



## Addressing a Changing Trade Workforce: Strategies for Electrical Contractors

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## Research Summary



The study responds to the evolving nature of the construction trade workforce.

**Study:** Involved a nationwide survey of nearly 700 IBEW electricians and 25 interviews w/individuals representing NECA contractors (The Top Performers)

**Objective:** To provide ECs w/strategies to manage, recruit, and retain trade workers

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## What is going on with labor...

- Shortage of skilled labor in the U.S. which started in the 1980s
- Labor availability issues are more pronounced on projects w/tight schedules – impacts safety, quality, and costs (overreliance of OT)



## Workforce statistics show that...



- Over 407,000 construction job openings (as of Jan-24)
- Job separations (374,000) continue to outweigh new hires (352,000)
- Btw. 2007-2011 over 2 million workers were laid off – never returning to the industry
- The Great Resignation (during the pandemic)
- 1 in 4 construction workers over the age of 55 (nearing retirement)

## How Do You Address the Workforce Shortage?

There's no one-size-fits-all solution

## Industry Perceptions

### Workforce Motivation

- ✦ Fringe Benefits
- ✦ Preferred Work Schedule
- ✦ Overtime
- ✦ Commitment

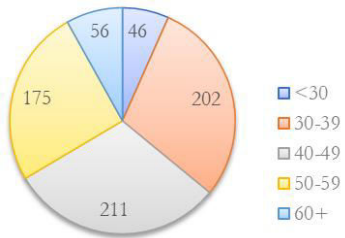
### Workforce Recruitment

- ✦ Image Perceptions
- ✦ Promotion for the Trades

### Workforce Retention

- ✦ Amount of Supervision
- ✦ Stress Levels
- ✦ Safety Training
- ✦ Productivity and Quality
- ✦ Promotion and Career Growth
- ✦ Work Environment
- ✦ Mentoring

## Nationwide Electrical Industry Survey



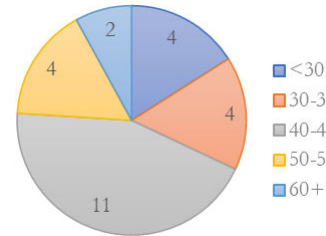
Job Position (Role)	No.
Apprentice	10
Electrician CW	1
Foreman	275
General Foreman	86
Journeyman	155
Office	127
Technician/Service	16

Regional Breakdown (%): East (34), Midwest (29), South (17), West (18)

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## Employee Structured Interviews



Job Position (Role)	No.
Apprentice (Field)	2
CEO/Owner/President (Office)	5
CW (Field)	1
Div. Mgr. (Office)	1
Foreman (Field)	4
Foreman/Estimator (Office)	1
General Foreman (Field)	2
JIW (Field)	2
JIW/Labor Mgr. (Field)	1
JIW/Apprenticeship Instructor (Field)	1
Prefab Coordinator (Office)	3
Superintendent (Field)	2

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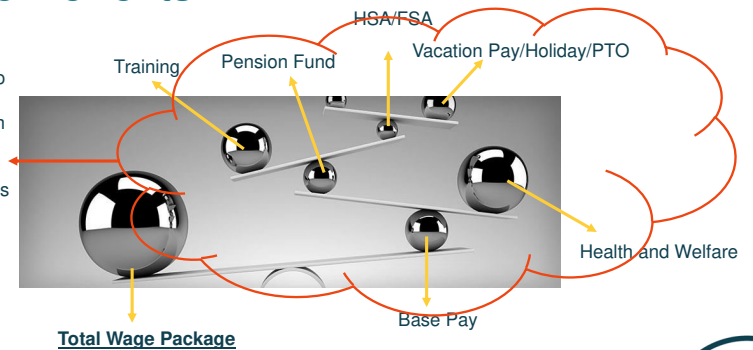
## Workforce Motivation

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## Fringe Benefits

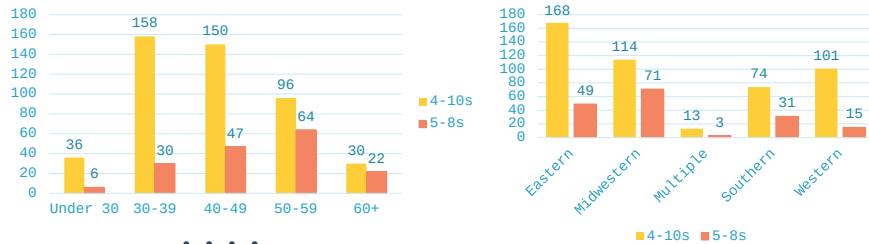
- ❖ Evaluate changes holistically
- ❖ Bring awareness to existing benefits (e.g., mental health support)
- ❖ Consider offering additional programs (e.g., mentoring, financial literacy, etc.)



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## Work Schedule Preferences



- ✓ Increased flexibility for family commitments/personal appointments
- ✓ Reduces # of daily commutes
- ✓ Can help prioritize work-life balance

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## Working Overtime



- 77% of study participants (Top Performers) report that they are willing to work OT when asked noting it's:

*"because they are here to help, are a team player, for emergency calls, when the customer needs it, when dealing with power shutdowns and changeovers, as the job demands, to meet deadlines, extra pay and financial advantages."*

But, how do we avoid this?



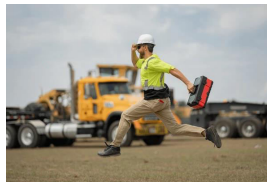
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## Employee Commitment

How do you keep employees satisfied and content in the age of increased mobility?

- ✚ Help prioritize individuals' commitment to seeing projects through to completion by creating a sense of ownership, engagement, recognition of worker involvement in decision-making, and overall impact on project success.
- ✚ Balance incremental costs related to tools, equipment, increased safety training/awareness, creating positive work environments, etc. against intrinsic value it creates among workers.



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## Workforce Recruitment



## Construction Industry Image

### OLD

- Construction worker
- Dirty and challenging
- Blue-collar work
- Male-dominated
- Heavy equipment and machinery
- Uneducated

### NEW

- Craftsperson/skilled trade professionals
- Rewarding and fulfilling
- Hands-on careers
- Diverse workforce
- Advanced technologies and tools
- Debt-free education

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## Promoting the Construction Trades



- Financial benefits / good quality jobs
- Professional and personal rewards
- Career growth opportunities
- Gratification from work and mentoring younger trade professionals
- Dynamic work environments and challenges
- Client / customer satisfaction

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## Workforce Retention

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## Job Satisfaction based on Supervision

Region	Please rate how satisfied you are with the amount of supervision you receive from your company. (1 being not satisfied, 5 being extremely satisfied)					Mean	Total
	1	2	3	4	5		
Eastern	3	7	48	91	78	4.03	227
Midwestern	1	0	30	84	80	4.24	195
Multiple	0	0	0	9	9	4.50	18
Southern	0	0	8	40	64	4.50	112
Western	1	3	22	49	42	4.09	117
Not Reported	0	0	0	1	0	4.00	1
<b>Total</b>	<b>5</b>	<b>10</b>	<b>108</b>	<b>274</b>	<b>273</b>	<b>4.19</b>	<b>670</b>

Job Title	Please rate how satisfied you are with the amount of supervision you receive from your company. (1 being not satisfied, 5 being extremely satisfied)					Mean	Total
	1	2	3	4	5		
Apprentice	1	0	2	6	1	3.60	10
Electrician CW	0	0	0	1	0	4.00	1
Foreman	2	3	42	106	112	4.22	265
General Foreman	0	3	13	38	32	4.15	86
Journeyman	2	3	30	65	52	4.07	152
Office	0	0	17	43	60	4.36	120
Technician	0	0	2	7	7	4.31	16
Not Reported	0	1	2	8	9	4.26	20
<b>Total</b>	<b>5</b>	<b>10</b>	<b>108</b>	<b>274</b>	<b>273</b>	<b>4.19</b>	<b>670</b>

## Job Satisfaction based on Stress

Region	Please rate how stressful your job is. (1 being not stressful, 5 being extremely stressful)					Mean	Total
	1	2	3	4	5		
Eastern	7	26	86	70	34	3.44	223
Midwestern	7	13	84	76	9	3.35	189
Multiple	1	1	3	9	1	3.53	15
Southern	7	12	37	42	14	3.39	112
Western	5	13	36	53	14	3.48	121
Not Reported	0	0	0	1	0	4.00	1
Total	27	65	246	251	72	3.42	661

Job Title	Please rate how stressful your job is. (1 being not stressful, 5 being extremely stressful)					Mean	Total
	1	2	3	4	5		
Apprentice	0	2	5	2	0	3.00	9
Electrician CW	0	0	0	1	0	4.00	1
Foreman	13	34	95	97	27	3.34	266
General Foreman	1	5	29	40	8	3.59	83
Journeyman	10	10	72	42	14	3.27	148
Office	0	6	34	59	19	3.77	118
Technician	1	5	4	5	1	3.00	16
Not Reported	2	3	7	5	0	3.20	20
Total	27	65	246	251	72	3.42	661

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## Job Satisfaction based on Safety Training



Do you feel you have adequate safety training? (1 being not adequate, 5 being extremely adequate)

4.58 average ratings from study participants on a 5-point Likert rating scale across regions



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## Productivity and Quality Highlights

### Finding

Overall, the respondents reported seeing positive trends in productivity and quality due to the advancements in the industry with practices such as building information modeling (BIM), prefabrication, and early planning.

### Key Highlights

- Continue leveraging advancing tech.(e.g., BIM/VDC, digital twins, AI, UAVs, AR/VR, etc. to inspire the next generation of workers
- Ensure training opportunities are available
- Foster leadership, growth, and knowledge transfer through mentoring

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## Promotion and Career Growth Highlights

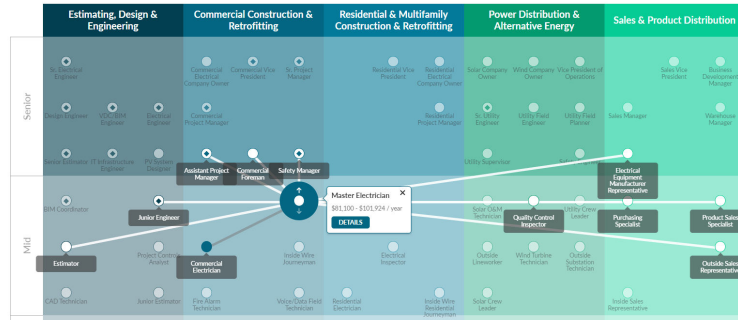


- Opportunities do exist for promotion (Majority (n=412) of the survey participant)
- Identify and nurture potential leaders early
- Consider personalized training methods to support individuals' goals, motivations, and career aspirations (balance btw. technical and soft skills)
- Younger individuals may prefer more structured career paths

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## Promotion and Career Growth Example



<https://electricalconstruction.careerplatform.com/map/>

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## Mentoring Keys to Success

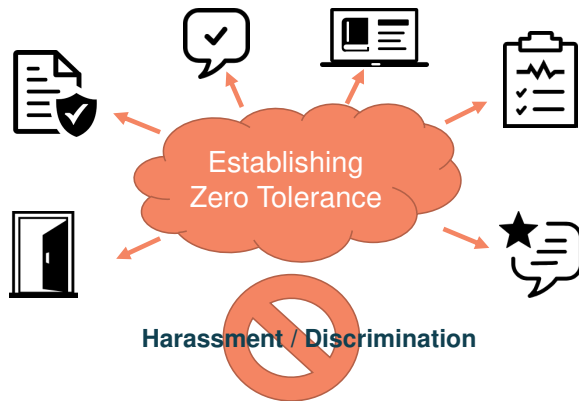


- Commit to talent development
- Create formal mentoring programs
- Support/encourage informal mentoring across levels
- Recognize the interaction btw. mentoring and retention

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## Work Climate Takeaways



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## Grand Challenges

- ✓ Attracting a new generation of workers
- ✓ Advancing recruitment and retention strategies to outpace other contiguous industries
- ✓ Promoting wages and benefits while balancing flexibility in benefit options



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