

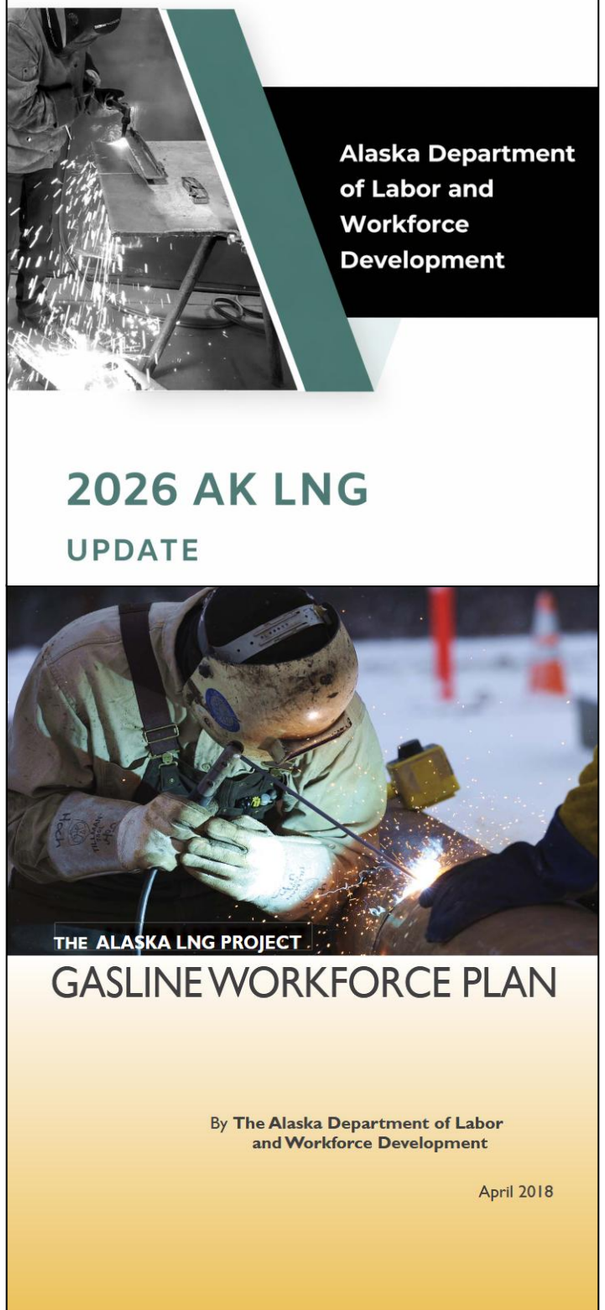
2026 AKLNG Workforce Trends & Opportunities

Department of Labor and Workforce Development
Alaska Workforce Investment Board

August 5, 2026

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AKLNG Workforce Planning

- 2018 Alaska LNG Workforce Plan established baseline workforce needs
- Project timelines, ownership, and market conditions have significantly changed
- Governor Dunleavy requested updated, actionable workforce analysis including all major projects
- AWIB commissioned a statewide update to assess demand, capacity, and gaps



Executive Summary

The AKLNG Project — an ~800-mile pipeline from the North Slope to a liquefaction facility in Southcentral Alaska — is one of the largest potential infrastructure developments in Alaska's history. Peak construction employment could reach **6,600 workers for AKLNG alone**, rising to **~8,670 statewide** when concurrent projects are included — roughly a quarter of Alaska's entire construction workforce.

The Challenge

Alaska cannot independently supply the workforce required for multiple concurrent projects.

The Opportunity

Strategic investment now can strengthen Alaska's training system and maximize resident hire.

The Urgency

Workforce preparation must begin before Final Investment Decision to avoid early mobilization shortfalls.

AKLNG Project Overview

Three Core Infrastructure Components

Component	Location	Function
Gas Treatment Plant	North Slope	CO_2 removal & gas conditioning
Mainline Pipeline (~800 mi)	North Slope to Nikiski	Gas transportation
Liquefaction Facility	Nikiski	LNG processing & export

In March of 2025, the Alaska Gasline Development Corporation (AGDC) and the Glenfarne Group formed **Glenfarne AKLNG, LLC** — Glenfarne holds 75 percent ownership and leads front-end engineering and commercial development toward a Final Investment Decision.



Construction & Operations Timeline



PART I — CONTEXT & FRAMEWORK

Workforce Challenge Context



Aging Workforce

Roughly one-third to nearly half of resident workers in key trades are age 45+. High replacement demand exists even without AKLNG.



Shrinking Labor Pool

Alaska's working-age population has fallen ~30,000 over the past decade. An 11-year streak of net out-migration continues.



Nonresident Reliance

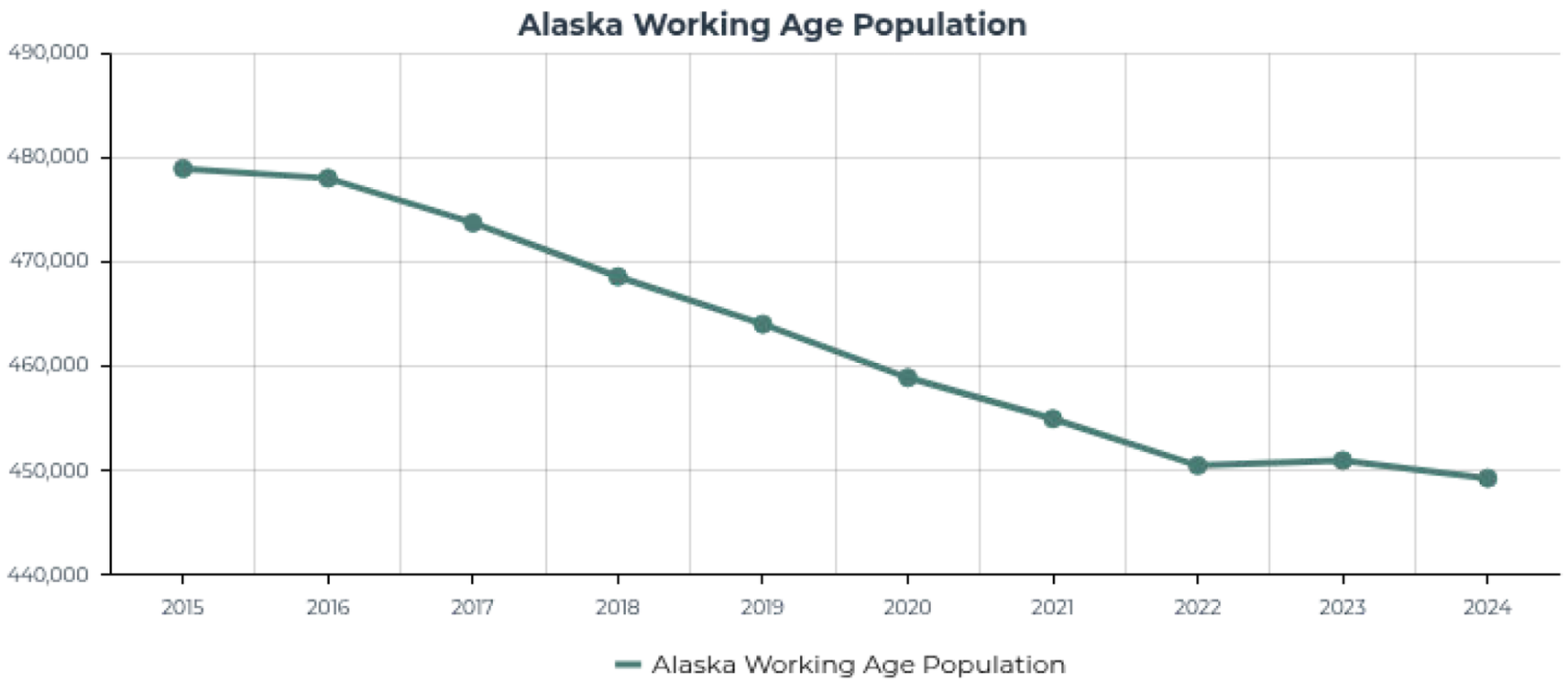
Nonresidents now account for ~23 percent of Alaska's total workforce — the highest share in three decades. Construction saw a 24 percent jump in nonresident workers from 2022 to 2023.



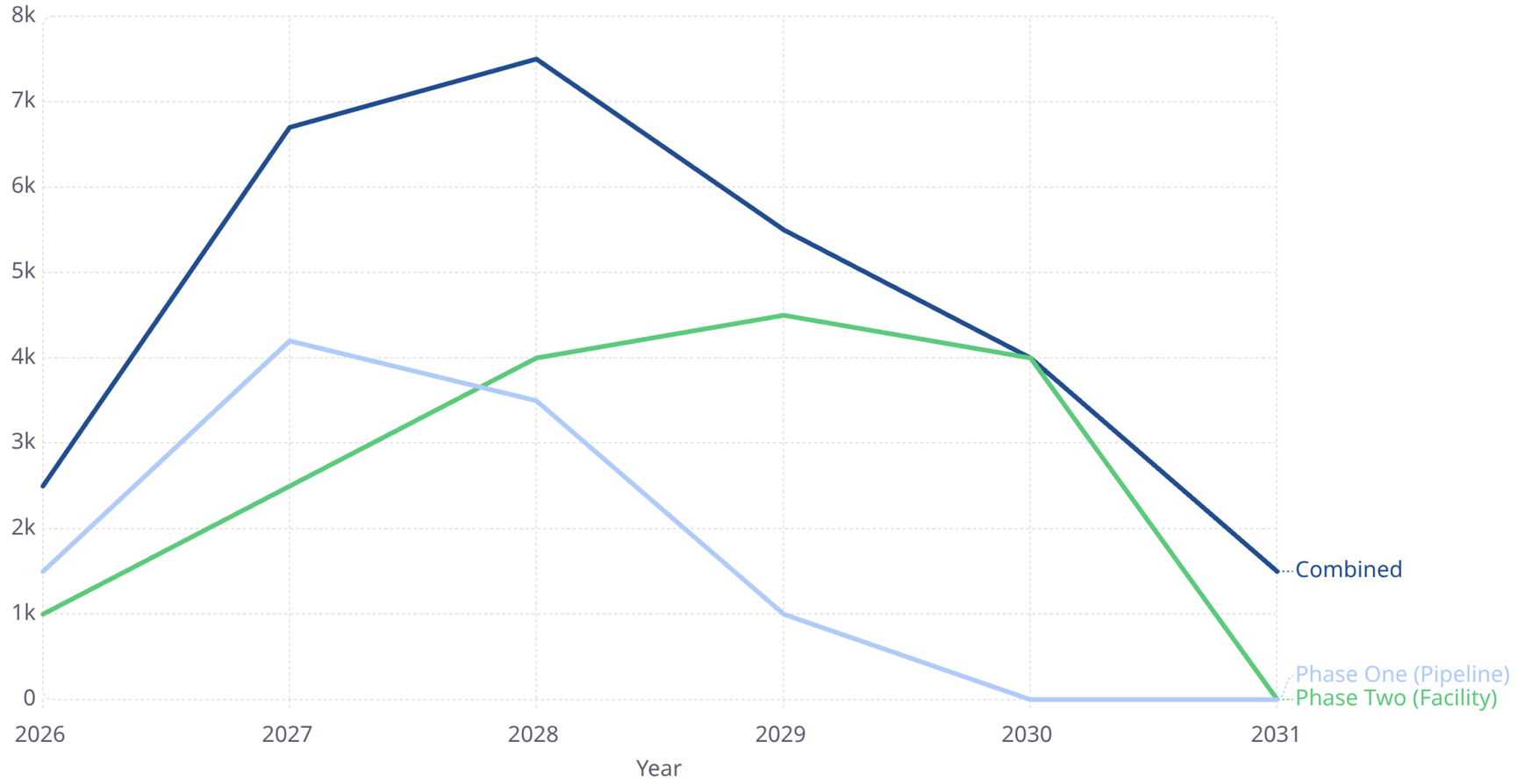
Overlapping Projects

Multiple large projects compete for the same occupational groups during the same construction window, compressing demand.

Alaska Working-Age Population Decline

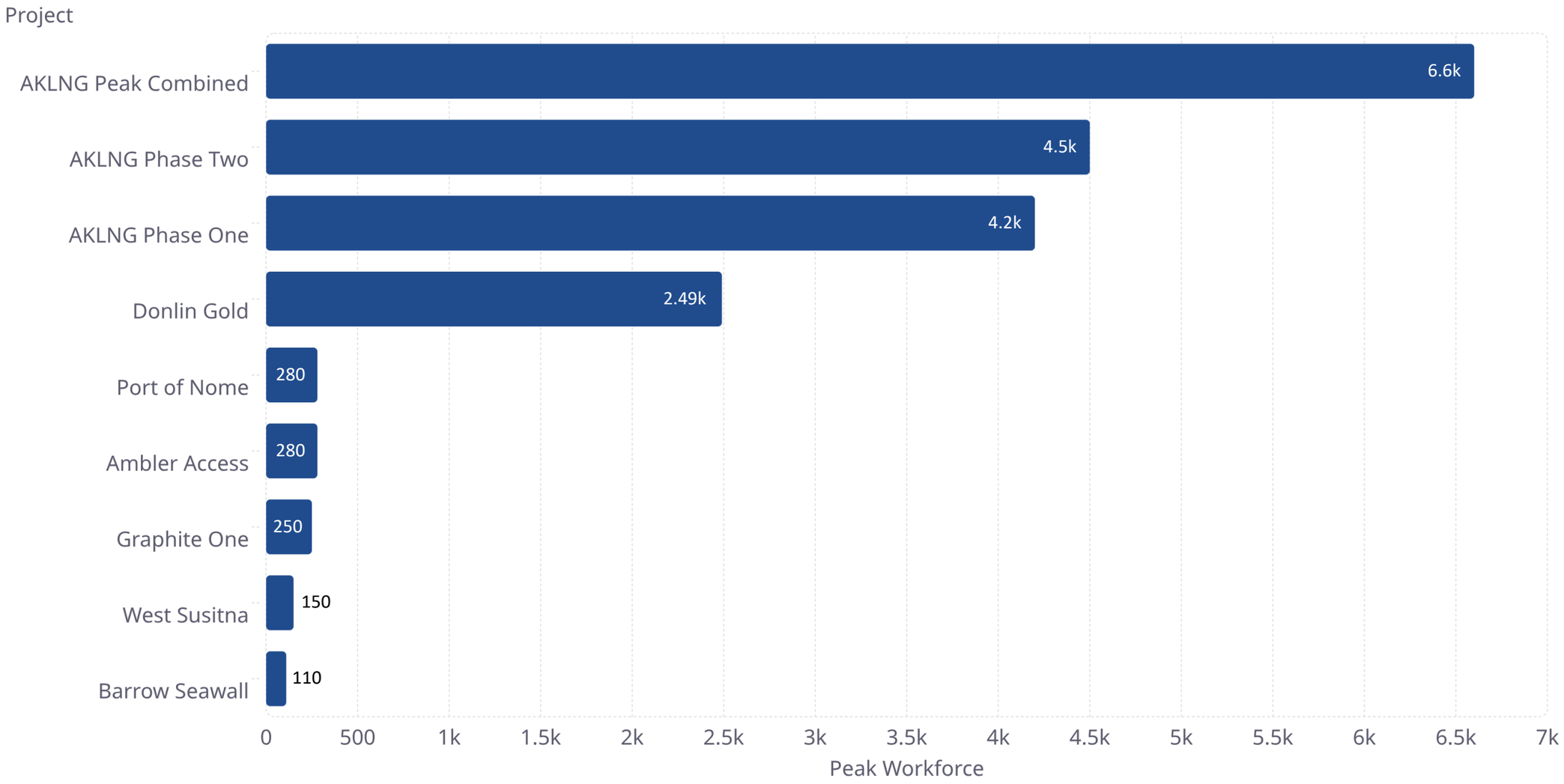


AKLNG Construction Workforce by Phase

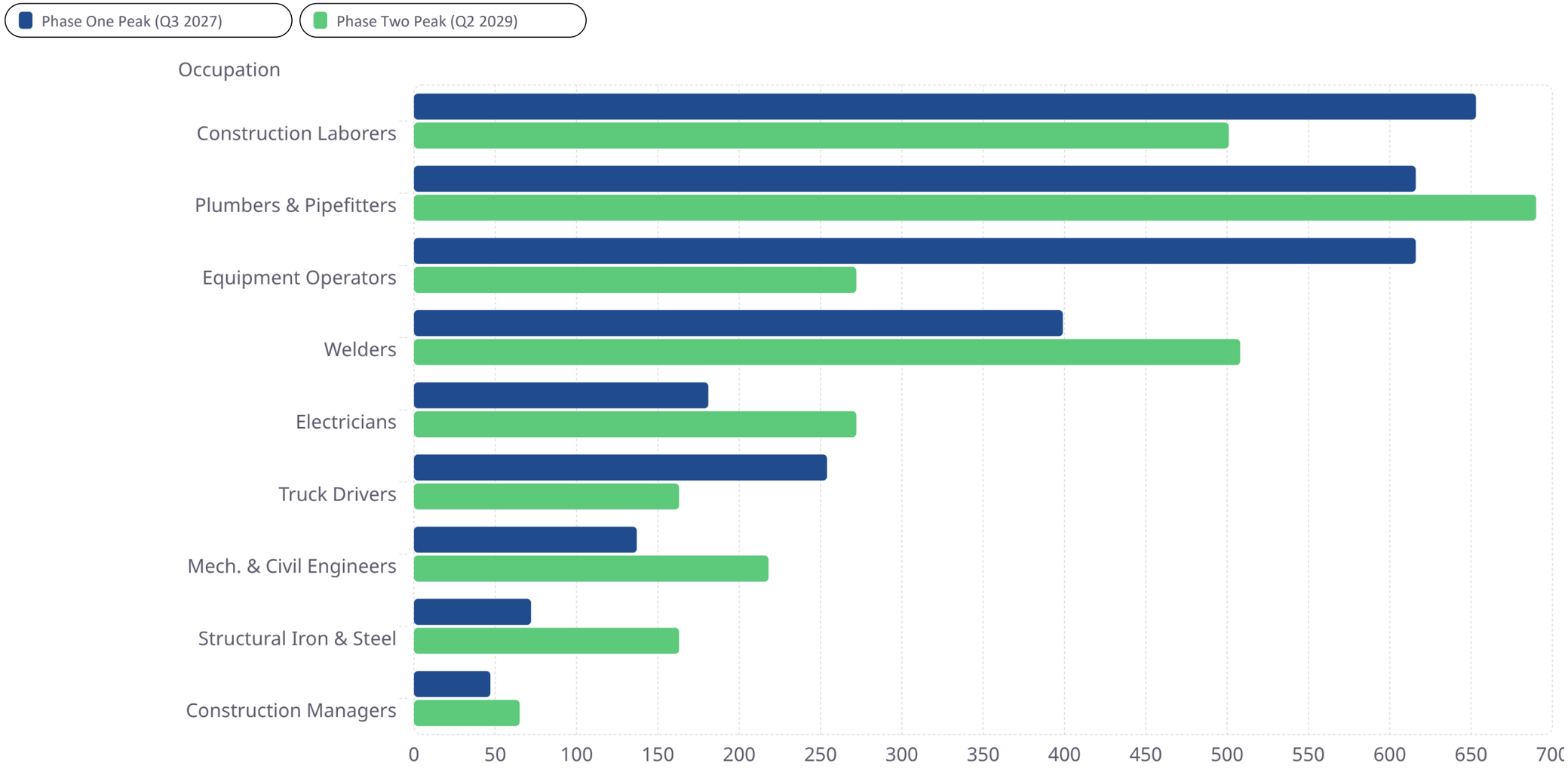


Phase One peaks at ~4,200 workers (Q3 2027) in heavy civil and welding-intensive pipeline trades. Phase Two peaks at ~4,500 workers (Q2 2029) in mechanical and electrical-intensive facility construction. Sustained operations employ approximately 900 workers long-term.

Overlapping Projects: Statewide Peak Demand



AKLNG Workforce Distribution by Occupation



PART III — TRAINING CAPACITY

Alaska's Workforce Training System

Colleges & Universities

University of Alaska system (UAA, UAF, UAS) plus community campuses statewide. Certificate through bachelor's degrees in engineering, welding, construction management, and industrial technology.

Registered Apprenticeships

2,400+ active apprentices statewide (2025–2026). Programs require 2–5 years to complete. Primary pathway for electricians, pipefitters, operating engineers, carpenters, and ironworkers.

Regional & Vocational Providers

AVTEC, NIT, ATC, SAVEC, NACTEC, and others. Short-duration, industry-aligned programs in CDL, welding, heavy equipment, and diesel mechanics.

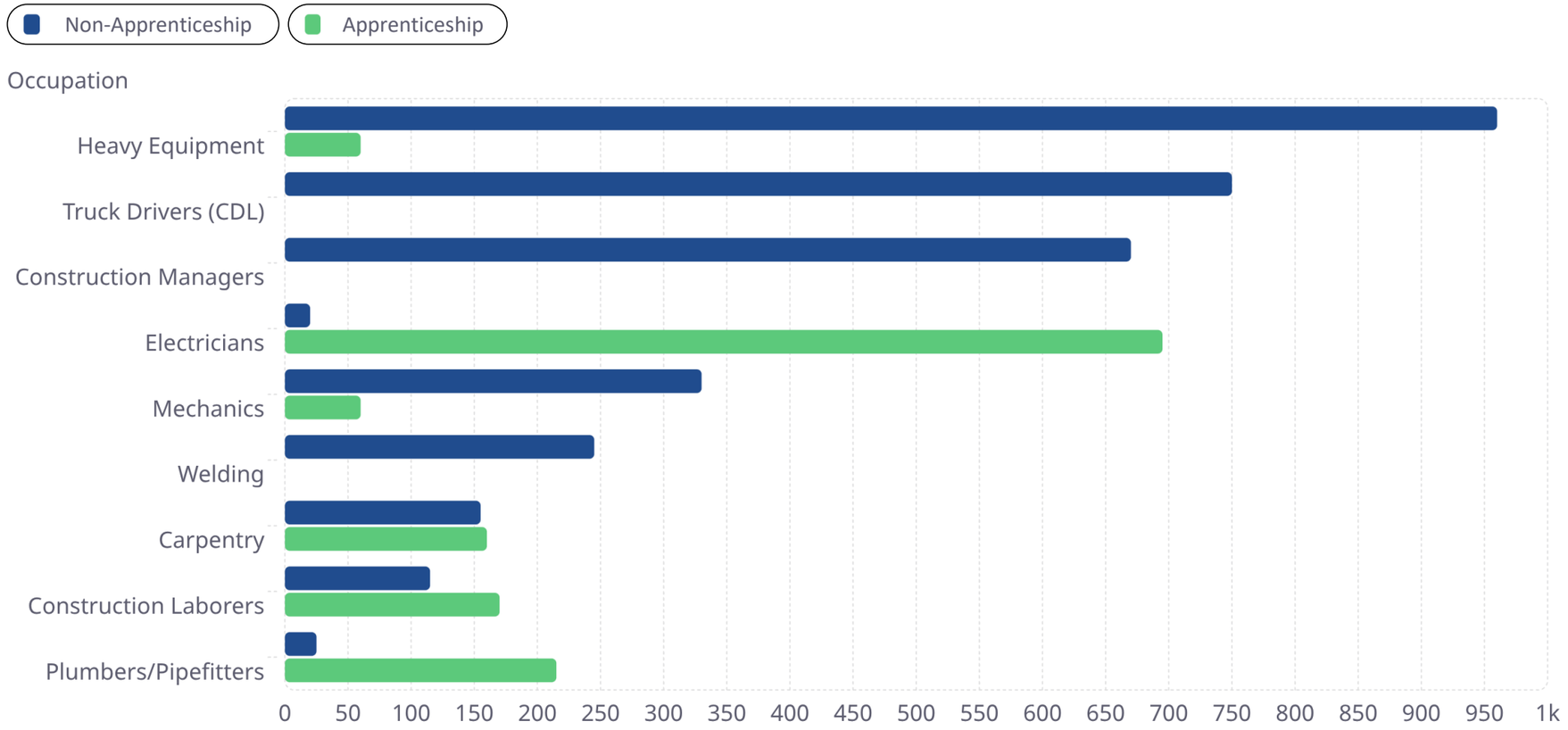
Secondary CTE

~7,500–8,000 high school graduates annually form the primary new-entrant pipeline.

Alaska Native Education Foundations

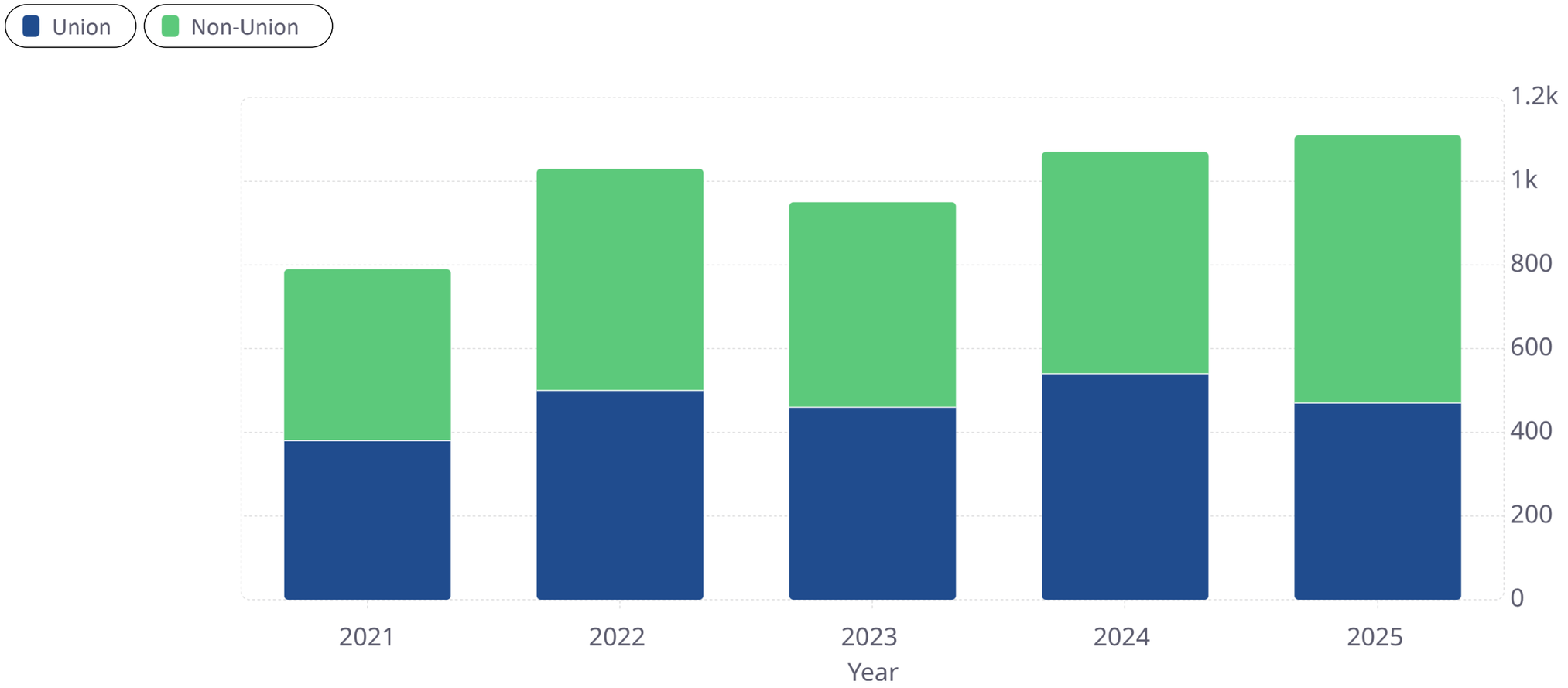
Alaska Native foundations provide scholarships, apprenticeship sponsorship, and workforce readiness for rural residents.

Annual Training Capacity by Occupation



Many providers reported operating at only 60–80 percent of capacity, suggesting participation and access barriers — not facility limits — are the primary bottleneck.

New Registered Apprenticeships by Year



Programs require 2–5 years to complete. This pipeline cannot rapidly respond to the late-2020s construction window without immediate action.

Training System Barriers & Constraints

Instructor Availability

The #1 constraint across all sectors. Industry wages exceed instructor pay, making recruitment and retention difficult in welding, electrical, heavy equipment, and Commercial Drivers License (CDL) programs.

Facility & Equipment Limits

Dedicated shop space, simulators, and industry-grade equipment restrict scheduling flexibility and cohort size. Specialized facilities are concentrated in larger population centers.

Housing & Support Costs

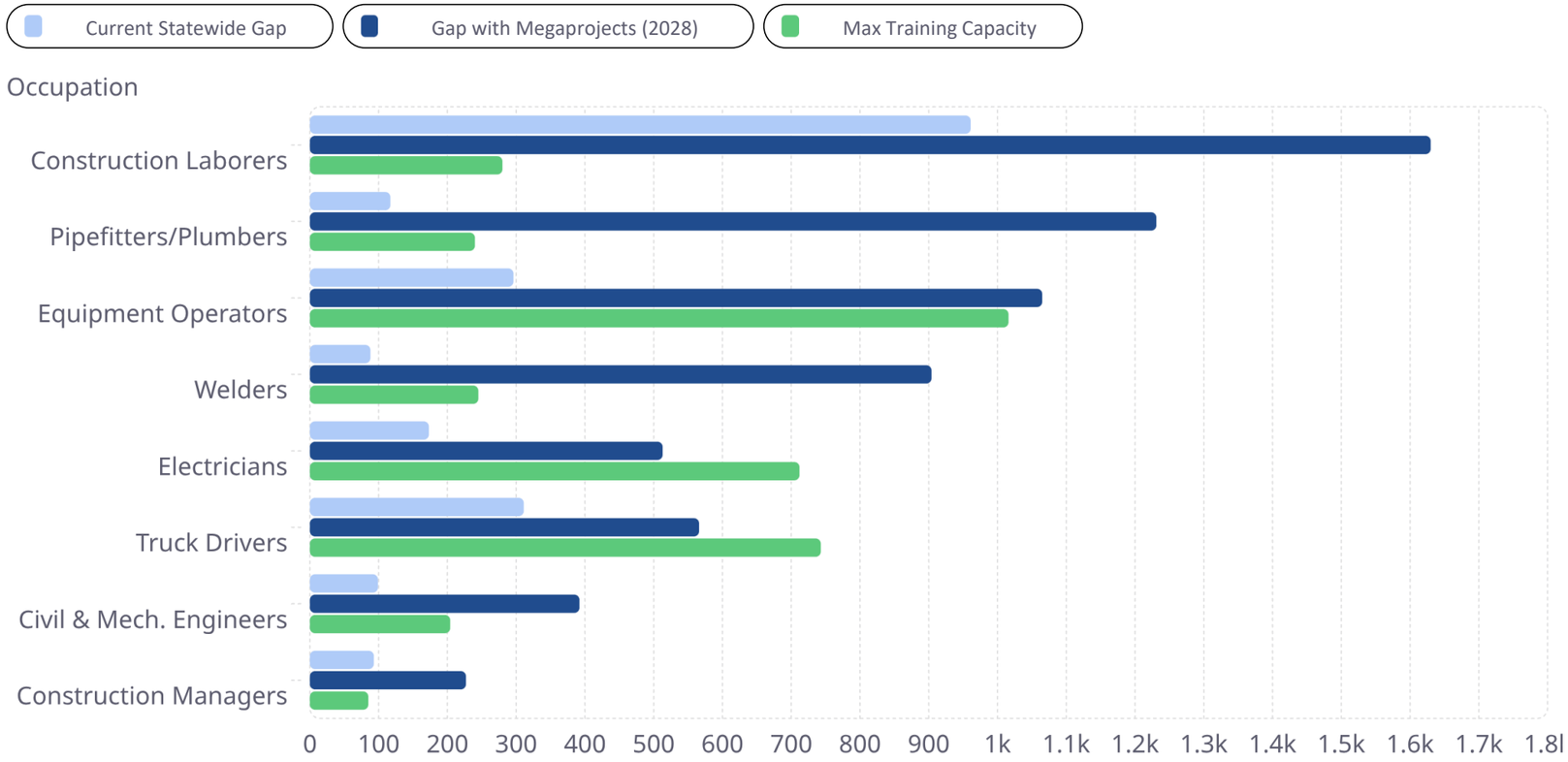
Rural trainees face travel, relocation, and housing costs that reduce participation. Childcare, transportation assistance, and case management are often unfunded.

Funding Cycles

Year-to-year funding cycles prevent long-term planning, slow instructor hiring, and delay equipment purchases — even when demand is rising.

"Workforce training must be designed with a clear objective: employment, not training for its own sake. Alaska must prioritize full funding for high-performing trade schools." — Mining and Petroleum Training Service (MAPTS)

Workforce Gap Analysis: 2028 Peak Demand



For most critical trades, **maximum training capacity falls far short of 2028 peak demand**. Even where capacity exists on paper, it cannot be mobilized instantly — it requires instructors, funding, and lead time.

Nonresidents already represent ~25% of workers in these occupations at baseline. Project construction will increase this reliance without coordinated investment.

Training Pathway Scalability Comparison

Pathway	Role in LNG Workforce	Time to Entry	Scalability
Short-Cycle Vocational (CDL, laborer, entry welder)	Entry-level construction	1-3 months	High
Registered Apprenticeship	Journey-level skilled trades	2-6 months to paid entry 2-5 yrs journeyperson	Moderate
College / Technical Programs	Technical & industrial roles	1-2 years	Moderate
Employer-Led / Incumbent Worker	Job-specific onboarding	Weeks-months	Moderate
University Degrees (Engineering)	Professional & supervisory	4+ years	Low (near-term)

No single pathway can close projected workforce gaps. A coordinated, multi-pathway strategy is required — beginning immediately for short-cycle programs and in parallel for longer-term pipelines.

Investment & Scaling Strategies

1

Expand Short-Cycle Training Now

Maximize enrollment in CDL, laborer, heavy equipment, and entry-level welding programs. These can influence early construction mobilization within months.

2

Grow Apprenticeship Pipelines Early

Increase intake immediately so apprentices are available at peak demand. Pursue State Apprenticeship Agency (SAA) status to allow 2:1 apprentice-to-journeyperson ratios in key trades.

3

Invest in Instructor & Facility Capacity

Prioritize providers with existing instructors and demonstrated delivery. Fund equipment upgrades and expand shop space at high-performing institutions.

4

Fund Student Support Costs

Transportation, housing, and childcare are the primary barriers preventing rural Alaskans from accessing training. Direct funding here yields the fastest participation gains.

Estimated Training Costs & Funding Sources

Typical Cost per Training Pathway

Pathway	Typical Cost Range
Commercial Drivers License (CDL) Programs	$6,000 – $10,000
Welding Programs	$8,000 – $23,000
Technical Certificates	$10,000 – $20,000
Apprenticeship Instruction	$5,000 – $8,000/yr
Engineering Degrees	$25,000+/yr

Available Funding Sources

- State Training & Employment Program (STEP)
- Technical & Vocational Education Program (TVEP)
- Workforce Innovation & Opportunity Act (WIOA)
- State capital appropriations
- Federal workforce & infrastructure grants
- Apprenticeship expansion funding
- Industry contributions post-FID

A 2–4-year investment window is critical for licensed trades and engineering disciplines. Investments must begin well before peak demand to influence workforce supply.

Alaska Hire Optimization



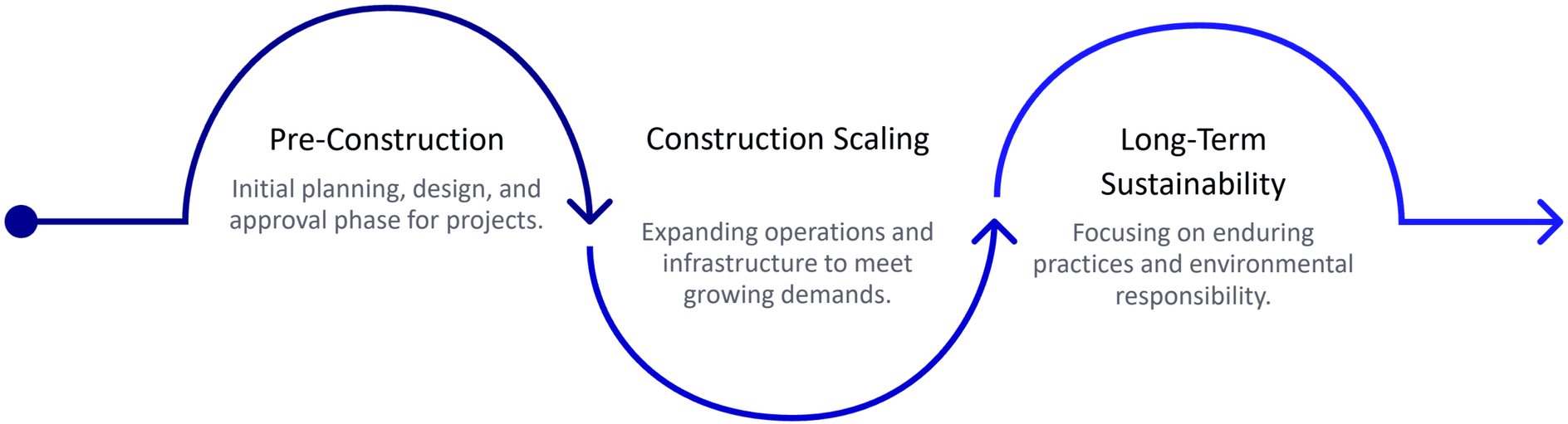
A Realistic, System-Wide Strategy

Alaska Hire is a **long-term outcome** shaped by alignment across training providers, contractors, state agencies, and regional stakeholders — not a single target tied to construction timelines.

- Set achievable resident participation targets by occupation
- Integrate workforce considerations into procurement and contractor planning
- Establish early demand-signaling between contractors and training providers
- Address regional participation barriers for rural and off-road communities

Nonresident labor will remain necessary during peak construction. The goal is to **maximize resident participation where achievable** while acknowledging Alaska's demographic realities.

Phased Implementation Framework



Workforce preparation must begin **before Final Investment Decision**. Early contractor engagement — several major partners already conditionally identified — creates an opportunity to share workforce requirements and mobilization timelines with Alaska training providers now.

Implementation Priorities



Priority 1: Maximize Existing Capacity

Bring existing providers, apprenticeship programs, and Career and Technical Education (CTE) programs to full operational capacity before building new facilities. Fastest and most cost-effective path to increased workforce output.



Priority 2: Align Pipelines with Time-to-Entry

Run short-cycle and long-cycle programs simultaneously. Short-cycle programs supply early mobilization; apprenticeship and college enrollment must increase now to supply peak demand in 2027–2029.



Priority 3: Strengthen Recruitment & Retention

Expand high school CTE transitions, recruit mid-career workers, and attract out-of-state students to Alaska institutions. Alaska's low unemployment means training capacity alone is insufficient.



The Bottom Line

Act Early

Workforce preparation must precede FID. Every quarter of delay narrows the window to influence peak 2027–2029 demand.

Fund Strategically

Prioritize student support costs, multi-year funding commitments, and providers with proven delivery capacity.

Be Realistic

Nonresident labor will be necessary. Set achievable Alaska Hire targets and measure progress consistently.

Coordinate

No single agency or pathway can close the gap alone. Aligned action across industry, government, and training providers is the only path to success.

Key Takeaways & Actionable Recommendations

Key Takeaway	Actionable Recommendation
Alaska lacks the population size or training capacity to independently supply the workforce for multiple projects.	Adopt a realistic Alaska Hire strategy with achievable workforce participation targets.
Federal apprenticeship requirements constrain rapid enrollment expansion.	Invest in apprenticeship expansion by becoming a State Apprenticeship Agency — potential to double apprentices in some trades.
Many training providers are not at capacity.	Scale short-term training immediately to anticipate near-term workforce demand. (SB217)
Existing funding programs often do not address primary barriers to training participation.	Prioritize funding toward the student (including support costs, transportation, housing, and childcare).
Short-term funding cycles limit providers' ability to plan and scale.	Stabilize workforce funding through multi-year commitments aligned with project timelines.

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& WORKFORCE DEVELOPMENT

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