



Construction Sector Workforce in California

October 28, 2022



C·O·E

CENTERS OF EXCELLENCE
FOR LABOR MARKET RESEARCH



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California Community Colleges

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About this Report

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- Next Steps



Find the Report Here:

<https://coeccc.net/central-california/2022/09/construction-sector-workforce-study/>



Acknowledgements

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Executive Summary

- Businesses are impacted by an **insufficient pool of qualified job candidates**
- Most businesses expect their **need for qualified employees to increase** in coming years
- A majority of businesses only require a **minimum of a year or less of related work experience** for candidates who are at an education level of high school diploma or higher
- Many businesses are interested in working with **community colleges to develop programs that could help fill training gaps**

Methodology



Methodological Approach

Kern Community College District in partnership with the Centers of Excellence in South Central Coast, Bay Area, Far North and Central Valley/Mother Lode contracted with the Center for Economic Development (CED) to perform a workforce study of California's construction and contracting sector.



An Employer list was purchased from Data Axle (8,148)

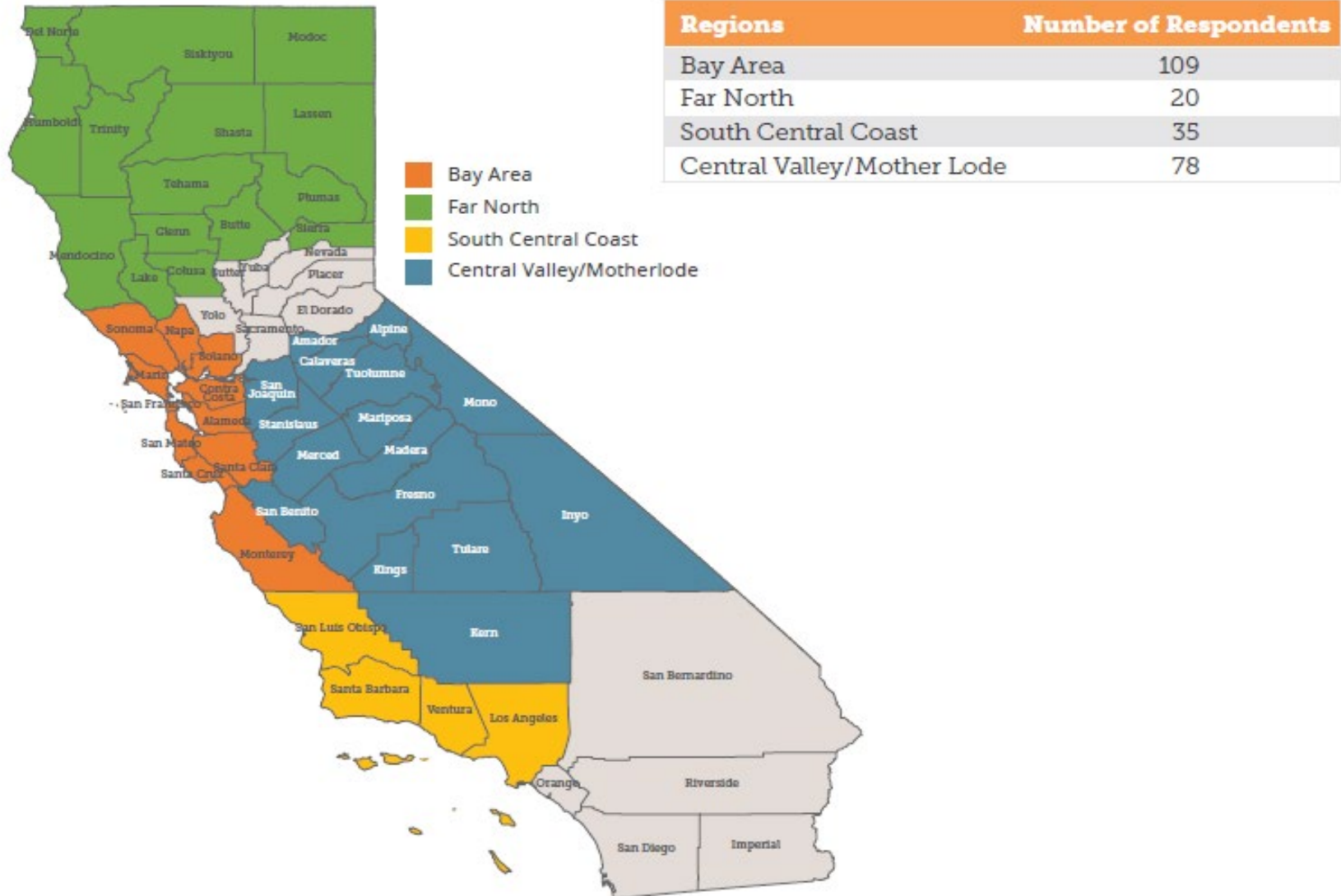
Construction NAICS codes were used for firm identification



Builders Exchanges and Other Construction Associations were also solicited for participants via email and follow-up calls (332)

Business Characteristics

Map of California Counties included within each study region and their respective count.



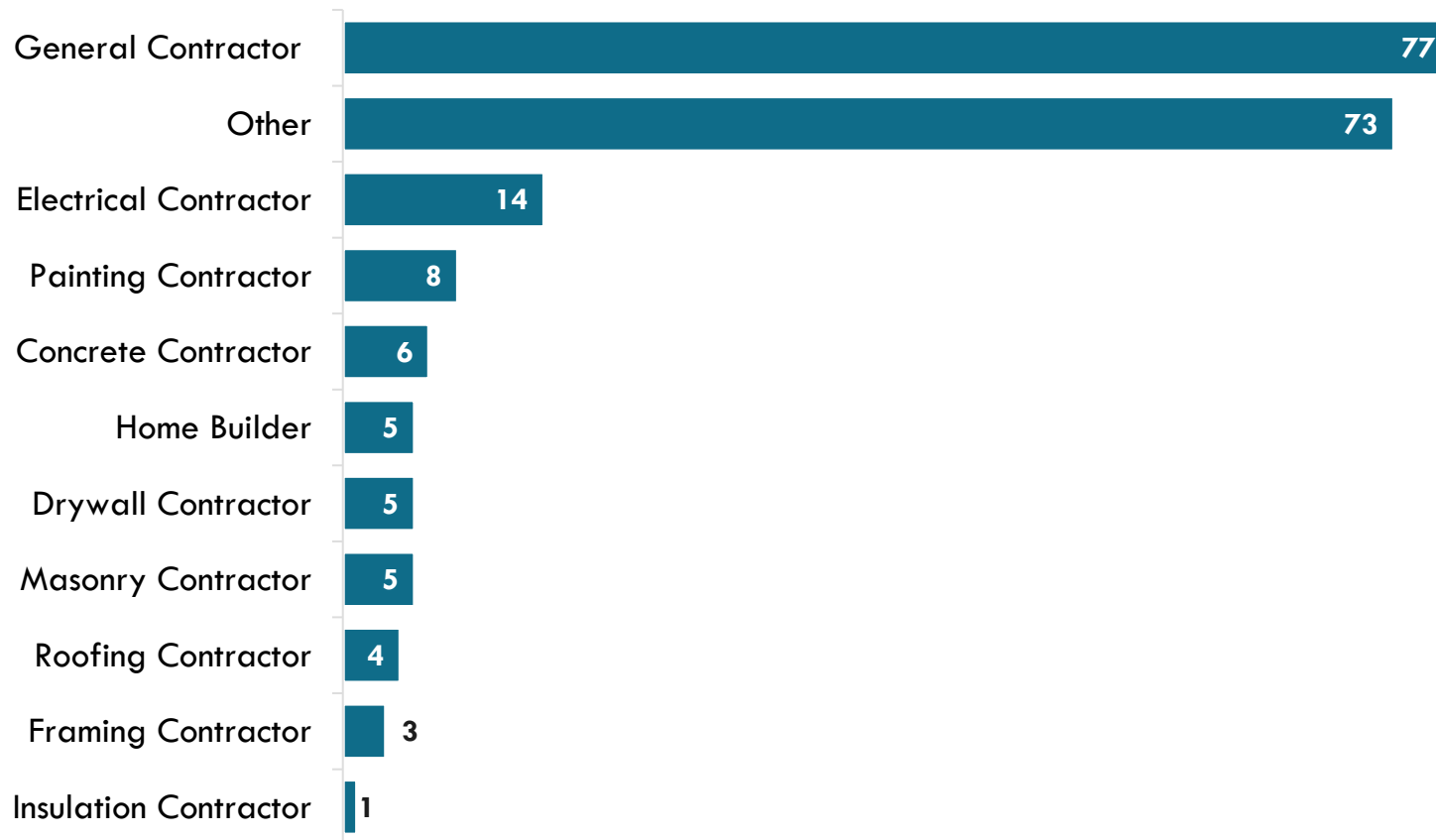
A decorative graphic on the left side of the slide consists of a vertical grey line with several horizontal branches. Various colorful circles (red, yellow, green, blue, purple, grey) are attached to these branches. Each circle contains a white icon representing different business concepts: a bar chart, a line graph, a pie chart, a person silhouette, a checkmark, and a grid. The overall theme is business and data analysis.

Business Characteristics

- Majority of respondents were General Contractors (**37%**)
- Respondents recruit heavily from the **SF Bay Area and the Central Valley/ Mother Lode**

Company Classification

How would you classify your company?



Employer Data





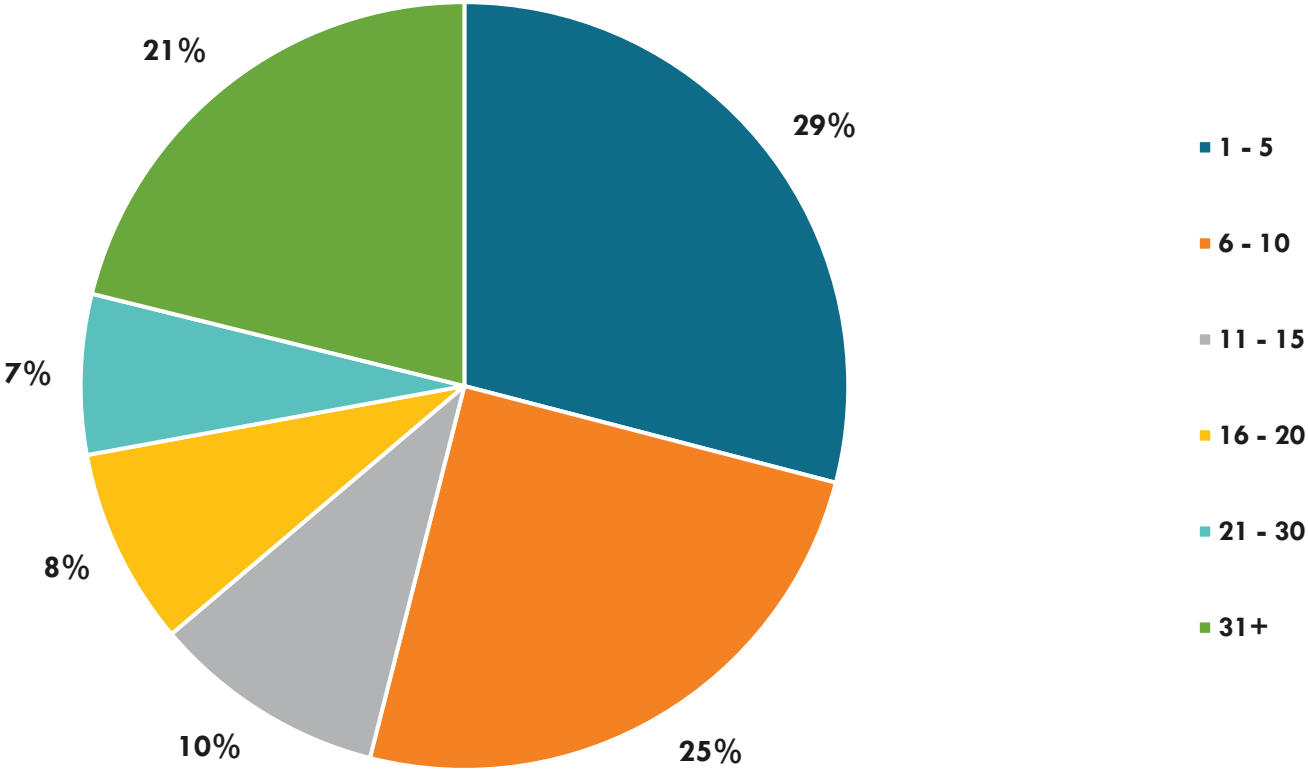
Number of Employees

- The Vast majority of employers (**88%**) had **under 100 employees**
- **97%** of firms associated with the identified 25 NAICS construction codes had **fewer than 50 employees**

Direct Participants

Employers were asked:

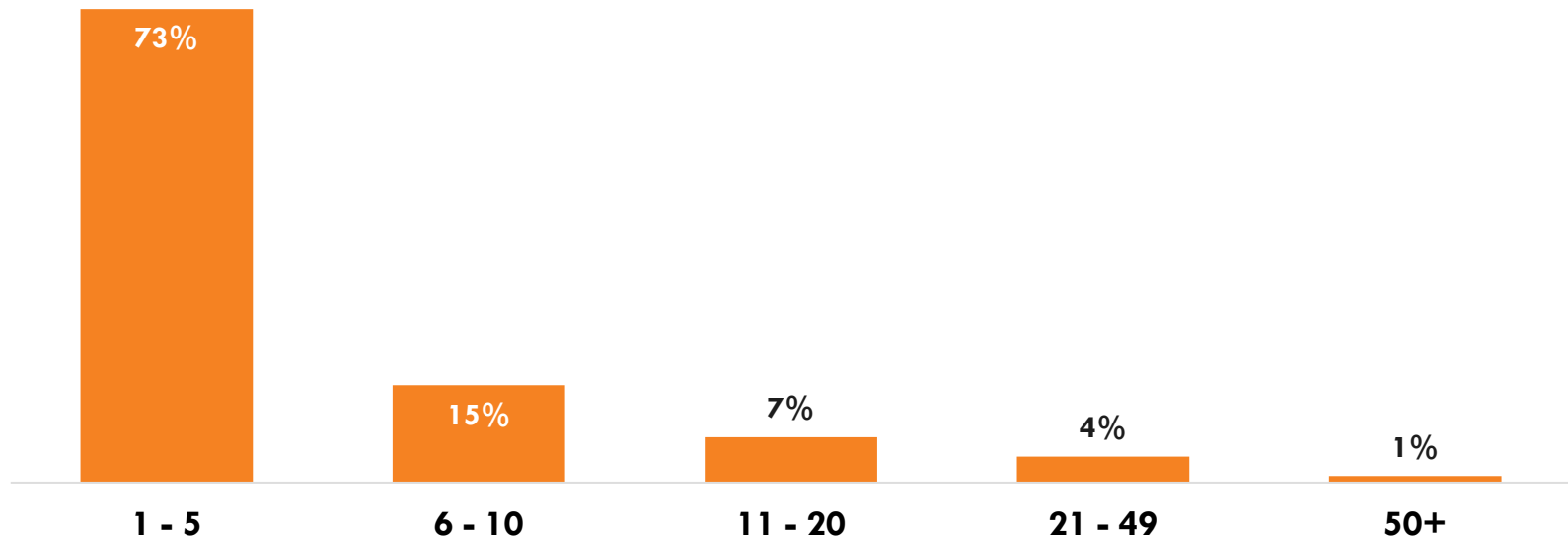
Of the workers you currently have, how many physically participate in construction work?



Worker Replacement

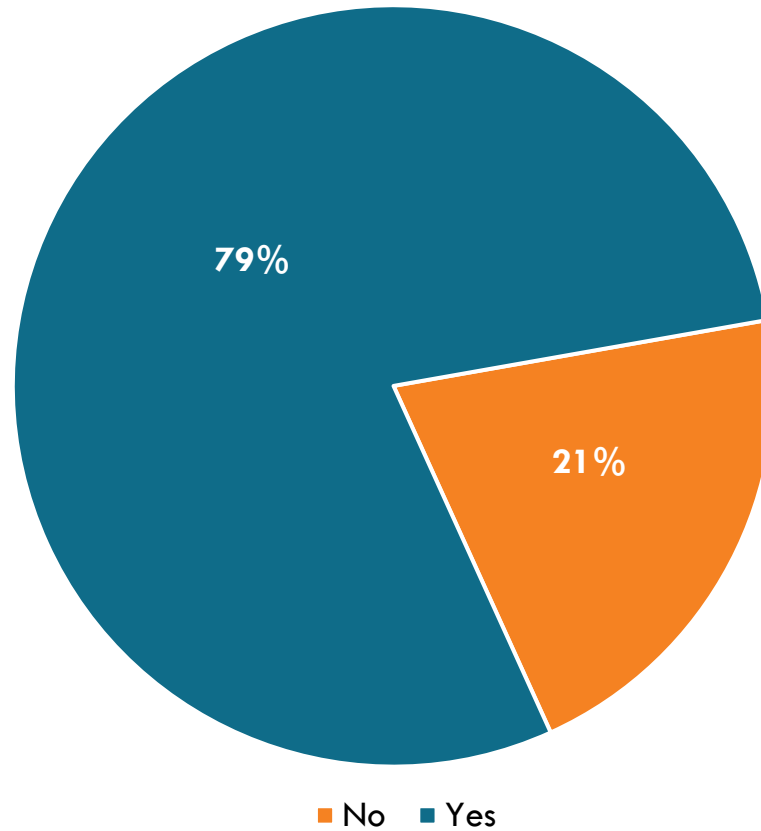
Employers were asked:

On average, how many of your construction workers will you need to replace each year?



Anticipated Worker Change

Do you plan to have more construction workers two years from now?



Postsecondary Supply



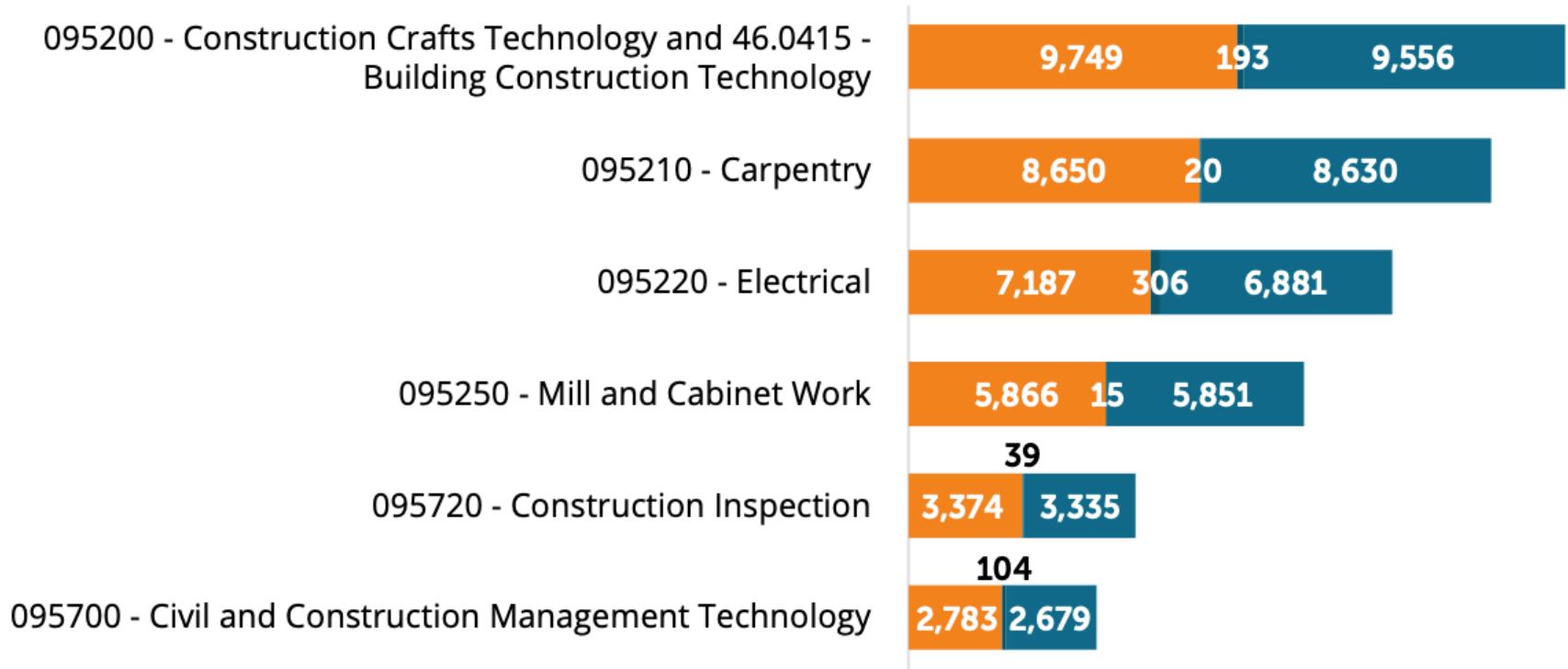
Postsecondary Supply

Postsecondary supply in the Four Regions

TOP/ CIP Code	Title	Supply
47.0201	Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology	595
095220	Electrical	306
094600	Environmental Control Technology	272
095200	Construction Crafts Technology	117
095700	Civil and Construction Management Technology	104
46.0415	Building Construction Technology	77
095230	Plumbing, Pipefitting and Steamfitting	71
095720	Construction Inspection	39
094730	Heavy Equipment Operation	34
095640	Sheet Metal and Structural Metal	34
094610	Energy Systems Technology	27
095210	Carpentry	20
095250	Mill and Cabinet Work	15
TOTAL		1,711

Postsecondary Supply

Gap Analysis in the Four Regions



Demand

Supply

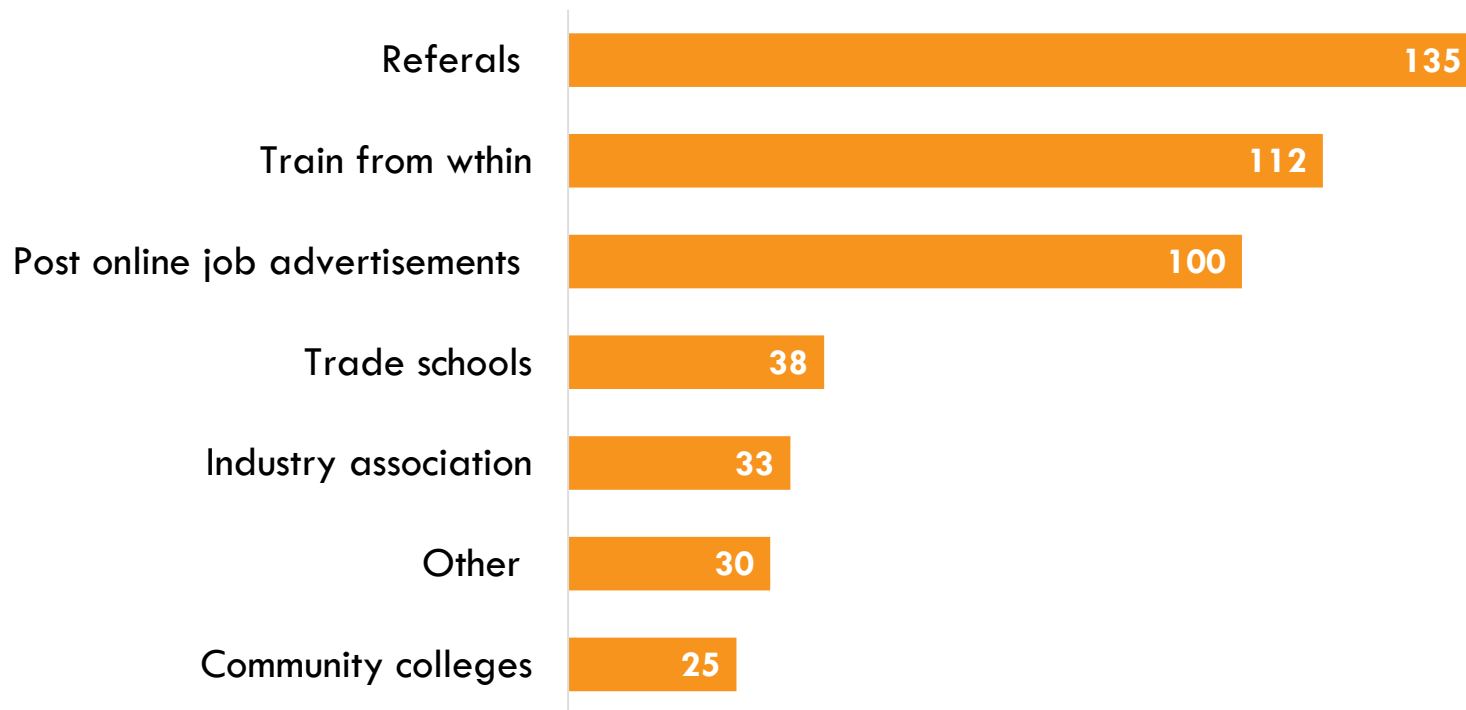
Gap

Employer Recruitment Method



Employer Recruitment Method

Where do you find qualified candidates to fill vacancies for construction worker positions?

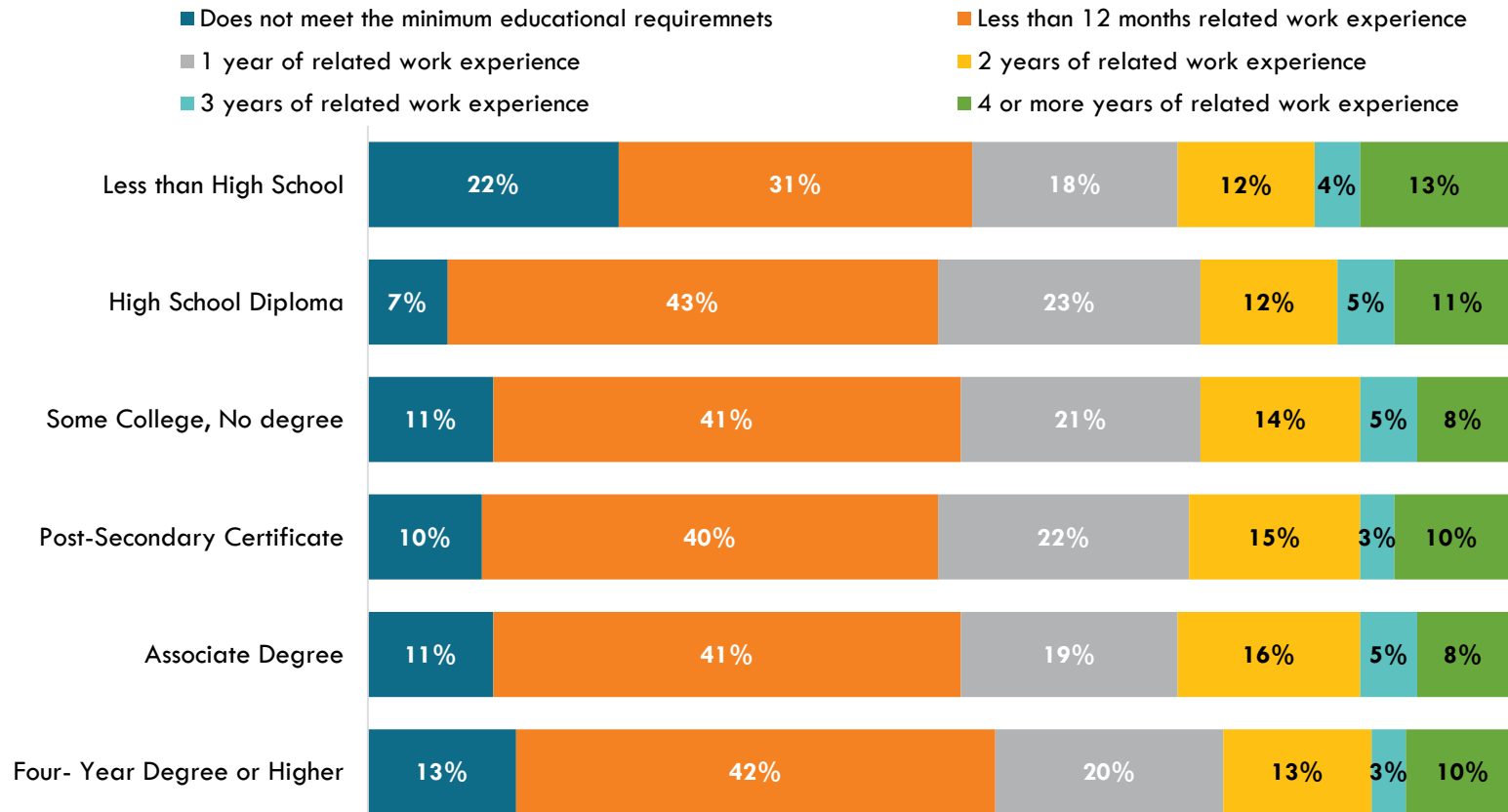


Skills, Training, & Education



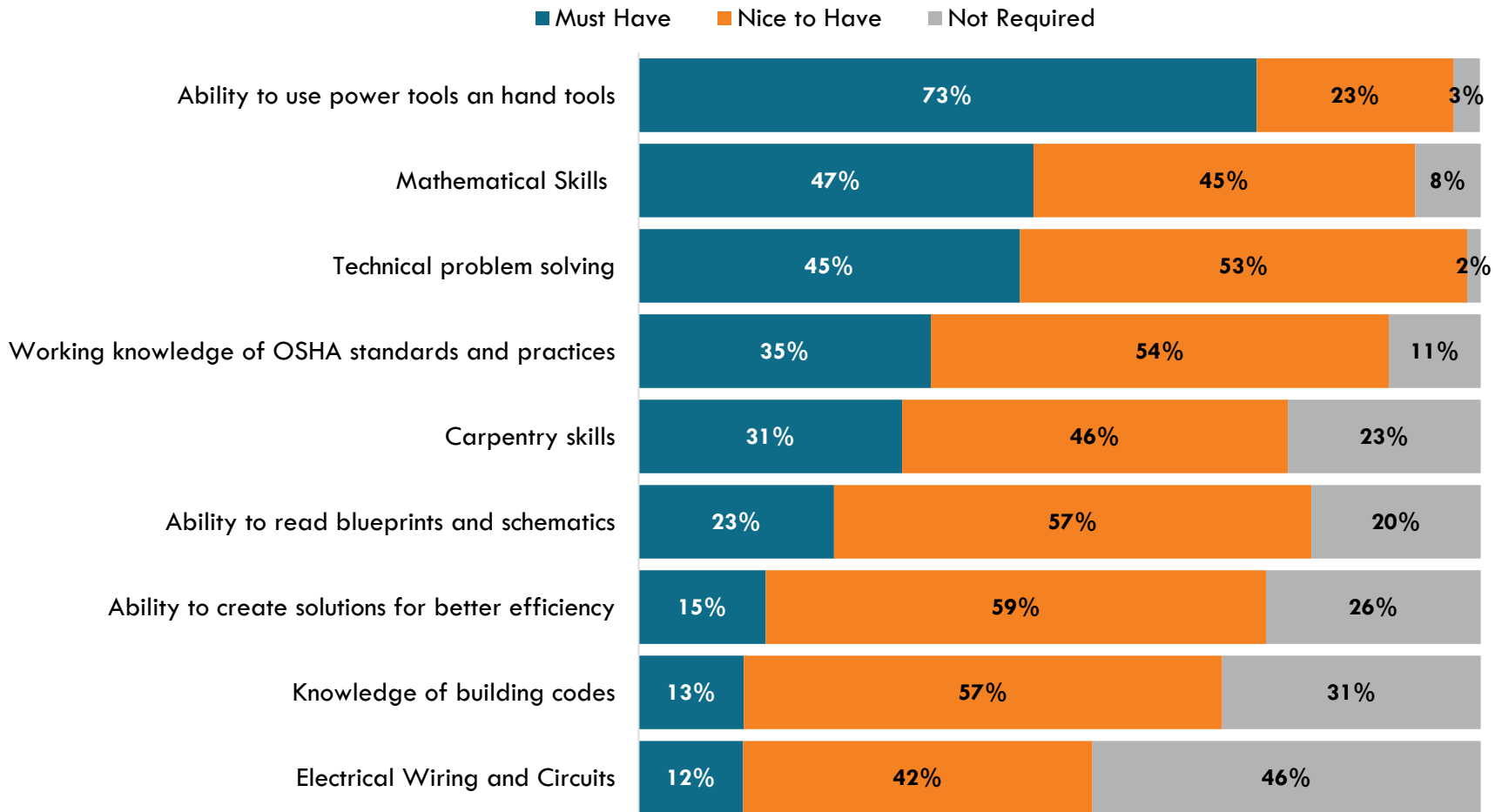
Skills, Training, & Education

Minimum Related Work Experience Required for Following Education Levels



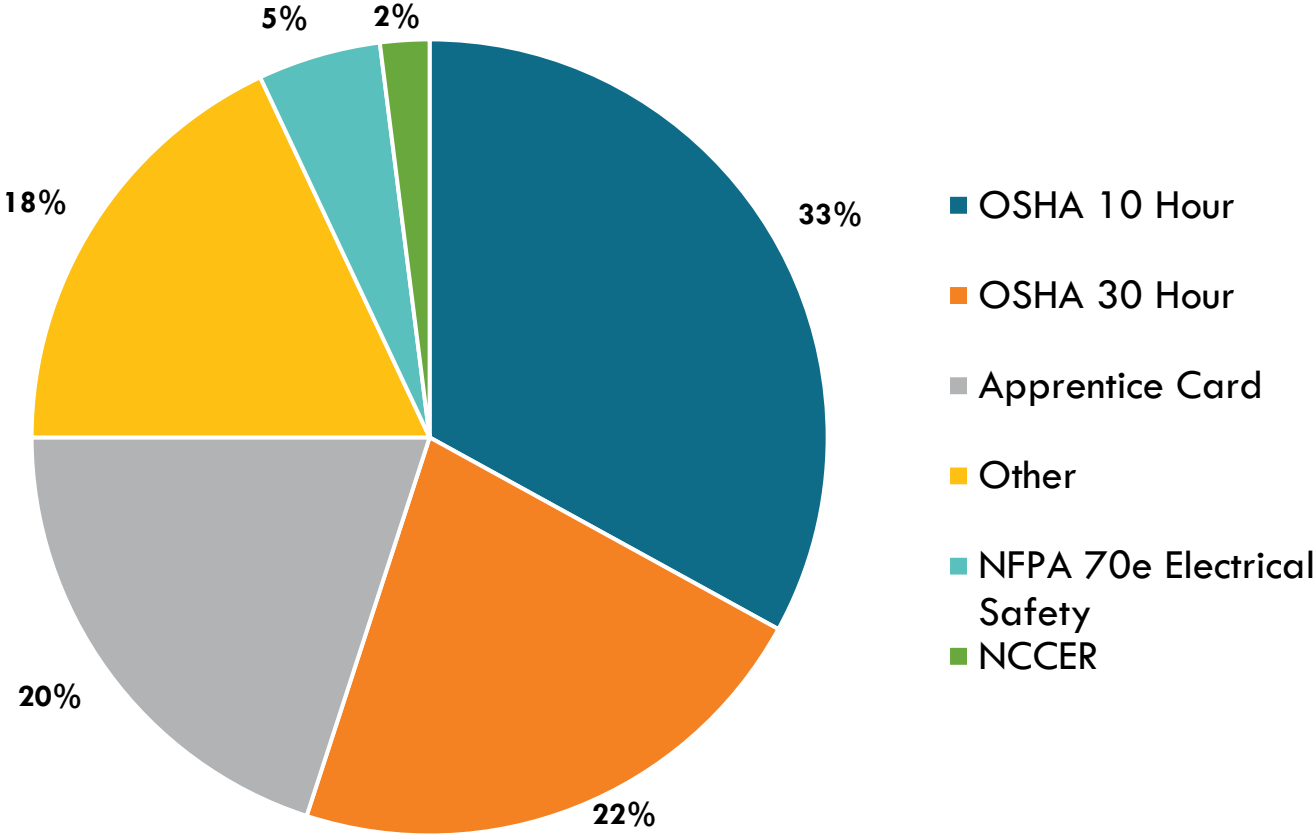
Importance of Skills

Importance of Skills for Qualified Construction Worker to Possess



Certifications

Which of these certifications are the most important certification for a construction worker to possess?



n = 139

Workforce Challenges/Opportunities



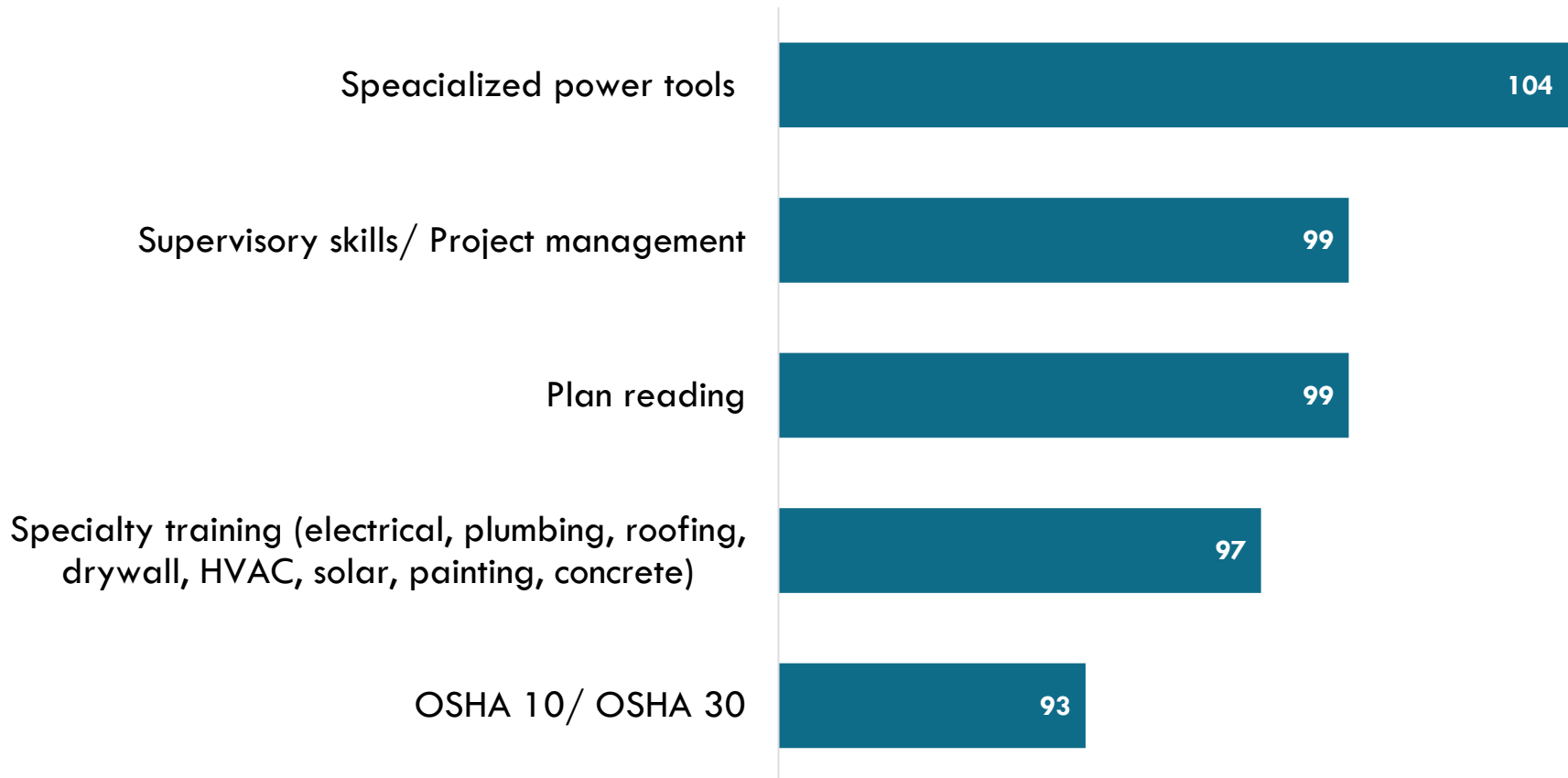
Implications of Inflation Reduction Act (IRA)

Inflation Reduction Act Total Job Estimates – Summary Figures

	Average Annual Budget and Job Creation Figures over 10 Years			Total Budget and Job-Years Figures	
	Public Spending	Total Spending (= public + private spending)	Annual Job Creation	Total Spending	Total Job Creation, Job-Years
Electricity Programs	\$21.4 billion	\$66.3 billion	573,177	\$663 billion	5,731,771
Transportation Programs	\$3.3 billion	\$5.6 billion	65,821	\$56 billion	658,212
Building Programs	\$4.8 billion	\$9.4 billion	91,082	\$94 billion	910,819
Manufacturing Programs	\$6.7 billion	\$12.8 billion	106,032	\$127.7 billion	1,060,320
Environmental Justice and Community Resilience Programs	\$1.1 billion	\$1.1 billion	14,892	\$11 billion	148,916
Lands Programs	\$1.1 billion	\$1.1 billion	22,582	\$10.9 billion	225,817
Agriculture Programs	\$2.2 billion	\$2.2 billion	38,573	\$22 billion	385,732
Totals	\$40.6 billion	\$98.4 billion	912,159	\$984 billion	9,121,587

Professional Development Opportunities

Which of the following professional development opportunities would you be interested in for your existing workers? (select all that apply)





Workforce Challenges/Opportunities

1. Generally, survey participants perceive their employees **already meeting** necessary educational levels
2. Employers **prioritize experiences** over education
3. Employers **do not correlate education** with actual construction experience
4. Employers believe relevant **skills are acquired through experience**, as opposed to educational opportunities

Key Findings & Recommendations for Community Colleges





Most-Desired Skills

- Ability to use **power and hand tools**
- **Mathematical skills**
- **Technical problem-solving**
- Working knowledge of **OSHA** standards and practices



Key Findings

- An **insufficient pool** of qualified workers is seen as one of the greatest challenges in the sector
- Many respondents express interest in **establishing internships** with local institutions



Recommendations

- Increase **marketing efforts** to local employers
- Adjust curricula to meet **industry certification** needs
- Prioritize “**Must Have**” skills in construction-related courses
- Provide **professional development** opportunities



A Note on Energy Efficiency

- Significant need for **environmental literacy** among workers
- **New legislation** and future regulations will prioritize **energy efficiency** and sustainable building techniques

Q&A



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Next Steps

For those of you at community colleges, what would next steps be for you at your college to implement the recommendations in your construction program?

For those of you partnering with your local community college, what next steps are you looking forward to taking based on the report recommendations?

Thank you!

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