BAY AREA MANUFACTURING (BAM) COLLABORATIVE

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DECEMBER 15, 2011
BAWFC GRANT

- **Early 2011:**
  Bay Area Manufacturing Renaissance Council (BAMRC) support

- **August 2011:**
  Launch of funding strategy to increase post-secondary education role

- **November 2011:**
  Bringing resources to Laney College to build out a robust model aligned with the BAMRC, the BAM Collaborative

Secured support from Bay Area Workforce Funding Collaborative

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*Data from a BAMRC study of manufacturing in Alameda and Contra Costa Counties, November, 2010*
WHAT IS COMPELLING ABOUT THIS PROJECT?

• **Bay Area Workforce Funding Collaborative**
  Focus on CCs
  Interest in bridge programs connected to career pathways

• **Funding the Bay Area Manufacturing Collaborative**
  Partnership, employer engagement, career pathways, sector approach

• **Dynamic Partners**
  including BAMRC, CMTA, CLF, CLP, Laney College, OUSD, East Bay EDA, CTA
CERTIFICATION AND PATHWAYS

• National connection and initiatives
  Center for Labor and Community Research (CLCR)
  National Manufacturing Renaissance Council (NMRC)
  National Association of Manufacturers (NAM)
  Manufacturing Institute (MI)
  Presidents Advanced Manufacturing Partnership (AMP)

• NAM Endorsed Manufacturing Skills Certification System (MSCS)

• Bay Area Strategy: Linking Secondary, Adult Education and Post-Secondary Institutions to develop full pathways
Skills Certification System

Education Path
- Industry Graduate Degree
- Applied Industry Bachelor's Degree
- Associate Degree with Multiple Specialties
- Associate Degree with Specialty
- Diploma + Specialty
- High School Diploma

Certification Path
- Engineer, Business Manager
- Engineer, Manager
- Engineering Technician
- Engineering Technician
- Certified Production Technician
- Operator

Career Path

MANUFACTURING Institute

National Career Readiness Certificate™
ALIGNING EDUCATION, CERTIFICATION AND CAREER PATHWAYS

*Industrial Systems Technology*

Forsyth Tech, Greensboro, North

**EDUCATION PATHWAY**
- **BACHELOR OF SCIENCE / ENGINEERING DISCIPLINE**
  - (Potential path not currently articulated)
  - NCSU, NCA&T, UNC-C, ECU
- **ASSOCIATE IN APPLIED SCIENCE**
  - 70 Credit Hours / Two Years Full Time
  - 22 Courses
  - Day Curriculum
- **DIPLOMA PROGRAM**
  - 41 Credit Hours / One Year Full Time
  - 14 Courses
  - Day Curriculum
- **CERTIFICATE PROGRAM**
  - Machine Operator
  - 12 Credit Hours / 6 months
  - 4 Courses

**CERTIFICATION PATHWAY**
- SME Engineering Technologist
- MSSC Maintenance Awareness
- MSSC Safety
- NIMS Level II, Bench work and Layout
- Career Readiness Certificate

**CAREER PATHWAY**
- Mechanical Engineer
- Maintenance Engineer
- Plant Engineer
- Entry Level Maintenance Worker
- $51k - $79k (17-2141)
- Machine Operator
- Assistant Maintenance Person
- Maintenance Helper
- $23k - $39k per year (49-9042)
- Operator
- Assistant Maintenance Person
- $17k - $27k (49-9098)

**National Career Readiness Certificate**
- Personal Effectiveness
- Academic Competencies
- Workplace Competencies

**High School**
- Dual Enrollment - Careers Now - 2 in 6 Initiative

**Out of School/Low Skill Youth/Adults**
- WIA/Career Centers – ESL/VESL - GED/ABE “Bridge” and Foundation Programs

**Skilled Adults**
- Retraining/Lay Offs – Continuing Education
- Company Specific Apprenticeship
LANEY COLLEGE
INDUSTRIAL MAINTENANCE PROGRAM

Career Advancement Academy (CAA) Fall 2011 (funded by CCC Chancellor’s Office)
• Part of East Bay CAA – on ramp for underprepared students
• Integrates technical and foundational skills – contextualized approach

One year certificate (30 units)
• Pending state approval
• Courses in machining, welding, electrical, hydraulics & pneumatics, safety, etc.

2nd year advanced certificate in development
24 students in cohort
LANEY COLLEGE
IM PROGRAM (IN THE NEWS)
**DELIVERABLES**

**LANEY COLLEGE STUDENT FOCUS**

- Benchmark and develop curriculum for the 2nd year of the industrial maintenance technology program.

- Counsel & prepare students for internships and post-graduation employment.

- Further the process for Laney College to become National Institute for Metalworking Skills (NIMS) accredited
  - Accreditation of Laney facilities
  - Create network of local industry contacts to act as inspectors for NIMS tests

- Develop internships with local industry in manufacturing and industrial maintenance technology
• Work with the Manufacturing Institute to establish their skills certification program in the Bay Area.

• Begin outreach to local companies to create a Bay Area manufacturing alliance.

How do we create a viable and useful network/alliance of bay area manufacturers?
• Develop manufacturing career pathways with local high schools and middle schools.

• Hold Bay Area workshops on Careers in Manufacturing. The workshops are open to local counselors, teachers and administrators to help inform them about manufacturing career pathway opportunities. Held at local manufacturing facilities and include guest speakers from industry.

How can we better inform students, teachers, parents, counselors, administrators, etc. about manufacturing as an excellent career pathway?
<table>
<thead>
<tr>
<th>Occupational Title</th>
<th>Real Time #</th>
<th>Mean Salary</th>
<th>Req HS diploma</th>
<th>Req some college/AS/unspecified</th>
<th>Req BA or higher</th>
<th>% of postings w/ unspecified education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Workers, All other</td>
<td>1,715</td>
<td>$61,337</td>
<td>38%</td>
<td>9%</td>
<td>53%</td>
<td>53%</td>
</tr>
<tr>
<td>Inspectors, Testers, Sorters, Samplers, and Weighers</td>
<td>1,328</td>
<td>$44,761</td>
<td>34%</td>
<td>6%</td>
<td>60%</td>
<td>45%</td>
</tr>
<tr>
<td>First-Line Sup/Mgers of Production and Operating Workers</td>
<td>926</td>
<td>$74,851</td>
<td>20%</td>
<td>3%</td>
<td>77%</td>
<td>49%</td>
</tr>
<tr>
<td>Assemblers and Fabricators, All other</td>
<td>344</td>
<td>$35,643</td>
<td>81%</td>
<td>12%</td>
<td>7%</td>
<td>61%</td>
</tr>
<tr>
<td>Separating, Filtering, Clarifying, Precipitating, Still Machine Setters, Operators, Tenders</td>
<td>218</td>
<td>$66,956</td>
<td>24%</td>
<td>15%</td>
<td>60%</td>
<td>61%</td>
</tr>
<tr>
<td>Computer-Controlled Machine Tool Operators, Metal and Plastic</td>
<td>201</td>
<td>$39,584</td>
<td>65%</td>
<td>6%</td>
<td>29%</td>
<td>56%</td>
</tr>
<tr>
<td>Cutting and Slicing Machine Setters, Operators, Tenders</td>
<td>193</td>
<td>$77,825</td>
<td>19%</td>
<td>1%</td>
<td>80%</td>
<td>51%</td>
</tr>
<tr>
<td>Textile, Apparel, Furnishings Workers, all other</td>
<td>174</td>
<td>$76,123</td>
<td>26%</td>
<td>2%</td>
<td>72%</td>
<td>44%</td>
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<tr>
<td>Machinists</td>
<td>163</td>
<td>$57,225</td>
<td>61%</td>
<td>8%</td>
<td>32%</td>
<td>60%</td>
</tr>
</tbody>
</table>
DISCUSSION

How do we leverage this group’s strengths to....

• build knowledge about manufacturing as a growth sector in our Bay Area economy
• create a viable and useful network/alliance of Bay Area manufacturers?
• better inform students, teachers, parents, counselors, administrators, about manufacturing as an excellent career pathway?
DISCUSSION

- What would success look like as the BAM Collaborative and BAMRC move forward?
- What are the indicators of success?
- How will we measure our collaborative success?
FOR MORE INFORMATION

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