

Ship Repair/Marine Welding Comprehensive Workforce Training Solution



State of Hawai'i
Department of Labor &
Industrial Relations



UNIVERSITY of HAWAI'I®
COMMUNITY COLLEGES



***The Chamber of
Commerce of Hawaii***



C&S SERVICES INC.



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 Shipyard 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.

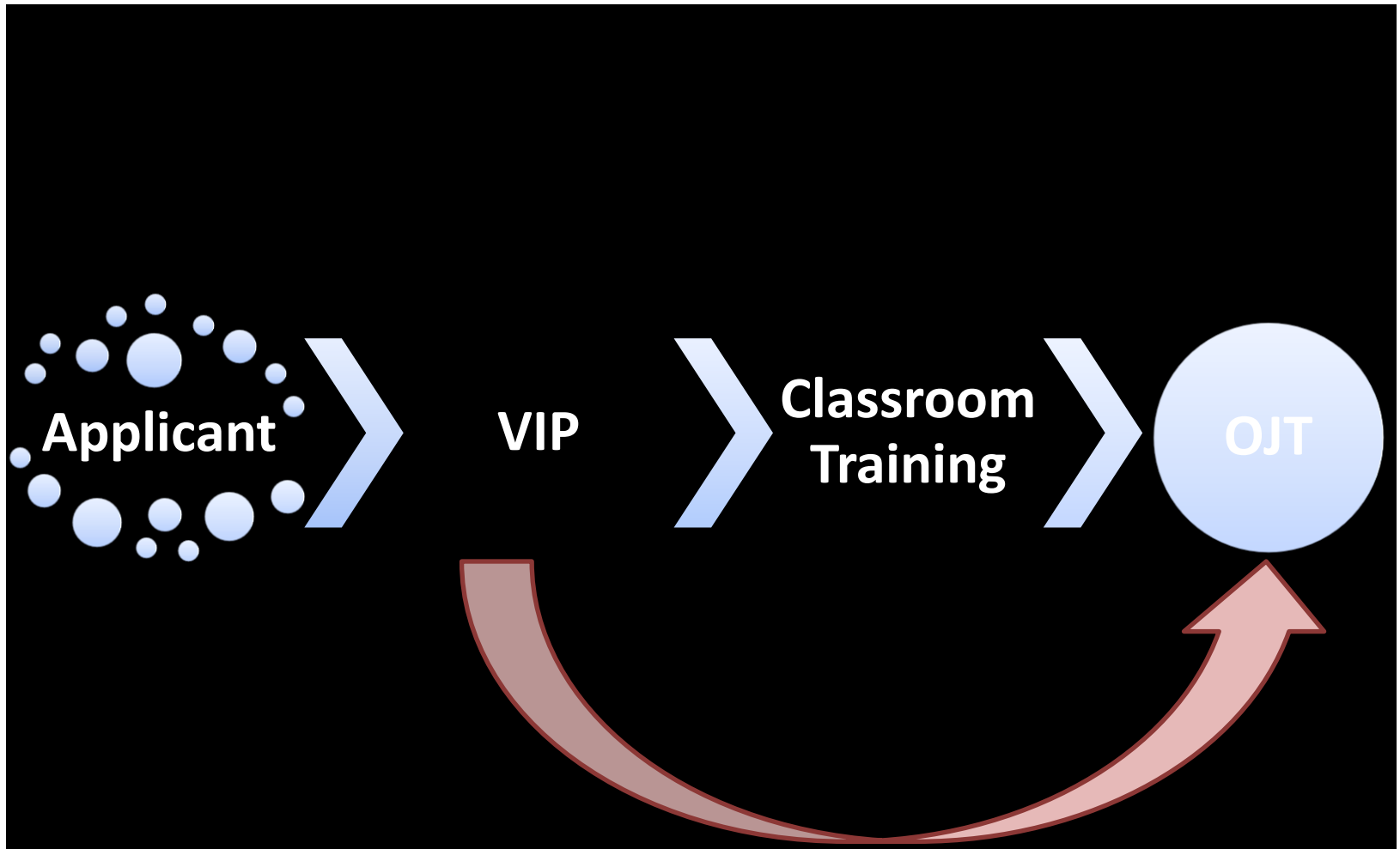
LMI Analysis

- 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 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

