

Alumni Outcomes Survey Results

2018-2022

Institutional Research & Decision Support



Olin College of Engineering

About the Survey

- ➔ Why do we do this survey?
- ➔ Other surveys at Olin
- ➔ Other sources of information about Olin alumni
- ➔ What this survey is not

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Survey Administration

Each year, Institutional Research surveys all alumni two, five, and ten years after graduation, and publishes the results in the “First Look” report. This presentation shows trends from the past five years.

Overall Response Rate	2018	2019	2020	2021	2022
Number Surveyed	216	228	215	245	240
Number of Responses	122	128	169	117	130
Response Rate	58%	56%	67%	48%	54%

By Major	2018	2019	2020	2021	2022
ENG	62%	60%	65%	45%	56%
ECE	51%	50%	65%	55%	56%
ME	61%	55%	73%	45%	49%

By Legal Sex	2018	2019	2020	2021	2022
Female	55%	55%	70%	45%	56%
Male	61%	57%	65%	50%	53%

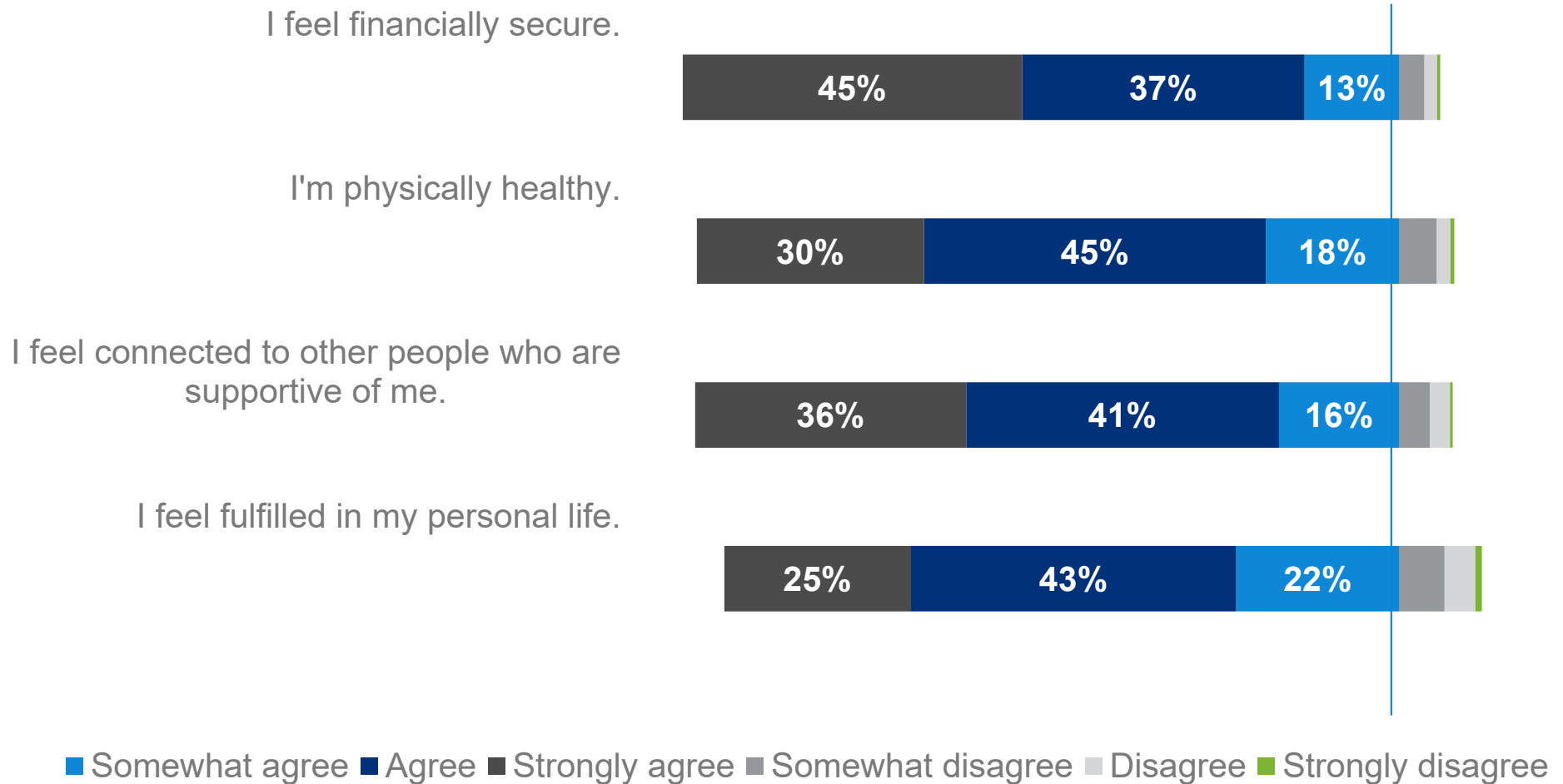
Life After Olin: Alumni gave us a thoughtful glimpse into their lives. Here are some recent developments in their lives that they shared. The pandemic continues to be a strong influence.

A word cloud of terms related to the COVID-19 pandemic. The most prominent words are 'married', 'years', 'move', and 'year'. Other significant words include 'house', 'partner', 'time', 'life', 'community', 'work', 'bought', 'back', 'friends', 'school', 'ago', 'climb', 'baby', 'close', 'graduate', 'oliner', 'hobby', 'lot', 'join', 'free', 'past', 'old', 'living', 'recently', 'class', 'boston', 'pandemic', 'feel', 'enjoy', 'major', '2021', '2020', 'local', 'i've', 'job', 'big', 'im', 'buy', 'art', 'work', 'oliner', 'graduate', 'close', 'friends', 'school', 'ago', 'climb', 'baby', 'hobby', 'lot', 'join', 'free', 'past', 'old', 'living', 'recently', 'class', 'boston', 'pandemic', 'feel', 'enjoy', 'major', '2021', '2020', 'local', 'i've', 'job', 'big', 'im', 'buy', 'art', 'work', 'oliner', 'graduate', 'close', 'friends', 'school', 'ago', 'climb', 'baby'.

Selected quotes from the 2022 survey:

- ➔ I moved from Boston to LA about a year ago. This is my first time living outside of Massachusetts and I'm loving it here.
- ➔ About to get engaged, thrilled to have moved back to the East Coast from the West Coast, and enjoying lots of outdoor activities!
- ➔ In the last two years I bought my first home . . . and got married!
- ➔ The need for financial wellness can sometimes clash with Olin's do-good ideals, especially when the kinds of personally fulfilling jobs that also pay well can be ultra-competitive. It is not always possible to have both.

Overall life satisfaction



Olin's mission statement reads*, "Olin College prepares students to become exemplary engineering innovators who recognize needs, design solutions and engage in creative enterprises for the good of the world." How well do you believe Olin prepared you in relation to that mission? Are you finding opportunities to connect Olin to your daily life?



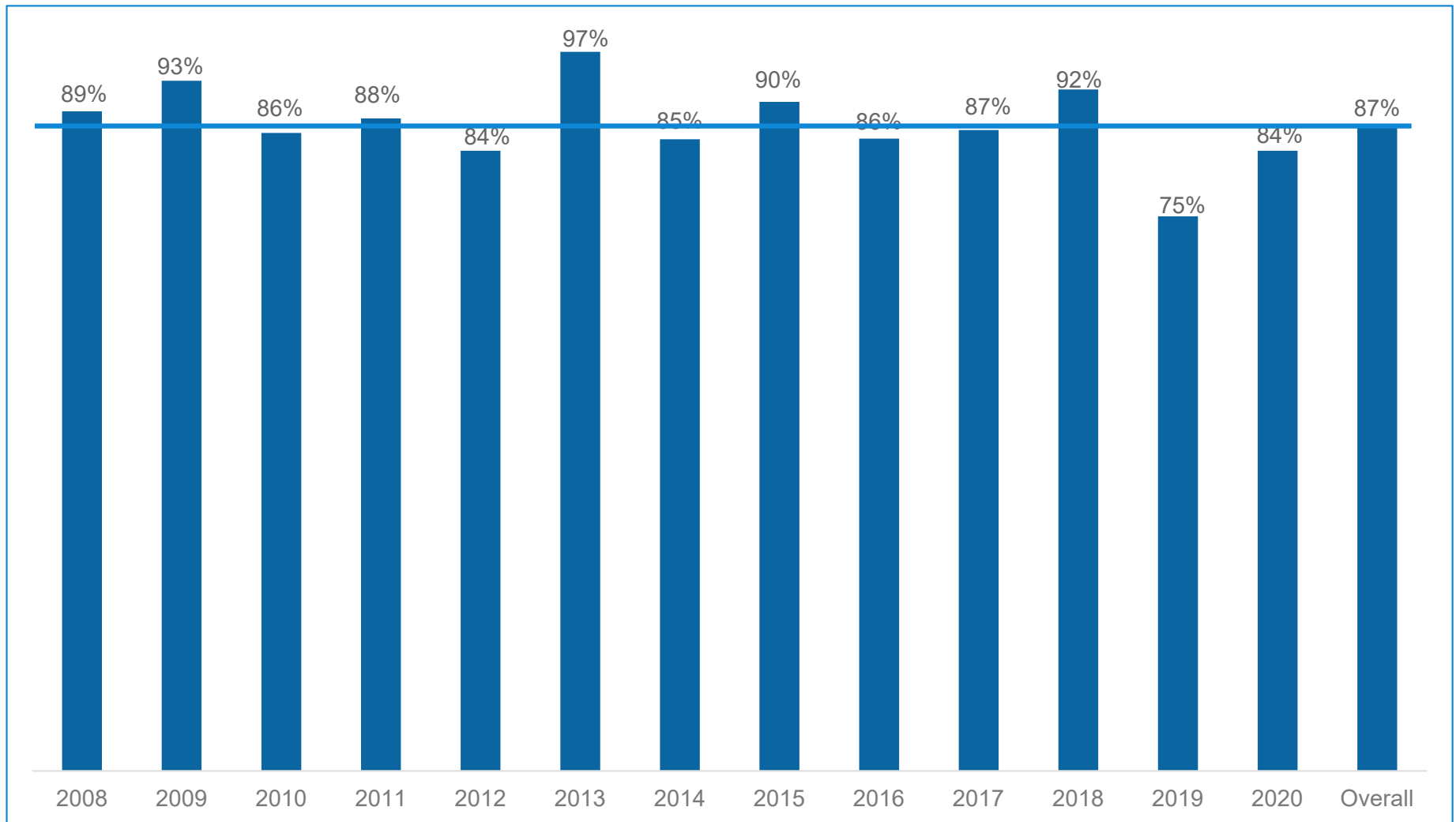
*While the mission and vision has since been updated, this version was in place when these alumni graduated (most recent graduates were class of 2020).

Mission

- ➔ This is pretty much exactly what I do at work. . . Yet that is not often at the forefront of our conversations when projects are developed and when people join the team. So a few colleagues and I have started a group where we are trying to normalize and standardize conversations about ethics. Courses at Olin encouraged us to consider more than just the technical challenge we face in the short term, but also the impacts to society and the ethical responsibility the engineer faces (2018)
- ➔ I'm super cognizant of how I am designing the systems I work on, and frequently try to ensure we are addressing all potential persons using the device, not just a stereotyped target user. Olin prepared me to think outside of the norms to try to build inclusively (2020)
- ➔ Honestly not that well. I think the question of who engineering currently serves and who it historically serves is something I did not really start to contend with until after I had graduated from Olin (2020)
- ➔ I hope Olin is finding more ways to live by this statement in the classroom, and in who they invite to campus. Doing good for the world is a very subjective statement, but when I was a student, it upset a lot of us to see Raytheon and other military contractors at career fairs, and the ethics of engineering was unfortunately never discussed in any of my classes (2018)

If you had to do it all over again, would you still choose Olin?

Percent “Definitely” or “Probably” Yes



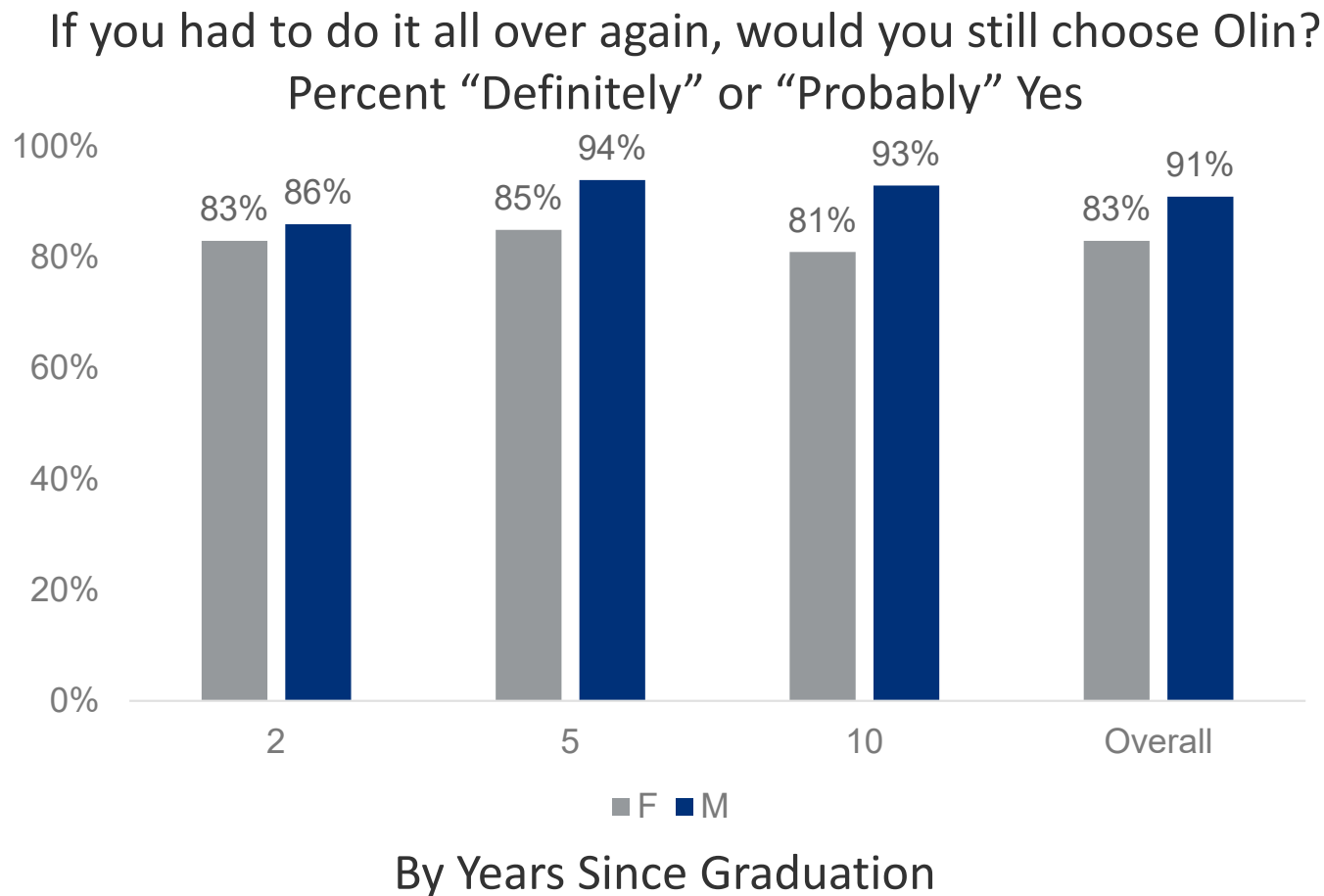
By Graduation Year

Results for the class of 2016 include responses from surveys in 2018 and 2021.



Olin College of Engineering

Over the past four years, an average of 83% of female students (based on legal sex) would choose Olin again, compared to 91% of male students ($p < .05$).



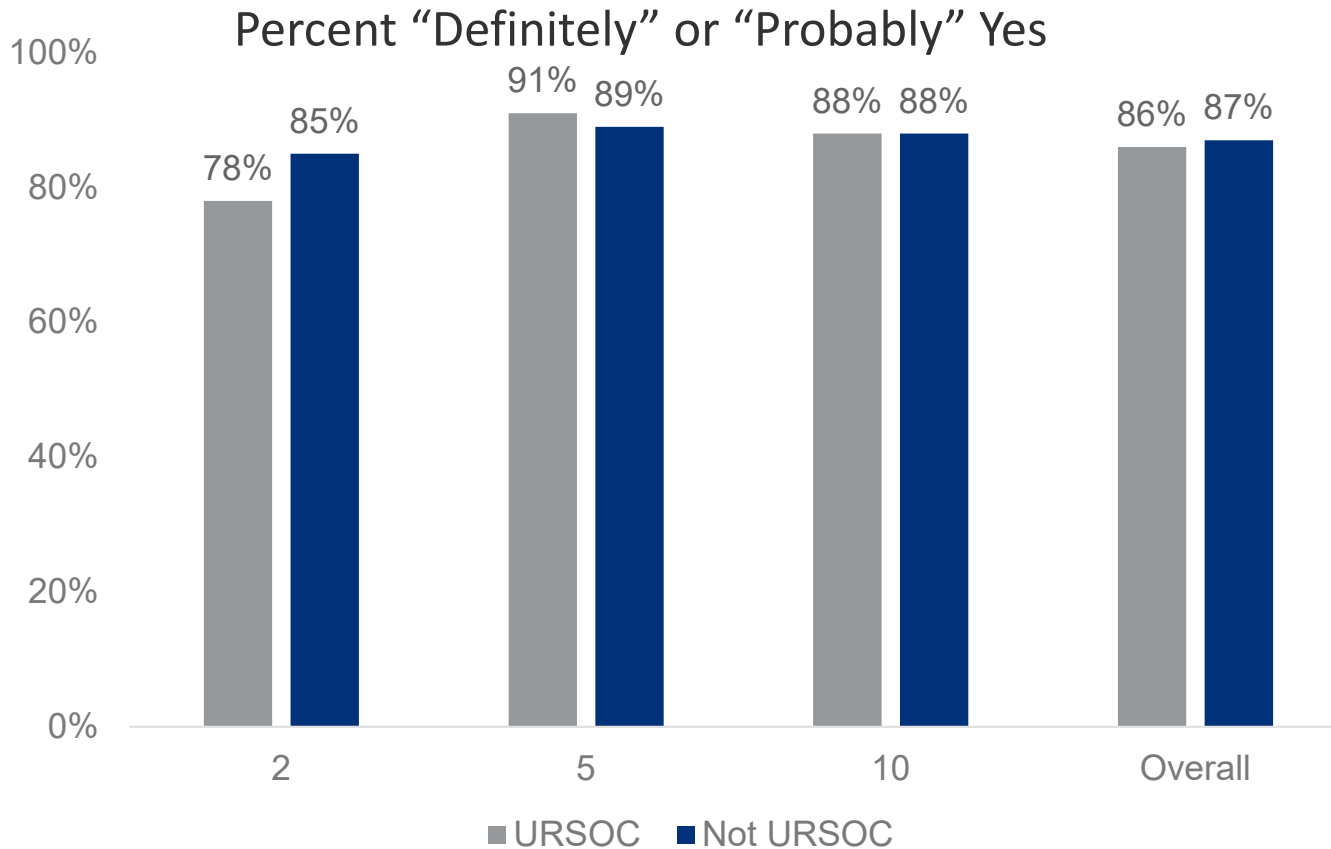
Why?

- ➔ As to my answer of definitely no on the above question, I do not regret going to Olin but if I had to choose with what I know now I would not do it again. It turns out that while I got really useful skills from Olin, the ones that I needed I am often lacking because I didn't go to a traditional school...I really should have been somewhere where I could do fundamental research for a traditional PI. I think I learn better in lecture classes and out of textbooks.
- ➔ I was diagnosed . . . while I was at Olin and I got very little support. . . there were older, wiser adults around me who I feel like could have seen that I was failing to thrive and intervened. It's a shame that I still think of my college experience as something I had to overcome . . . that's always something I mention in these surveys with the hope that intervention for current students struggling with physical and/or mental health issues is stronger than it was when I was a student.
- ➔ Olin prepared me for a lot of things, but it did not prepare me to question the value of my role and the limitations I have from staying it. Olin did not teach me how to handle microaggressions in a manner that wouldn't label me as a problematic annoyance. Olin did not teach me about the ways in which I have to rely on others to support me and fight 10x harder to be heard. Olin taught me how to learn and how to adapt, and those are things I have done after I've fought all the battles I'd like to fight.
- ➔ I believe Olin cannot exist in an ethical way at its current size. When someone is sexually assaulted at Olin, their only options are to completely absorb the impact themselves or to cause extreme disruption in the life of their perpetrator. . This course of action has inevitable social fallout as well, so many do not choose it-- there is no way to go about it and maintain privacy at such a small institution.



Only 31 survey respondents (5%) identify as an under-represented student of color (URSOC). 86% of those alumni would choose to attend Olin again, compared to 87% of non-URSOC alumni.

If you had to do it all over again, would you still choose Olin?



By Years Since Graduation

Survey years: 2018 - 2022

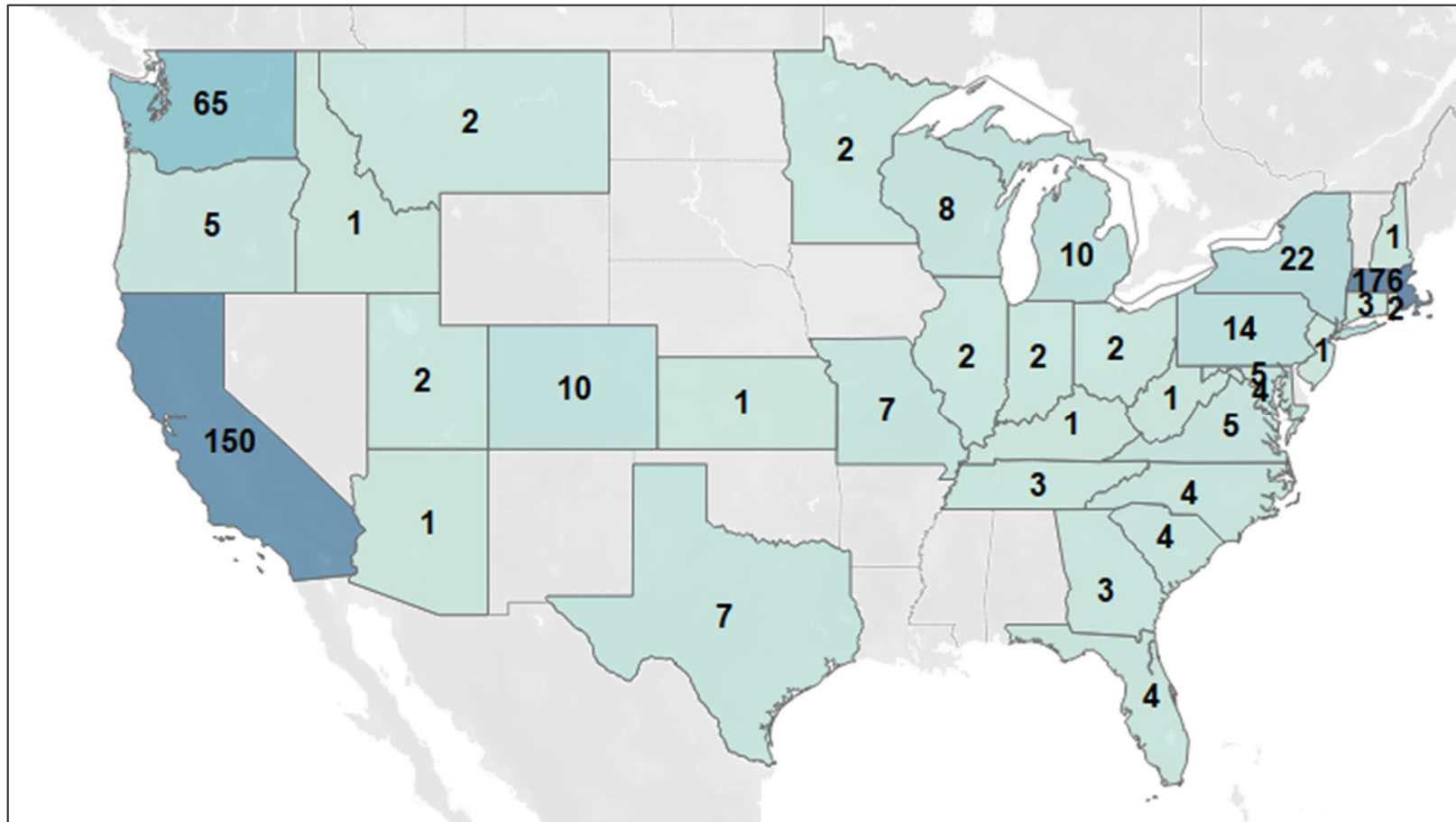
Why?

- ➔ I think the above question is silly... I say I'm not sure, but I have no regrets about going to Olin. I think it was a great experience. But I think there is so much to be learned from all kinds of experiences, whether it was a perfect experience or not. Even bad experiences are worth having most of the time. They make us stronger just as much as positive experiences. You have to work apposing muscles to strengthen your body in a healthy way.
- ➔ I am not sure if I'd still choose Olin. We learn a great deal about doing good in a world riddled with social issues (and technical issues, though I am much more interested in the social aspect), and tools/techniques to approach these problems whether through engineering or design methods. Having learned these, I feel both gratitude and a responsibility to use them. I do not always wish I felt that responsibility, as that can pivot to a feeling of guilt if and when I fall short.
- ➔ I think my Olin education has had a huge contribution to my career's success. . . I probably could have been capable of learning the basic technical skills of software engineering anywhere (things such as algorithms, data structures, etc). But in addition to these necessary technical skills, Olin also teaches so many "soft skills". "Soft skills" including: how to learn new things on-the-job (for example, for final projects in classes usually you have to learn about something extra to finish your project - ie, how to use a certain library or package), how to work as part of a team, agile methodologies, basic industry standards (git, working with "tickets", etc), and user-centered design.

Employment: 2018-2022

Percent Employed Full Time						
Time since Graduation	2018	2019	2020	2021	2022	Overall
2 Years	80%	83%	89%	81%	83%	84%
5 Years	76%	75%	86%	78%	74%	78%
10 Years	95%	89%	90%	85%	85%	89%

Employment Location: 2018-2022



Not pictured: Alaska (3) and 12 foreign countries.

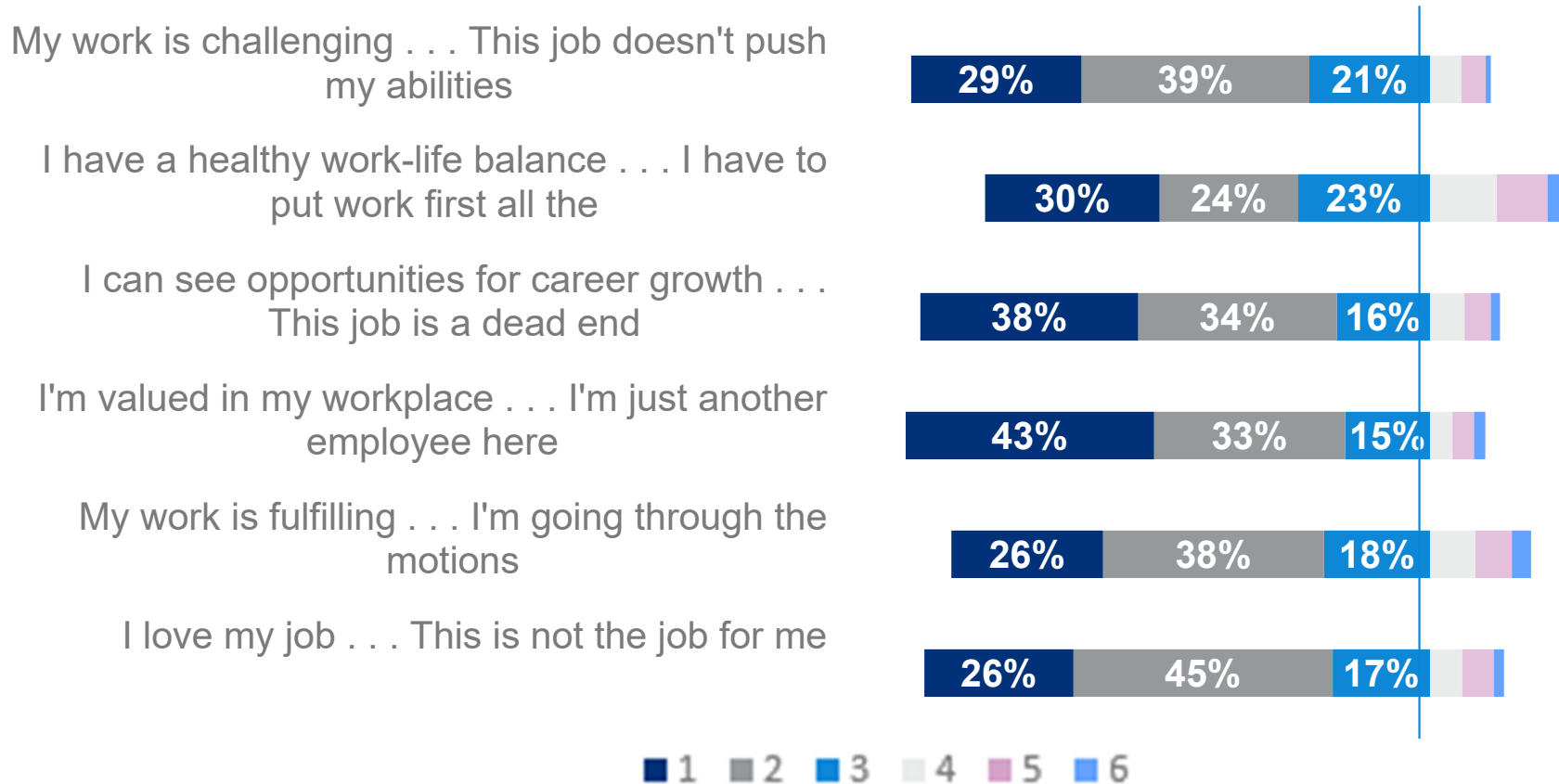
Job Satisfaction by Years Since Graduation

These items are scaled from one to six with one being the most positive response, Items with a mean of 3.0 or higher would lean to the negative side.

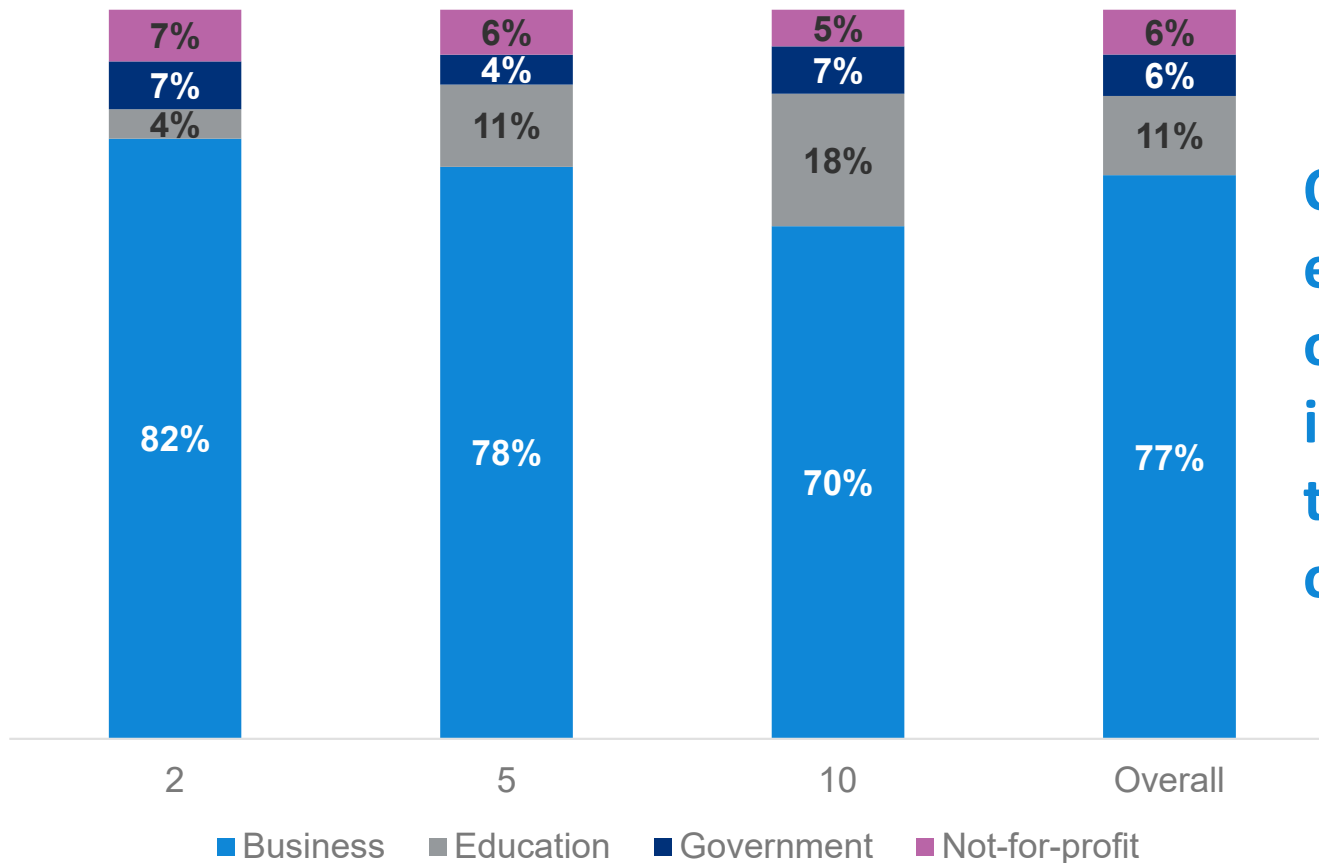
Average by Years Since Graduation	2	5	10	Overall
I love my job . . . This is not the job for me	2.12	2.18	2.09	2.13
My work is fulfilling . . . I'm going through the motions	2.36	2.29	2.14	2.26
I'm valued in my workplace . . . I'm just another employee here	1.93	1.82	1.85	1.87
I can see opportunities for career growth . . . This job is a dead end	2.00	1.89	2.04	1.98
I have a healthy work-life balance . . . I have to put work first all the	2.30	2.41	2.46	2.39
My work is challenging . . . This job doesn't push my abilities	2.15	2.05	1.96	2.06

Job Satisfaction: 2018-2022

These items are scaled from one to six with one being the most positive response.



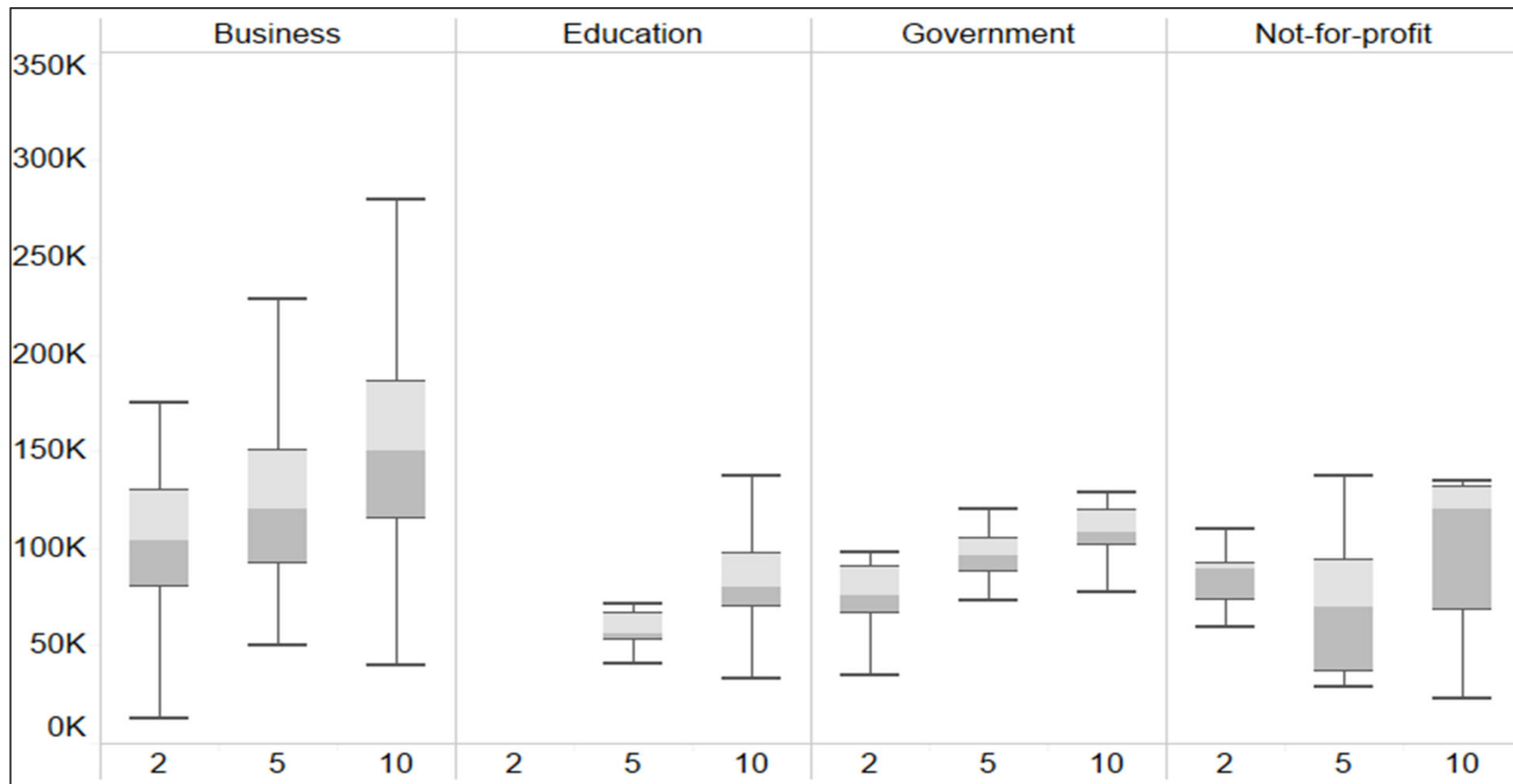
Employment Sector by Years Since Graduation



Of alumni who are employed full-time, on average 91% are in a position related to engineering, math, or science.

Survey years: 2018 - 2022

Salary by Sector and Years Since Graduation



	Business			Education			Government			Not-for-profit		
	2	5	10	2	5	10	2	5	10	2	5	10
Max	175,000	229,000	280,000		72,000	137,800	98,000	120,000	129,000	110,000	137,000	135,000
Upper quatrile	130,000	150,000	186,400		66,183	97,500	90,200	105,000	119,706	92,400	93,750	131,250
Median	104,000	120,000	150,000		56,000	80,000	75,568	96,500	108,000	90,000	70,000	120,000
Lower quartile	80,000	92,000	115,000		52,500	70,000	66,500	88,000	101,859	73,000	36,500	68,000
Min	13,200	50,000	40,000		41,000	33,170	34,840	73,000	77,329	60,000	29,000	22,941

Survey years: 2018 - 2022

What aspects of your Olin experience best prepared you for this position (even if you're not working in an engineering-related position)? Were there any areas in which you felt unprepared?

Alumni report that their Olin experience taught them how to be adaptable, comfortable with uncertainty, able to communicate well, and to work well on teams.

- ➔ I'm much more prepared for than the other engineers that I've started with is the ability to deal with ambiguity. . .I'm able to make a lot of progress with very little information and how I'm able to piece together information and continually unblock myself. I think this is something I definitely learned at Olin.
- ➔ Olin best prepared me for learning by doing. Much of my job is based on skills that I did not learn from school but have been quick in picking up because of the do-learn mindset at Olin.
- ➔ In business, everything is cooperative / collaborative, so dealing with people - even the difficult ones - is critical. A related skill I developed at Olin is being able to communicate effectively with people outside my specialty. A big part of my job is calibrating my "technicalness" to my audience.



What aspects of your Olin experience best prepared you for this position (even if you're not working in an engineering-related position)? Were there any areas in which you felt unprepared?

Alumni feel less prepared in some specific technical areas, and in adjusting to the corporate world.

- ➔ I also feel like we didn't do as much of the practical job training skills like how frequently do you keep your manager updated? should you proactively ask them for feedback? I was unprepared to come in as the most junior member of a team and to listen far more than I spoke.
- ➔ Underprepared for algorithm design - - - I didn't have lots of practice testing code/thinking about how code will perform at scale - - - I definitely felt less technically prepared than many of my peers - - - I also think that Olin could do a better job of integrating design for manufacturing into more of its classes. . . it was barely touched on in my curriculum.

Entrepreneurial Activities: 2018-2022

Percent involved in start up						
Time since Graduation	2018	2019	2020	2021	2022	Overall
2 Years	24%	17%	21%	12%	17%	19%
5 Years	26%	29%	27%	33%	21%	27%
10 Years	30%	39%	49%	26%	44%	39%

What aspects of your Olin experience prepared you for starting a company? How could Olin have prepared you better?

Alumni credit Olin for giving them experience in project management and working with diverse teams. Many also had experience in starting new ventures while at Olin, and some availed themselves of coursework at Babson. Many mention that Olin's design curriculum helped them in their entrepreneurial endeavors. However, many wish that Olin had offered more specific opportunities to learn how to run a business.

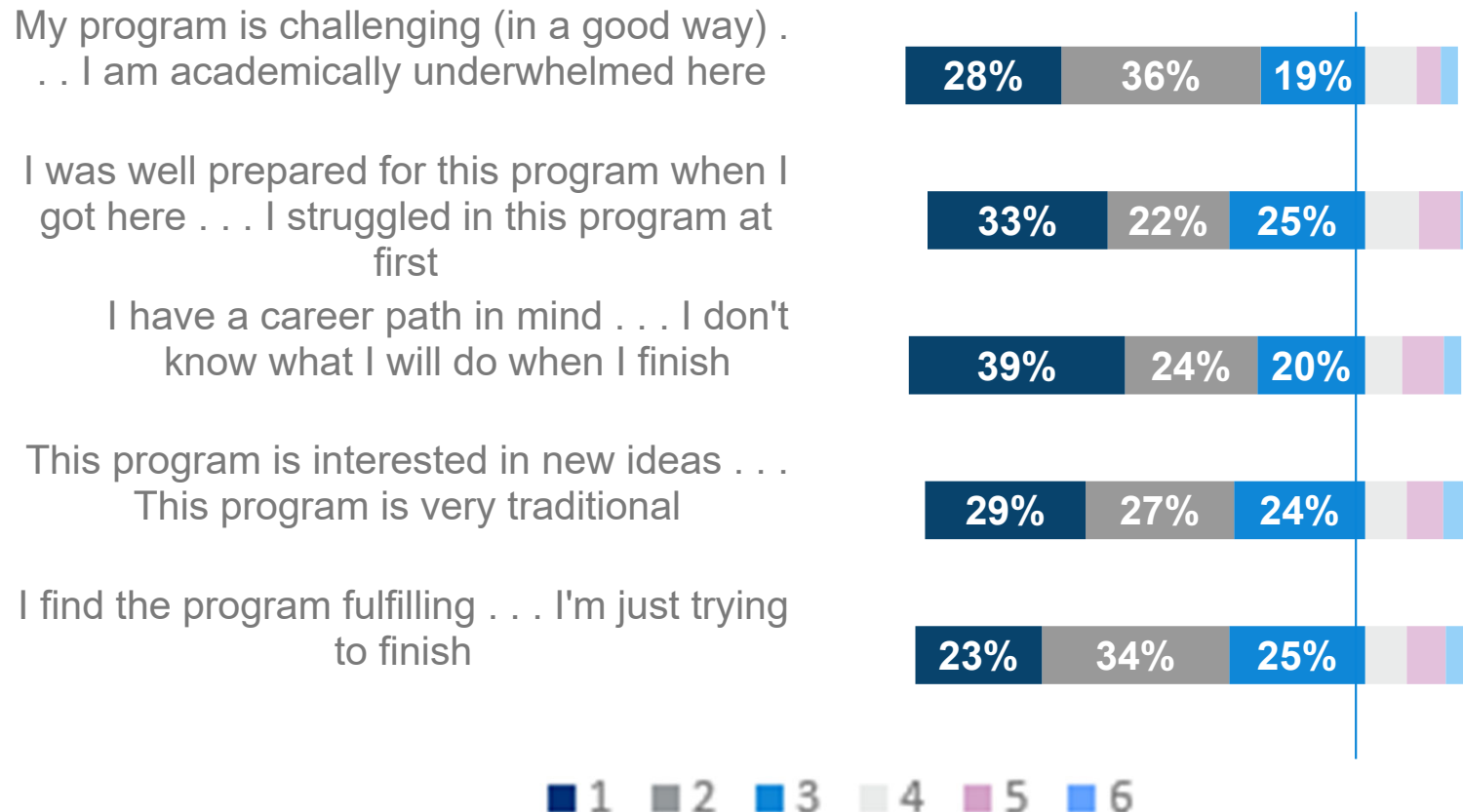
- ➔ Olin's hands-on approach made me very comfortable with diving into a problem that I didn't understand and learning while doing. The connection with Babson and design classes did a great job of training me to consider the context around why we develop/sell products.
- ➔ My design backgrounds from Olin has been critical in understanding ways to push a company forward. UOCD has made the wrong approaches evident, even if we haven't identified the right approach.
- ➔ I'd have really liked a "crash course in business" while at Olin. Like how to incorporate, file taxes, hire people, and some of the other really fundamental things you need to do to run your own business. I feel like this could be an optional evening thing that would be really beneficial. I'm having to figure all that out as I go, and it's not easy at all. I think it's one of the bigger things slowing my growth.
- ➔ Olin could have provided classes on the critical but mundane aspects of business: accounting, taxes, legal frameworks, raising funding, etc. I've stumbled on these because people assumed I knew them.

Graduate School: 2018-2022

Percent attended graduate school						
Time since Graduation	2018	2019	2020	2021	2022	Overall
2 Years	27%	24%	18%	29%	19%	23%
5 Years	43%	48%	24%	42%	28%	36%
10 Years	63%	52%	74%	54%	29%	56%

Satisfaction with Graduate Program: 2018-2022

These items are scaled from one to six with one being the most positive response.



Satisfaction with Graduate Program by Years Since Graduation

These items are scaled from one to six with one being the most positive response, also indicated in the table below by a lighter shade of blue. All items would be considered to be on the positive end of the scale. Items with a mean of 3.0 or higher would lean to the negative side.

Average by Years Since Graduation	2	5	10	Overall
I love my graduate studies . . . this is not the program for me	2.06	2.06	2.68	2.39
I find the program fulfilling . . . I'm just trying to finish	2.25	2.41	2.71	2.55
This program is interested in new ideas . . . This program is very traditional	1.50	2.63	2.80	2.54
I have a career path in mind . . . I don't know what I will do when I finish	2.25	2.13	2.45	2.32
I was well prepared for this program when I got here . . . I struggled in this program at first	2.19	2.50	2.64	2.53
My program is challenging (in a good way) . . . I am academically underwhelmed here	2.19	2.00	2.52	2.31

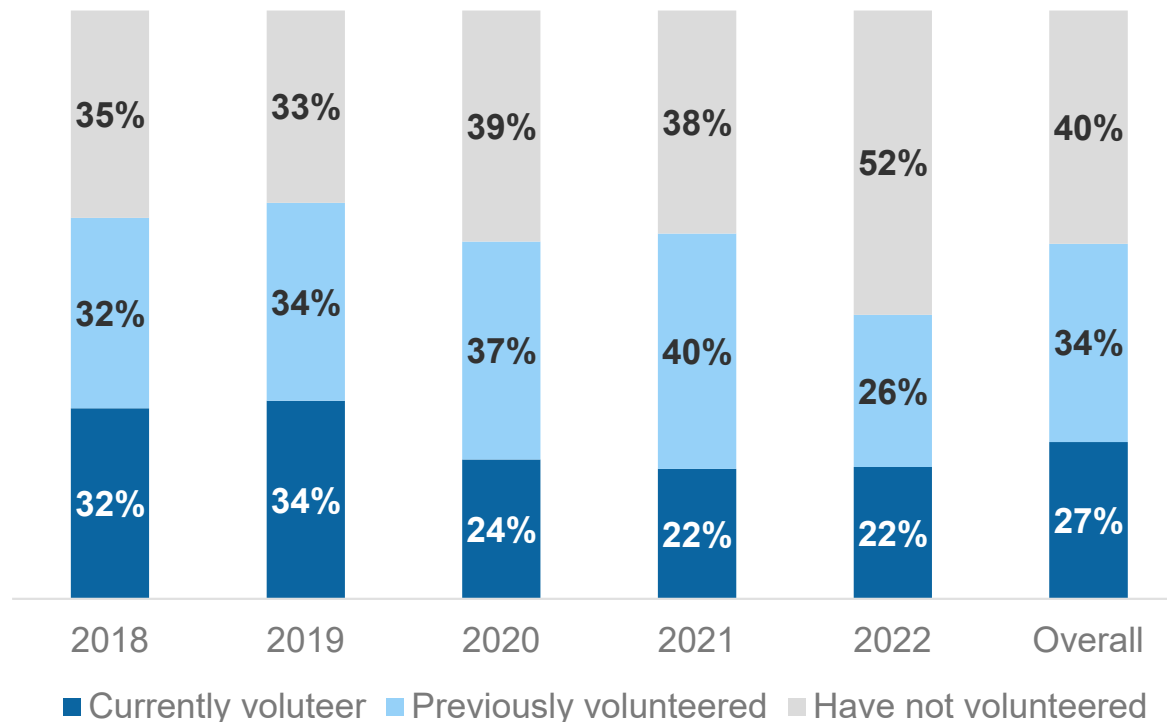
What aspects of your Olin experience best prepared you for further study in this field? Were there any areas in which you felt unprepared?

There is a wide variation in how alumni respond to this question – and there is a wide variation in the types of graduate programs in which alumni enroll. In addition to STEM-related PhD programs alumni have pursued MBAs, MDs, JDs, DDS, and MPH, and Education degrees (to name a few).

- ➔ Definitely the hands on engineering work I did at Olin prepared me well for a lot of the research projects I've undertaken while at grad school.
- ➔ Graduate work is a lot of independent work. The interdisciplinary skills we got at Olin meant I could build set ups, create automated experiments, rapidly analyze data, and write everything up.
- ➔ I felt very unprepared for taking tests in a traditional classroom. . . I'd often refer to myself as "home-schooled" for my undergrad because I'd be wildly ahead in some aspects (programming to make lab science easier), and laughable ignorant in others (how to predict what would be on a test).

Volunteer Activities

By Survey Year



Organizations

FIRST Robotics
 Girls Who Code
 Engineers Without Borders
 Habitat for Humanity
 Churches
 Local organizations
 Political organizations
 Many others!

■ Currently volunteer ■ Previously volunteered ■ Do not volunteer

Learning Outcomes

These items are scaled from one to four with four being the most positive response.

Average by Years Since Graduation	2	5	10	Overall
Develop and Apply Knowledge, Skills, Approaches and Methods	3.19	3.29	3.43	3.30
Think Critically	3.47	3.41	3.65	3.51
Develop and Apply Creativity	3.21	3.14	3.27	3.20
Prioritize Doing Good in the World	2.88	2.74	2.76	2.80
Develop and Apply Self-Directed Learning Abilities	3.26	3.41	3.48	3.38
Collaborate Successfully	3.49	3.56	3.34	3.47
Communicate Effectively	3.21	3.31	3.34	3.29
Design and Implement Processes to Achieve Desired Outcomes	2.99	3.19	3.08	3.09
Develop Personal and Professional Identity	2.79	2.80	3.08	2.88

What is one thing in the curriculum that should be changed or strengthened? (Classes of 2018-2020)

Top mentions for recent graduates were math (15 mentions), ethics and social justice (10), computer science (7), and issues around technical rigor (6) and depth (6).

- ➔ We need a greater emphasis on Math. It's becoming too diluted through the project-based curriculum (2020)
- ➔ Having more computer science courses. Or at least more computer science professors so students don't have to teach a fundamental class like Data Structures and Algorithms (2020)
- ➔ Fundamentals. We need more knowledge and understanding of concepts in STEM, not just experience of working with others (2019)
- ➔ Focus on foundational engineering concepts . . . As much as everyone would love for all things to be taught in a project-based format, in practice some concepts are more effectively taught in a traditional setting (2019)

What is one thing in the curriculum that is great the way that it is? (Classes of 2018-2020)

Recent graduates expressed appreciation for Olin's project-based curriculum (26), as well as the design curriculum (16) and emphasis on teamwork (15) Others mentioned the first year curriculum, the interdisciplinary nature, and Olin's professors (5 each).

- ➔ Olin's entire project-based learning premise is incredibly valuable. Ever since I started working, my colleagues have noted my ability to think on my feet and solve problems on the fly. They have complimented my ability to work with a wide range of peers and stakeholders, to communicate complex technical decisions, and to understand the overall trajectory and impacts of our projects. I may have gaps when it comes to "hard" engineering knowledge, but I get the feeling that I make up for those in all these other areas (2018)
- ➔ I love the design stream! UOCD was one of my favorite classes and I definitely think it shaped the way I think about most things in the world (2020)
- ➔ The first semester! I like the mix of engineering disciplines people are exposed to and the Pass/No Record helps high school overachievers chill out a little (2019)
- ➔ I think the Olin curriculum is very practical. The realities of working on a team in a collaborative environment to create deliverables is a great thing to learn in a scaffolded environment (2020)

Thinking back to your time on Olin, is there a course or project experience you would identify as making a major difference for you?

UOCD, SCOPE, POE, ADE, and Sustainable Design were cited most frequently by alumni – as were many others. Alumni also pointed to Baja, Olin.js, independent study and research, study abroad, and cross-registered courses.

“I think the design courses (UOCD, Assistive and Adaptive Design) had the largest impact in how I approach engineering for actual people.”

“My Engineering For Humanity project gave me a lot of confidence that I could do a do a good job making a small, but detailed solution to help someone. I think it showed how an engineering mindset can be cultivated and applied beyond math and physics.”



What's next?

- ➔ Alumni survey for class of 2022 in November
- ➔ Future presentations on
 - NSSE 10/21
 - Academic Assessment (OLOs) and Course Evaluations 11/11
- ➔ Office hours with Maggie TBD

