Ship Repair/Marine Welding Comprehensive Workforce Training Solution

BAE Systems

SHIP REPAIR
ASSOCIATION OF HAWAII

Pacific Shipyards International

State of Hawai‘i
Department of Labor & Industrial Relations

University of Hawai‘i
COMMUNITY COLLEGES

The Chamber of Commerce of Hawaii

MARISCO LIMITED

PCATT

C&S Services Inc.

INSPECT TESTING
Agenda

• Background
• Use of LMI
• How the program works
  – VIP
  – UHCC Training
  – OJT
• Program Outcomes
• Next Steps – Scaling
• Industry Perspective on the program
• Q&A
Background

• Program developed out of discussion at the Chamber of Commerce Manufacturing in Hawaii Subcommittee.

• Partners
  – Chamber of Commerce of Hawaii
  – BAE System
  – Members of the Ship Repair Association of Hawaii that are participating in this program
    • Pacific Shipyards International
    • Marisco
    • BAE Systems
    • C&S Services Inc.
    • Inspectesting
  – DLIR Workforce Development Division
  – UH Community Colleges
    • Honolulu CC

• Designed to meet the short run projected worker shortage and provide long stabilization to the industry.
LMI Analysis

- Forecasting to determine the long run projection for SOC codes:
  - 51-4121 Welders, Cutters, and Braziers
  - 51-4122 Welding, Soldering, and Brazing Machine Setters, Operators and Tenders

- LMI suggested that between 2013 and 2022 in these occupations jobs would grow by 10.3% and pay an average hourly wages was $26.68/hr.

- Inverse Staffing Patterns showed that Ship Building and Repairing (NAICS 336611) employed 9.1% of the welders in state.

- Ship Building and Repairing in Hawaii was projected to grow at 11.4% and the industry paid an annual average earning of $74,273.

- The industry was projected to outpace job growth in the US by 3.8%

- Industry had a reported job multiplier of 2.18 and a 1.68 earnings multiplier.
Program Overview

• 1 month - Voluntary Internship Program
• 138 Hours – Certificate of Professional Development from Honolulu Community College
• 6 month, 1040 hour - On the Job Training Program
Shipyard Model Overview

Reference: M. Pilotin-Freitas
Participant Demographics

- 13 Total Participants
  - 9 Enrolled through the Voluntary Internship Program
  - 4 did not qualify for the VIP but enrolled directly into the Honolulu CC training course.
- 6 Veterans
- 2 Females
- 11 Males
Voluntary Internship Program

• 13 Participants Enrolled in the Voluntary Internship Program
  – 1 month internship program with Pacific Ship Yards and involved discussions with members of the Ship Repair Association of Hawaii
Honolulu Community College
138- Hour Ship Repair Welding Technology Program

• Maritime Rules and Requirements (OHSA 7615 Safety in Maritime Employment
• Blue Print Reading
• Welding Workmanship
• SMAW – Welding and Oxy-Fuel Cutting Theory
Credential – Certificate of Professional Development
On the Job Training Program

- All 13 participants enrolled in the On the Job Training Program
  - 5 at Pacific Shipyards
    - 4 OJT and 1 direct hire
  - 6 at BAE Systems
    - 4 OJT and 2 direct hires
  - 2 at C&S Services (Pending)
    - 1 OTJ and 1 direct hire
Outcome Measures

• 100% pass rate in the Voluntary Internship Program
  – (9 of 9 started and completed)

• 100% pass rate in the Honolulu Community College Marine Welding Certificate Program
  – (13 of 13 started, completed and received the Professional Development Certificate)

• 92% completed the On the Job Training Program at 3 employers.
  – The On the Job Training Program Participants received an hourly rate of $13.31/hour with a 75% reimbursement.
ROI – Payback Period

• Investment for start up and initial offering
  – University of Hawaii dollar investment $30,000 (does not include in-kind and administrative time)
  – OJT (assuming all OJT contracts come through)
    • Pre Tax: $89,980
    • After taxes: $76,483 (assuming a 15% tax rate)
  – Total training program cost: $106,483 or $8,191/participant

• Breakeven Analysis: The 13 participants need to work for 2.01 years after the program at $13.31/hour and a 15% rate for the state to break even. Note: this does not include the 1.68 earnings multiplier effect from adding these new jobs.
  – If we take into account the 1.68 earnings multiplier, the $13.31 rate has the equivalent impact of $22.36/hr. reducing the payback period to 1.2 years.
Most Important Outcome