

# NCARB ACSA

# Professional Practice Data Collection

*A Joint Initiative of the National Council of Architectural Registration Boards (NCARB)  
and the Association of Collegiate Schools of Architecture (ACSA)*  
*Part II*

# Research Goal

This project builds on a previous survey conducted in 2018 that compared and assessed current professional practice coursework and identified how accredited programs prepare students for the realities of modern-day practice.

The goal of this expanded research is to provide insights about the perception of professional practice education and its relationship to general firm practices, firm hiring, the Architectural Experience Program<sup>®</sup> (AXP<sup>®</sup>) and the Architect Registration Examination<sup>®</sup> (ARE<sup>®</sup>).

# Target Population

We sent the survey to architectural professionals with NCARB Records and varying experience levels. We received a total of **6,493** valid responses and tracked participants into three basic categories.

## Firm Leaders and HR Executives:

This population provided a wealth of data about firm hiring practices and insight into professional practice knowledge.

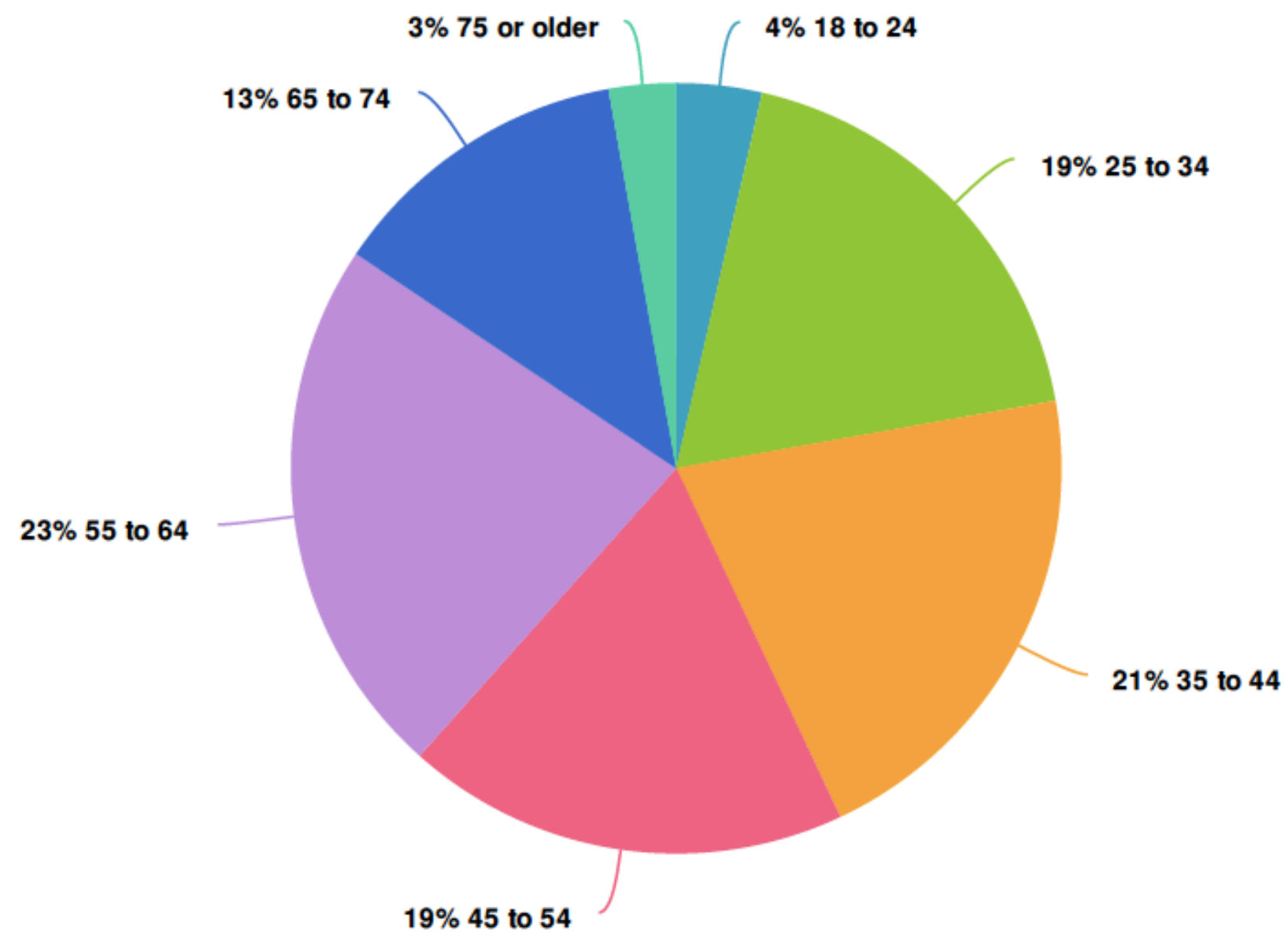
## AXP supervisors and Architect Licensing Advisors:

This population provided opportunities for professional development for emerging professionals and assessed the level of professional knowledge expected from recent graduates.

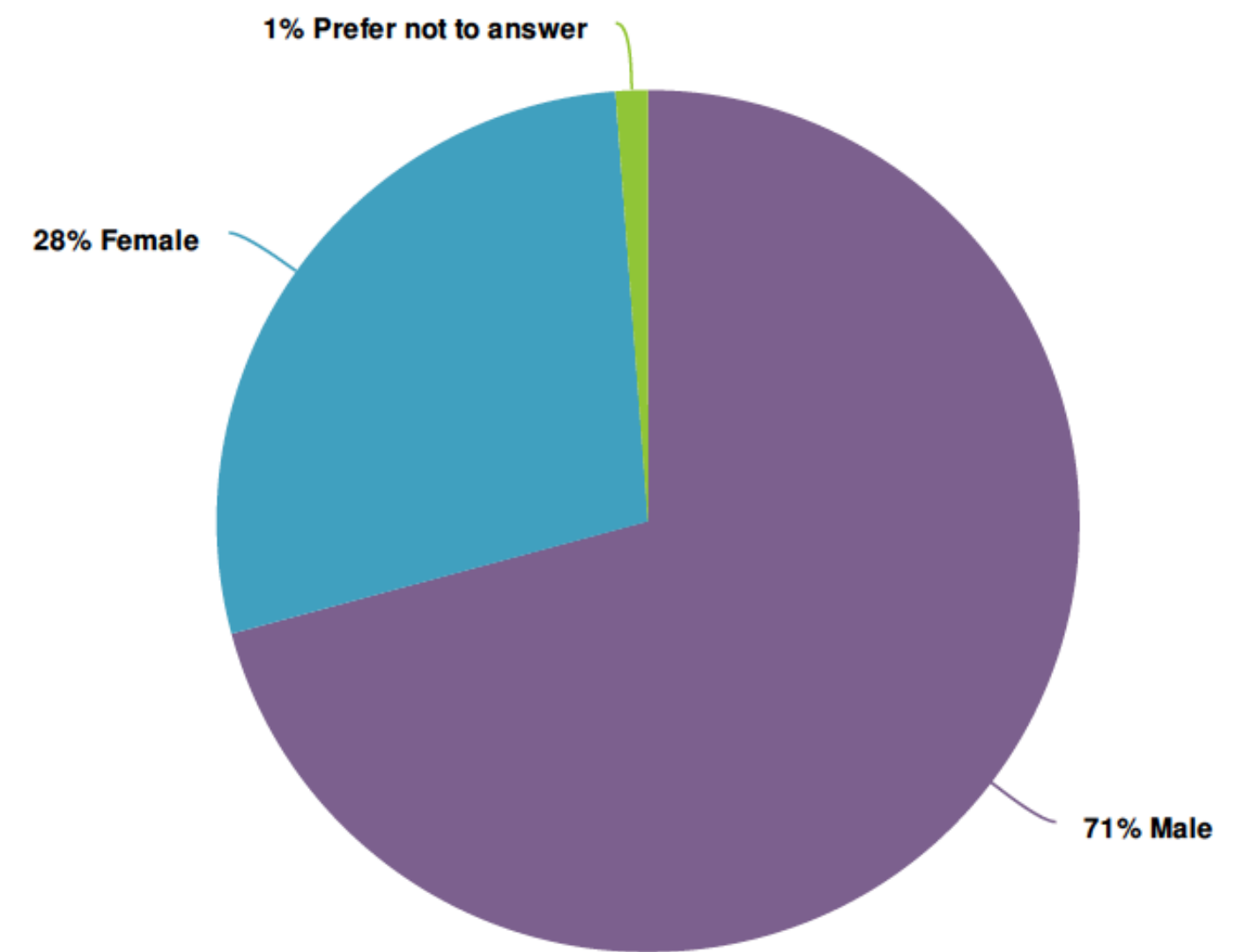
## New Professionals (0-2 years of full-time experience):

Recent graduates and experienced students provided first-hand experiences of perceived expectations of new hires and recommended ways to support the pathway to licensure.

# Demographics:

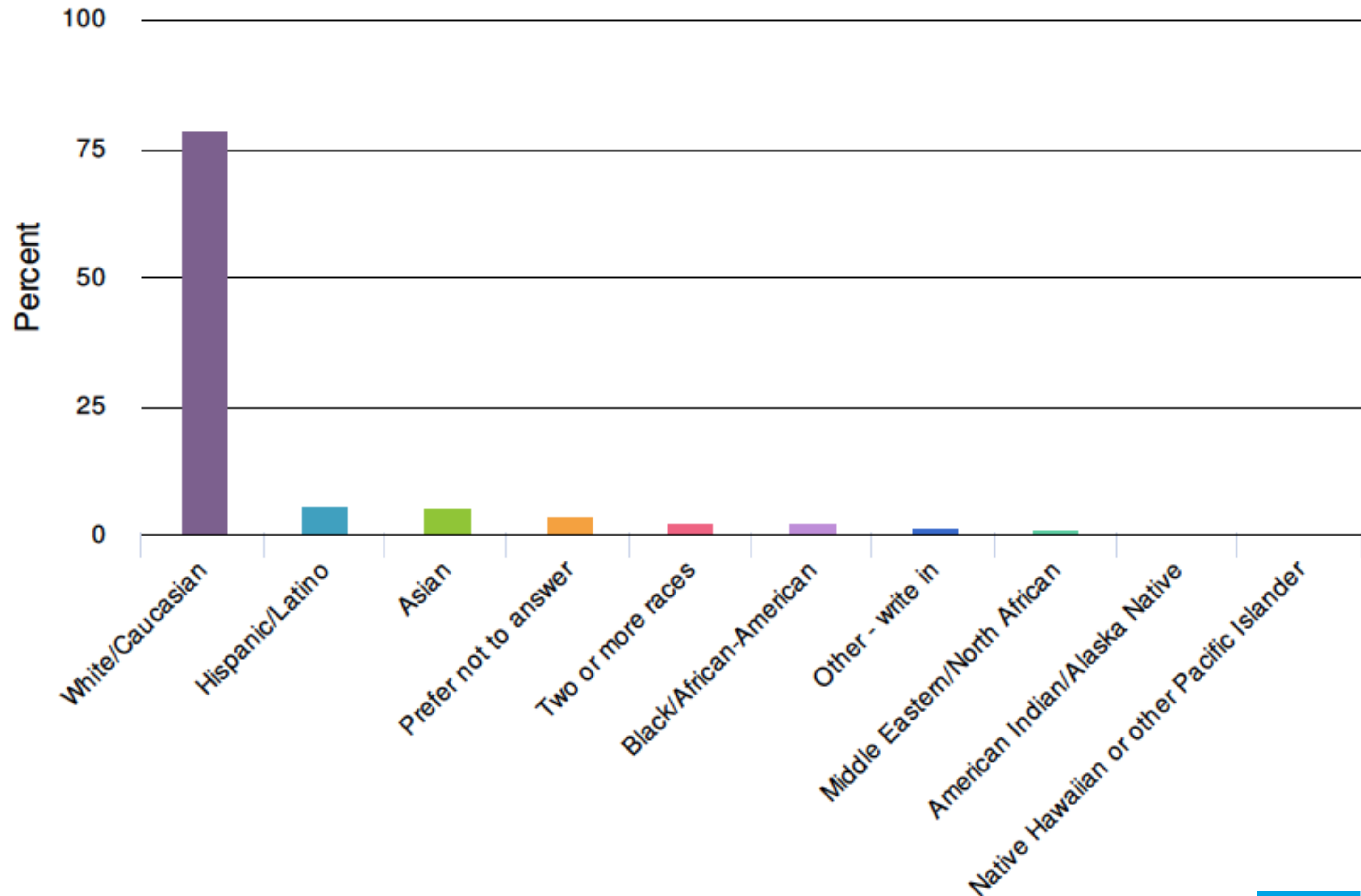


What is your age?

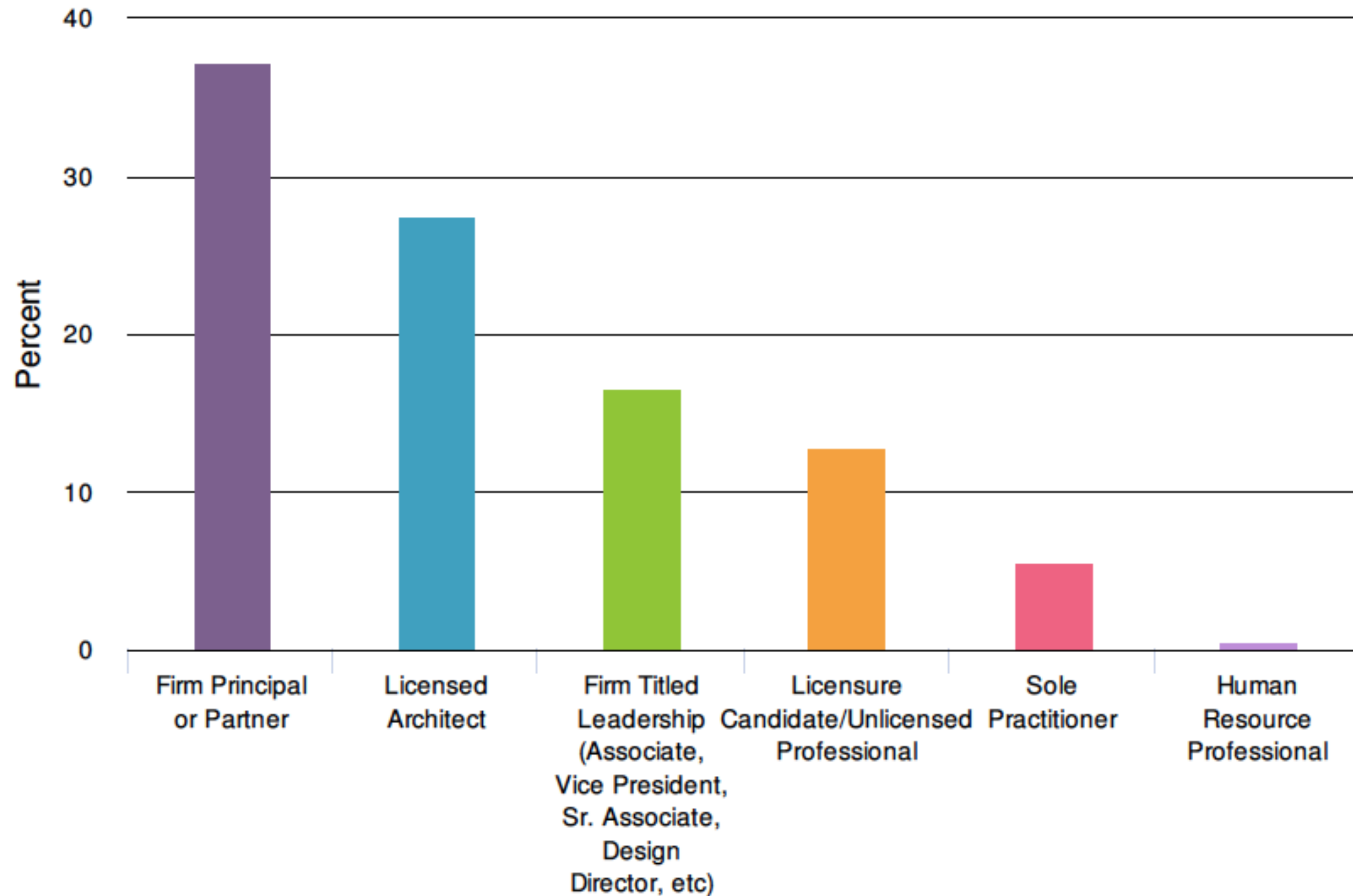


What gender best describes you?

# Demographics: What race/ethnicity best describes you?



Select the most appropriate position from the options provided.



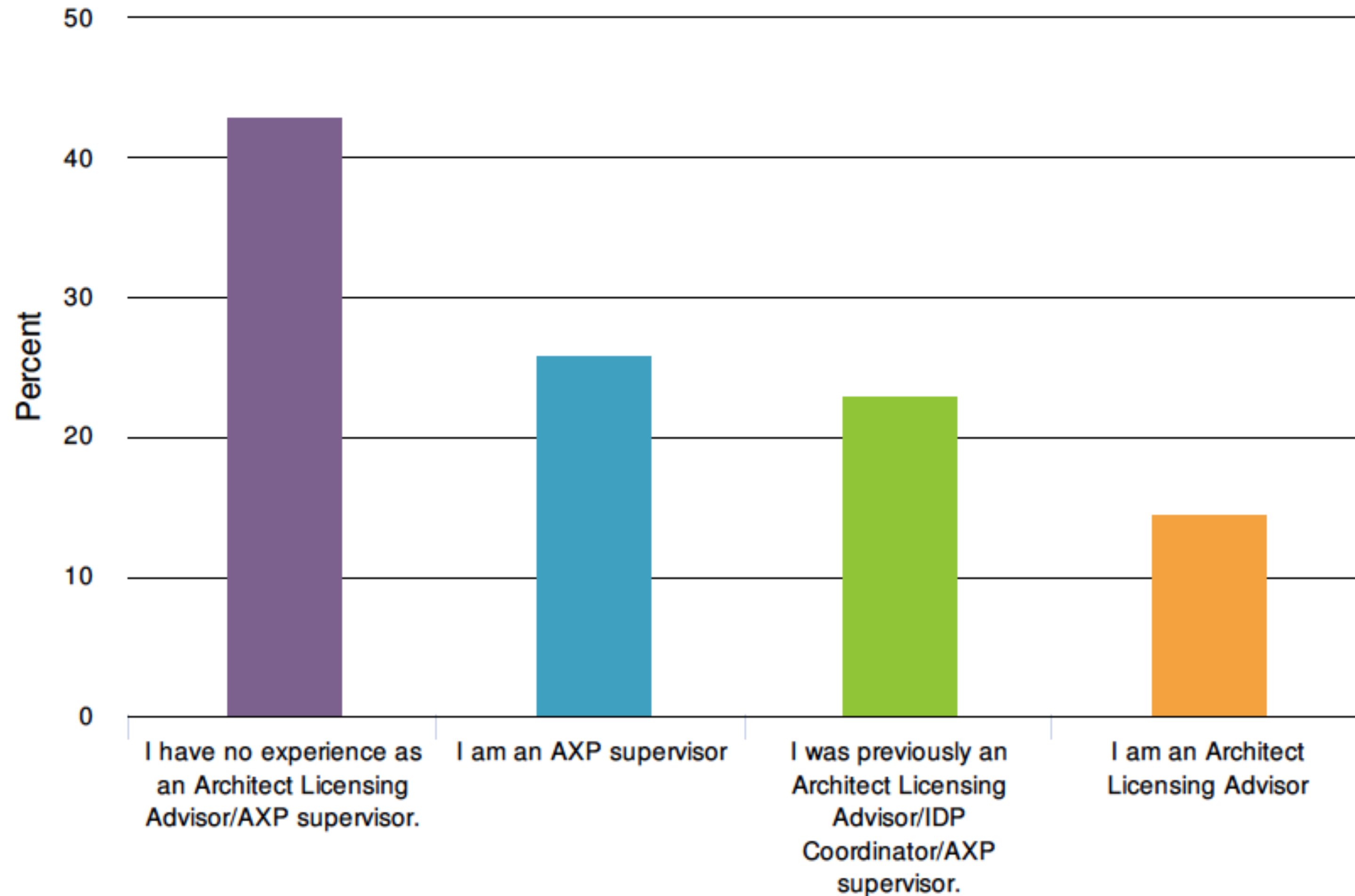
# In what year did you obtain licensure?

Average (median) year of licensure: **2000**

# How many years have you worked in an architectural practice?

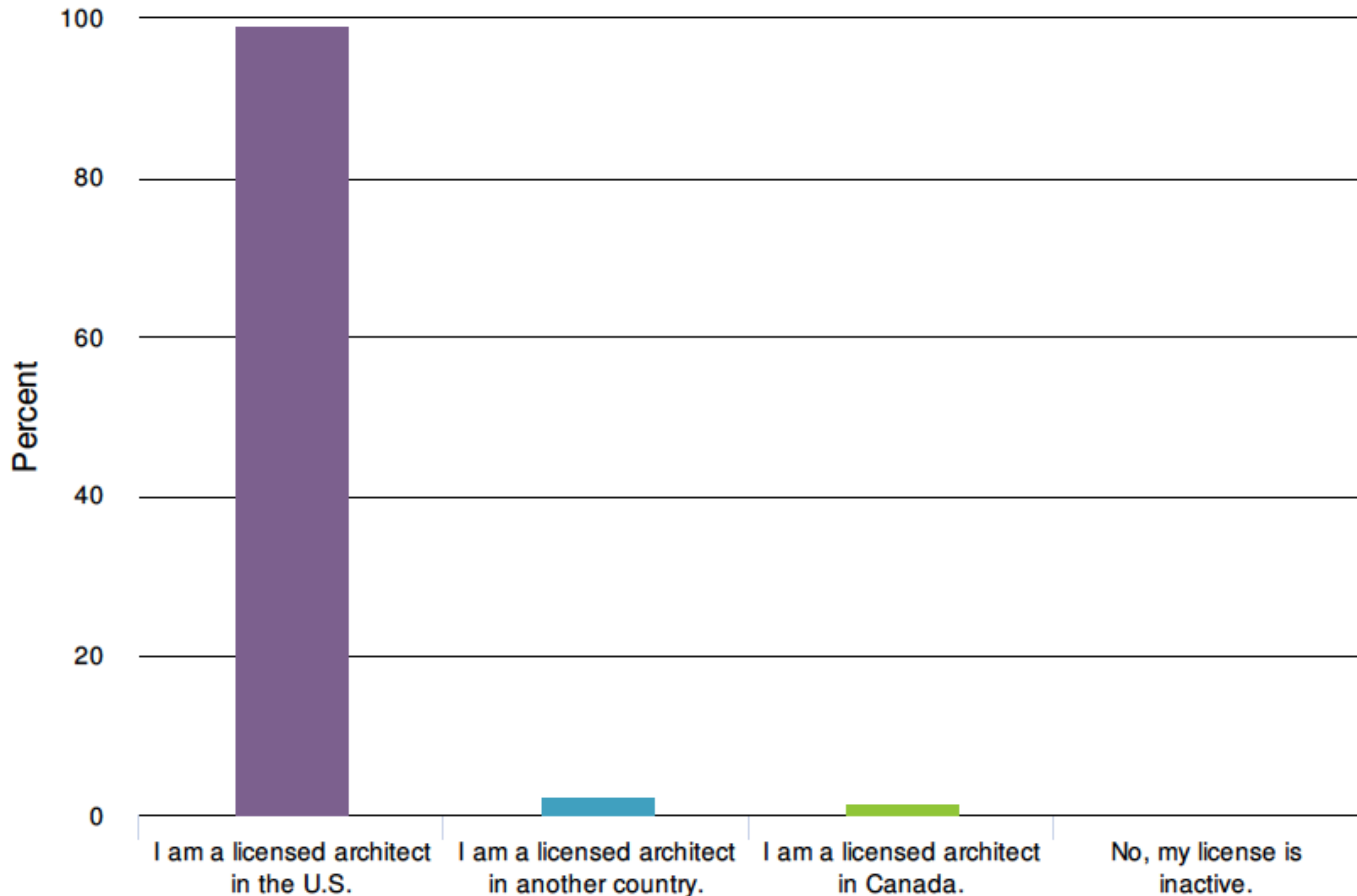
Average years of firm experience: **22 years**

# Are you currently an Architect Licensing Advisor or an AXP supervisor?

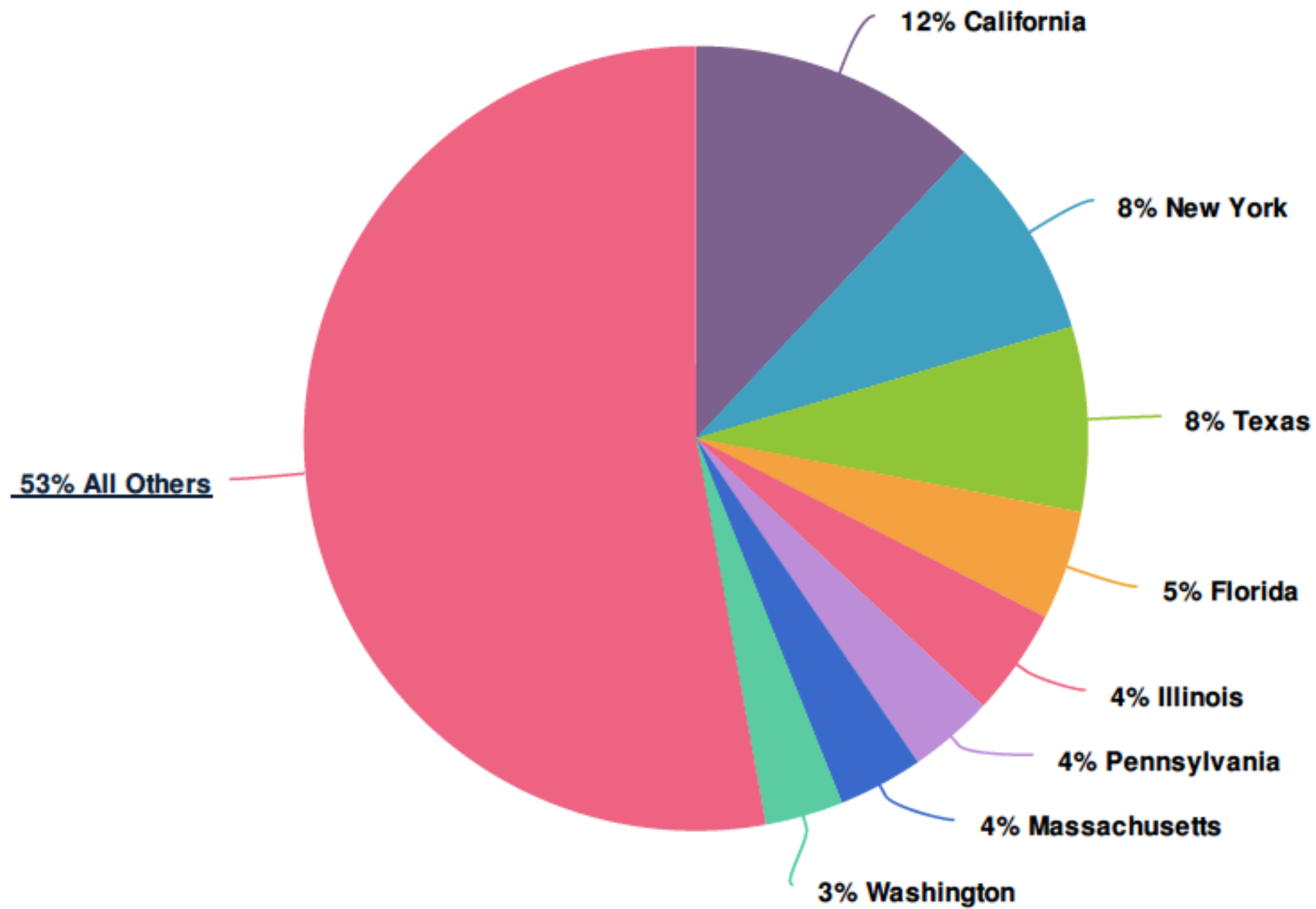




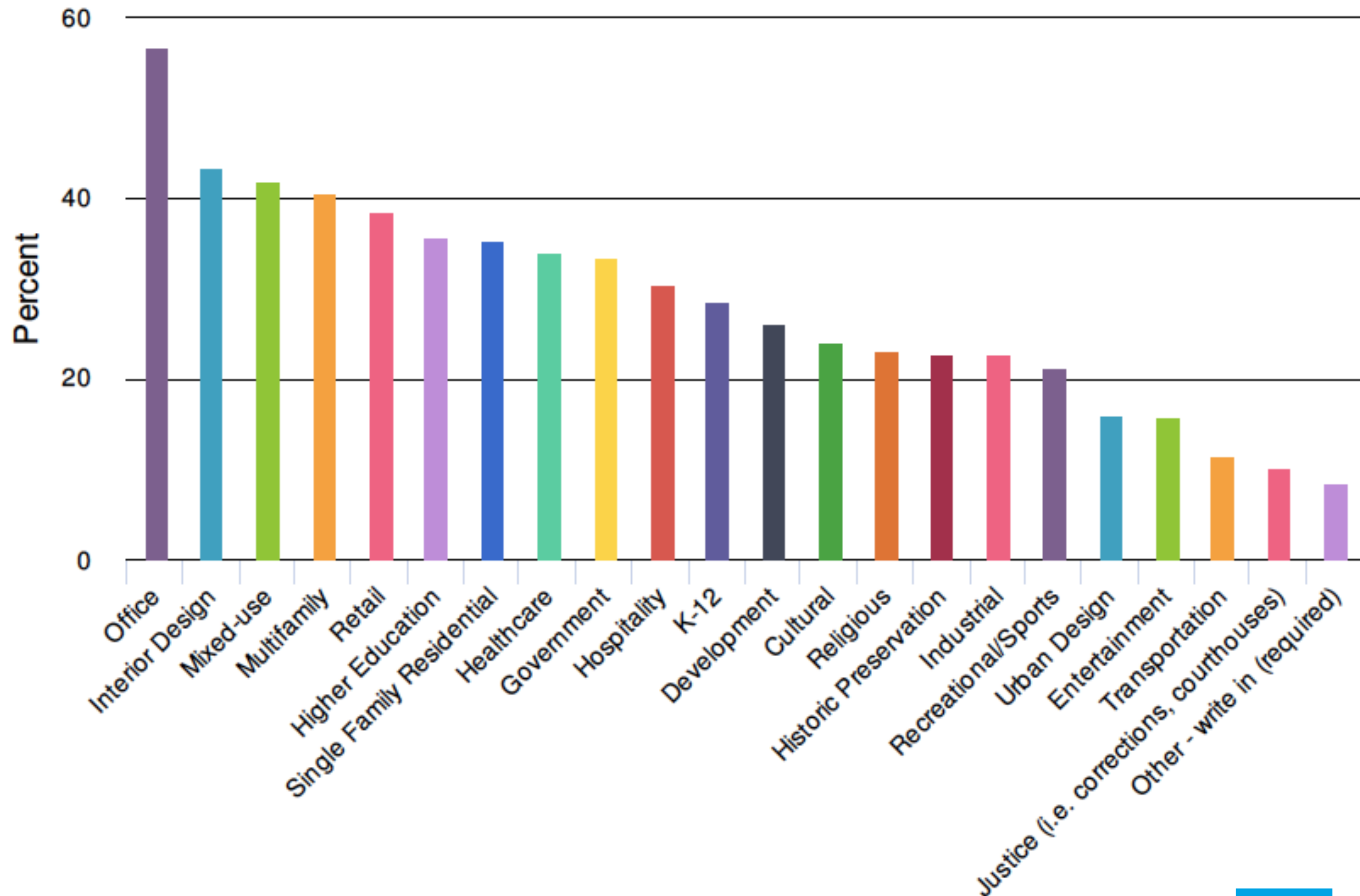
# Where are you currently licensed to practice architecture? (select all that apply)



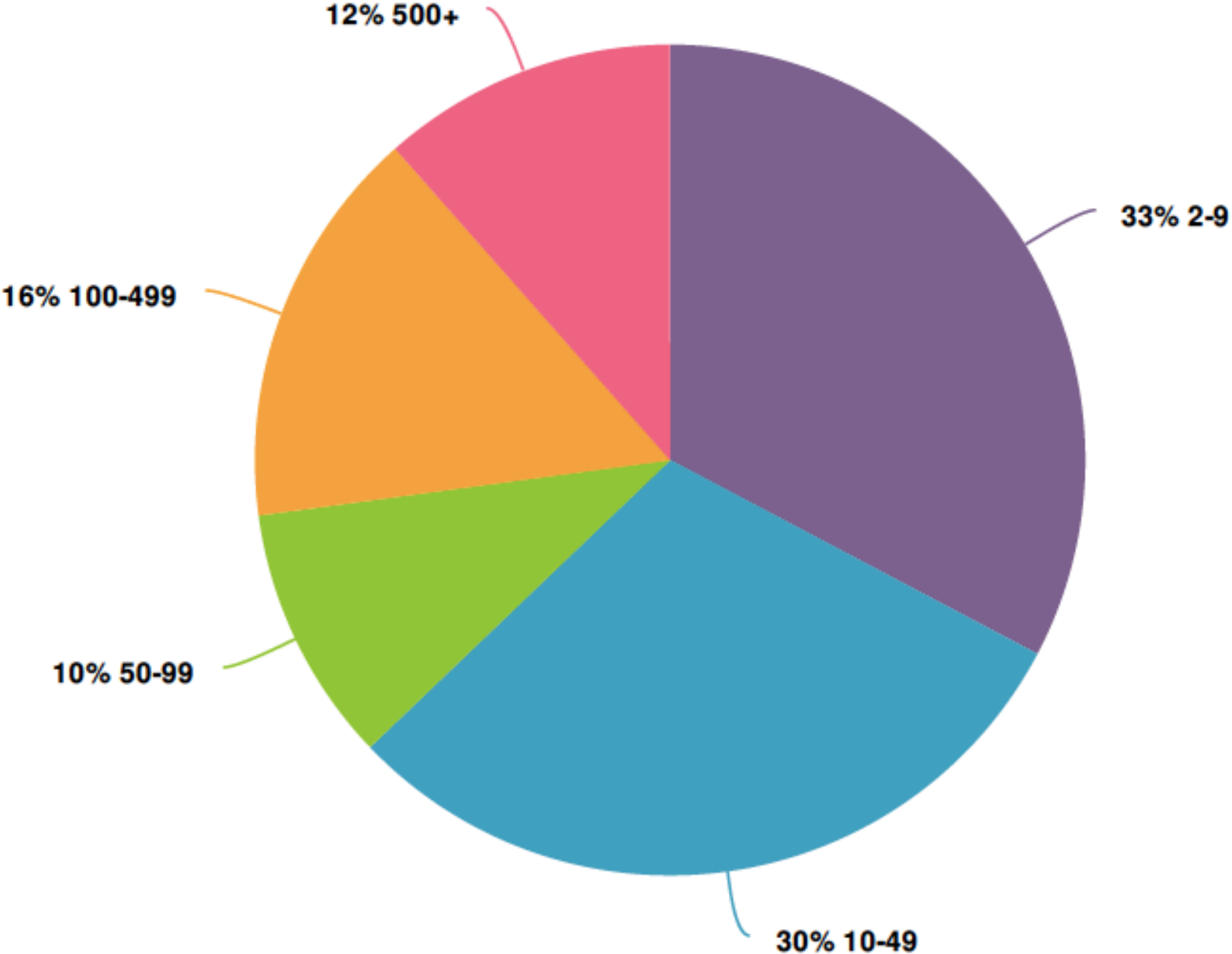
# Where is your current office located?



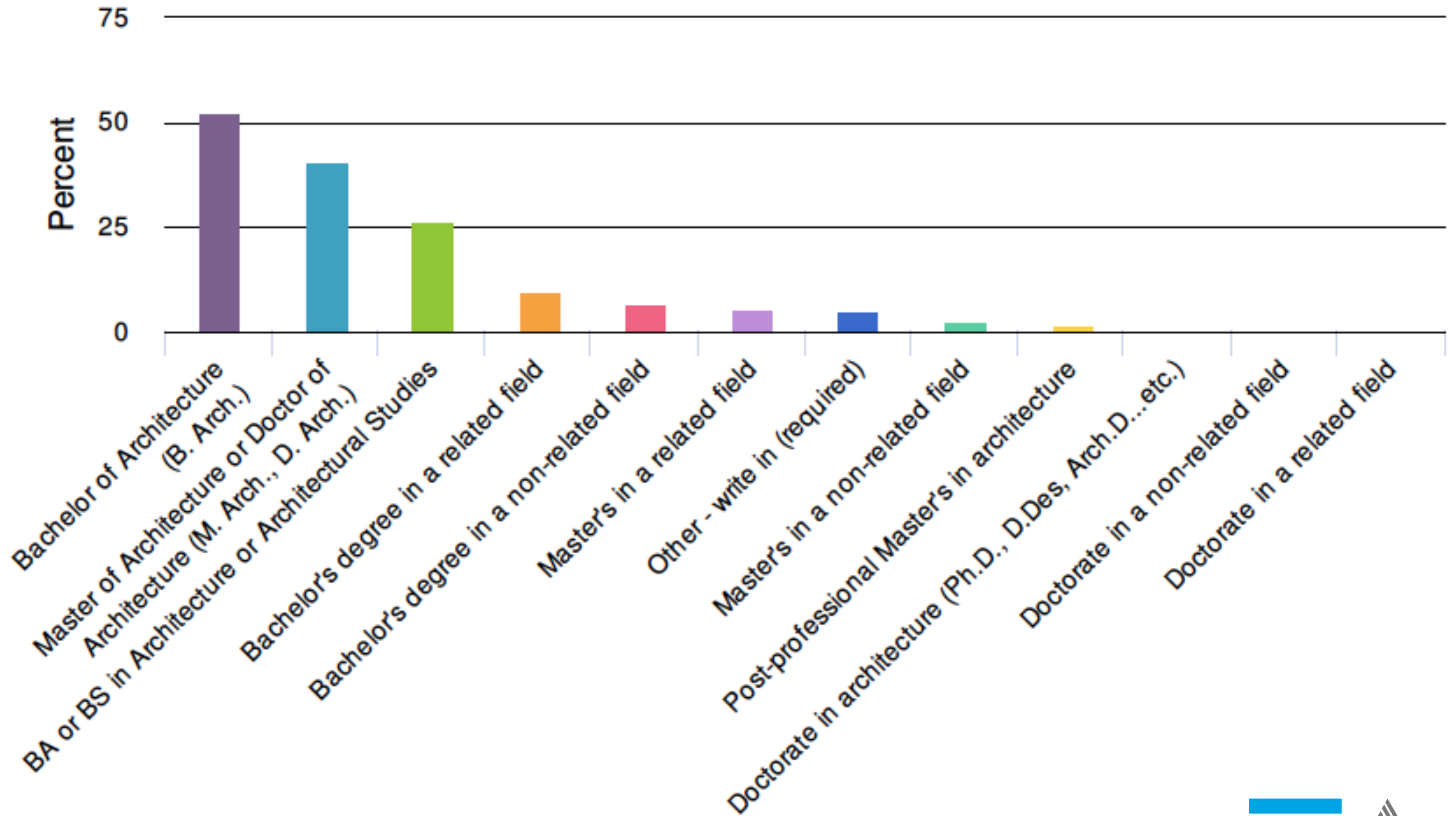
# What project types does your firm work on most often? (check all that apply)



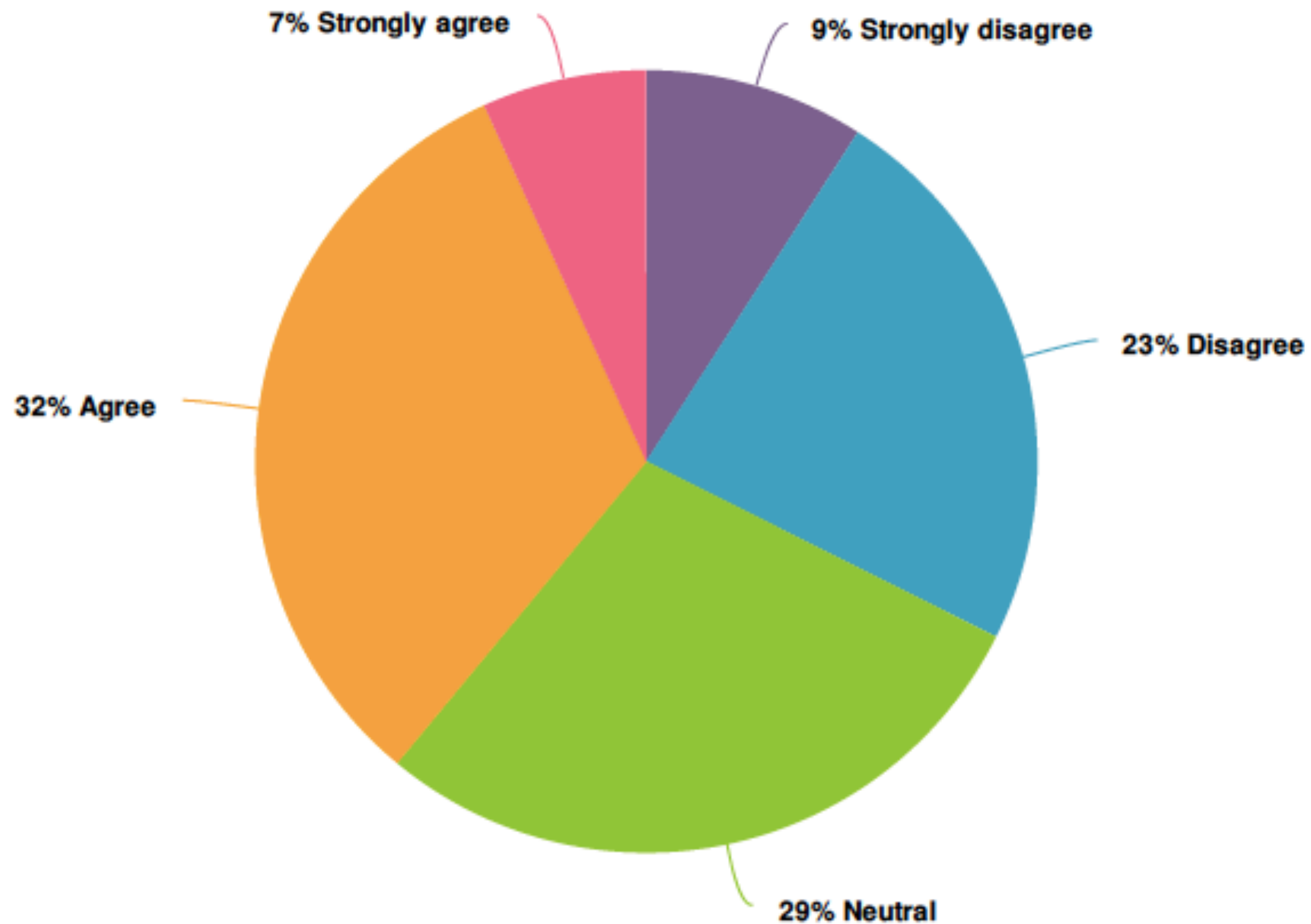
How large is your firm, including staff in all offices?  
*(not including sole practitioners)*



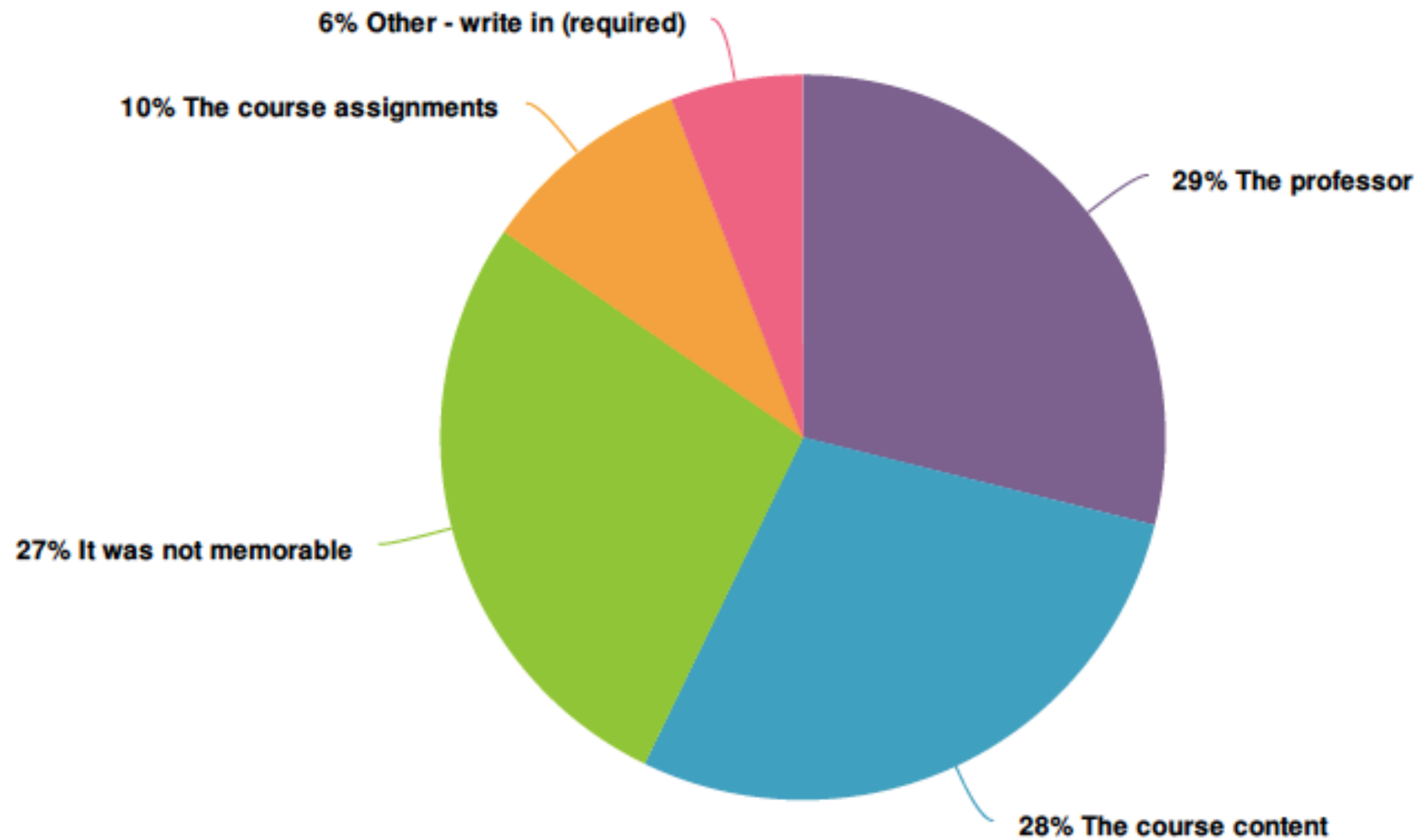
# Which of the following degrees have you completed? (select all that apply)



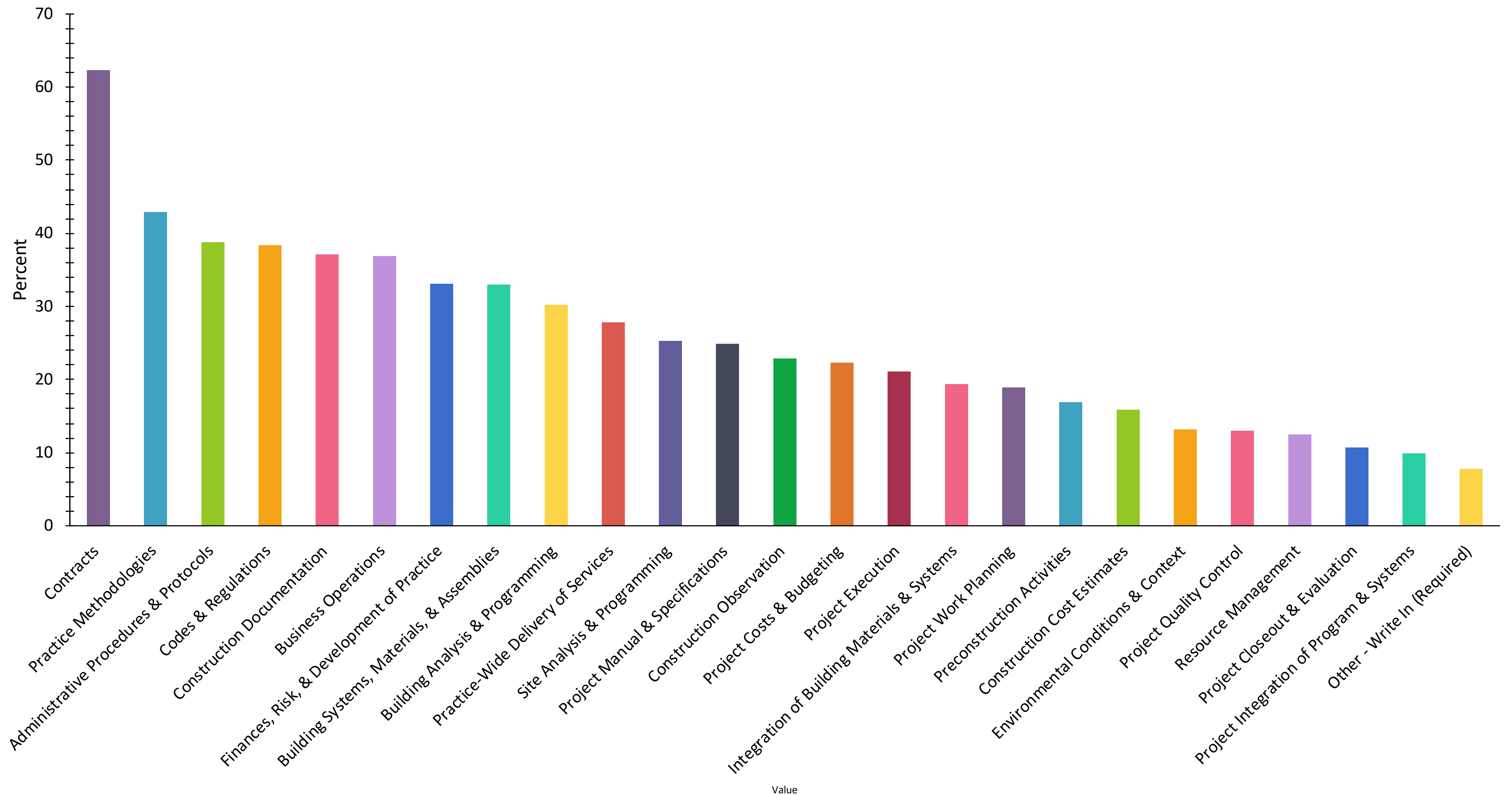
Do you feel that the professional practice course prepared you with the understanding necessary to enter the profession at the time it was taken?



# What was most memorable about the professional practice coursework you completed?



# From your recollection, which of the following AXP topics did your professional practice course cover?



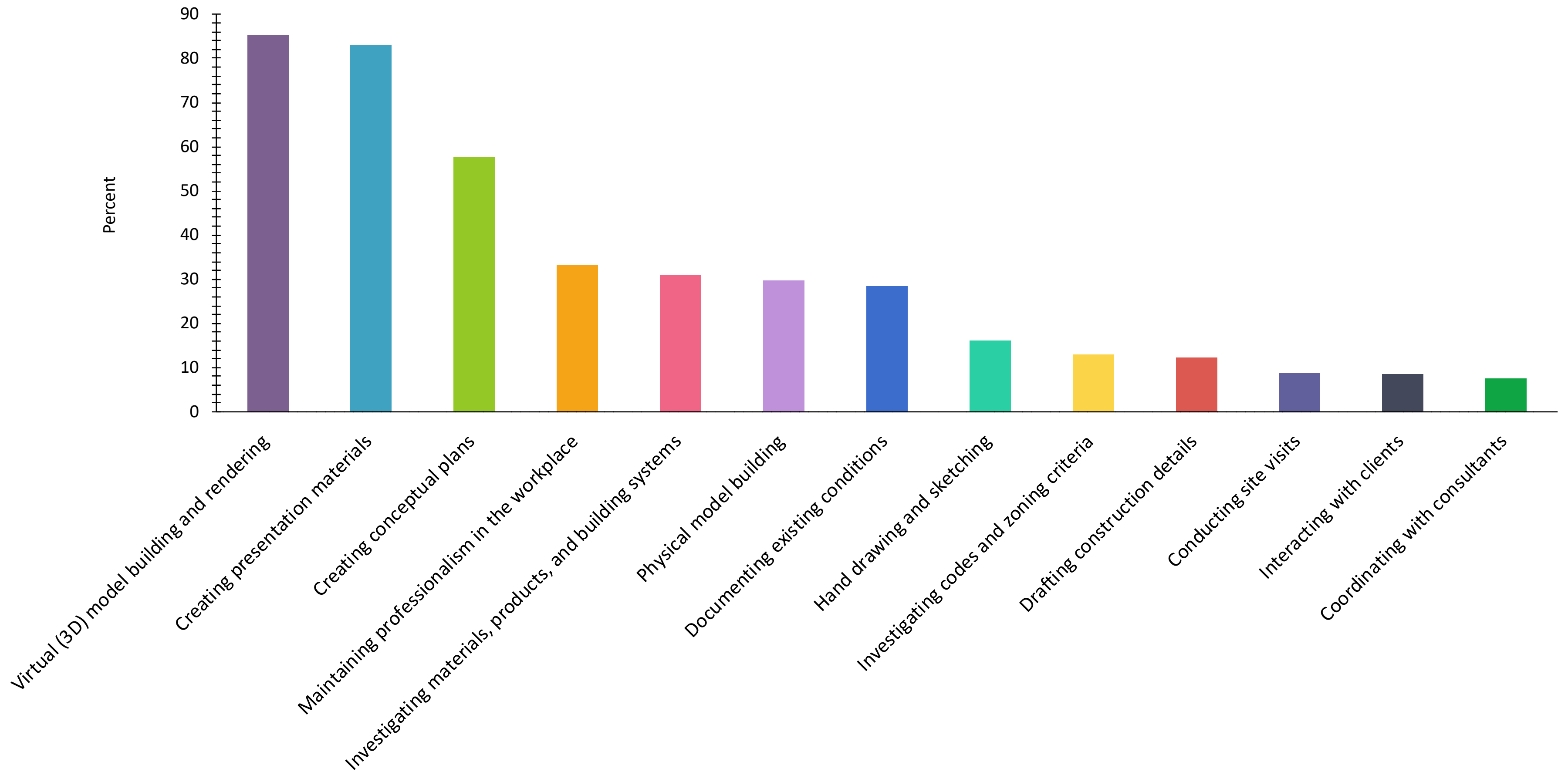
Value



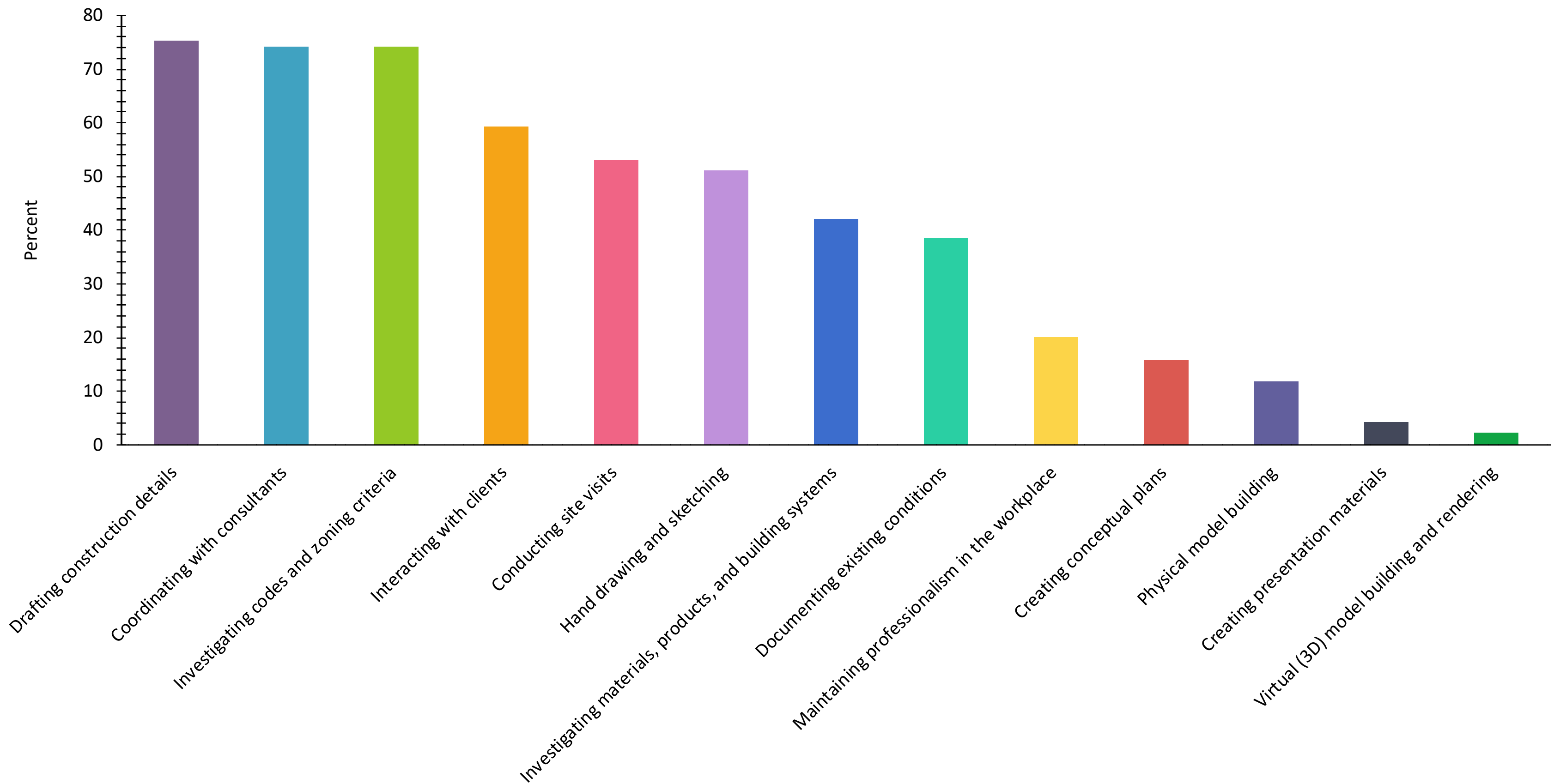
Thinking about your own experience taking professional practice courses, please rank the following categories from most emphasized to least emphasized?

Item	Overall Rank	Rank Distribution	Score	No. of Rankings
Professional Conduct	1		28,573	4,727
Legal Responsibilities	2		27,811	4,716
Practice Management	3		27,506	4,678
Project Development & Documentation	4		24,400	4,628
Project Planning & Design	5		24,389	4,621
Project Management	6		22,636	4,549
Programming & Analysis	7		22,057	4,571
Construction & Evaluation	8		18,726	4,537
Stakeholder Roles	9		16,251	4,525

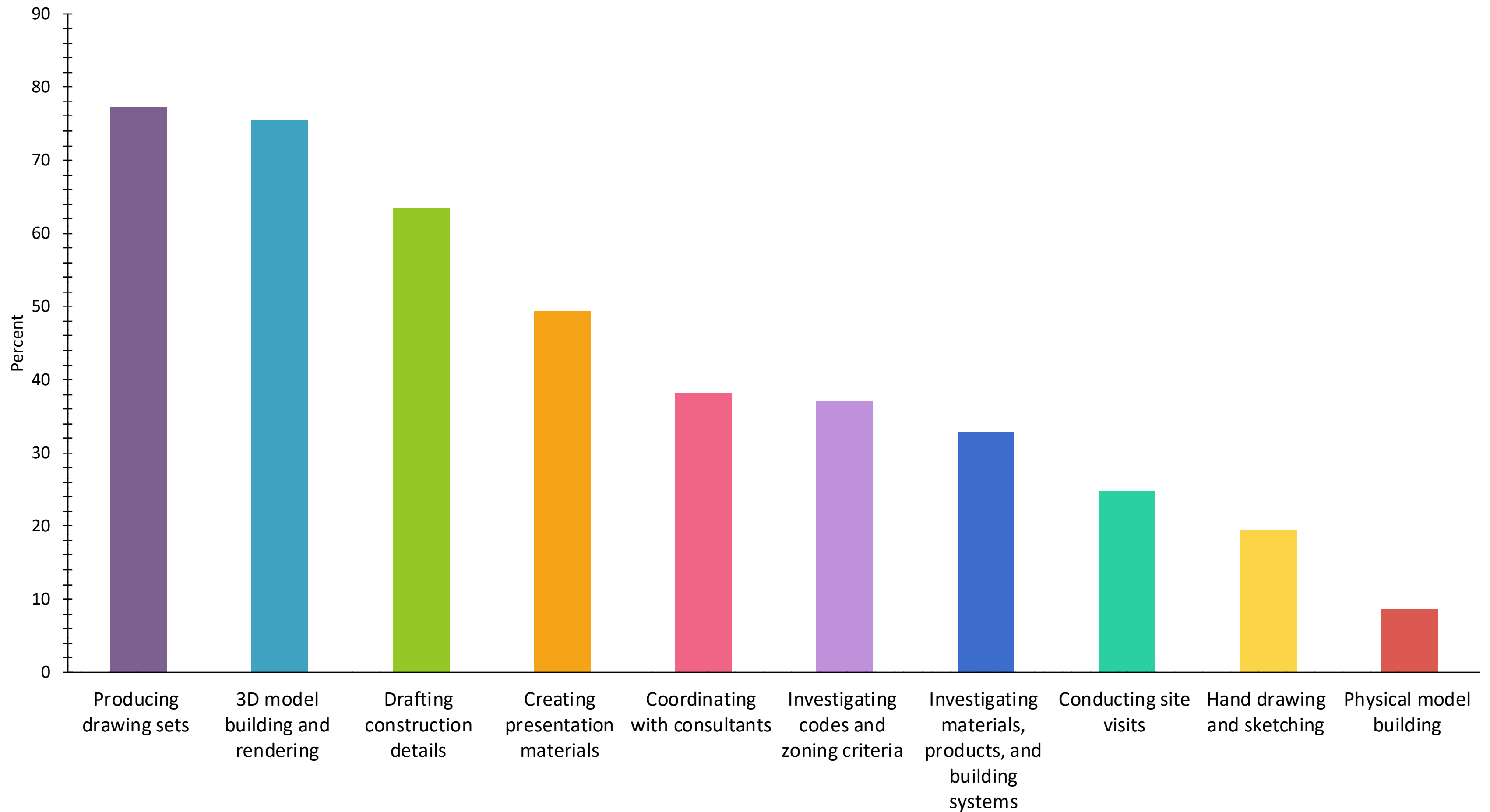
# [Firm Leaders] From your perspective, which of the following tasks are areas of strength for recent graduates?



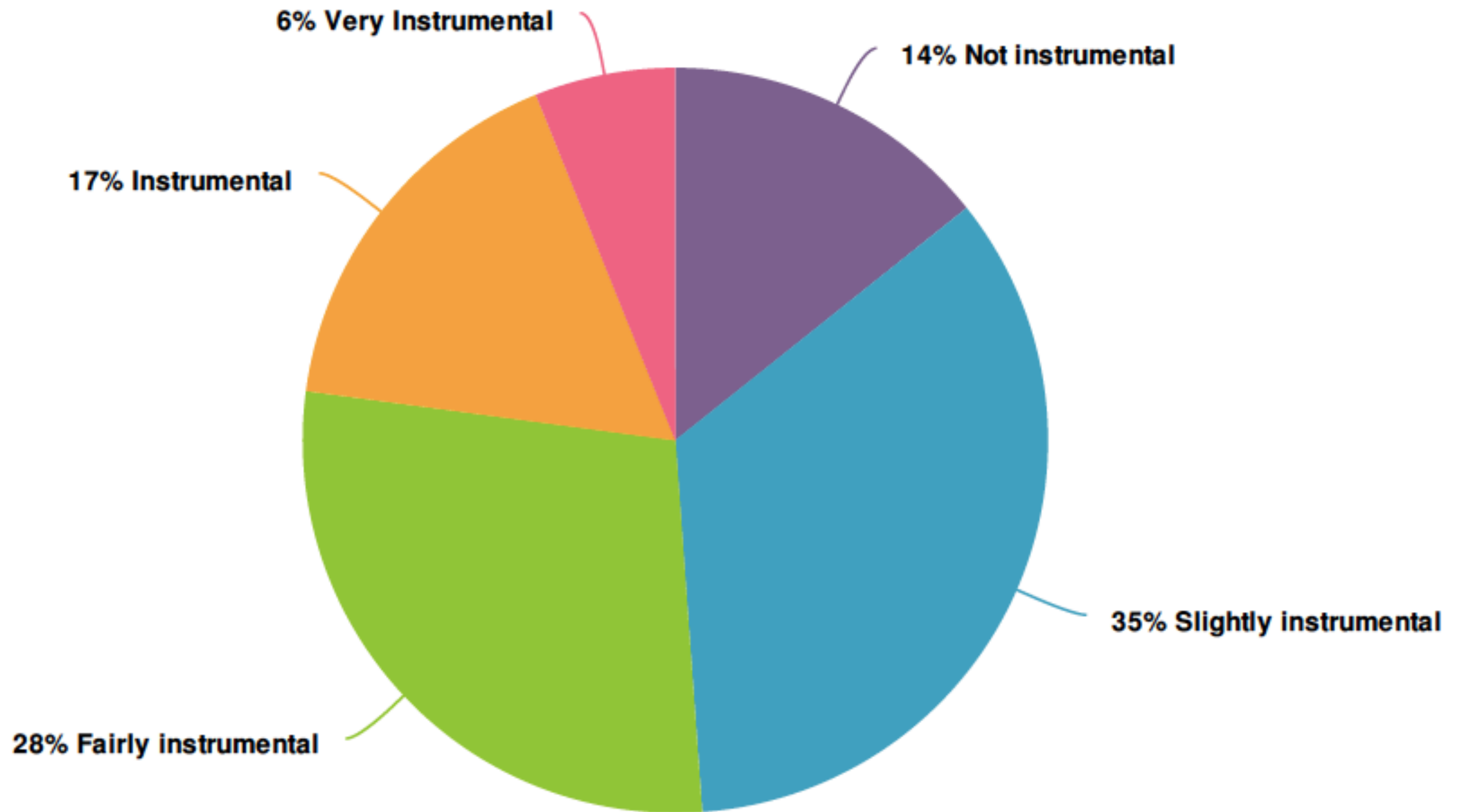
# [Firm Leaders] From your perspective, which of the following tasks are areas of weakness for recent graduates?



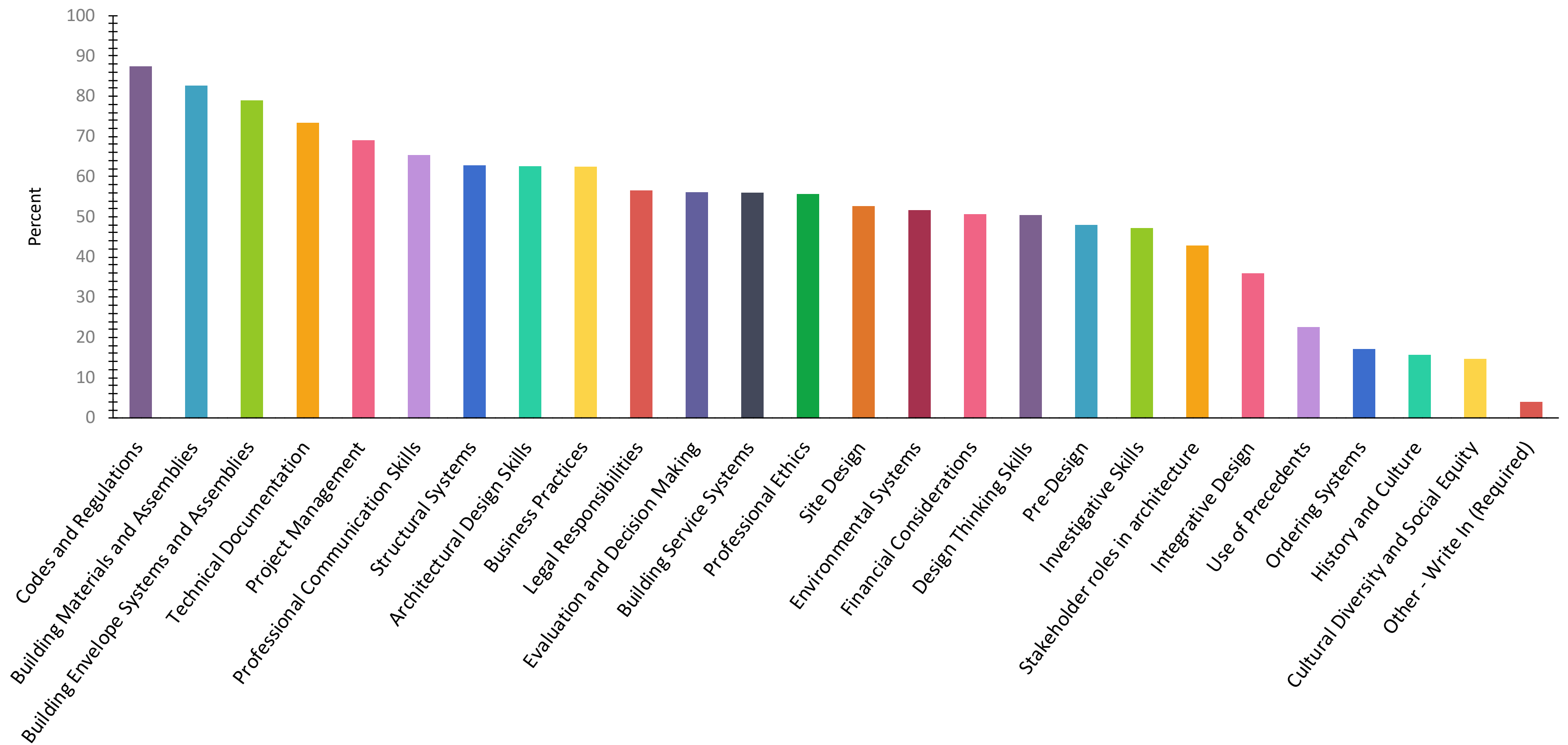
# [New Professionals] What are your primary job responsibilities?



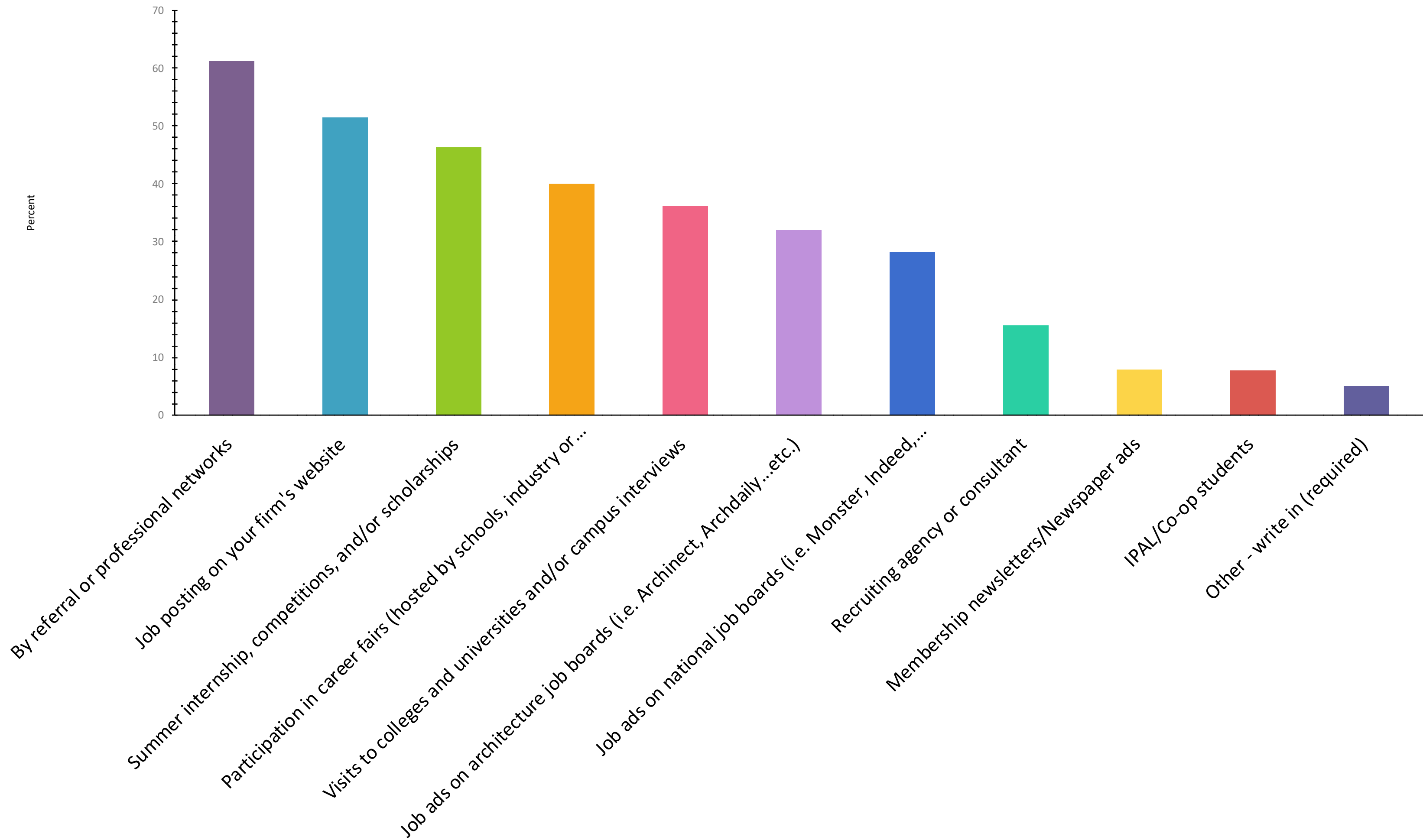
[Firm Leaders] In your opinion, how instrumental is current professional practice coursework in preparing graduates for AXP and the ARE?



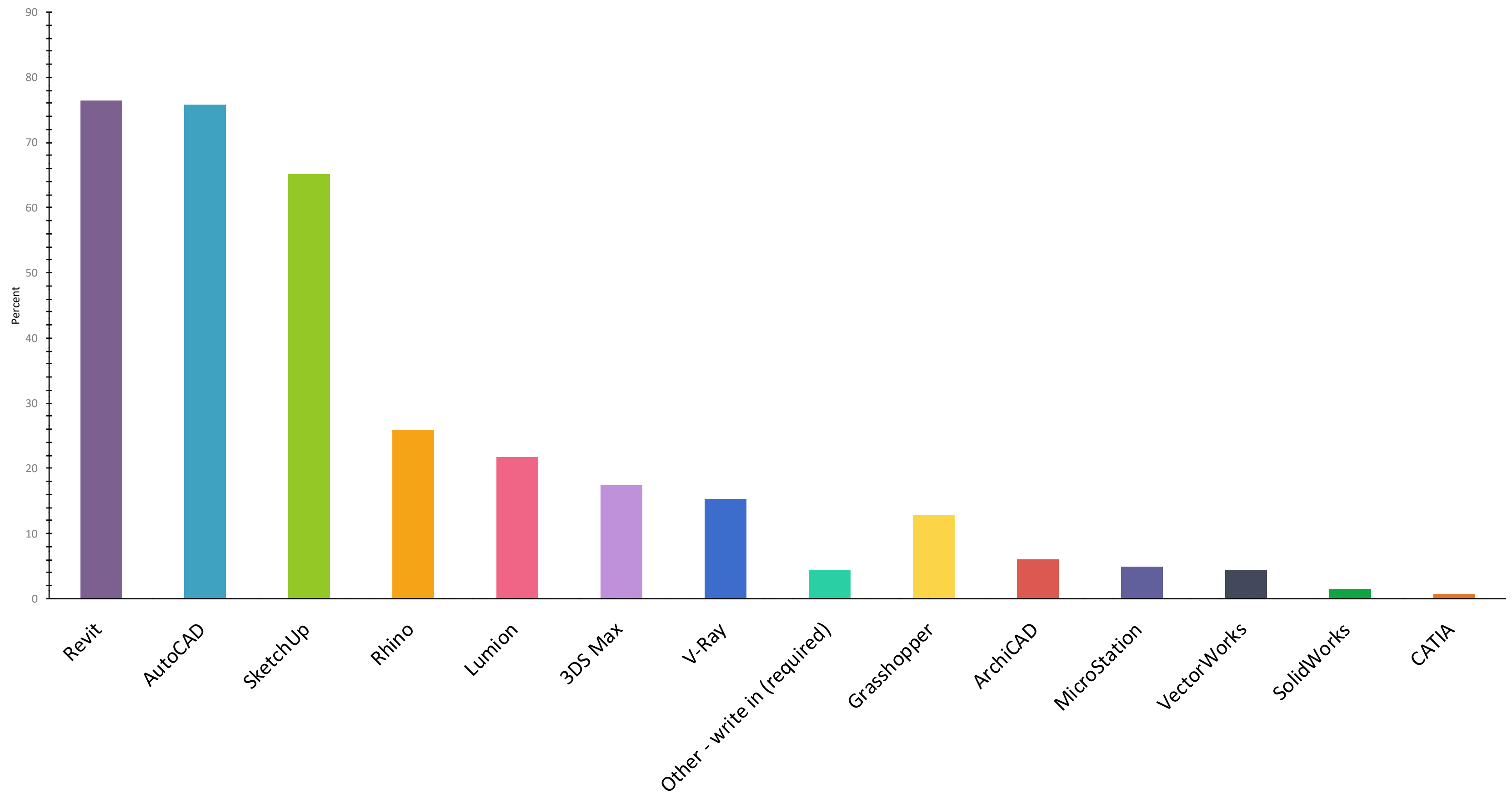
# [Firm Leaders] Which of the following topics do recent graduates continue to develop during AXP/ARE preparation?



# [Firm Leaders] How do you attract recent graduates?



# [Firm Leaders] What architectural software programs does your firm currently use?





# Progressive Firm Instrument

The Leading Firm Instrument was developed and embedded in the larger survey as a way of gauging the progressive nature of firms around the country. The seventeen affirmative statements were created with the help of two NCARB expert review panels. These statements ask about firm practices and cover a myriad of topics relevant to architecture and firm leadership.

On the next page, you will find the list of statements found to be most popular or most attainable. These statements were most frequently cited by firms as a measure of progress/forward thinking.

Additionally, statements were evaluated based on an overall average score. Under this method, the lowest average score serves as an indicator by suggesting that very few firms lead the discipline in this way.

The answer choices ranged from “Strongly Disagree” to “Strongly Agree.” On average firms were able to affirm eight of seventeen statements.

# Progressive Firm Instrument

## Most attainable progressive firm characteristics

1. My firm can provide a range of different project delivery types to best fit client needs.
2. My firm's clients seek our expertise in considering future program needs and meeting a broad range of metrics.
3. My firm implements explicit strategies to promote an equitable workplace by following best practices for reducing bias and increasing equity and transparency.
4. My firm implements explicit strategies to assist with employee growth such as support for training, time for research, flexibility to do non-billable work.
5. Over the years, my firm has expanded services beyond the traditionally defined role of the architect.

## Least attainable progressive firm characteristics

1. My firm conducts or partners with others to do systematic research about design, construction, and/or human behavior using established social science or empirical research methods.
2. My firm is frequently represented with presentations of our work at conferences, in print, or on online design forums.
3. My firm looks for new hires that demonstrate curiosity by having a niche interest or specialization.

# Job-Person Fit

When asked to evaluate each other, firms and new professionals responded as follows:

## Firms prioritized:

Fit within office culture	8.2/10
Passion/Curiosity for architecture	8.0/10
Software proficiency	7.6/10
Design ability/Portfolios	7.3/10
Desire to become licensed	7.0/10
Recommendations	6.9/10
Previous work experience	6.6/10
Academic performance	5.9/10
Project management	4.4/10
Research interest	4.4/10
Business knowledge	3.7/10

## New professionals prioritized:

Office culture	8.3/10
Support for licensure	8.2/10
Work-life balance	8.2/10
Business practices	7.8/10
Location	7.7/10
Design ability/Portfolios	7.6/10
Compensation/Benefits	7.5/10
Training opportunities	7.1/10
Firm merit/Reputation	7.0/10
Projects/Building type	6.7/10
Software used	5.9/10
Referral from friend/colleague	5.8/10
Firm size	5.7/10
Specialization	5.1/10
Research capacity	4.7/10

## Job-Person fit *(by Carnegie classification)*

**We analyzed responses based on Carnegie classifications.  
School types are defined below for reference.**

Research 1 schools award at least 20 research/scholarship doctoral degrees and have at least \$5 million in total research expenditures reported to the National Science Fund (NSF). These are often very large and the most selective.

Research 2 schools award at least 20 research/scholarship doctoral degrees and have at least \$5 million in total research expenditures reported to the National Science Fund (NSF). These are typically large and selective.

Doctoral schools award at least 20 research/scholarship doctoral degrees or at least 30 professional degrees in at least 2 programs.

Master's schools award at least 50 master's degrees and fewer than 20 doctoral degrees during the update year.

Baccalaureate schools are institutions where baccalaureate or higher degrees represent at least 50 percent of all degrees but where fewer than 50 master's degrees or 20 doctoral degrees are awarded.

Special focus schools are institutions where a high concentration of degrees are in a single field or set of related fields, in this case, architecture, art, and design.

# Job-Person fit *(by Carnegie classification)*

## **Based on their first job after graduation recent grads from...**

Special focus schools were most likely to prioritize Merit/Reputation

Research 1 schools were most likely to prioritize Design ability /Portfolios

Doctoral schools were most likely to prioritize Business practices

Research 2 schools were most likely to prioritize Office culture

Research 2 and Special focus schools were most likely to prioritize Specialization

Special focus schools were most likely to prioritize Projects/Building Type

Special focus schools were most likely to prioritize Referral from friends/colleagues

Special focus schools were most likely to prioritize Research capacity

Doctoral schools were most likely to prioritize Software used

Research 2 schools were most likely to prioritize Location

Doctoral schools were most likely to prioritize Training opportunities

Special focus schools were most likely to prioritize Work-Life balance

Research 2 were most likely to prioritize Firm size

Special focus schools were most likely to prioritize Compensation/benefits

Special focus schools were most likely to prioritize Desire to become licensed

\* See the previous slide for Carnegie definition

# Job-Person Fit *(by firm size)*

*XS=2-9 employees*

*S=10-49 employees*

*M=50-99 employees*

*L=100-499*

*XL=500+ employees*

## **When evaluating new applicants with 0-2 years of work experience ...**

XL firms were most likely to prioritize “Academic performance”

XL firms were most likely to prioritize “Design ability/Portfolios”

XS firms were most likely to prioritize “Business knowledge”

S firms were most likely to prioritize “Fit within office culture”

XS and XL firms were most likely to prioritize “Passion/Curiosity for architecture”

XS firms were most likely to prioritize “Project management”

XS firms were most likely to prioritize “Recommendations”

XL firms were most likely to prioritize “Research interest”

XS and S firms were most likely to prioritize “Software proficiency”

S and M firms were most likely to prioritize “Previous work experience”

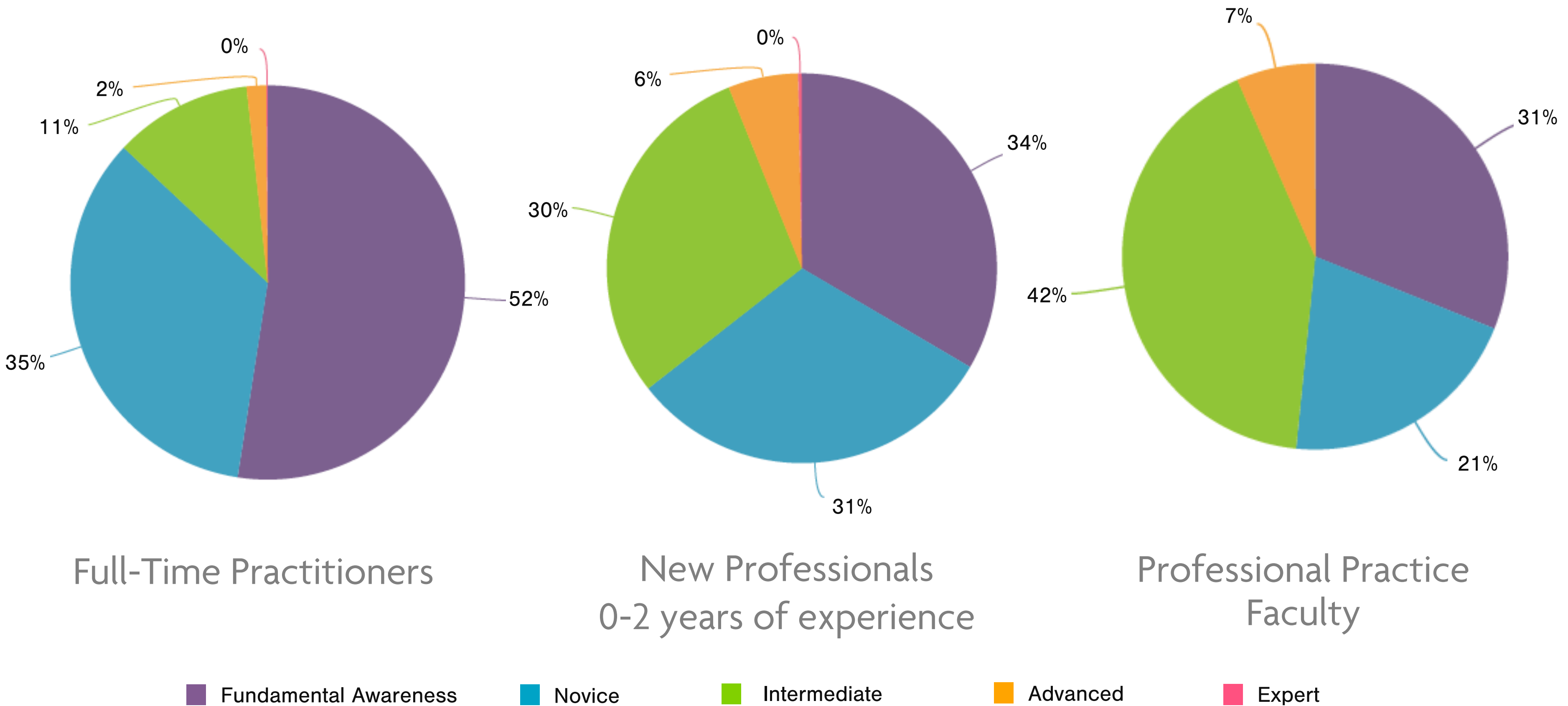
XL firms were most likely to prioritize “Desire to become licensed”

# Other Findings: Firm Size

- The survey found that a human resource departments and firm size are positively correlated. The likelihood of a human resource department increases with the size of the firm.
- XS firms were significantly less likely to hire recent grads.
- XS firms are most likely to agree or strongly agree to the question “Do you feel that the professional practice course prepared you with the understanding necessary to enter the field at the time it was taken.”
- XL firms are most likely to report recent graduates’ level of competency as fundamental awareness (the lowest level). However, XL firms are most likely to report a general level of competency of intermediate or advanced from their own professional practice course.
- XS firms are most likely to report graduates’ level of competency as intermediate.
- XS firms are most likely to title new hires with 0-2 years of experience as “architectural intern” or “draftsperson,” and the likelihood of both titles progressively decreases as firm size increases.
- Finding a job via a summer internship, competition, and/or scholarship is positively correlated with firm size. As firm size increases, so does the likelihood that a recent hire secures a job in this way.

# Other Findings: Comparisons to Part I

At the end of the professional practice course, what is the target level of competency for students?





# Other Findings: Comparisons to Part I

Which of the following AXP topics did/does your professional practice course cover?

## Top 15 areas cited by practitioners

1. Contracts
2. Practice Methodologies
3. Administrative Procedures & Protocols
4. Codes & Regulations
5. Construction Documentation
6. Business Operations
7. Finances, Risk, & Development of Practice
- 8. Building Systems, Materials, & Assemblies**
- 9. Building Analysis & Programming**
10. Practice-wide Delivery of Services
- 11. Site Analysis & Programming**
- 12. Project Manual & Specifications**
13. Construction Observation
14. Project Costs & Budgeting
15. Project Execution

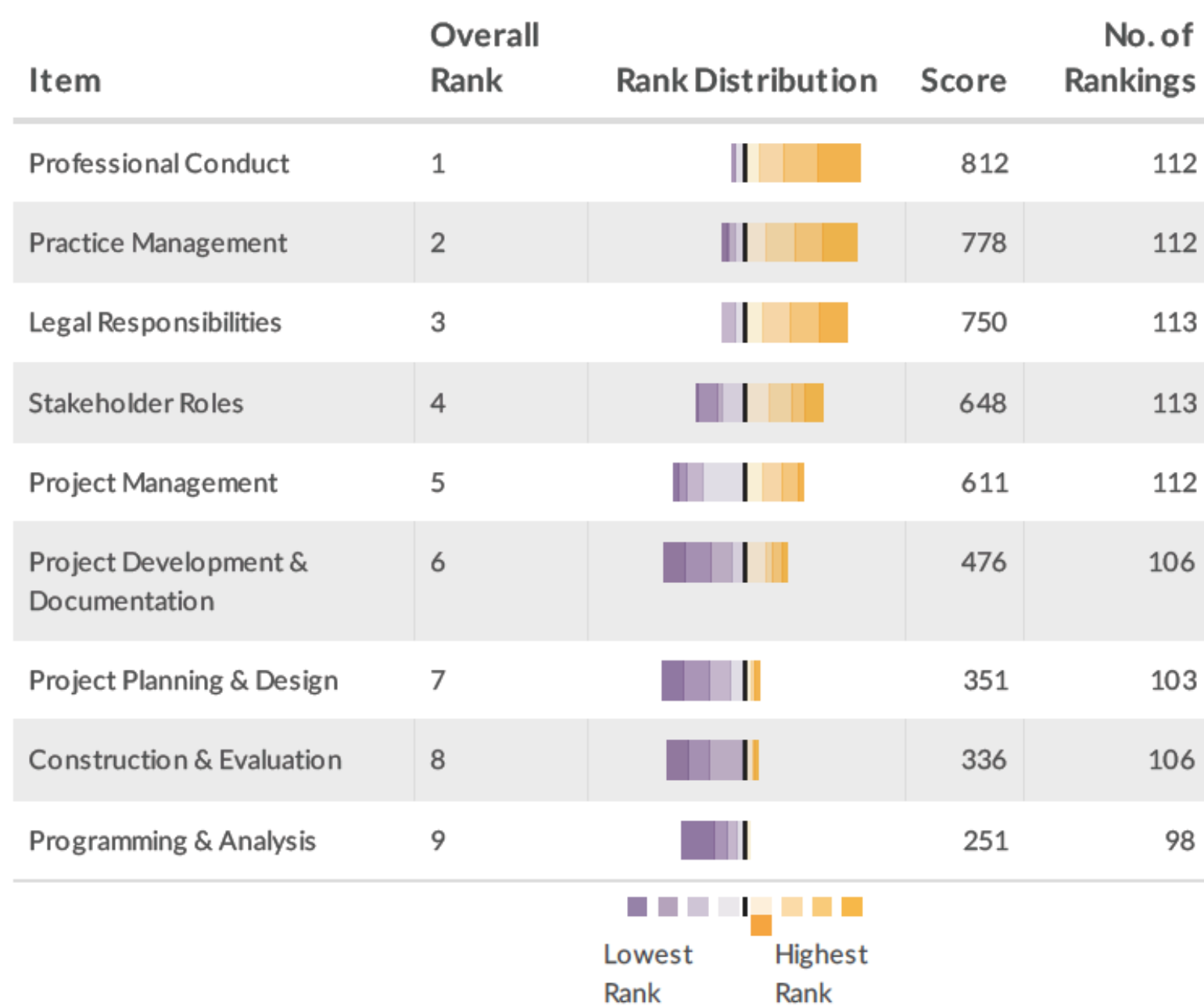
## Top 15 areas cited by professional practice professors

1. Practice Methodologies
2. Finances, Risk, & Development of Practice
3. Business Operations
4. Administrative Procedures & Protocols
5. Contracts
6. Practice-wide Delivery of Services
7. Codes & Regulations
8. Project Costs & Budgeting
- 9. Project Work Planning**
- 10. Construction Cost Estimates**
11. Construction Documentation
12. Project Execution
13. Construction Observation
- 14. Preconstruction Activities**
- 15. Project Closeout & Evaluation**

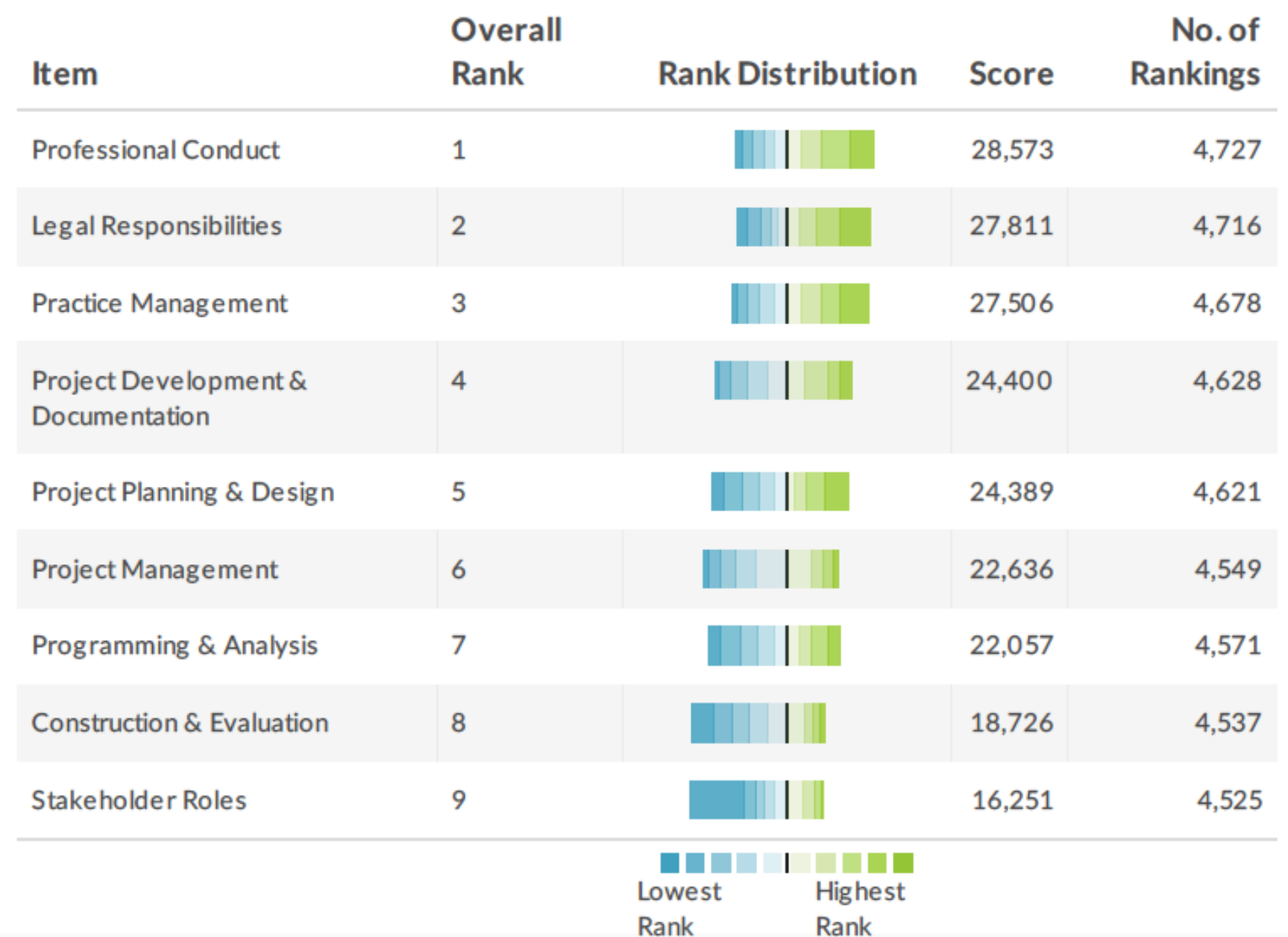
■ Notes areas not cited by both practitioners and professors

# Other Findings: Comparisons to Part I

Thinking about your own experience taking professional practice courses, please rank the following categories from most emphasized to least emphasized?



2018 Survey of Professional Practice Faculty



2019 Survey of Practitioners

# Other Findings: Comparisons to Part I

- When comparing responses from both Part I and Part II, we found recent graduates and professional practice faculty held similar views when asked about the level of competency obtained. Practitioners assessed lower competency levels for recent graduates on average than professors.
- Our research also found that the average professional practice faculty member and the average firm leader are more similar than many think. Both averaged more than 20 years of experience, worked in an XS firm, are licensed in the U.S., and are most likely to identify as Caucasian men.
- Both professors and practitioners noted “contracts” as a large area of focus for professional practice coursework.
- However, while ethics was integral to professors, practitioners rarely mentioned ethics as a topic for professional practice coursework. However, the practitioners were asked to remember their coursework, which could have been 5, 10, 15+ years ago, and so this absence is not necessarily indicative of a lack of ethics taught.
- Lastly, firm leaders were far more likely to have B.Arch degrees than their counterparts teaching professional practice, who reported M.Arch degrees most often.