



MassCEC Equity Workforce Planning Grant

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Project Overview

The MassCEC Equity Workforce Training Planning grant is to understand the appropriate Heat Pump education trainings available to existing HVAC contractors and new entrants to the field from four Environmental Justice communities.

Project Goals

NEEDS ASSESSMENT

IDENTIFY STRATEGIC PARTNERSHIPS

CURRICULUM DEVELOPMENT

IDENTIFY NEW WORKER/EMPLOYER ROADMAP CONDUITS

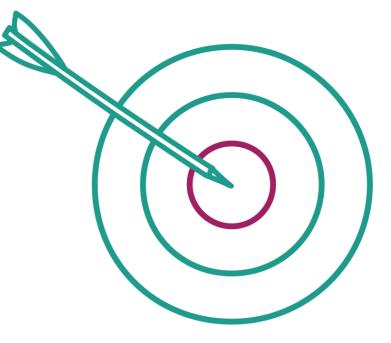
Needs Assessment Methods

Survey of Regional Employers

- Identified 40 nearest to RCC, but invited all
- 11 total
- Interview with local contractor network

Interviews with National Industry Actors

- HVAC curriculum development service (1)
- Manufacturers (2)
- Certifying body (1)
- Distributor (1)



Key Insights from Regional Employers

Importance of networking for job placement & career development

4-8 additional workers needed per company over the next two years

Entry-level positions requiring no prior experience: apprentice, helper, driver

Nearly half of employers are willing to hire an entry level employee 3-6 months into training

Half of HVAC companies have capacity to train in-house

All require a driver's license; most require a drug screening; more than half require a high school diploma or GED in addition to ownership of hand tools

EPA 608 certification most desired

Entry level wage average = \$19.55

Key Insights from National Industry Actors

Not typically involved in recruitment or WD, but open to partnering on solutions

Soft skills not included in training curricula and cannot always be learned on-the-job

Wraparound service providers still missing some cultural soft skills

Actors may play informal role in career development through outreach to training providers

Shorter training programs would benefit from continuing education requirement

Certifications are attractive for hiring, but employers less concerned with workers gaining more credentials after hire

Industry is referral-based so maintaining positive relationships is essential

Workflow is seasonal so proactive servicing is a strategy to even out demand

Curricula Overview

Entry Level

- Introduction to Electricity
- Introduction to Refrigeration
- Comfort Cooling Operations
- Comfort Heating Operations
- Forced Air Systems (focus on duct design)

- HVAC System Operations
- EPA Section 608 Certification
- Entry level ability assessment such as the Industry Competency Exam (ICE) or an employment ready certification (HVAC Excellence)

Continuing Education (Upskilling)

- Insulation types and identification
- Window types and identification
- Door types and identification. •

- Building shell design
- Manual J load calculation
- Using load calculation software (many examples available)
- Product selection



Strategic Recommendations

WRAPAROUND SERVICES

STRATEGIC PARTNERSHIP DEVELOPMENT

EXPAND RETENTION/PLACEMENT SERVICES (OR PARTNER)

CONSIDER OFFERING CONTRACTORS BUSINESS DEVELOPMENT TRAINING



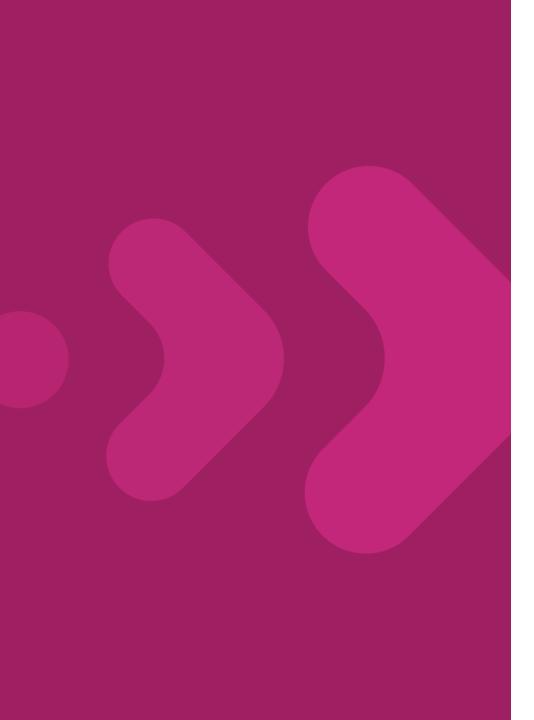
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Appendix

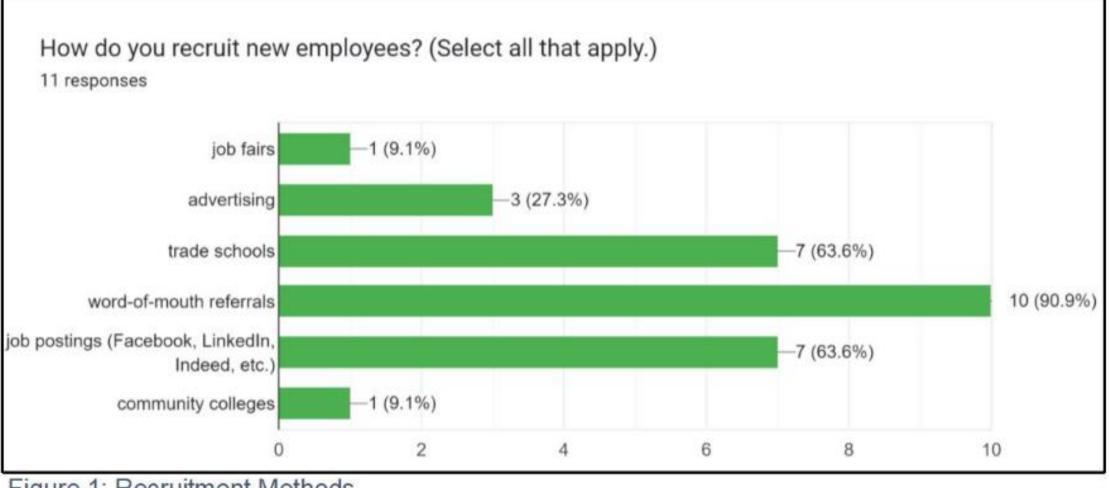


Figure 1: Recruitment Methods

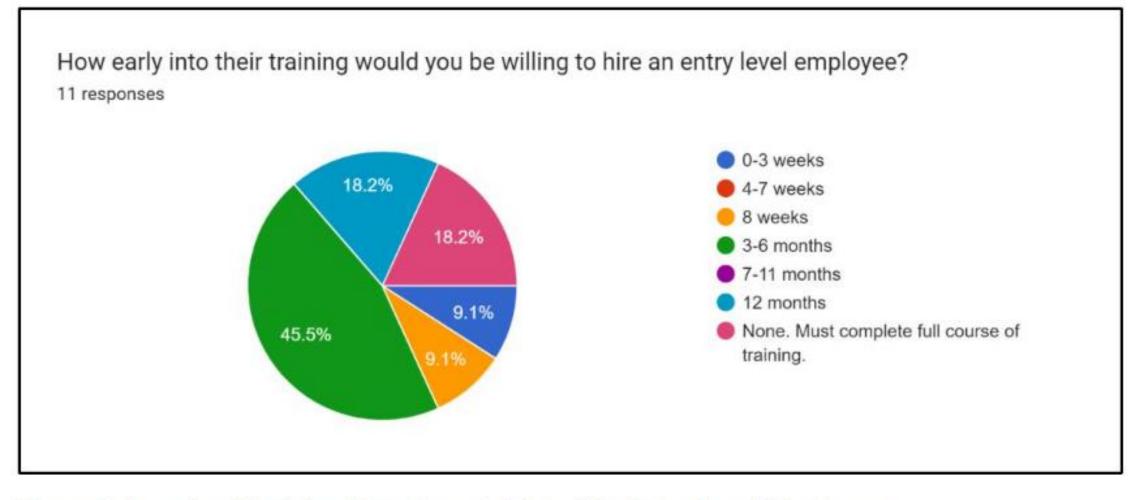


Figure 2: Length of Training Time Acceptable to Hire Entry Level Employee

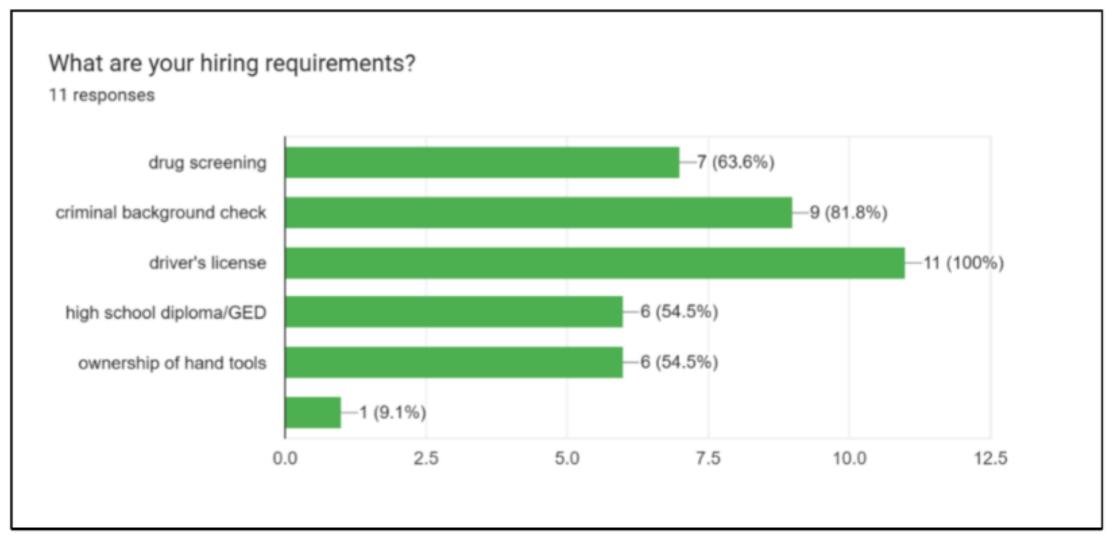


Figure 3: Hiring Requirements

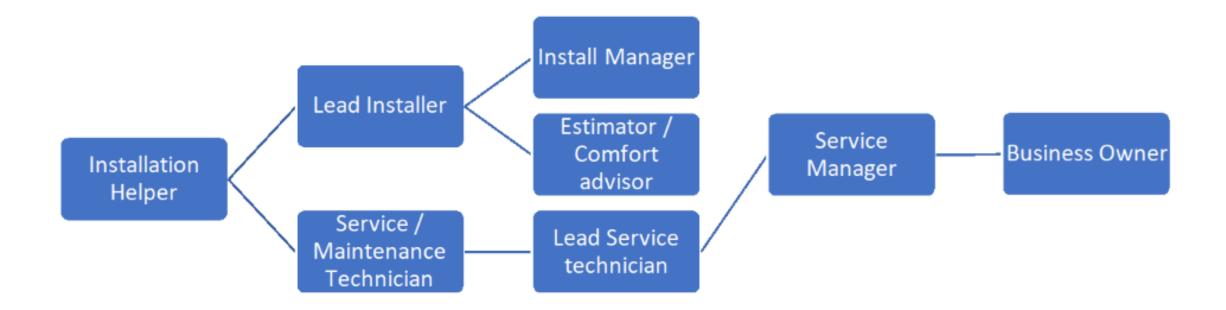


Figure 4: Entry Level Career Pathway for Heat Pump Installation