



Alaska's transportation workforce detours

Maximizing training opportunities & outcomes in DOT&PF's key industries

UAA's Institute of Social and Economic Research

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Land Acknowledgment

Wherever we are in Alaska, we are on the traditional homelands of Indigenous peoples. The University of Alaska Anchorage campus is located on the unceded lands of the Dena'ina. We recognize and thank them for their past, present, and future stewardship.



Acknowledgements

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University of Alaska	AVTEC	AGC Alaska
Alaska Works	Alaska DOLWD	Alaska Safety Alliance
Alaska DEED	Union training centers	Regional training centers

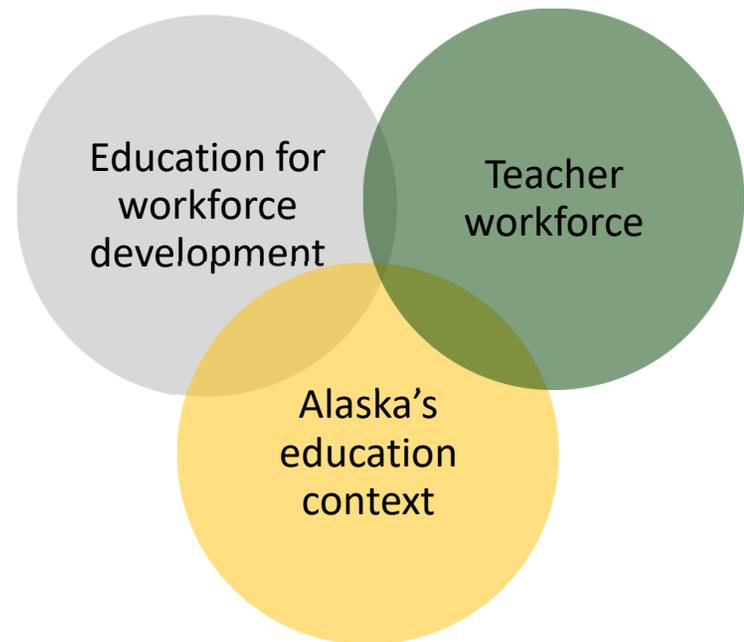
Thank you to the training providers and employers who completed interviews and surveys!

Our institute & center

Institute of Social & Economic Research

- Alaska-focused
- Nonpartisan
- Policy-focused
- Intended to help people understand social and economic systems

Center for Alaska Education Policy Research



Presentation overview

- Research focus & scope
 - Methods
 - Report overview
 - Workforce projections & trends
 - Secondary & postsecondary training programs
 - Employer perspectives
 - Recommendations
 - Q&A and feedback
- 

Research focus

This work was commissioned by the Alaska Department of Transportation and Public Facilities (DOT&PF) Office of Civil Rights in anticipation of infrastructure investments and multiple projects.

Research Questions

- Does Alaska have the workers it needs for upcoming construction projects and infrastructure development?
- What can be done to improve underrepresented Alaskans' access to high-wage, high-demand construction jobs throughout the state?

Introduction & scope

Goals

- Describe current Alaska workforce in priority occupations
- Identify projected growth in those occupations
- Identify how the state could fill positions in those jobs, especially with underrepresented groups

Priority/target occupations

Carpenters	Cement masons	Electrical workers
Ironworkers	Operating engineers	Pile drivers
Plumbers & pipefitters	Truck drivers	Construction laborers

Methodology

Synthesized data across a variety of sources

Primary data

Interviews

- 18 training providers
- 15 employers

Surveys

- 30 training providers
- 117 employers

Secondary data

Alaska DOLWD employment data

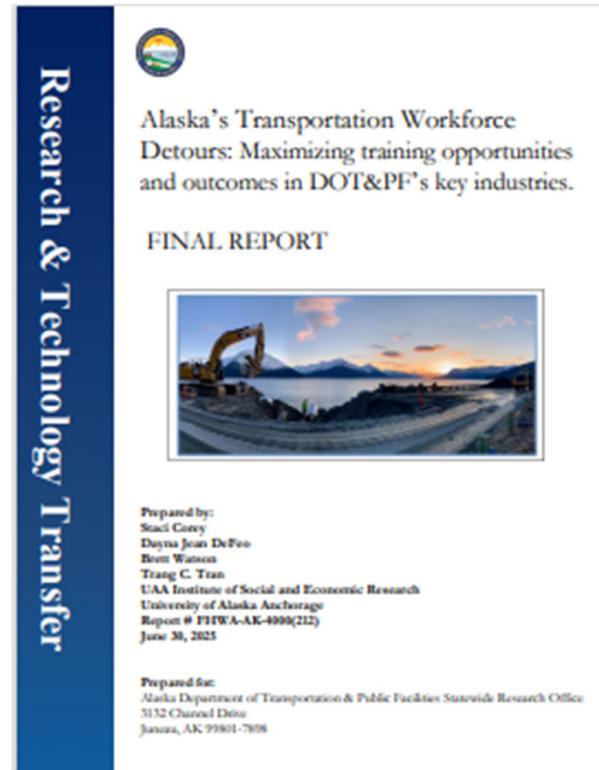
- Aggregate statistics

Publicly available data

- Alaska DOLWD
 - US Department of Labor
 - Alaska DEED
- 

Report overview

- Comprehensive profiles for each of the 9 target occupations
 - Occupation overview
 - Wages
 - Age, gender, & place of residence
 - Projected growth
 - Movement in & out of the occupation
 - Training overview
 - Employer challenges/perspectives



QR link to report:



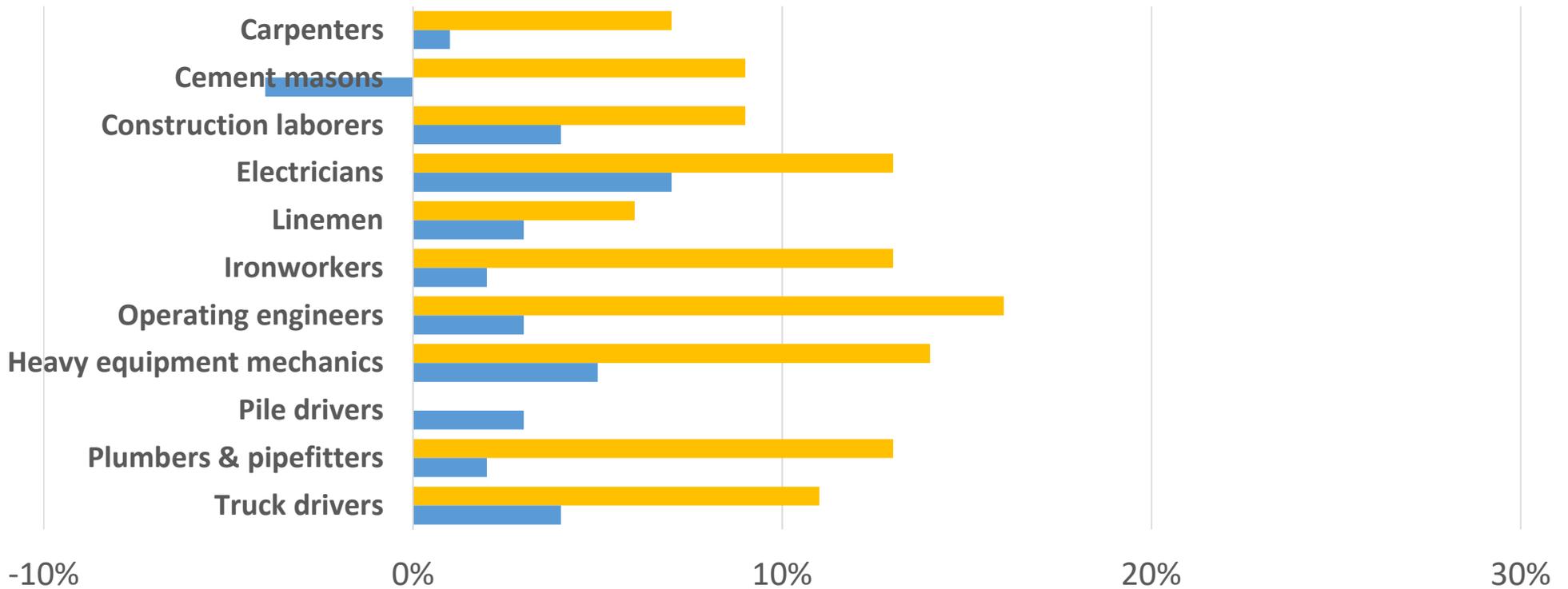


Workforce projections & trends

“We have had challenges in some of the more remote locations ... getting local qualified workers.”

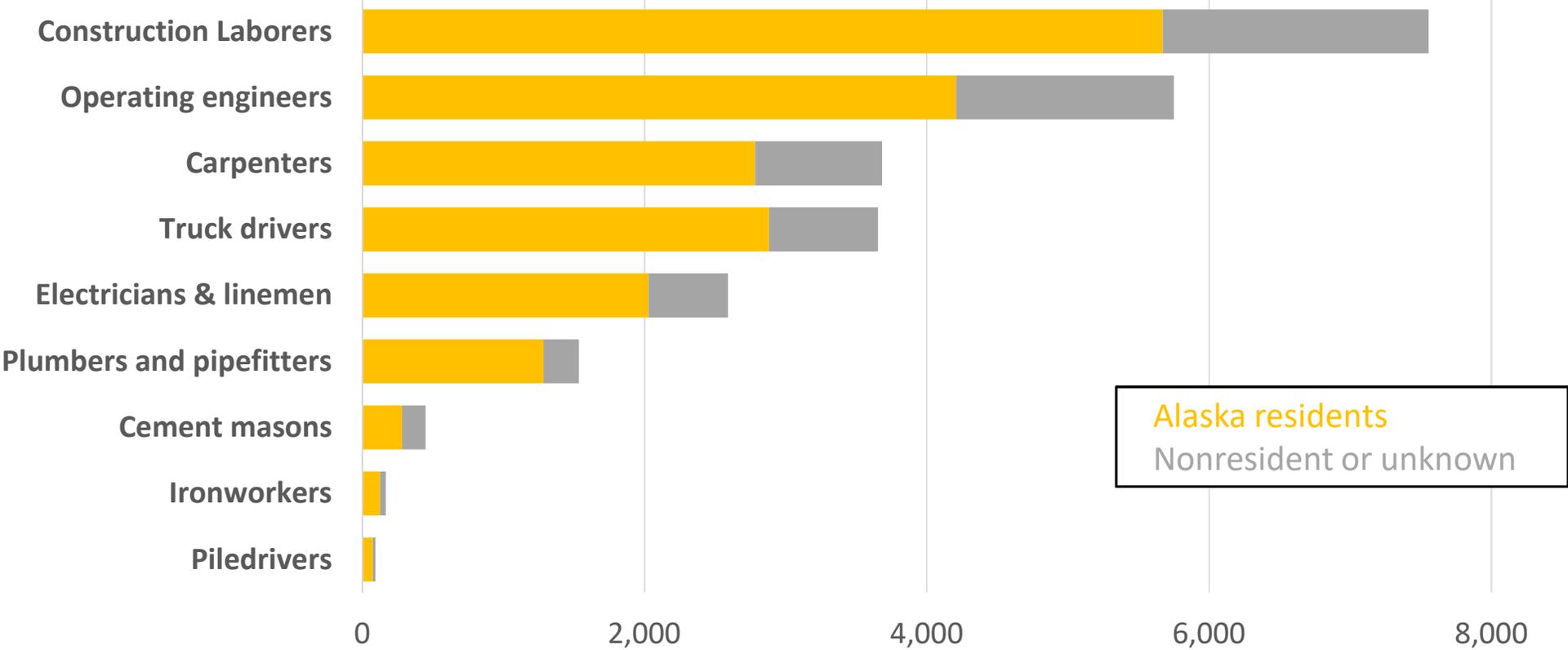
- Training provider

Projections for 2022-2032 show **Alaska** outpacing **national** growth for target occupations.



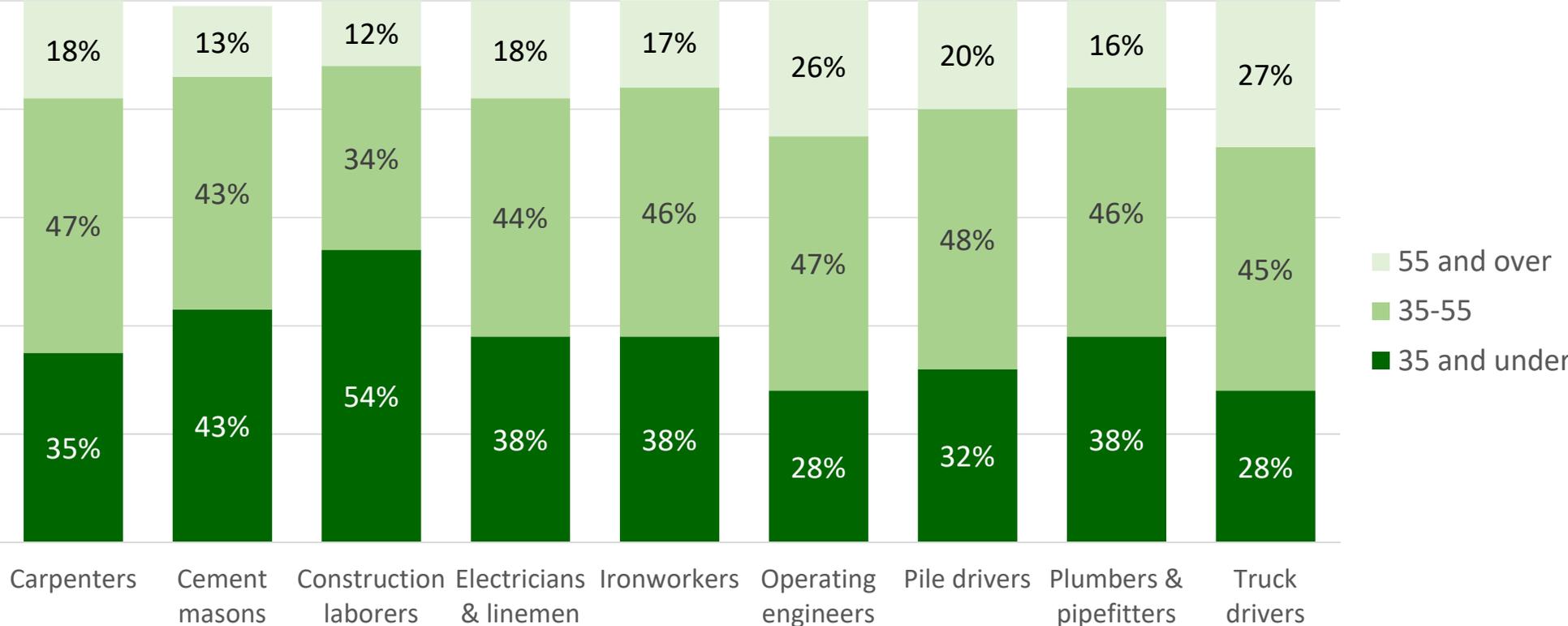
Alaska source: Projections Central 2022-2032 long-term projections
United States source: Bureau of Labor Statistics 2022-2032 employment projections

76% of the priority occupation workforce is Alaska residents.



Source: 2022 AK DOLWD suppressed cohort

Construction laborers have the **youngest** workers; truck drivers & operating engineers have the **oldest**.



Source: AK DOLWD suppressed cohort, 2022

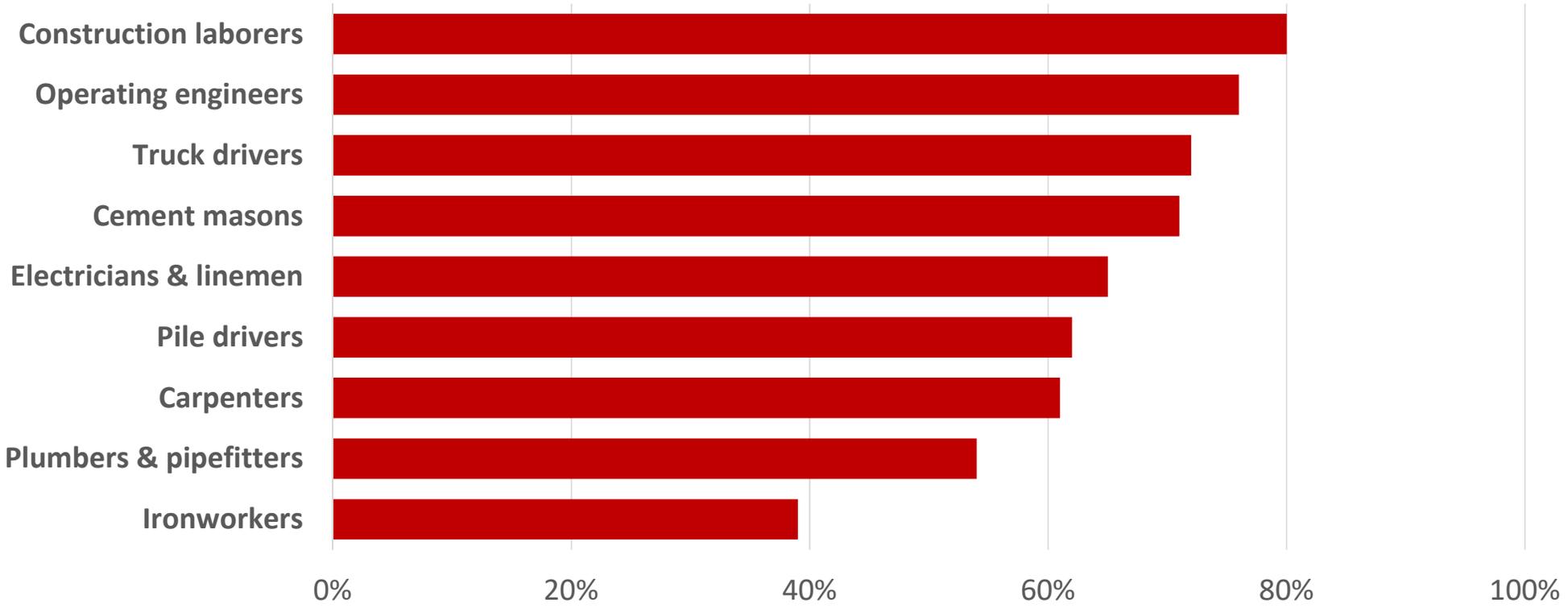
Women represent fewer than 5% of workers in the priority occupations.

- Highest representation in construction laborers (11%)
- Lowest representation in pile drivers and plumbers & pipefitters (3%)



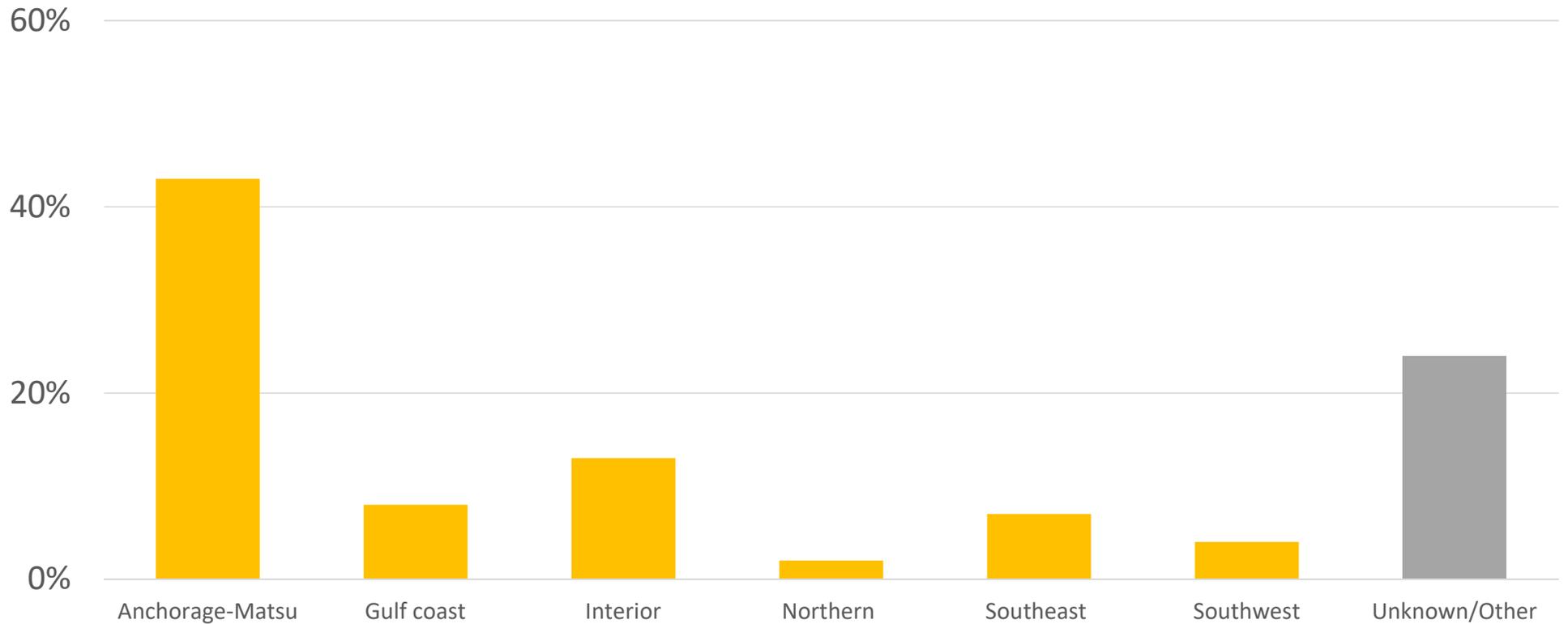
Source: 2022 AK DOLWD suppressed cohort

Across the priority occupations, **women** take home less pay than men.



Source: 2022 AK DOLWD suppressed cohort

Most workers live in the Anchorage-Matsu area.



Source: AK DOLWD suppressed cohort, 2022



Secondary training programs

“I think one the best ways to go about [growing our workforce] would probably be stimulating a little more interest in the younger people ... I’m talking about the ones that are like in fifth and sixth grade. [Get them interested] in the construction industry.”

- Training provider

Alaska's secondary education construction training

State programs

- AK Dept. of Education & Early Development distributes federal funds to support school districts in CTE programs
- AK Workforce Investment Board (AWIB) grant funds for AK Construction Academies and State Training and Employment Programs (STEP)

District & local programs

- School districts offer CTE classes, offered through high schools and some middle schools

Alaska's secondary education construction training

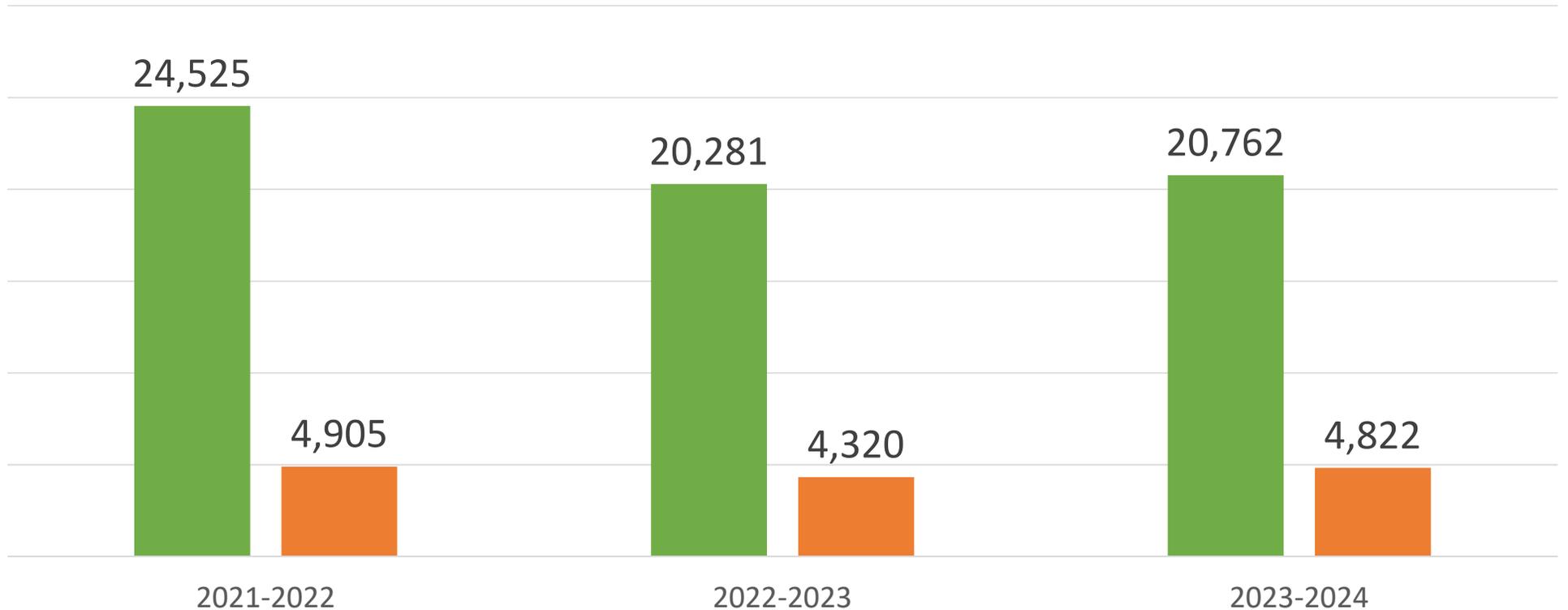
School districts enhance their CTE construction programs, through:

- Specific within-school career pathways related to construction, welding, or transportation
- Specialized programs at CTE high schools
- Working with industry partners including unions, regional training centers, local and statewide non-profits and Alaska Native corporations
- Partnering with post-secondary institutions for credits or dual enrollment



DOT&PF CRO Alaska Construction Career Day brings together industry partners with high school students.

Construction courses make up about one-fifth of all CTE enrollments in Alaska high schools.



Source: Alaska DEED enrollment numbers



Postsecondary training programs

“Keeping them in our community is very important ... we have a lot of people that leave. And the more people that leave ... it really affects our whole community...”

- Employer

Post secondary training landscape

Types of construction training programs

Skills training

Pre-apprenticeships

Apprenticeships/internships

Training settings

Unions training centers

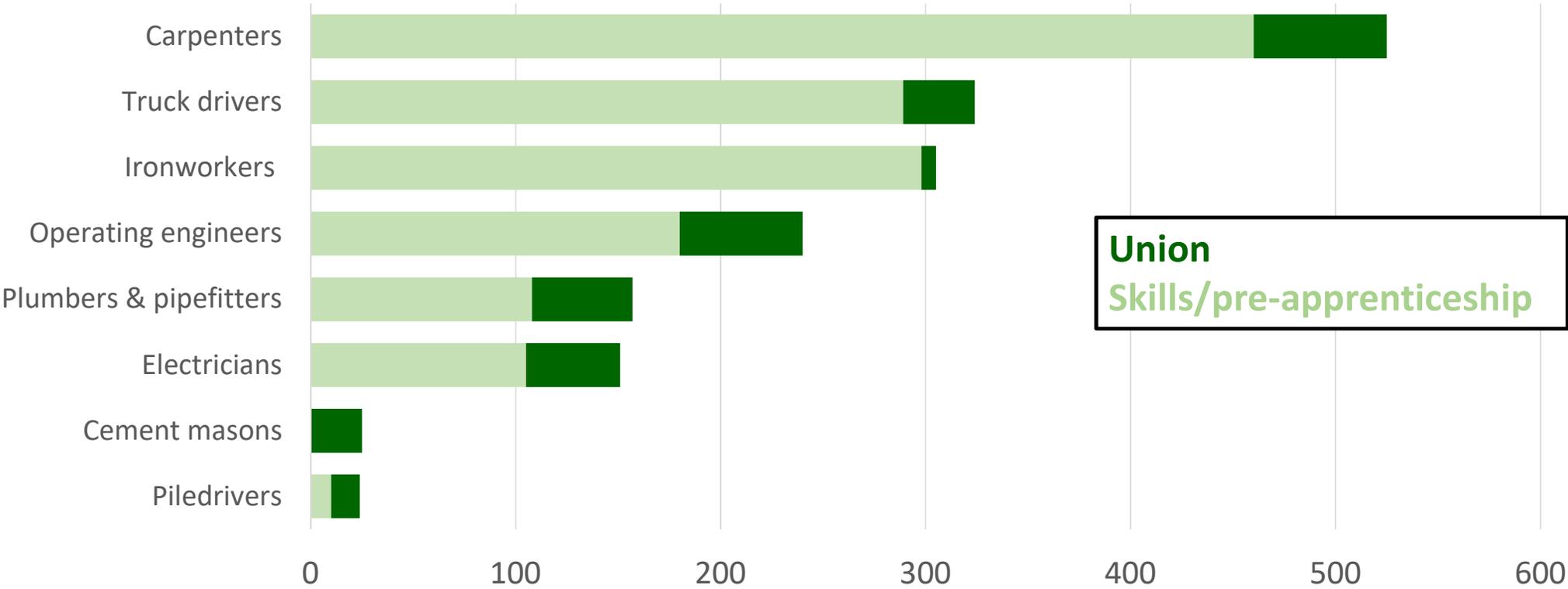
College campuses

Online

Job sites

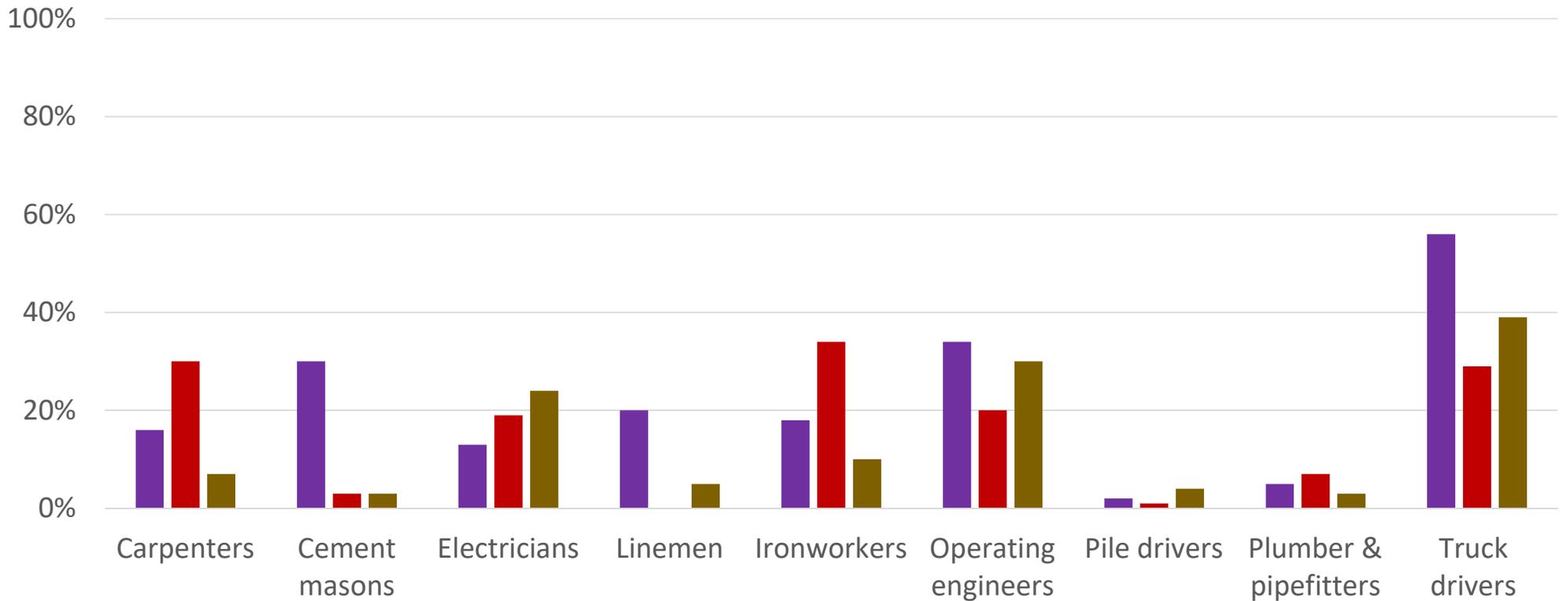
Regional/local vocational training centers

Annual admissions to skills/pre-apprenticeship and union trainings differ by occupation.



Source: ISER Alaska training providers survey, 2024

Students of color, women, and rural students are underrepresented in postsecondary training.



Source: ISER Alaska training providers survey and interviews, 2023-2024

Training programs across all occupations identified common challenges.

Visibility or value of the industry

Funding

Access or proximity to training centers

Balancing work and training

Seasonality & physical aspect of the job

Availability of qualified applicants

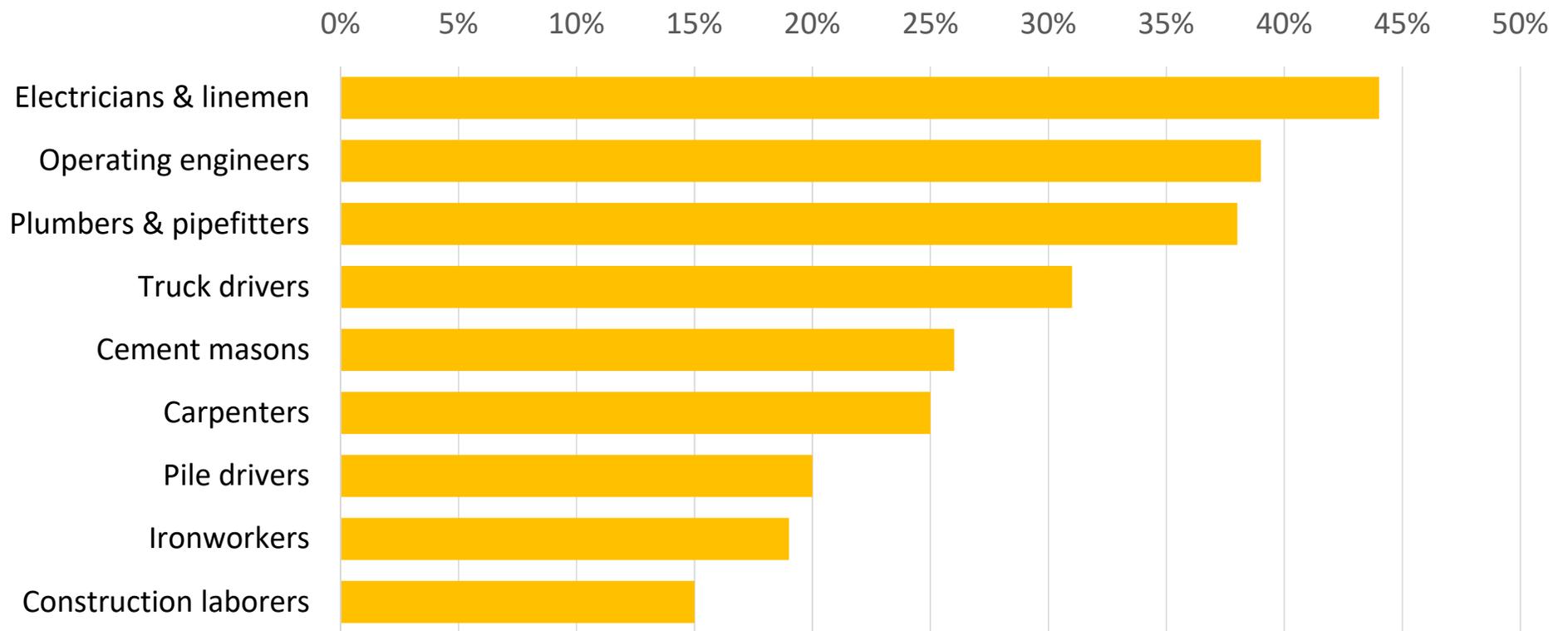


Employer perspectives

“I’d like to see the State really invest in workforce development. ... We've got a lot of work in the state that's gonna need these kinds of trained people.”

- Employer

The 5-year retention rate across all priority occupations averages 30%.



Source: Alaska DOLWD suppressed 2017 and 2022 cohort transition data

Top 5 employer challenges across all target occupations

- Worker shortages
- Skill gaps
- Competition w/AK employers
- Aging/retiring workers
- Lack of workers in rural areas

Additional notes on hiring challenges

- Employers of pile drivers were more likely to report recruitment and hiring challenges.
- Employers of ironworkers were the least likely to report worker shortages but still rated it as a small to moderate challenge.
- The lowest ranked challenges across all the occupations were finding union workers and strict/changed licensing requirements.



Recommendations

“We’re all trying to chase the same thing, and it’s too bad that we’re not all doing it collectively.”

- Training provider

Crosscutting Recommendations



Access - Expanding training access by investing in flexible, technology-enabled, and rural-accessible programs



Outreach – Strengthening outreach to youth, women, and underrepresented groups



Value - Promoting the value & wide variety of career paths in construction



Retention – Supporting year-round employment with cross-training and off-season job matching to retain workers and instructors



Partnerships – Strengthening partnerships between trades, training programs, and industry to streamline career pathways



Compensation - Offering competitive pay, benefits, and supports for workers



Supports – Reducing barriers to training and employment through supportive solutions with travel, housing, and childcare

Thank you! Questions? Feedback?

- Contact us directly!
- Share this information!
- QR code for report



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