



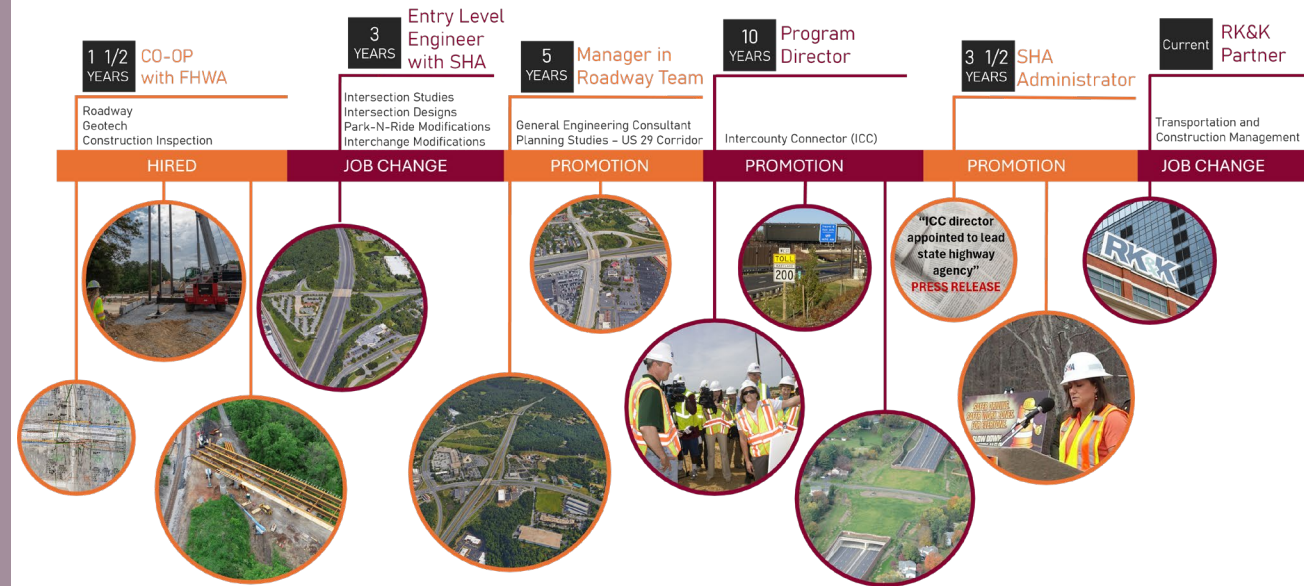
2024 Maryland Engineering Conference

October 17, 2024

Melinda B. Peters, PE, CCM
Partner, RK&K

**INDUSTRY
TRENDS &
BUILDING THE
FUTURE OF OUR
INDUSTRY**

My Civil Engineering Career





Civil Engineering Career

1 1/2
YEARS

CO-OP with FHWA

Roadway
Geotech
Construction Inspection

HIRED

3
YEARS

Entry Level Engineer with SHA

Intersection Studies
Intersection Designs
Park-N-Ride Modifications
Interchange Modifications

JOB CHANGE





Civil Engineering Career

5 YEARS Manager in Roadway Team

General Engineering Consultant
Planning Studies – US 29 Corridor

PROMOTION



10 YEARS Program Director

Intercounty Connector (ICC)

PROMOTION



Civil Engineering Career



3 1/2 YEARS SHA Administrator

Current RK&K Partner

PROMOTION

JOB CHANGE

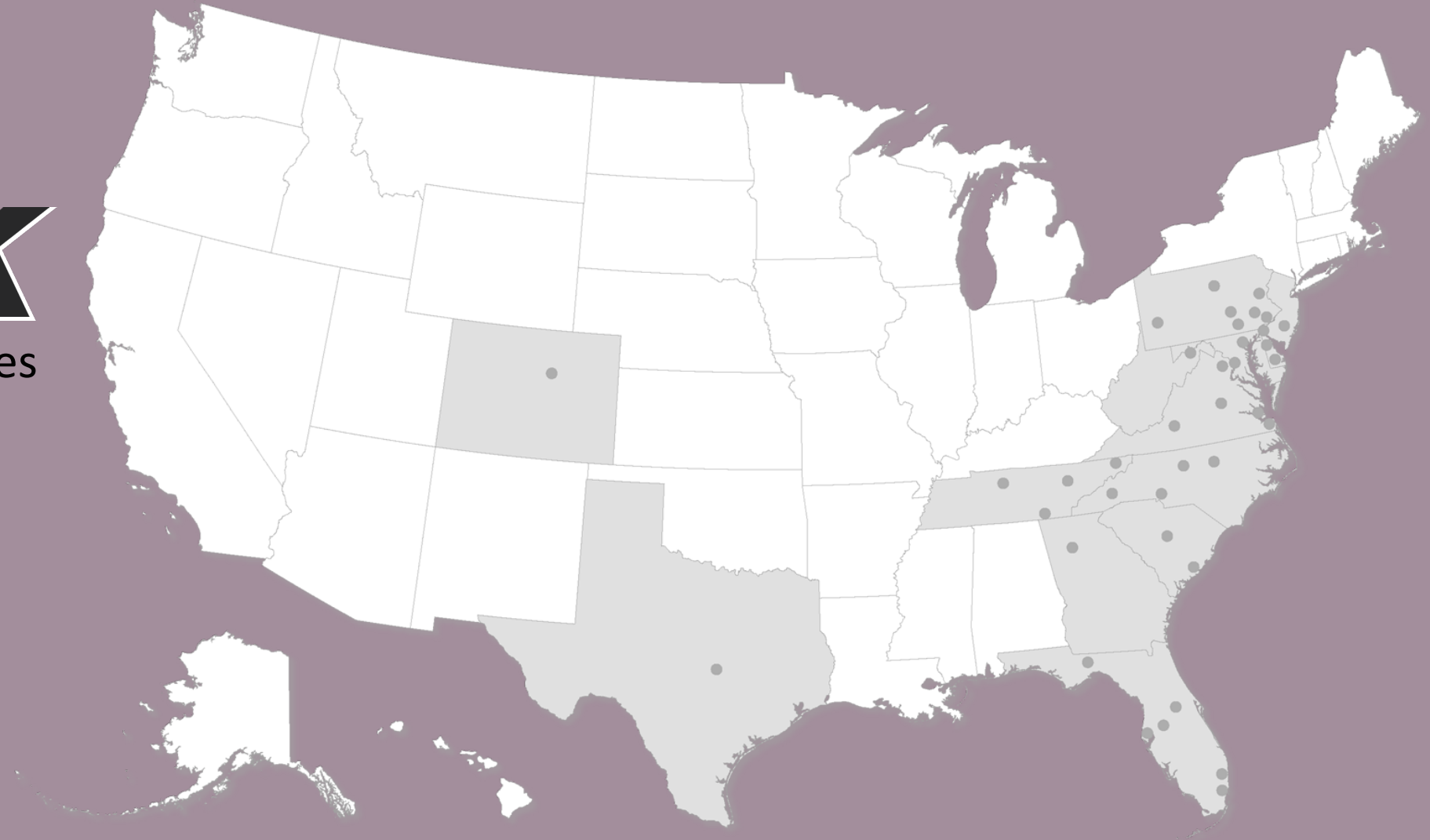
Transportation and Construction Management

"ICC director appointed to lead state highway agency"
PRESS RELEASE



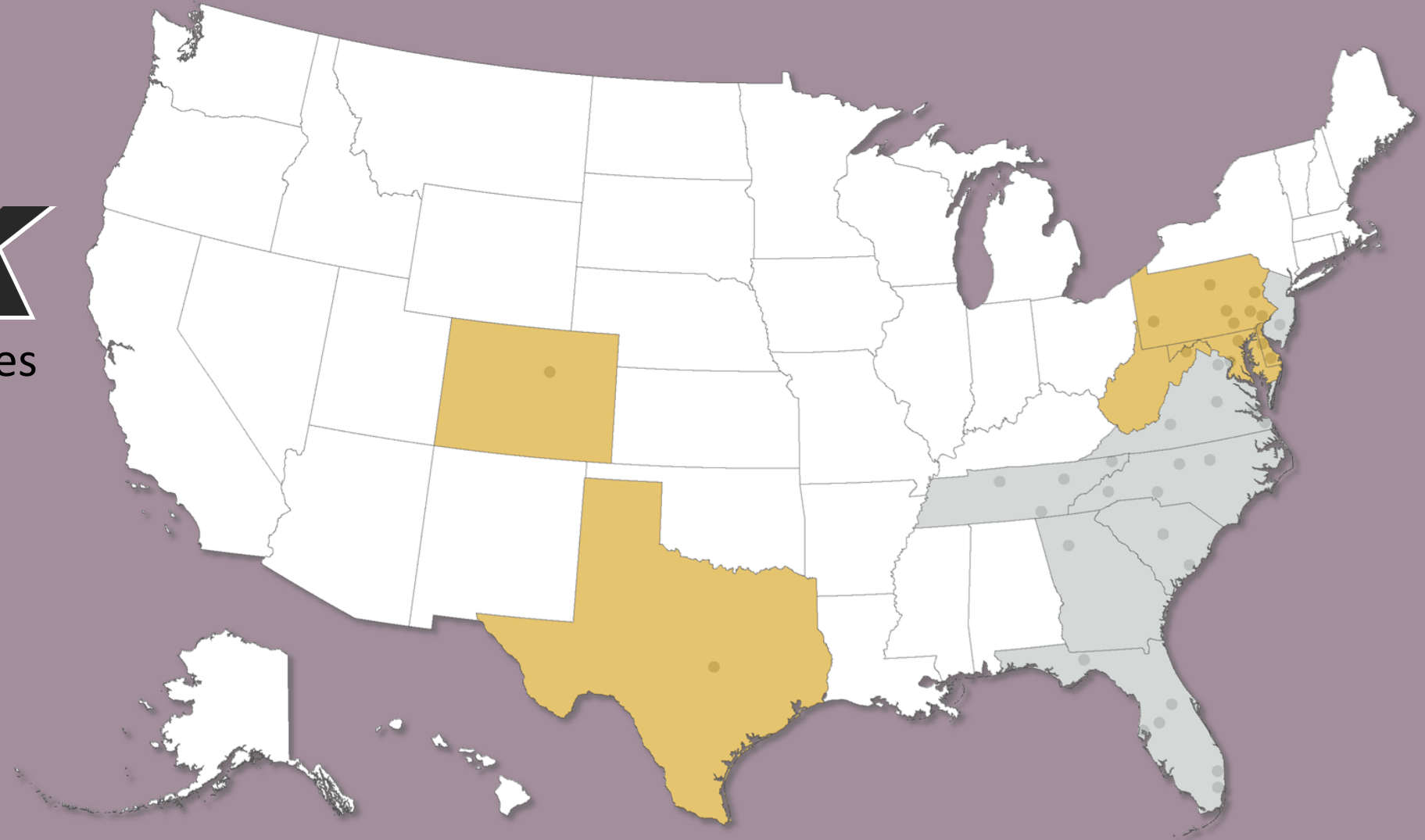


- 1,700 employees
- 38 offices
- 13 states + DC



RK&K

- 1,700 employees
- 38 offices
- 13 states + DC





Roadway Design



Structures



Water Resources



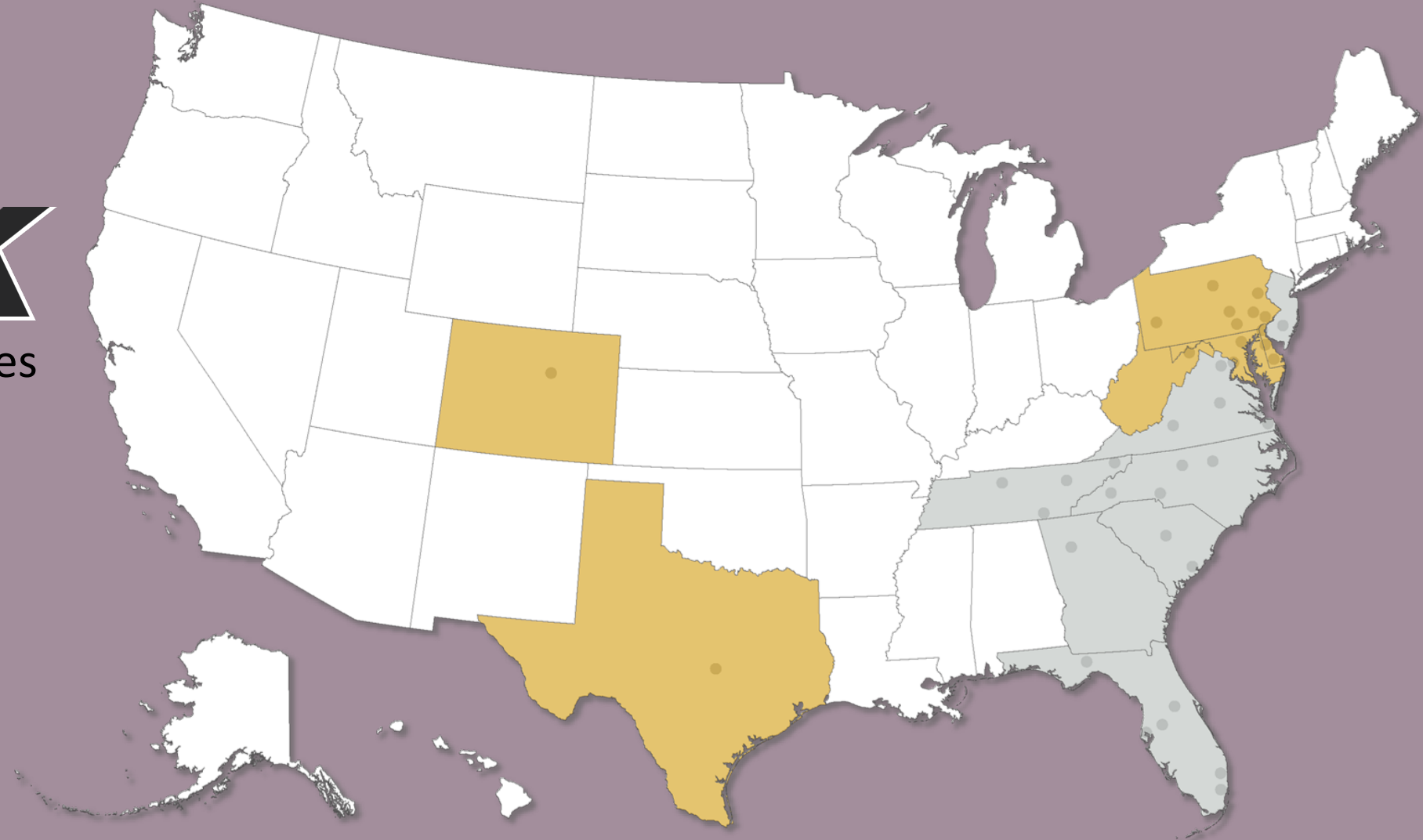
Construction Management



Natural Resources

RK&K

- 1,700 employees
- 38 offices
- 13 states + DC



Transit / Rail



Planning



Geotechnical



Traffic / ITS

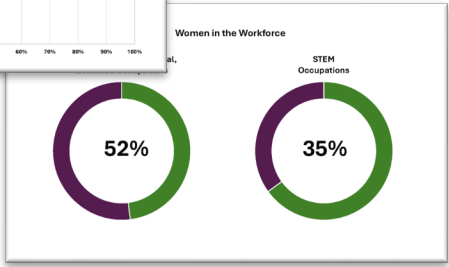
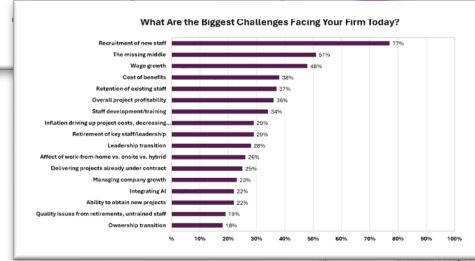
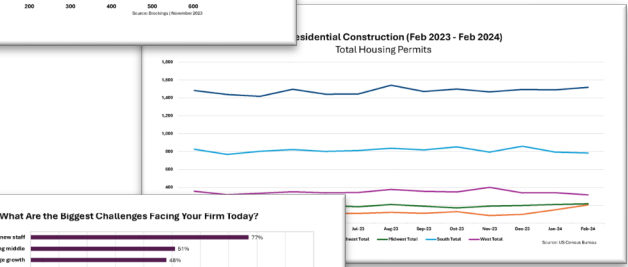
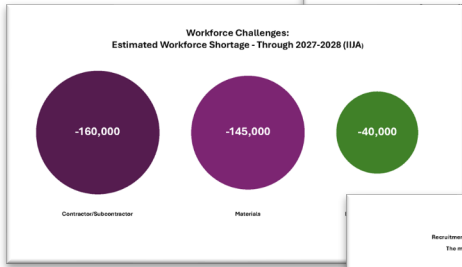
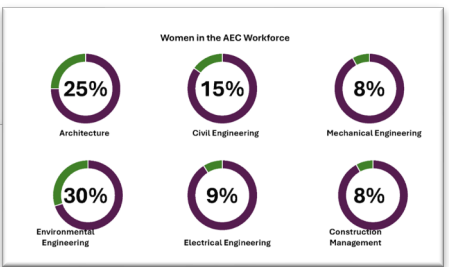
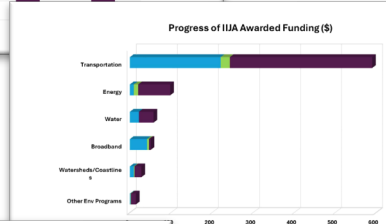
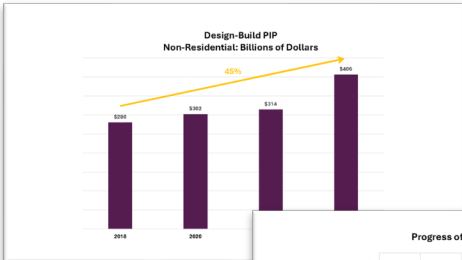


Surveying

Opportunities / Challenges

- **Industry is constantly evolving**
- **Future workforce**
- **Role of AI and Technology in our business**

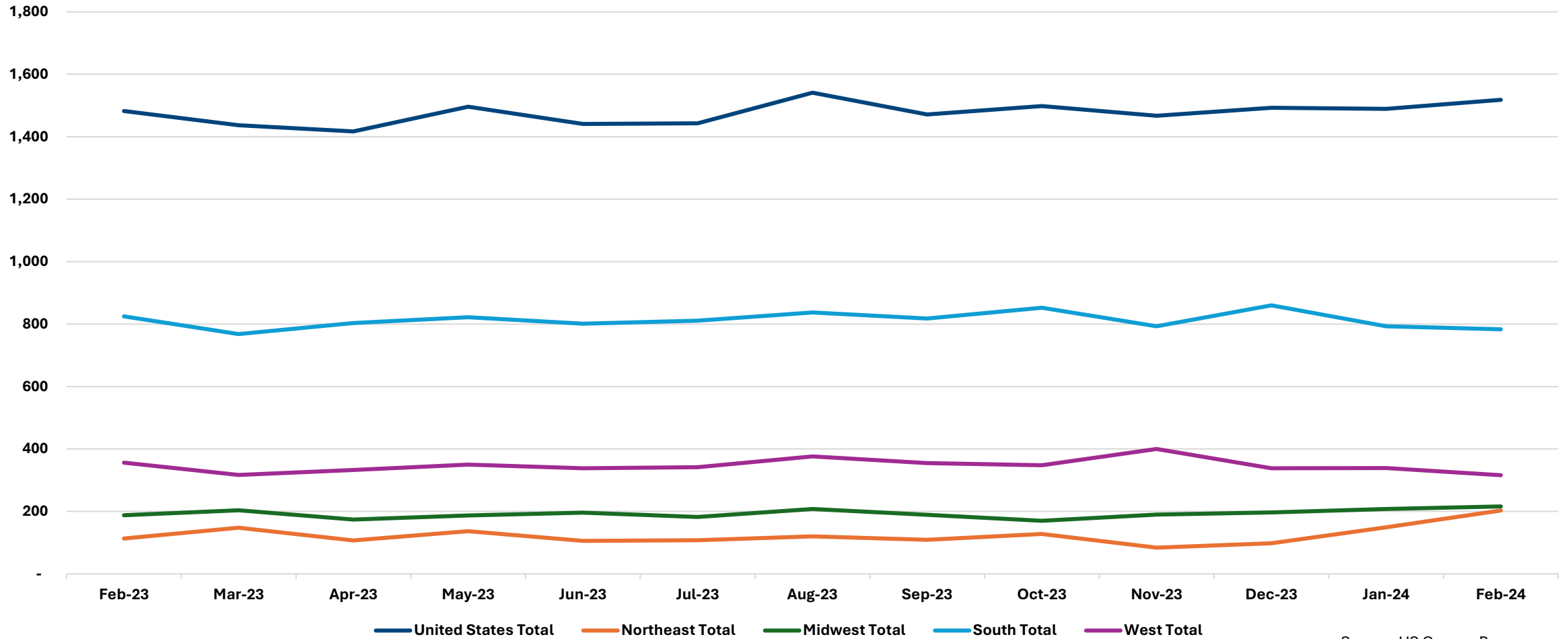
Industry Trends





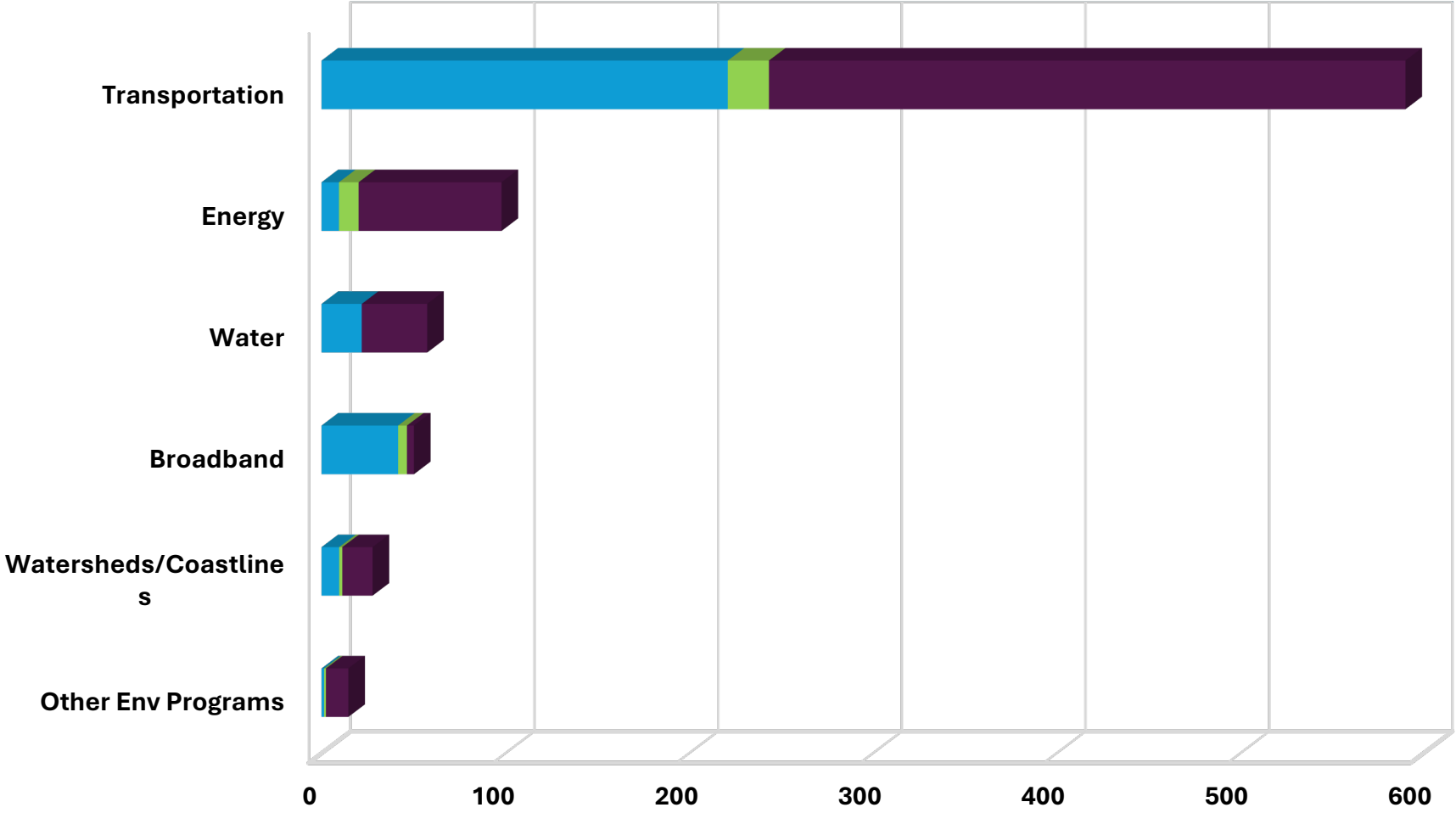
New Residential Construction (Feb 2023 - Feb 2024)

Total Housing Permits



Source: US Census Bureau

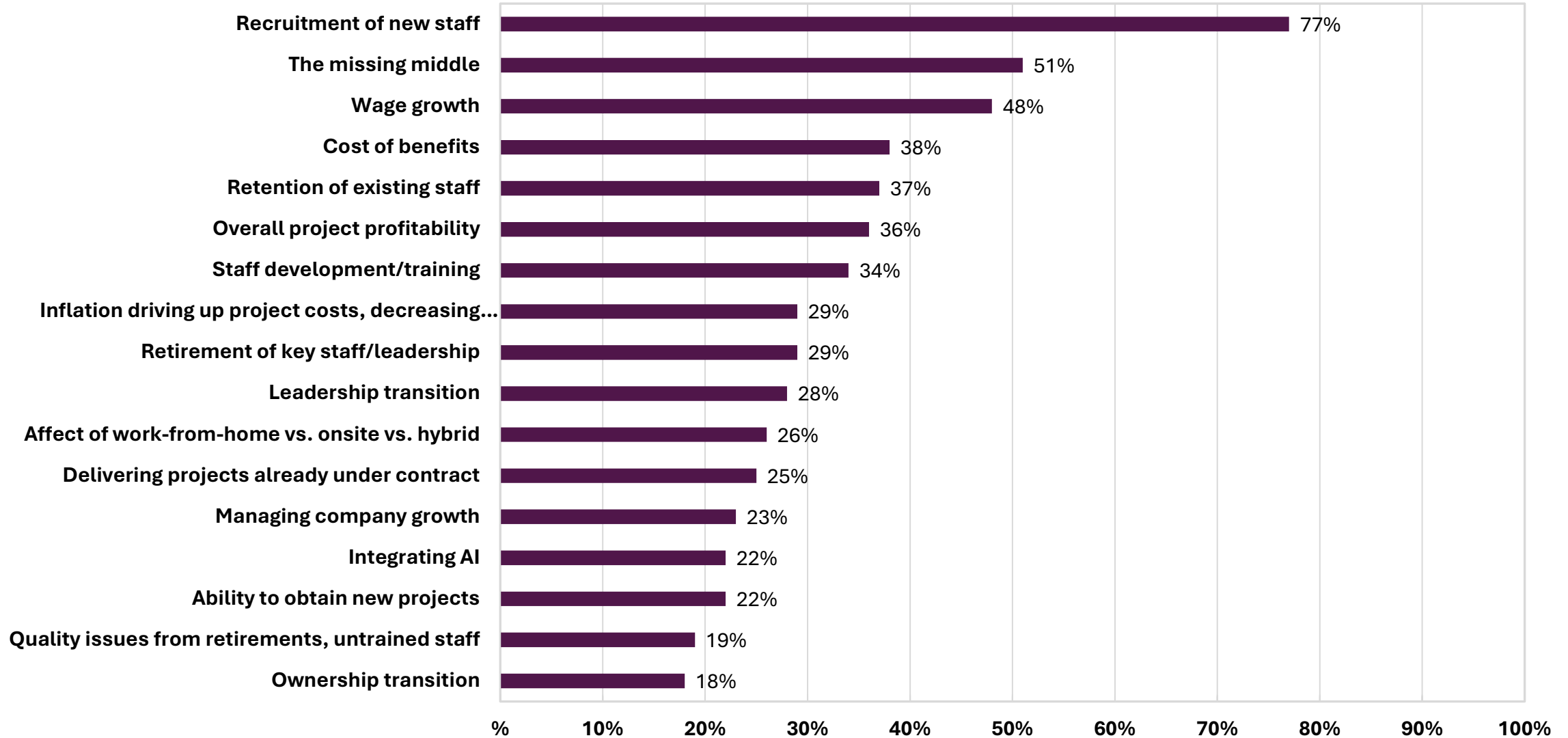
Progress of IJA Awarded Funding (\$)



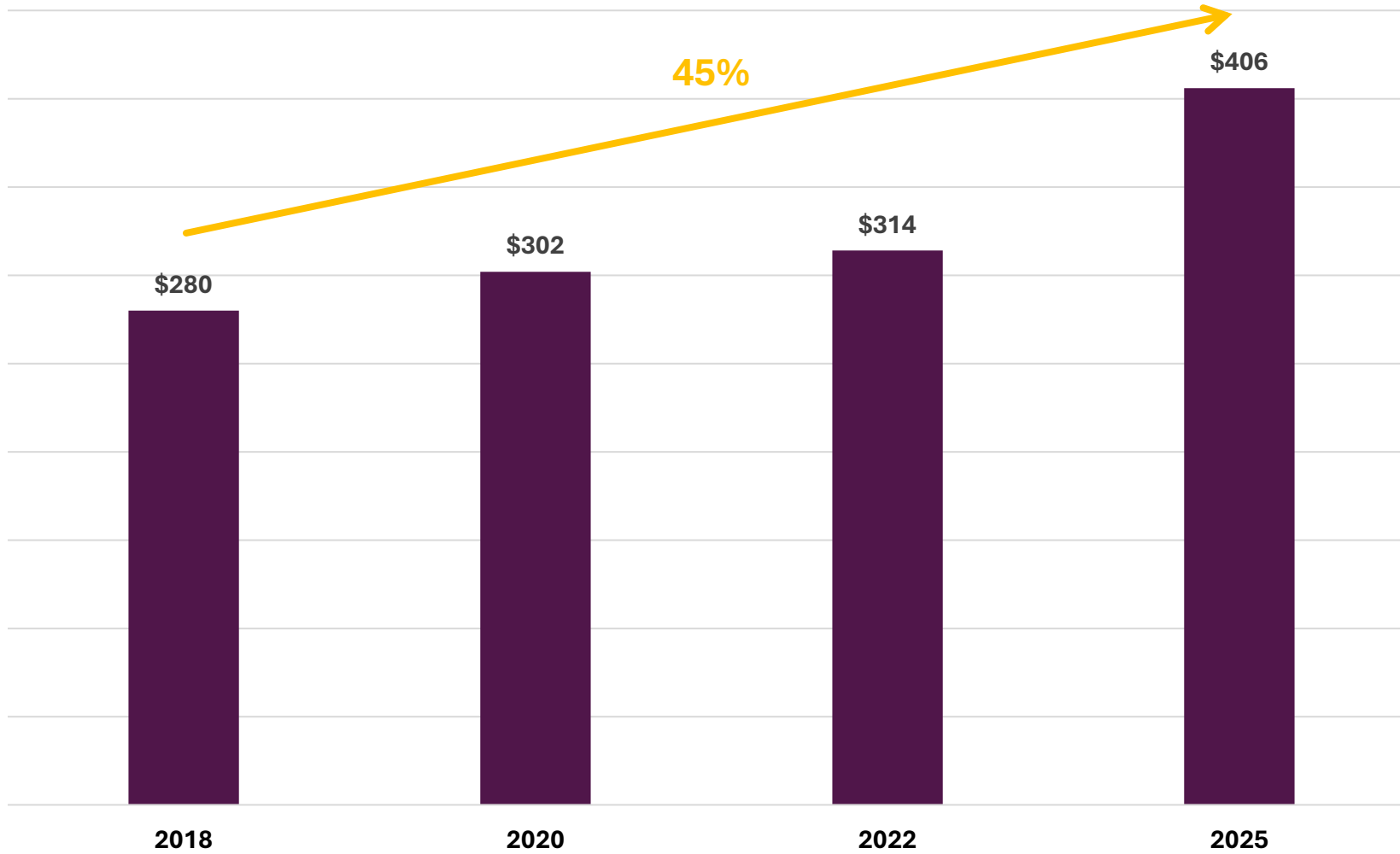
Source: Brookings | November 2023

■ Formula/Direct ■ Competitive ■ Remaining

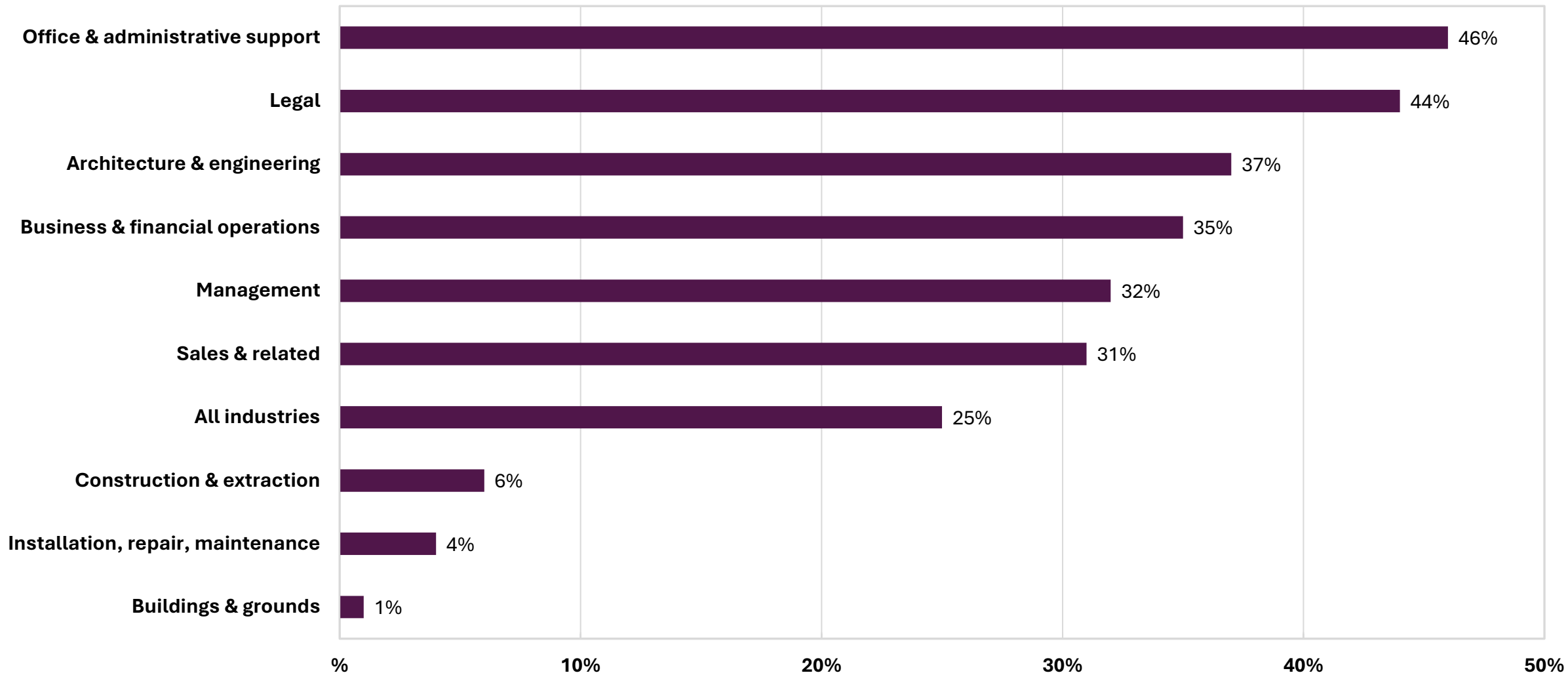
What Are the Biggest Challenges Facing Your Firm Today?



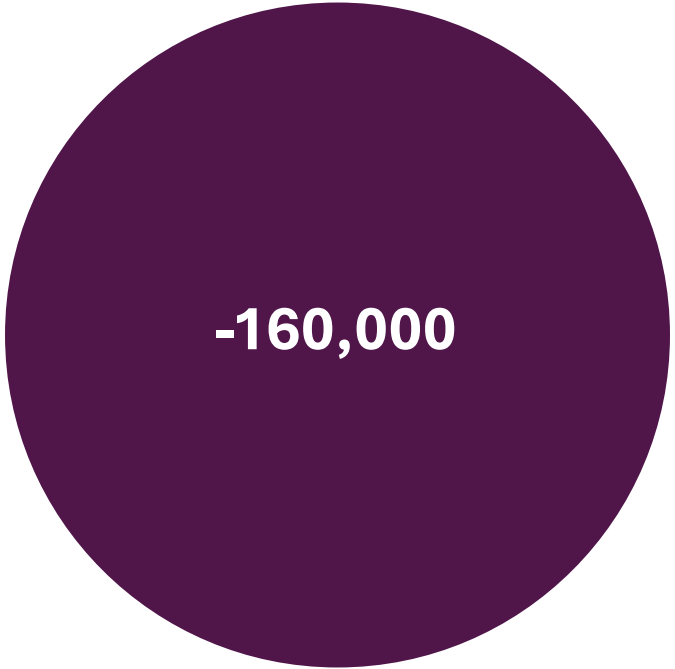
Design-Build PIP Non-Residential: Billions of Dollars



AI Impact on Select Industries



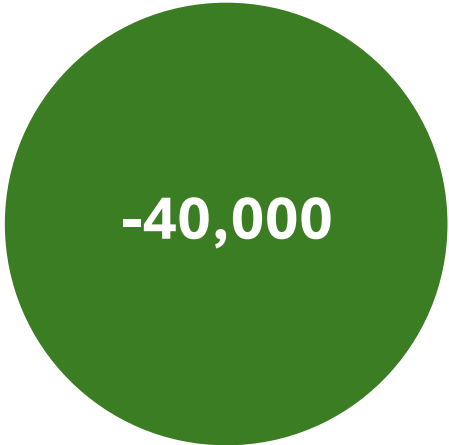
**Workforce Challenges:
Estimated Workforce Shortage - Through 2027-2028 (IIJA)**



Contractor/Subcontractor

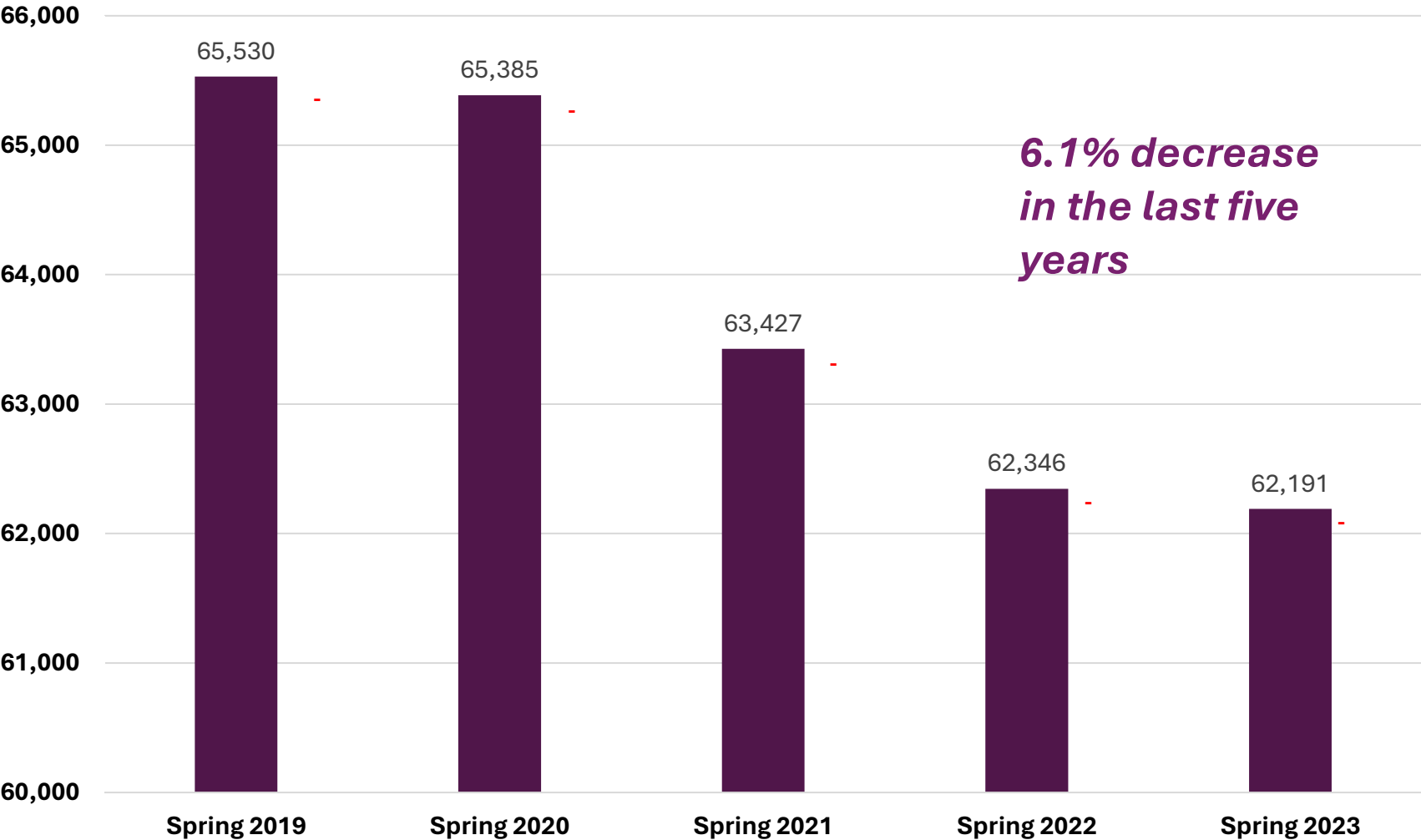


Materials



Engineering/Technology

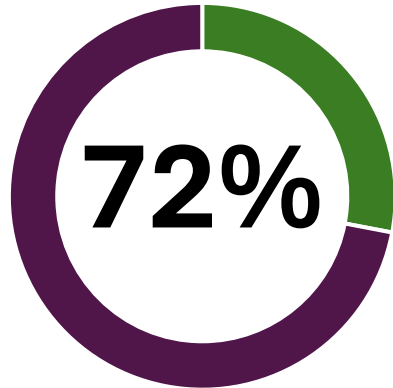
Estimated Engineering Enrollment 4-Year Institutions



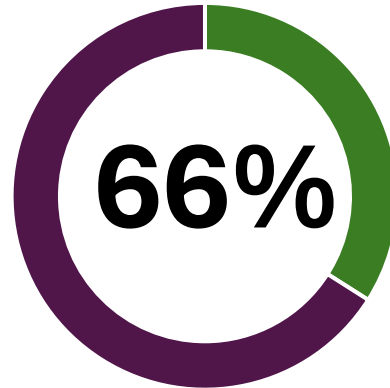
Source: National Student Clearinghouse Research Center

The New Normal: Talent Considering Leaving Their Firm (Next 12 Months)

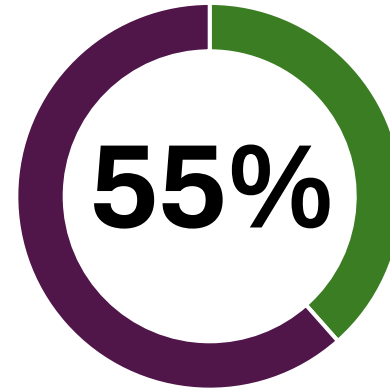
Gen Z



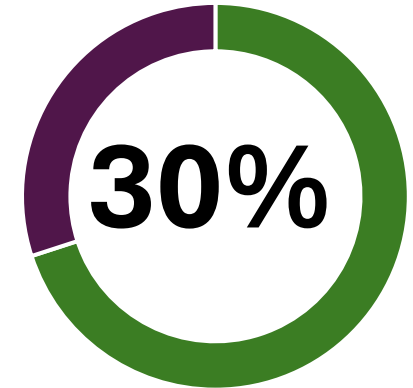
Millennial



Gen X



Baby Boomer



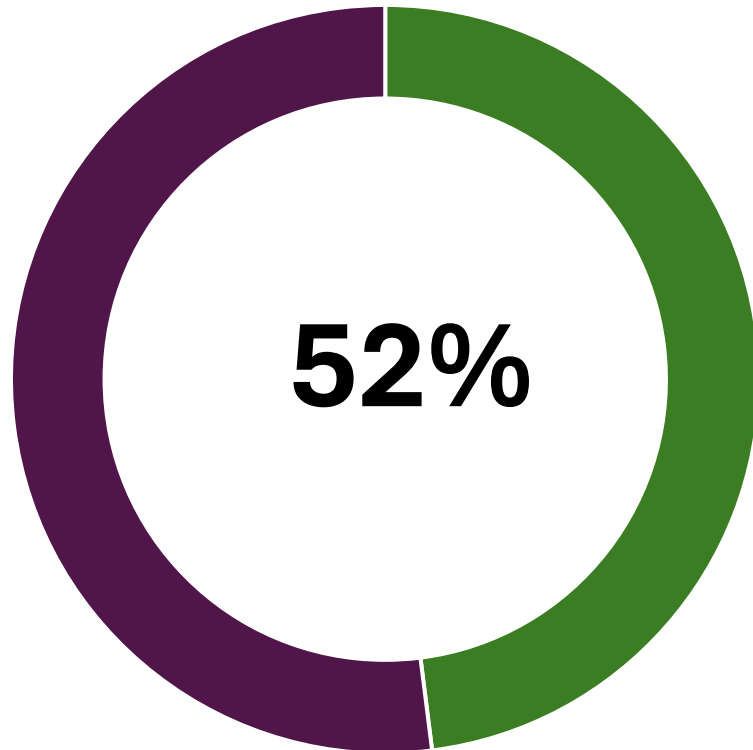
Median Tenure by Age

Age Range	Median Tenure
25-34	2.8 years
35-44	4.9 years
45-54	7.5 years
55-6	9.9 years
65+	10.3 years

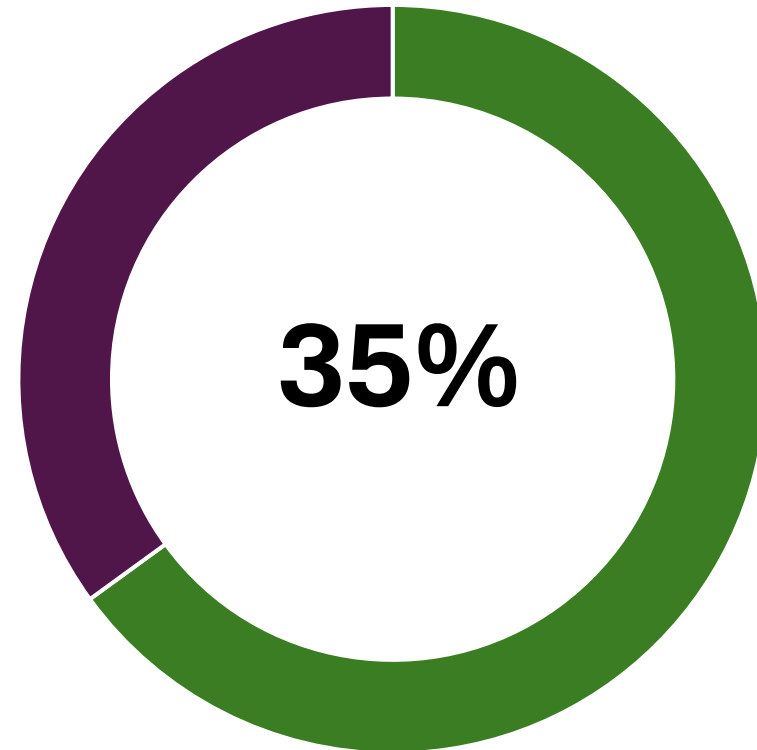
Source: US BLS (9/2020); Gallup

Women in the Workforce

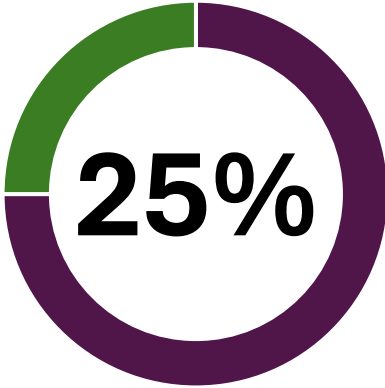
Management, Professional,
& Related Occupations



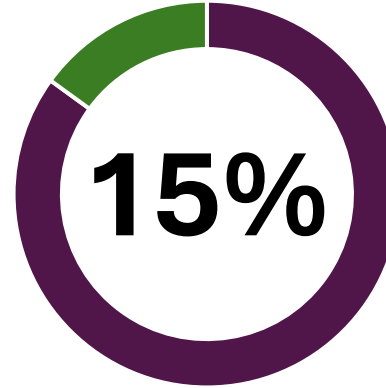
STEM
Occupations



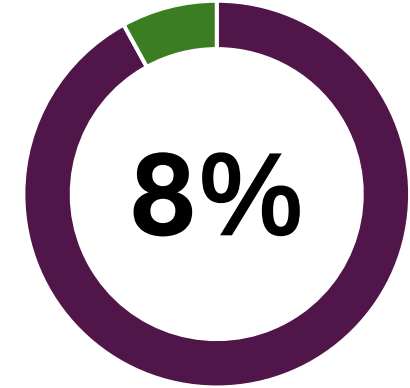
Women in the AEC Workforce



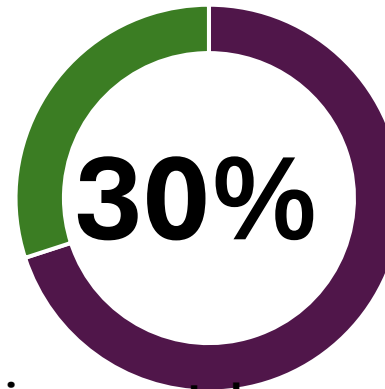
Architecture



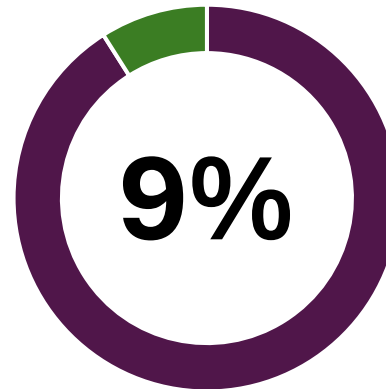
Civil Engineering



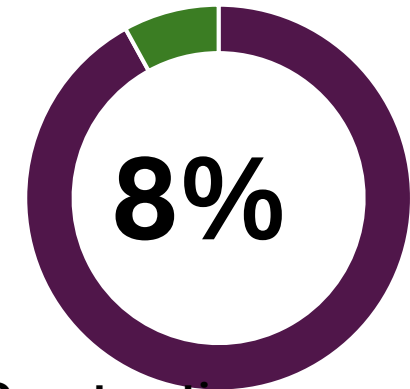
Mechanical Engineering



Environmental
Engineering

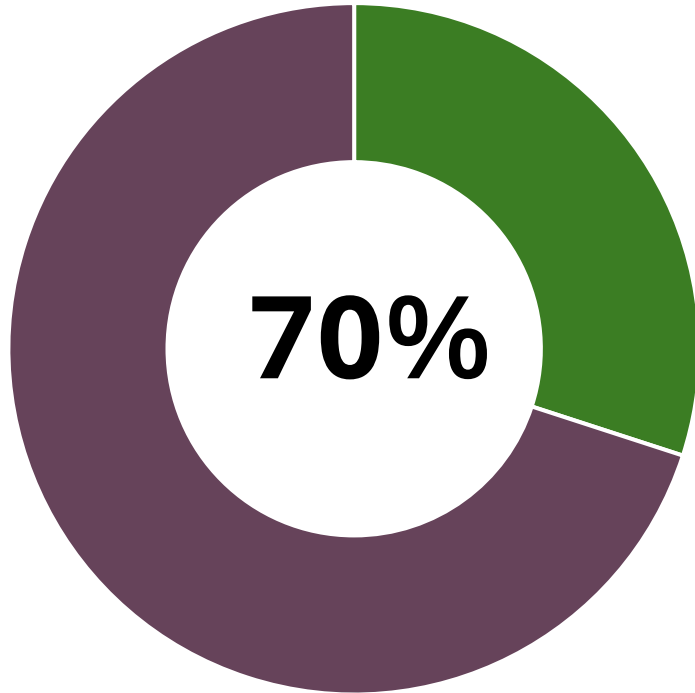


Electrical Engineering



Construction
Management

Women in Engineering



70% of women who earn a Bachelors in Engineering are not working in engineering 20 years later

Our role in
building the
future of
our industry



Advancing women
Advancing transportation



AMERICAN COUNCIL OF ENGINEERING COMPANIES/MARYLAND

Industry Partner Activities

- Career Fairs
- Young members group



ACEC/MD

AMERICAN COUNCIL OF ENGINEERING COMPANIES/MARYLAND

Industry Partner Activities

- Career Fairs
- Technical groups
- Annual Quality Event
- Industry outreach events





Industry Partner Activities

- Industry outreach events
- Partnerships with other organizations
- Focused on future funding

Industry Partner Activities

- Mentoring
- Engaged with a local high school
- Leadership Development



Advancing women
Advancing transportation

Initiatives



RK&K Initiatives

- High School Engagement



RK&K Initiatives

- Community Engagement





RK&K Initiatives

- College Recruiting/Hiring



Chat



19 People



Raise



React



View



Notes



Apps



More

RK&K Initiatives

- Intern Program

Melinda Peters

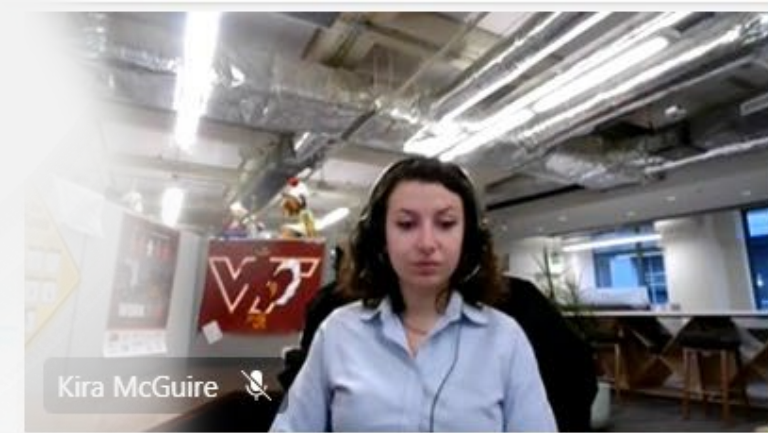
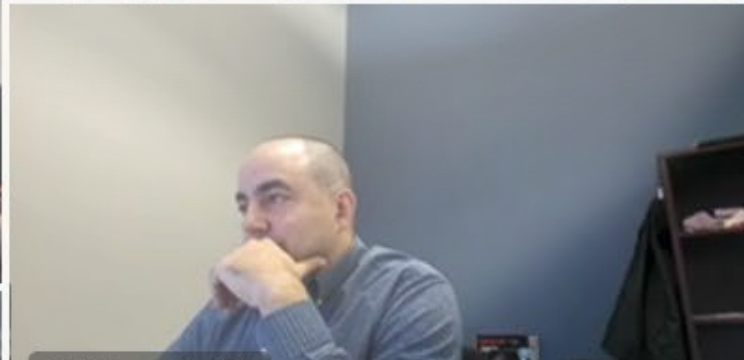
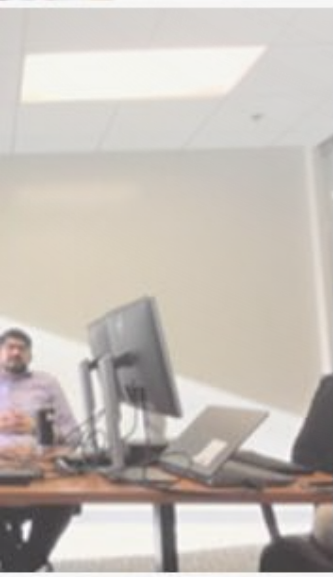
Kira McGuire

Mike Hogan

Wilmington Conference Room 1 (w/ Projector)

Jade Kane

David Peterson



RK&K Initiatives

- Pathways in Technology Early College High School (P-TECH) Program



RK&K Initiatives

"...I have learned so much at RK&K this summer. I feel excited for my future...I felt a little out of place considering I come from the P-TECH program and not a 4-year university"

- Pathways in Technology Early College High School (P-TECH) Program



RK&K Initiatives

*...I got to meet so many new people my age who also want to become engineers, and **I realized where I was coming from did not matter as much as where I could be headed.**"*

- Pathways in Technology Early College High School (P-TECH) Program



RK&K Initiatives

- New hire engagement – onboarding and new hire program





RK&K Initiatives

- Focus on FE and PE
 - Training
 - Pay for test
 - Pay increase when pass

RK&K Initiatives

- Mentoring



Opportunities / Challenges

- **Industry is constantly evolving**
- **Future workforce**
- **Role of AI and Technology in our business**

QUESTIONS?

Melinda Peters – mpeters@rkk.com

Mobile - 443-865-9865

