclear advocates in the Southeast, Mexico, Carolinas, and Canada should be activated to let their

voices be heard as there is a perception that community support is more favorable than government support in these regions.

Recommendations

For NAYGN:

- Leverage partner organizations and NAYGN members involved in culturally-based associations to increase the ethnic diversity within NAYGN.
- Continue to diversify NAYGN membership by establishing new chapters at nuclear startups.
- Consistently provide (1) leadership/management, (2) job specific, and (3) negotiation skills training to satisfy the desires of the membership at large AND spur participation.
- Strategize advocacy efforts to target not only regions where it is needed (to save a plant or implement a clean energy standard) but also where there is a mismatch between community and government support.
- Leverage NAYGN members in management to inspire more participation.
- Highlight success stories of NAYGN positively impacting members' career advancement to connect the dots between typical NAYGN activities (networking, professional development, advocacy) and upwards career trajectories.

For the nuclear industry:

- Address the employee morale concerns in the industry. Over 80% of NAYGN members view employee morale as important or very important to them. However, less than 40% of NAYGN members are satisfied with the level of employee morale at their company.
- Evaluate employee workload and staffing levels. NAYGN members are working more hours per week in 2022 than they were in 2020 and work/life balance is the leading factor for why NAYGN members would leave the nuclear industry.
- Work with NAYGN to offer job specific training that could benefit multiple companies collectively.

Combined initiatives:

- NAYGN and the nuclear industry should cooperate to address the retention issues in the nuclear industry.
- NAYGN and the nuclear industry should collaborate to bring leaders and individual contributors closer together on issues such as remote work and work schedules.

XI. Acknowledgements

Thank you to the NAYGN members who responded to this survey. Your input is precious and has helped us form the voice of the young generation in nuclear.

Thank you to Farrah Khanpour, NAYGN Communications Officer for relentlessly advertising the survey through newsletters and social media blasts (and memes!). A shout out to Ashley Lawrence, NAYGN US Operations Officer and Matthew Mairinger, NAYGN Canada Operations Officer, for communicating the importance of participating in the survey to the Local Chapter Leads.

In addition, the Benchmarking Committee would like to recognize the NAYGN Board of Directors for their support and thorough review of the final product.

This report was a labor of love for the Benchmarking Committee members themselves. This team started meeting in August 2021 and has worked tirelessly to issue this report. Sarah Davis provided vital perspectives and knowledge on Diversity, Equity, and Inclusion topics: thank you! Patrick Dickerson was always quick to offer his opinion and the report is much stronger for his input (and his beautiful graphs): thank you! Timothy Crook examined salary data from every angle imaginable: thank you! Kristie Soliman always made the committee meetings brighter and provided excellent analysis of job satisfaction: thank you! Jin Whan Bae immediately jumped into the raw data and teased out a few more complicated relationships in the data and the result was some very interesting conclusions: thank you! Michael Smyth shepherded us through the process, took on a huge portion of the data analysis, and drafted the final report, all while running the meetings, keeping up with his day job and making it look easy: thank you! Much appreciation to Laura Kline for the midnight hour data analytics support. **Many thanks to the committee for your efforts!**

XII. References

1. 2020 NAYGN Career Report (note: login required)
2. Gallup Polling
3. Center for Disease Control
4. US Bureau of Labor Statistics' CPI Inflation Calculator
5. Advisor Smith Cost of Living Calculator
6. Numbeo Cost of Living Calculator
7. US Energy & Employment Jobs Report

XIII. Appendix - 2022 Survey

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NORTH AMERICAN YOUNG GENERATION IN NUCLEAR

2021 NAYGN Career Survey

Thanks for participating in the NAYGN Career Survey. The results collected herein will be summarized in the 2022 Career Report to be distributed throughout the industry. This report will be available for the 2022 NAYGN National Conference. All responses are kept anonymous.

* indicates required questions

This survey should take approximately 15 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 (please specify)

* 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/Pacific Islander
- [ ] Middle Eastern/North African
- [ ] Prefer Not to Disclose
- [ ] Other (please specify)

5. What is your sexual orientation

- ◯ Heterosexual
- ◯ Homosexual
- ◯ Bisexual/Pansexual
- ◯ Prefer not to disclose
- ◯ Other (please specify)

6. Which of the following statements applies to you regarding disability status?

- ◯ Yes, I have A disability, or have a history/record of having a disability
- ◯ No, I don't have a disability, or history/record of having a disability
- ◯ Prefer not to disclose

7. If languages other than English is spoken in your household, which one?

- [ ] Only English
- [ ] Other (please specify)

8. What are your countries of citizenship? (Check all that apply)

- [ ] United States
- [ ] Canada
- [ ] Mexico
- [ ] Prefer not to disclose
- [ ] Other (please specify)

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

- [ ] Single
- [ ] Married/Partner
- [ ] No Children
- [ ] Parent
- [ ] Prefer not to disclose

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

Current Company	
Nuclear Industry	
Total throughout Career	

* 11. 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
- ◯ Masters Degree
- ◯ Doctoral Degree

* 12. What level in the organization are you?

- ◯ Intern/Co-op/Student
- ◯ Individual Contributor (Non-Supervisory Employee)
- ◯ Supervisor (First-line)
- ◯ Manager/Director
- ◯ Executive

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* 13. 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.)

* 14. What best describes your current job function?

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

15. 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.

Please use American Dollars for survey benchmarking purposes. Approximate values are acceptable. Conversion Calculator can be found here, if needed: https://www1.oanda.com/currency/converter/

Starting Annual Base Salary in Nuclear Industry	
Current Annual Base Salary	
Current Annual **Additional** Pay (Overtime, Bonuses, etc.) *Do not combine with base salary.*	

16. Optional:
If you live in the United States, use this website to find your city (or a comparable city):
https://advisorsmith.com/data/coli/
Enter your Cost of Living Index (number between ~80 and ~180) for US data trending purposes
[Hint: look halfway down the page]

If you live in Canada, use this website to find your city (or a comparable city):
https://www.numbeo.com/cost-of-living/country_result.jsp?country=Canada
Enter your Cost of Living Index (number between ~60 and ~80) for Canada data trending purposes
[Hint: look at the table at the bottom of the page, column “Cost of Living Index”]

This data will be used to provide Cost of Living Adjusted Salary Information for anonymous data trending purposes.

Background Info: Living costs (housing, consumer goods, etc) vary from place to place. A cost of living index normalizes these costs such that the average US cost is 100 (Augusta, ME or Albany, NY or Nashville, TN). Indices vary from relatively affordable places to live (Beckley, WV or Muskogee, OK with an index of 80) to relatively expensive places to live (San Francisco, CA has an index of 178).

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* 17. What is your preferred work timing arrangement, if they were available to you?

- ◯ 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
- ◯ Flex Hours (flexibility to choose work schedule)

18. What is your preferred work format?

- ◯ In Person
- ◯ Hybrid (Primarily in Person)
- ◯ Hybrid (Half in Person, Half Remote)
- ◯ Hybrid (Primarily Remote)
- ◯ At Home

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

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

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

I'm very satisfied.	I'm satisfied.	I'm neither satisfied nor dissatisfied	I'm dissatisfied.	I'm very dissatisfied.
◯	◯	◯	◯	◯

* 21. Are you looking for a new job?

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

2021 NAYGN Career Survey

* 22. 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
- ◯ Not Looking

* 23. What is the top reason you would leave the nuclear industry? Select up to three

- ☐ Momentum Against Innovative Solutions
- ☐ Pursuit of Higher Compensation / Better Benefits
- ☐ Lack of Advancement / Growth Opportunities
- ☐ Location
- ☐ Corporate Culture / Leadership Style Differences
- ☐ Uncertainty Around the Future of Nuclear
- ☐ New Opportunity Outside My Current Role
- ☐ Tuition Reimbursement / To Further My Education
- ☐ Lack of Work/Life Balance
- ☐ Decommissioning / Legislation
- ☐ Hostile Work Environment
- ☐ Work from Home Opportunities or Lack Thereof
- ☐ Lack of Diversity, Equity, and Inclusivity Culture
- ☐ Not Applicable
- ☐ Other (Please Specify)

24. Is climate change a contributing factor why you joined or remain in the nuclear industry?

- ◯ Yes
- ◯ No
- ◯ Prefer Not to Disclose

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

	Positive	No Impact	Negative
My Company Culture	○	○	○
My Intent to Stay in the Nuclear Industry	○	○	○
The Future of Nuclear Power	○	○	○
My Career Advancement / Opportunities	○	○	○

Other or Unsure (Please Specify)

Other or Unsure (Please Specify)

Other or Unsure (Please Specify)

Other or Unsure (Please Specify)

* 26. 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)

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

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

	Very Important	Important	Neutral	Unimportant	Very Unimportant	N/A
Compensation/Pay/Benefits/Vacation	◯	◯	◯	◯	◯	◯
Universal Paid Leave (family, parental, sick leave)	◯	◯	◯	◯	◯	◯
Flexibility to Balance Life and Work Issues	◯	◯	◯	◯	◯	◯
Job Security/Organization's Financial Stability	◯	◯	◯	◯	◯	◯
Respectful Treatment of All Employees	◯	◯	◯	◯	◯	◯
Relationship with Immediate Supervisor	◯	◯	◯	◯	◯	◯
Career Development/Advancement Opportunities	◯	◯	◯	◯	◯	◯
Staffing Levels/Volume of Work	◯	◯	◯	◯	◯	◯
Employee Morale	◯	◯	◯	◯	◯	◯
Job Location	◯	◯	◯	◯	◯	◯

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

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	N/A
Compensation/Pay/Benefits/Vacation	◯	◯	◯	◯	◯	◯
Universal Paid Leave (family, parental, sick leave)	◯	◯	◯	◯	◯	◯
Flexibility to Balance Life and Work Issues	◯	◯	◯	◯	◯	◯
Job Security/Organization's Financial Stability	◯	◯	◯	◯	◯	◯
Respectful Treatment of All Employees	◯	◯	◯	◯	◯	◯
Relationship with Immediate Supervisor	◯	◯	◯	◯	◯	◯
Career Development/Advancement Opportunities	◯	◯	◯	◯	◯	◯
Staffing Levels/Volume of Work	◯	◯	◯	◯	◯	◯
Employee Morale	◯	◯	◯	◯	◯	◯
Job Location	◯	◯	◯	◯	◯	◯

2021 NAYGN Career Survey

30. What types of skills would you like to develop? Select up to 3

- [ ] Public Speaking / Remote Presence
- [ ] Communication (Verbal and Written)
- [ ] Leadership / Management
- [ ] Negotiation Skills
- [ ] Development of Teams
- [ ] Diversity, Equity, Inclusion Topics
- [ ] Job-specific Technical
- [ ] Nuclear Fundamentals

2021 NAYGN Career Survey

31. What is the most effective way you advocate for nuclear? Select up to 2

- [ ] Contact Government Officials
- [ ] Student Outreach
- [ ] Plant Tours/Events
- [ ] Social Media
- [ ] Public Events
- [ ] One on Ones
- [ ] Other (please specify)

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

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

2021 NAYGN Career Survey

* 33. What nuclear technology do you think is and will be the most impactful in the foreseeable future? (Rank in order of importance with 1 be the most important)

⠿ ▲▼	New Builds (existing Light Water Reactors: i.e. PWR, BWR, AP1000, etc.)
⠿ ▲▼	License Renewal or Subsequent License Renewal
⠿ ▲▼	Small Modular Reactors
⠿ ▲▼	Advanced Reactor Technology (Molten Salt, Fusion, etc.)
⠿ ▲▼	Industry Specific Applications (Cryptocurrency, Green Hydrogen, Water Desalination, Mining, District Heating, Aerospace, etc)

2021 NAYGN Career Survey

34. How would you rate the future of the nuclear industry in your region/community?

Very Negative	Negative	Neutral	Positive	Very Positive	Unsure
◯	◯	◯	◯	◯	◯

Please provide a reason for your rating (Optional).

35. 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. (Optional)

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

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

37. How many hours per month are you engaged with NAYGN or NAYGN sponsored activities?

- ◯ 2
- ◯ 4
- ◯ 6
- ◯ 8
- ◯ >8

* 38. 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).

* 39. 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	○	○	○	○	○
Other or Unsure (Please Specify)					
Community Outreach	○	○	○	○	○
Other or Unsure (Please Specify)					
Public Information	○	○	○	○	○
Other or Unsure (Please Specify)					
Membership and Networking	○	○	○	○	○
Other or Unsure (Please Specify)					
Communications (Social Media, Website, Webinars, Newsletters, Emails)	○	○	○	○	○
Other or Unsure (Please Specify)					
Diversity, Equity, and Inclusion	○	○	○	○	○
Other or Unsure (Please Specify)					

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

2021 NAYGN Career Survey

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

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

2021 NAYGN Career Survey

42. Have you ever responded to an NAYGN Career Survey Before

- ◯ Yes
- ◯ No
- ◯ Unsure

43. How did you find out about or join NAYGN?

- [ ] Employee Referral
- [ ] Company Communication
- [ ] Attending an NAYGN Event
- [ ] Social Media
- [ ] Professional Development or Leadership Event
- [ ] Other (please specify)

44. The length of this survey was:

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

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

46. 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