



Nuclear Construction Survey Overview

Data Sources

Projections

- Based on past trends – approximately 2 years old.
- Does not account for proposed projects.
- Source - Bureau of Labor Statistics/Idaho Department of Labor

Project Owner Survey

- Point in time (summer 2020).
- Estimates of future hiring.
- Not all projects are “approved”.
- Sources – Battelle, Fluor, Navy.

Construction Trends in Eastern Idaho

Historical

Supersectors	2007	2010	2019	Numeric Change		Percent Change	
				2007-19	2010-19	2007-19	2010-19
Construction	10,914	7,242	9,340	-1,574	2,098	-14.4%	29.0%

Projections

Private Supersector Projected Employment Growth, 2018-2028		
Supersector	Growth	
	#	%
Total Employment	20,042	11.9%
Construction	2,517	28.0%

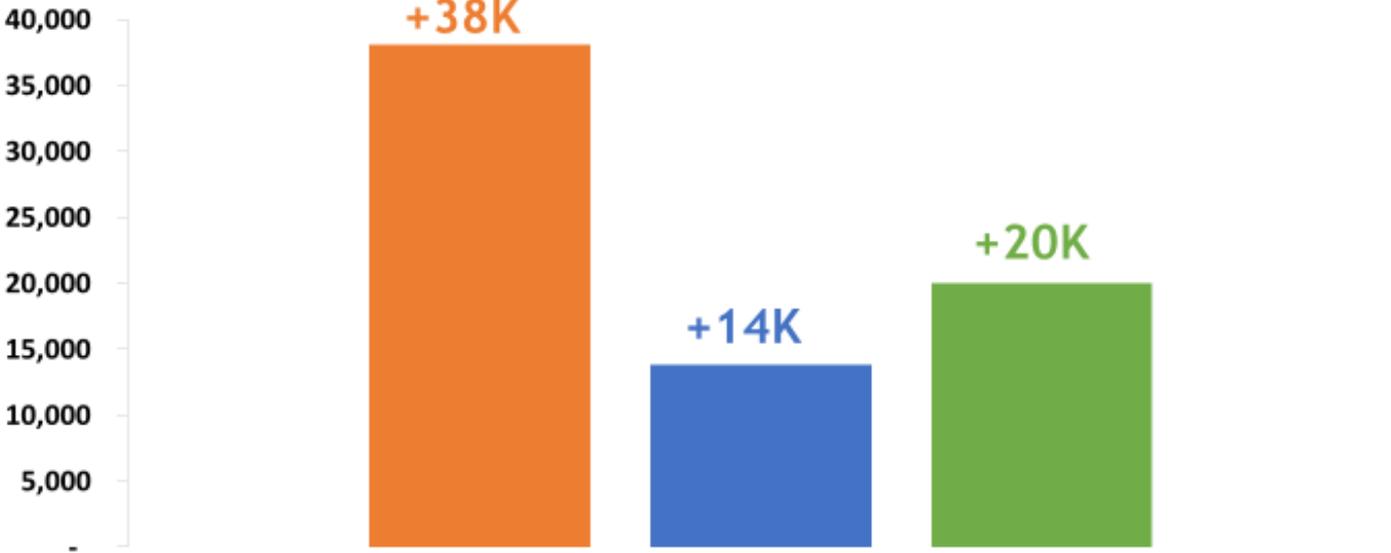
Source: Idaho Department of Labor

Population & Employment Growth – Eastern Idaho (2018-2028)



Projected Regional Growth

■ Employment ■ Labor Supply ■ Population



Source: Idaho Department of Labor

Project Owner Survey

Seven Projects:

- Spent Fuel Handling Recapitalization Project
- Naval Examination Acquisition Project
- Versatile Test Reactor
- Idaho Clean-Up Project
- INL Onsite Maintenance/Small Construction
- *Small Modular Reactors – Site Construction*
- *Small Modular Reactors – Manufacturing*

Project Owner Survey

38 Occupations

Asbestos workers	Boilermakers	Carpenters
Concrete finishers	Concrete iron worker	Concrete laborers
Dimensional inspector	Electrical inspector	Electricians
Equipment operators	Finishers	General Inspector
Heavy equipment operators	HVAC Mechanics	Insulators
Iron Workers	Laborers	Lineman
Machinist	Masons	Material handler
Mechanic inspector	Millworkers	NQA-1 quality inspector
NQA-1 trained supervisors	Operating engineers	Painter
Pipefitter	Plasters	Power dispatcher
Quality engineer	Radiographer	Receipt inspector
Roofers	Sheet Metal	System Mechanic
Tool crib attendant	Welders	

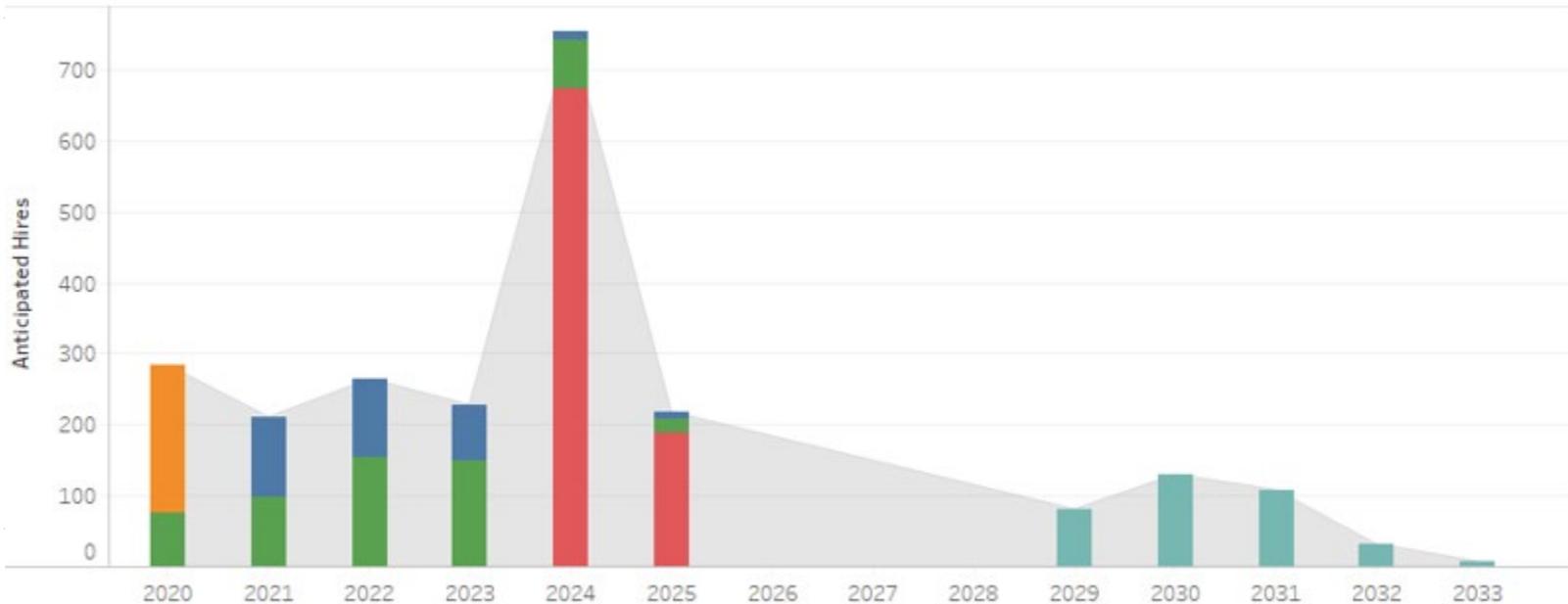
Project Owner Survey

Key Findings

- Peak hiring in 2024
- Two-thirds local hires, one-third from out-of-state.
- Eight occupations anticipate using greater than 33% apprentices:
 - Concrete iron worker
 - Concrete finisher/laborer
 - HVAC mechanic
 - Roofer
 - Material handler
 - Carpenter
 - Electrical technician

Anticipated Hires

(Colors indicate different projects)



Total Hires

(Through 2025)

Local Hires (Anticipated)	Out of State Hires (Anticipated)	Percent Local Hires (Anticipated)	Percent Apprentices	Minimum Average Years Experience
1,320	637	67%	17%	2.3

Top Occupations

(Through 2025)

	Local Hires (Anticipated)	Out of State Hires (Anticipated)	Percent Local Hires (Anticipated)	Percent Apprentices	Minimum Average Years Experience
Construction carpenter	120	69	63%	26%	1.9
Electrician	201	118	63%	11%	2.9
Iron worker	109	62	64%	1%	0.6
Laborer	104	62	63%	1%	0.8
Pipefitter	190	111	63%	2%	2.1

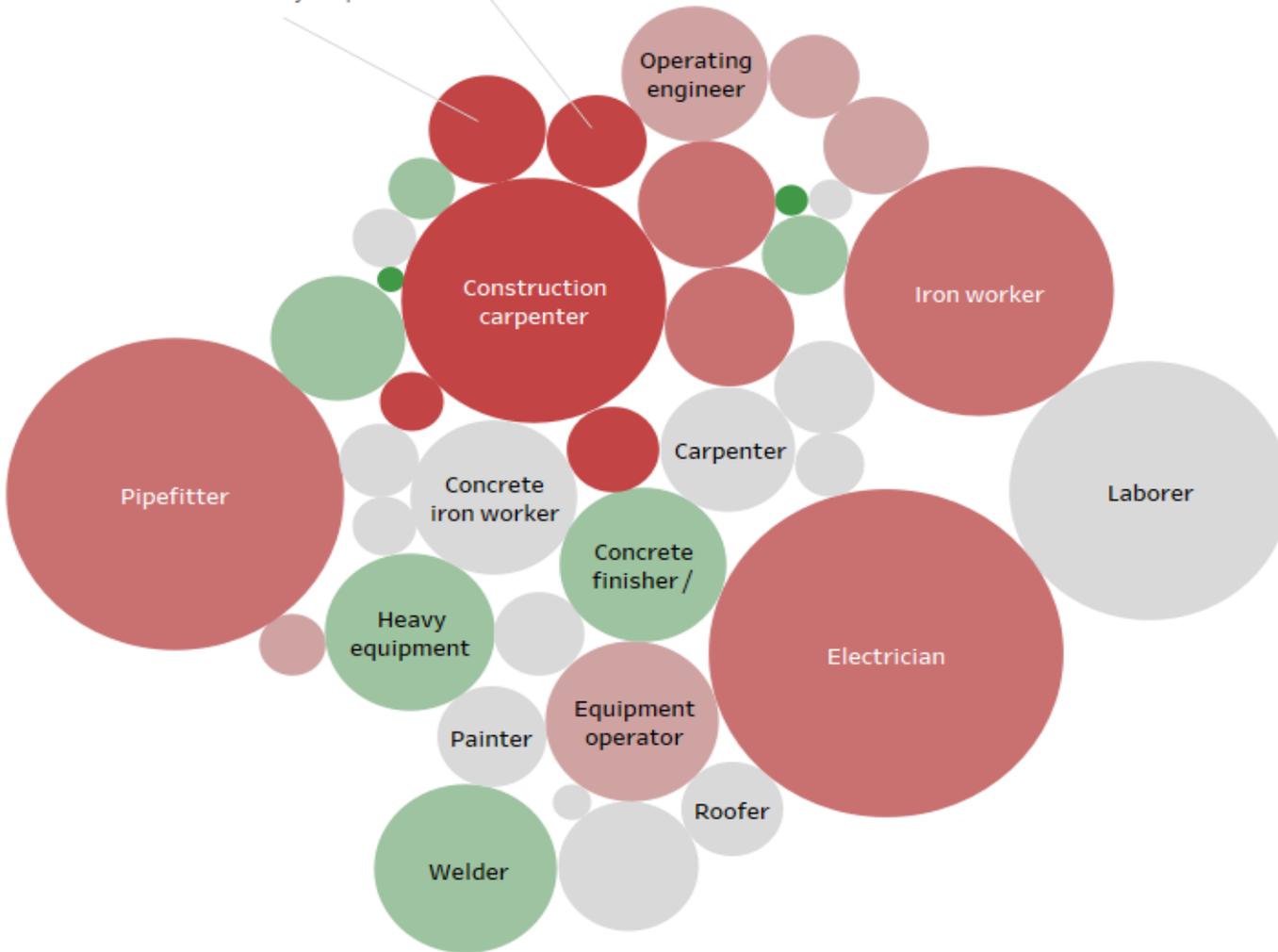
Difficulty Hiring

Size: # of anticipated hires

Color: average difficulty hiring

NQA-1 Trained Supervisor

NQA-1 Quality Inspector



Difficulty Rating for Unlabeled Occupations

Boilermaker	High
Mason	High
Dimensional inspector	High
HVAC mechanic	High
Radiographer	High
Quality engineer	High
Projects control personnel	High
Millworker	Low
System mechanic	Low
Power dispatcher	Low
Machinist	Low
Lineman	Low
Electrical technician	Low
Sheet metal	Low
Electrical inspector	Low
General inspector	Low
Material handler	Medium
NDE specialist	Medium
Insulator (mechanical)	Medium
Plaster	Medium
Mechanic inspector	High

Work Experience & Level of Education

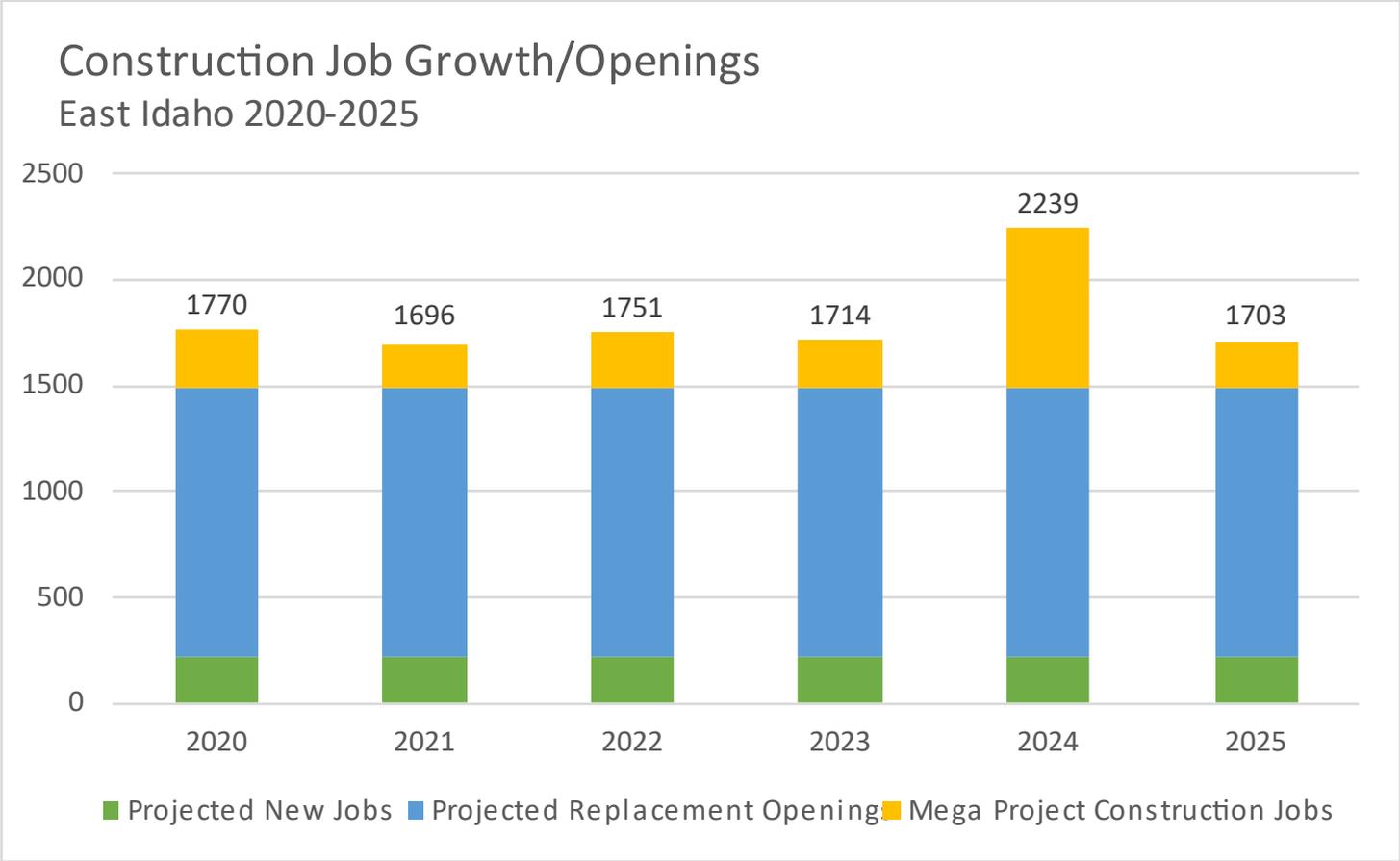
By Occupation & Project

By Occupation
Multiple values

Occupation	Anticipated Hires (By Project) *	Relevant Work Experience			High School Diploma	Career Technical Certificate
		Less than 1 year	1-2 years	3-5 years	✓	✓
Construction carpenter		Less than 1 year		3-5 years	✓	
			1-2 years	3-5 years	✓	
				3-5 years	✓	
Electrician				6+ years		✓
				3-5 years	✓	
			1-2 years	3-5 years		✓
			1-2 years			✓
Iron worker			1-2 years		✓	
				3-5 years	✓	
				3-5 years	✓	
Laborer		Less than 1 year				✓
				3-5 years	✓	
		Less than 1 year			✓	
			1-2 years		✓	
Pipefitter			1-2 years		✓	✓
				3-5 years	✓	
				3-5 years		✓
Pipefitter			1-2 years			✓
				3-5 years	✓	

* Project names are masked to protect confidentiality

Putting it All Together



What's Next?

- Outreach/recruiting strategies
- Training strategies
- Infrastructure planning
- Mitigate impact on existing businesses