



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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Alaska DEED

Union training
centers

Regional
training
centers

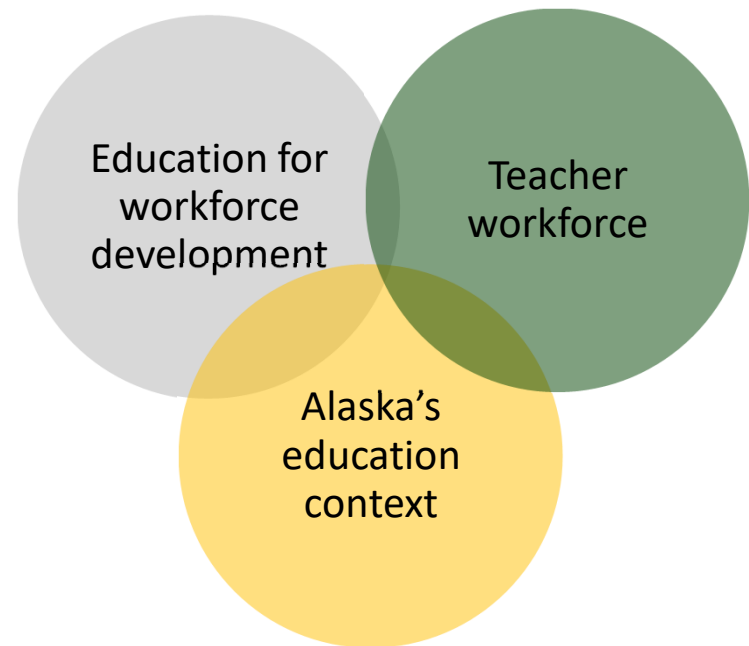
Thank you to the
training providers
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interviews and
surveys!

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

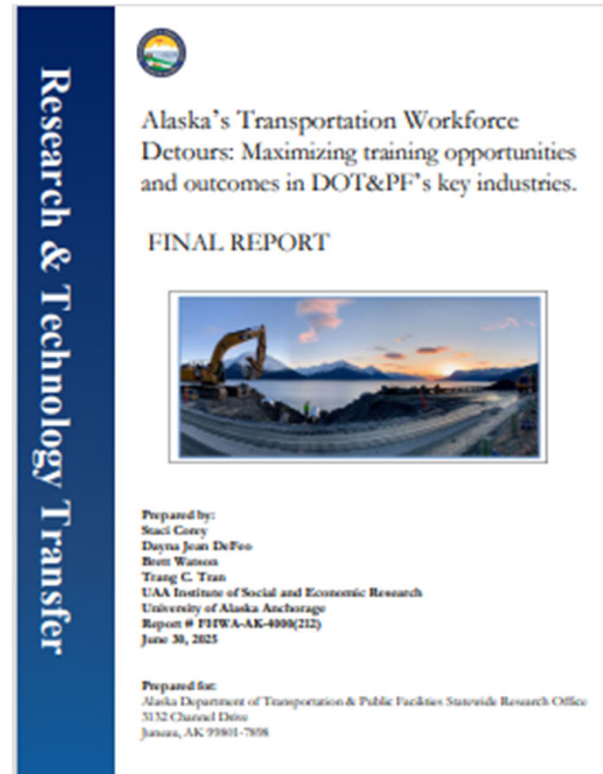
- Aggregate statistics

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:



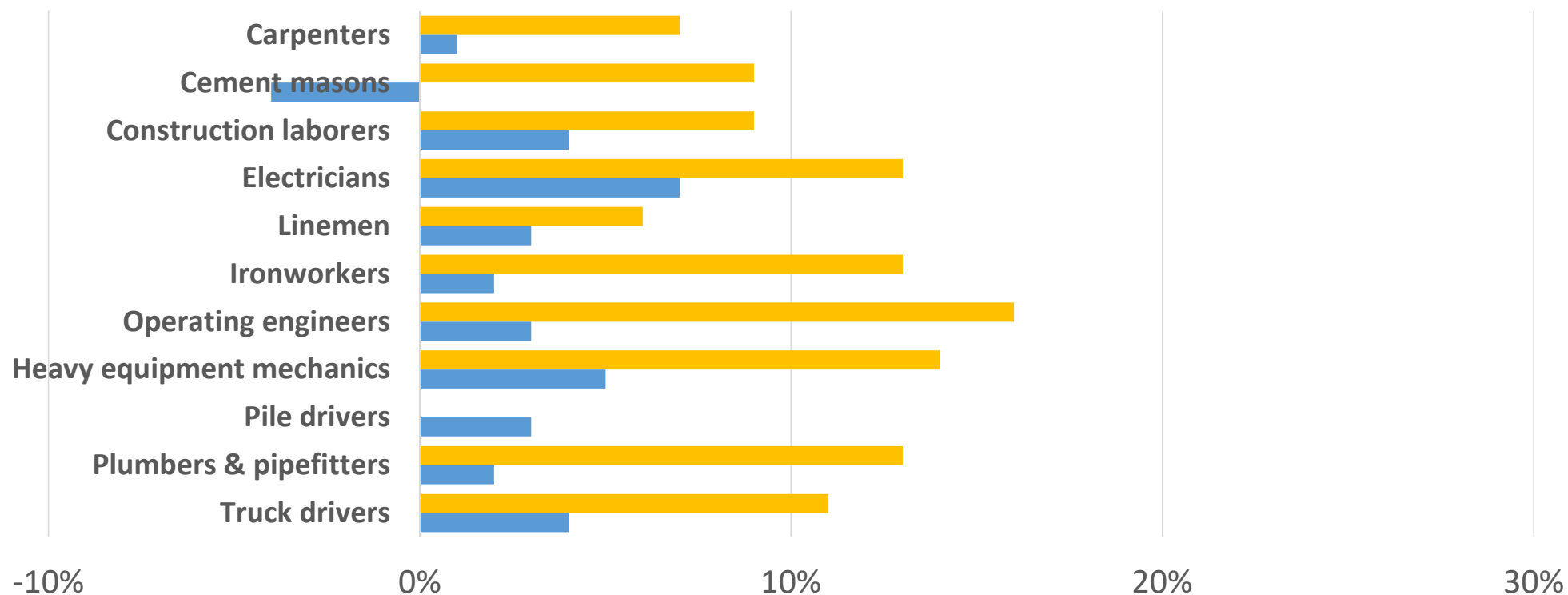


Workforce projections & trends

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

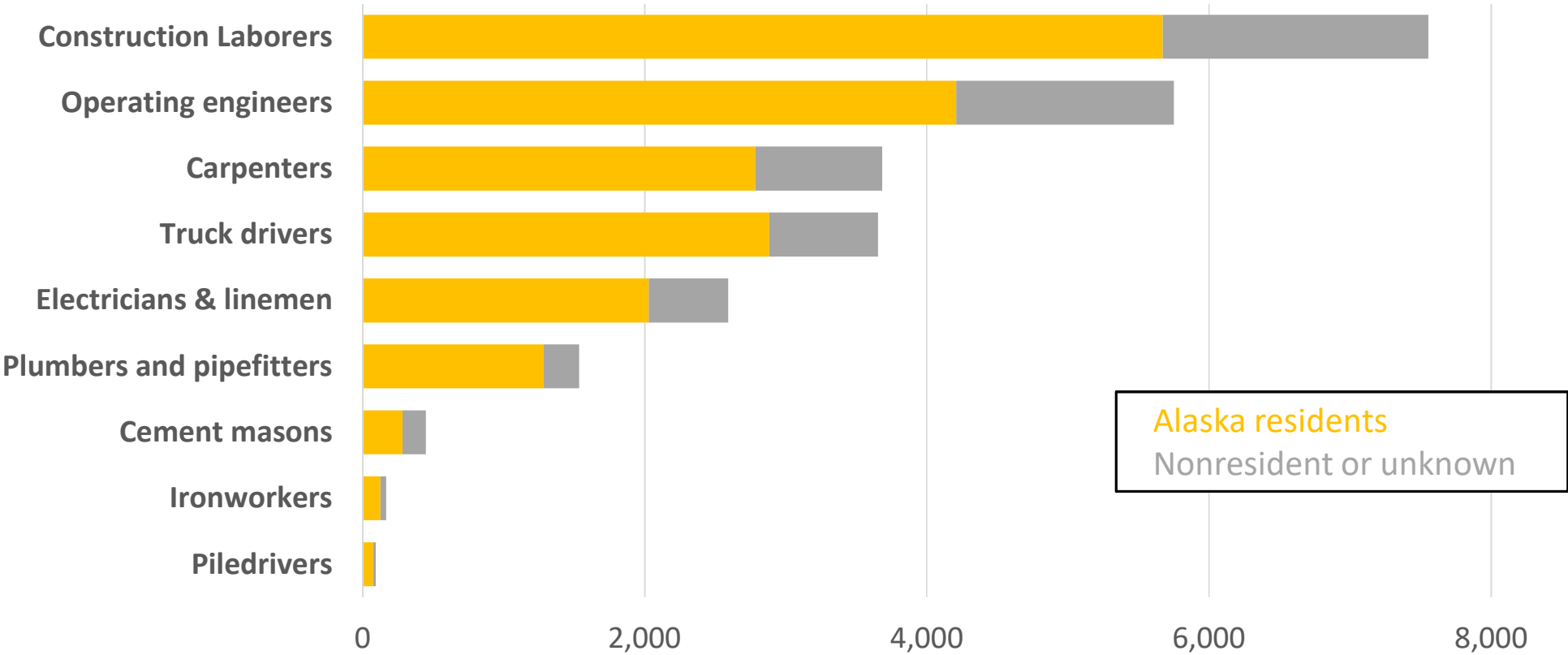
- Training provider

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



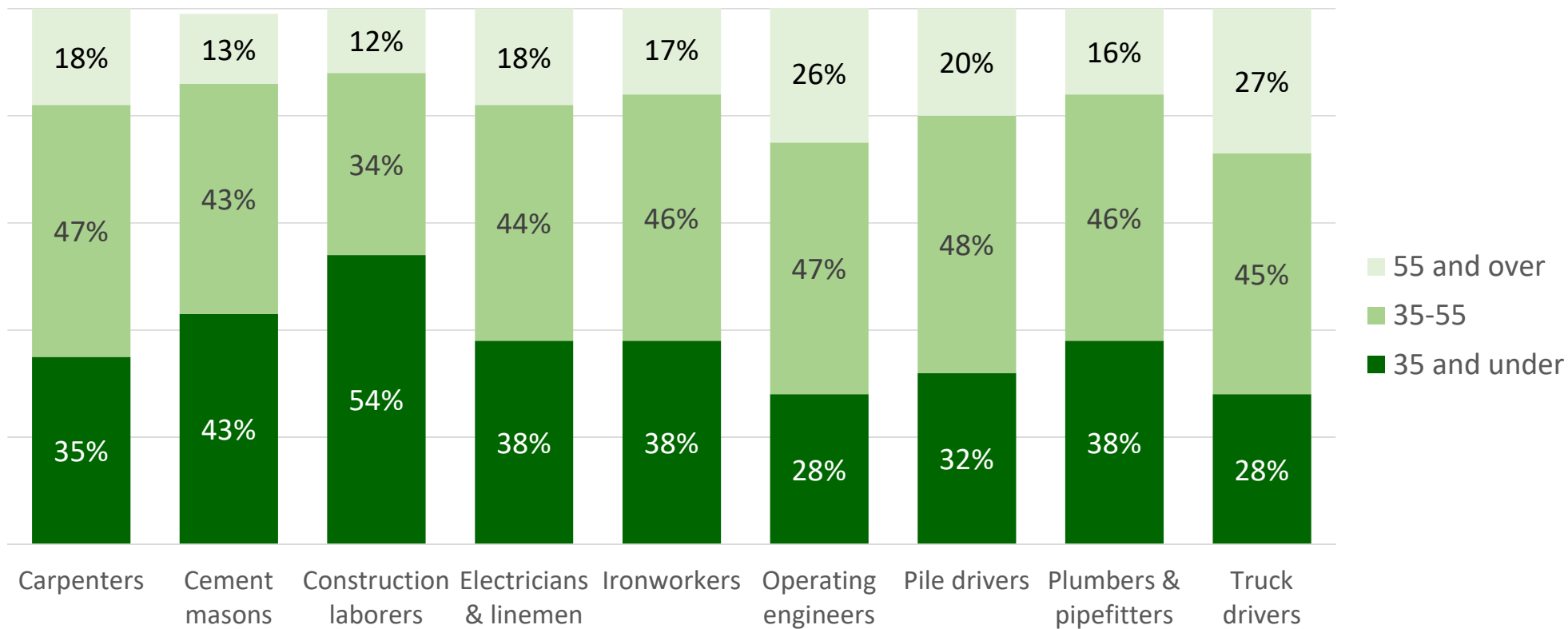
Alaska source: Projections Central 2022-2032 long-term projections
United States source: Bureau of Labor Statistics 2022-2032 employment projections

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

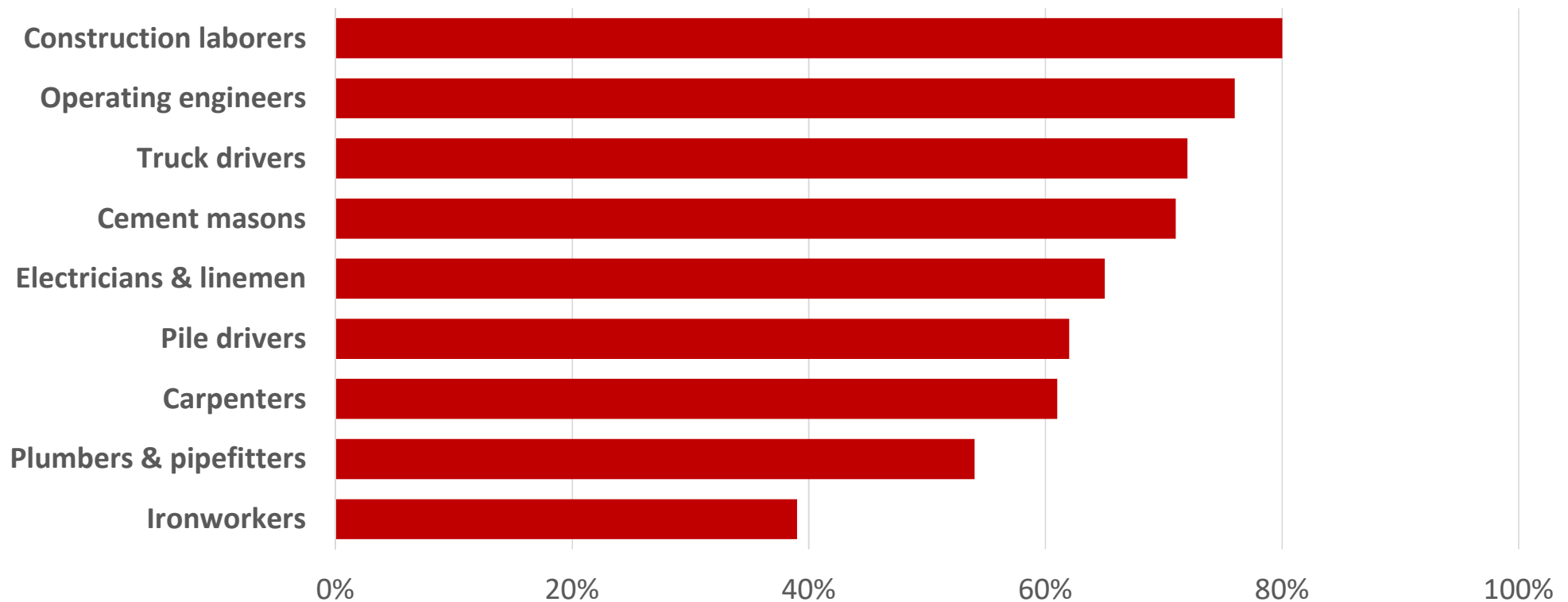
Women represent fewer than 5% of workers in the priority occupations.

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



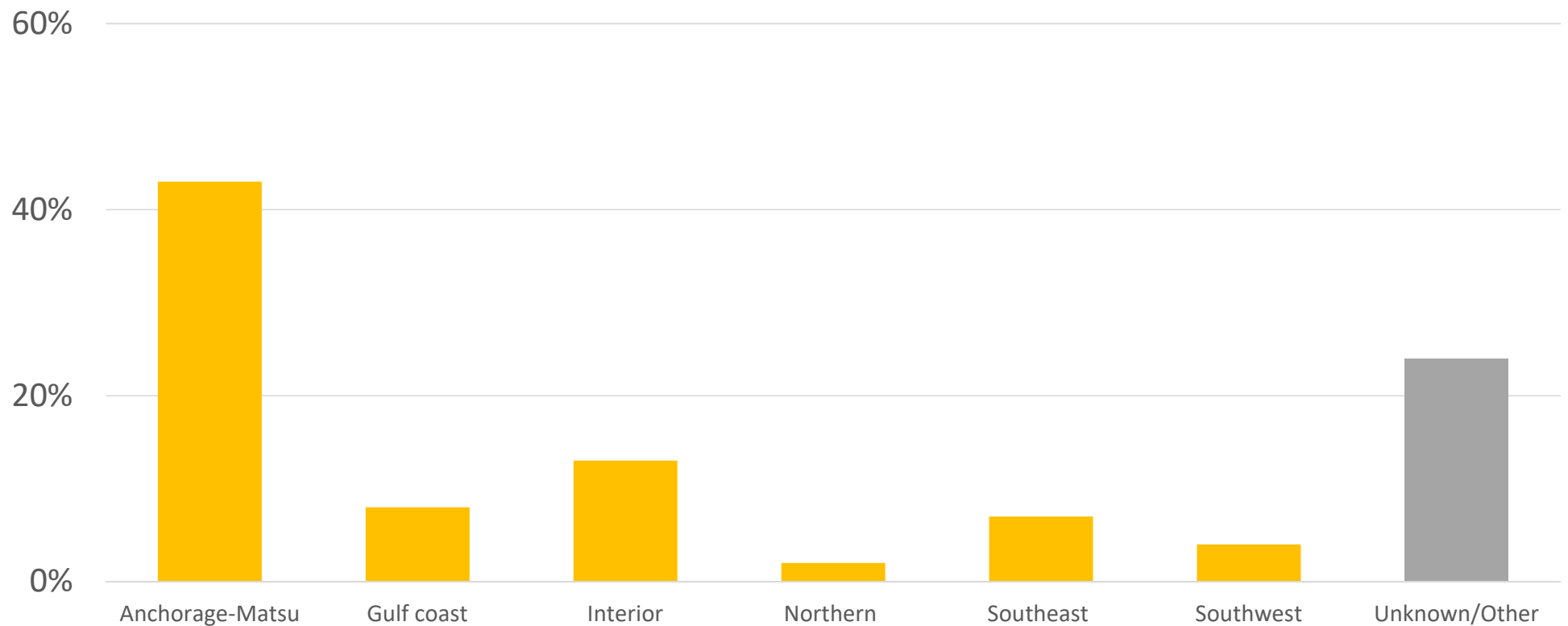
Source: 2022 AK DOLWD suppressed cohort

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)

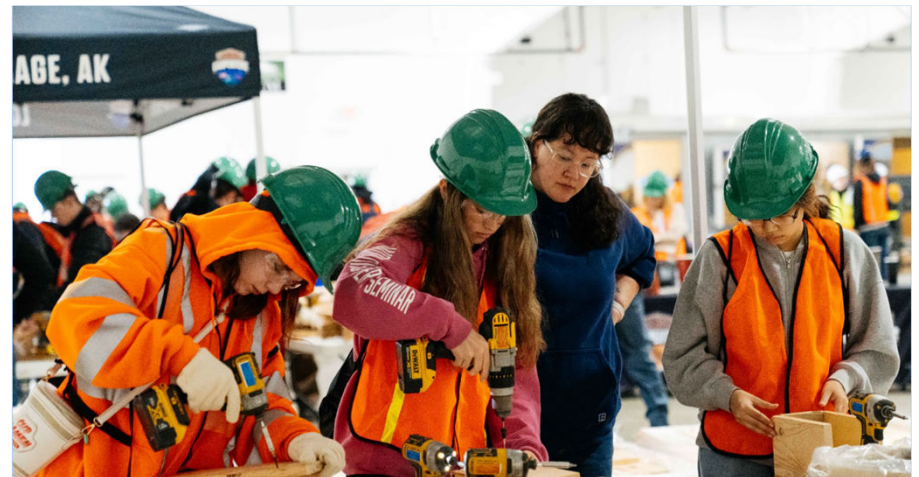
District & local programs

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

Alaska's secondary education construction training

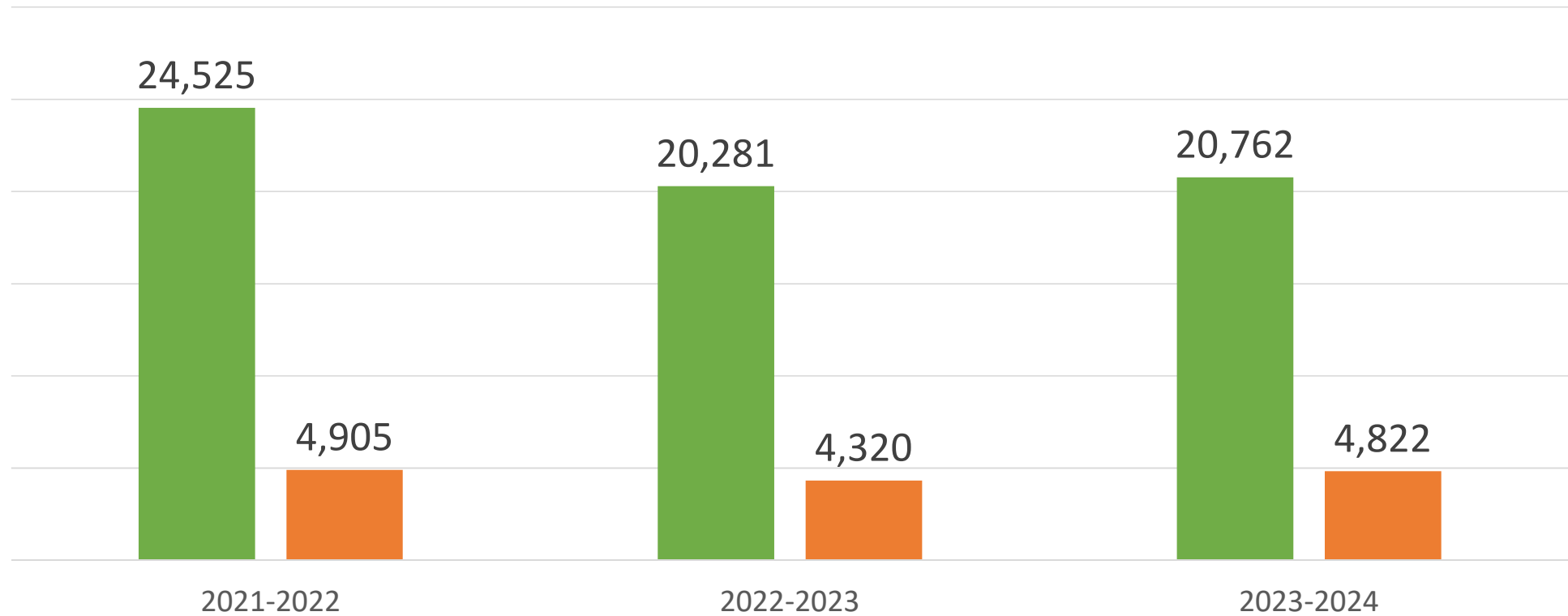
School districts enhance their CTE construction programs, through:

- 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

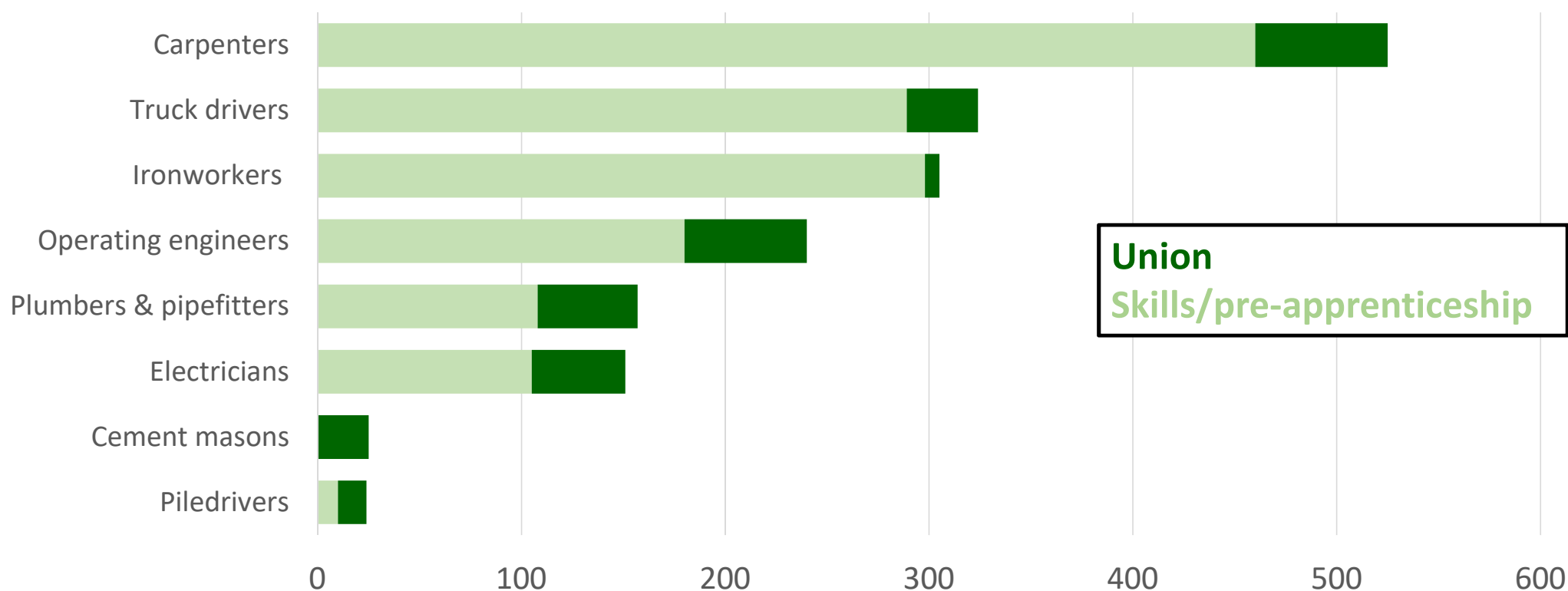
College campuses

Online

Job sites

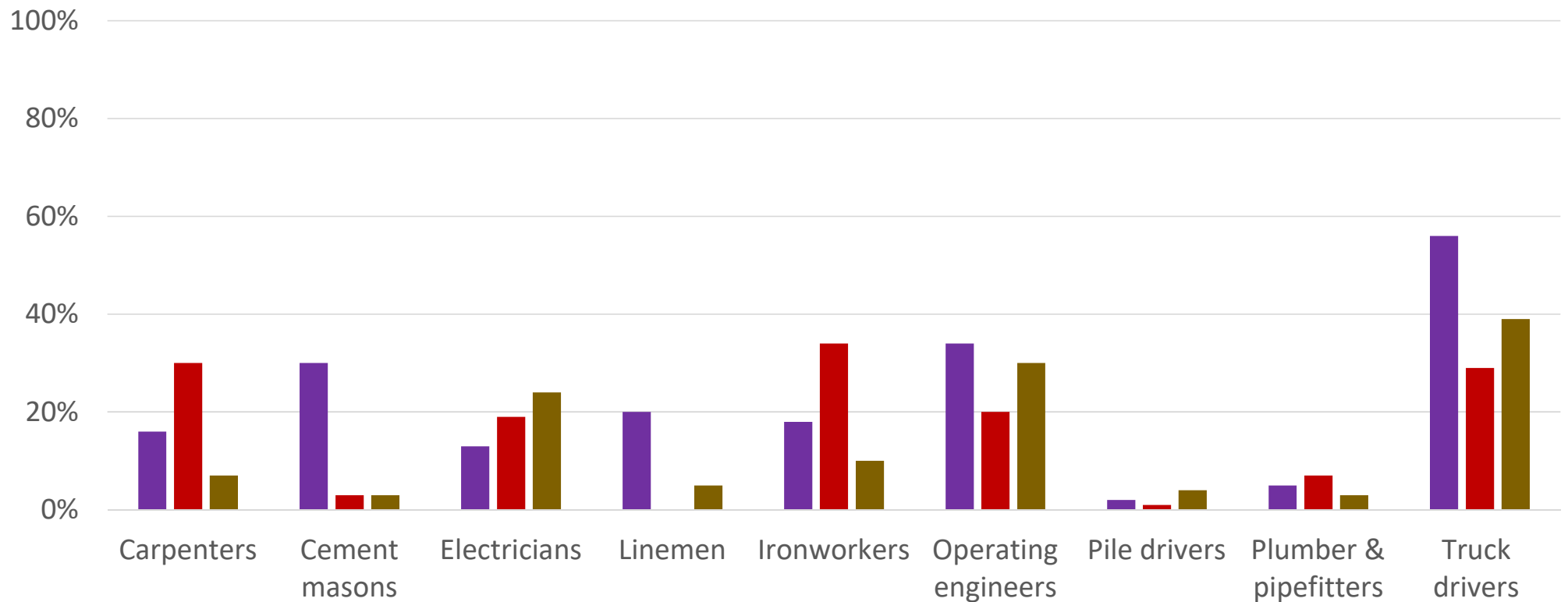
Regional/local vocational training centers

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



Source: ISER Alaska training providers survey, 2024

Women, students of color, 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

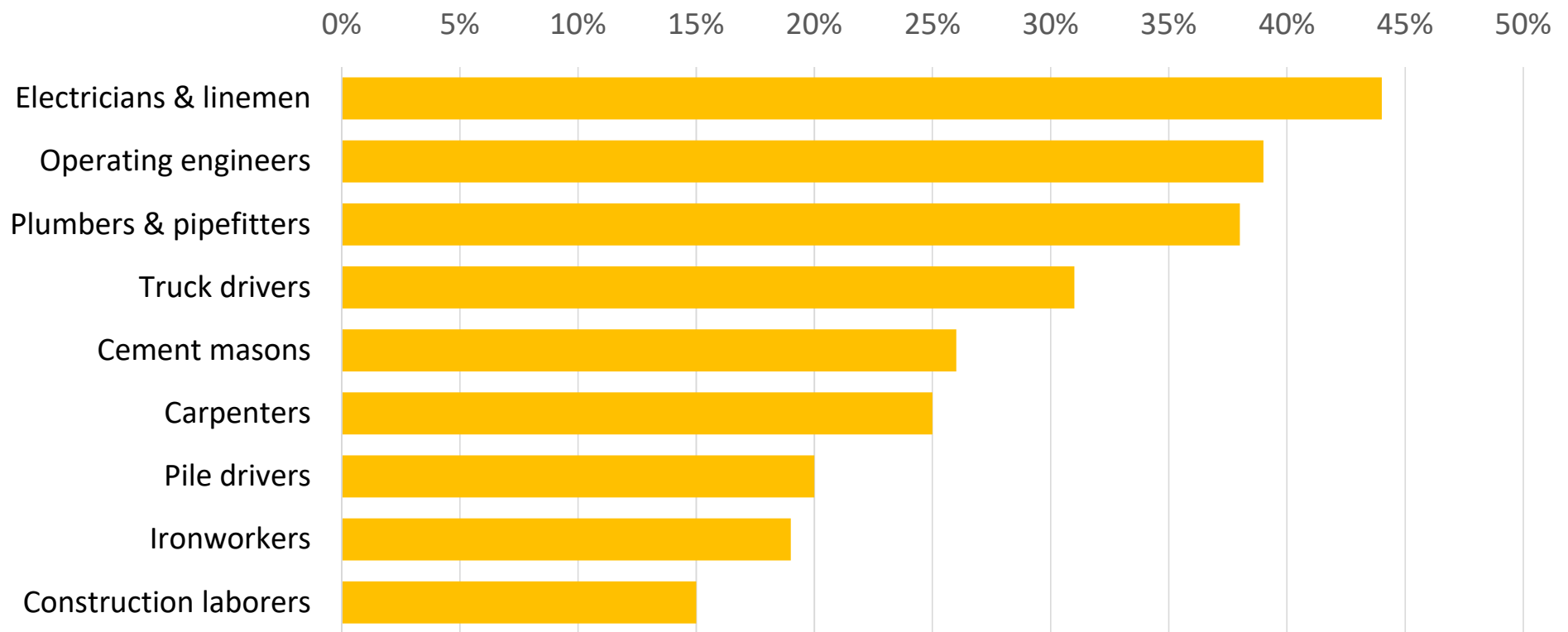


Employer perspectives

“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

- 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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