2015-17 Job Skills Program
July 1, 2015 - June 30, 2017

Report to the Legislature

December 2017
# Table of Contents

Preface ......................................................................................................................................................... 1

Program Overview ........................................................................................................................................ 2-3

  About the Job Skills Program .................................................................................................................. 2
  Job Skills Priorities ................................................................................................................................. 2
  Shared Investments ................................................................................................................................. 2
  Workforce Training Customer Advisory Committee ............................................................................. 2

Project Results and Program Data ......................................................................................................... 3

2015-2017 Job Skills Projects by Industry ............................................................................................... 4-5

2015-2017 Distribution of Grants

  by Educational Sector .............................................................................................................................. 6
  by Region .................................................................................................................................................. 6
  by Employer Size ...................................................................................................................................... 6
  by Industry ............................................................................................................................................... 6

2015-2017 Individual Project Descriptions and Outcomes ..................................................................... 7-40
Purpose of the Job Skills Program

The Washington State Legislature finds that it is in the public interest of the state to encourage and facilitate the formation of cooperative relationships between industry and educational institutions that provide for the development and expansion of skills training and education consistent with employment needs.

Since 1983 the Job Skills Program (JSP) has funded customized training designed to meet the needs of business and industry and to provide or retain gainful employment opportunities for new hires and incumbent workers.

Purpose of This Report

This Job Skills Program report is submitted by the State Board for Community and Technical Colleges (SBCTC) to the Washington State Legislature in fulfillment of 2013 ESHB 1247, which reads in part:

Beginning January 1, 2014, and every year thereafter, the college board shall provide the legislature and the governor with a report describing the activities and outcomes of the state job skills program.

Program Funding

The Job Skills Program (JSP) was funded at $5,450,000 from the education legacy trust account for FY 2016 and FY 2017 of the biennium.

$5,450,000 of the education legacy trust account - state appropriation is provided solely for administration and customized training contracts through the job skills program.
PROGRAM OVERVIEW

About the Job Skills Program
Attracting, developing, and maintaining a skilled workforce is a challenge faced by many employers in Washington’s targeted industry clusters. Washington’s Job Skills Program serves to develop the skills of new and existing workers, retain and grow living wage jobs, and help companies improve their competitiveness to strengthen Washington’s economy.

Job Skills Priorities
Strategic industry clusters are supported by the Job Skills Program whenever possible, and awards are spread to all corners of the state, including rural areas.

Job Skills resources are serving areas where:
- there is a shortage of skilled labor to meet businesses’ needs;
- upgrading employee skills is necessary to avoid layoffs;
- training incumbent workers for advancement creates new vacancies;
- new businesses or industry clusters need a skilled labor pool; and
- communities struggle with high unemployment.

Shared Investments
JSP is a dollar-for-dollar matching grant program, with at least 50% of training expenses covered by businesses through cash and/or in-kind payments. Businesses with reported Gross Business Income of less than $500,000 are exempt from the dollar-for-dollar match. In the 2015-17 biennium, for every dollar of the state’s investment, the private sector invested one dollar and thirty seven cents.

At the forefront of in-kind matches are the wages paid to employees while in training. In economic terms, these wages represent opportunity costs to the employer, who must either forego the productive contributions of those employees while they train, or pay substitutes to maintain production during training activities. Other in-kind employer contributions include materials, training supplies, management and supervisor time spent planning and coordinating the training, and specialized equipment contributed for training.

Workforce Training Customer Advisory Committee
The State Board for Community and Technical Colleges utilizes the Workforce Training Customer Advisory Committee made up of representatives from business, labor, and public and private educational institutions to guide program decisions. A Job Skills sub-committee meets to review, provide input, and recommend applications for Job Skills grants. Representatives of the Department of Commerce and the Workforce Training and Education Coordinating Board also participate in the review process.
PROJECT RESULTS AND PROGRAM DATA

Each Job Skills project identified desired outcomes and provided information on those outcomes upon the completion of training. Outcomes are unique to each project, vary greatly, and often the complete results of training are not fully realized until well after the reporting period. Details on individual projects can be found beginning on page 7.
### 2015–2017 Job Skills Projects by Industry

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Industry</th>
<th>Grant Amount</th>
<th># of Co’s</th>
<th>Trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>AccraFab</td>
<td>Aerospace</td>
<td>$50,000</td>
<td>1</td>
<td>58</td>
</tr>
<tr>
<td>Achilles USA</td>
<td>Composites</td>
<td>$35,400</td>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td>Aerojet Rocketdyne</td>
<td>Aerospace</td>
<td>$168,371</td>
<td>1</td>
<td>129</td>
</tr>
<tr>
<td>Aerospace Manufacturing Technologies (AMT)</td>
<td>Aerospace</td>
<td>$227,298</td>
<td>1</td>
<td>308</td>
</tr>
<tr>
<td>AstaReal, Inc.</td>
<td>Biomedical</td>
<td>$28,257</td>
<td>1</td>
<td>58</td>
</tr>
<tr>
<td>AvTech Tyee, Inc.</td>
<td>Electronics/High Tech, Aerospace</td>
<td>$123,600</td>
<td>1</td>
<td>142</td>
</tr>
<tr>
<td>Bellmont Cabinets</td>
<td>Wood/Paper Products</td>
<td>$88,700</td>
<td>1</td>
<td>113</td>
</tr>
<tr>
<td>BodyPoint</td>
<td>Medical Devices</td>
<td>$108,913</td>
<td>1</td>
<td>44</td>
</tr>
<tr>
<td>Bridgeways</td>
<td>Medical Devices</td>
<td>$24,720</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>Cascade Gasket</td>
<td>Aerospace</td>
<td>$139,400</td>
<td>1</td>
<td>197</td>
</tr>
<tr>
<td>Composite Solutions</td>
<td>Composites</td>
<td>$90,740</td>
<td>1</td>
<td>74</td>
</tr>
<tr>
<td>Crunch Pak</td>
<td>Food Processing</td>
<td>$162,851</td>
<td>1</td>
<td>245</td>
</tr>
<tr>
<td>Cubcrafterists</td>
<td>Aerospace</td>
<td>$68,037</td>
<td>1</td>
<td>115</td>
</tr>
<tr>
<td>Damar Aerospace</td>
<td>Aerospace</td>
<td>$92,430</td>
<td>1</td>
<td>84</td>
</tr>
<tr>
<td>DeLaval</td>
<td>Other: Milking Equipment</td>
<td>$63,700</td>
<td>1</td>
<td>38</td>
</tr>
<tr>
<td>EKOS Corp</td>
<td>Medical Devices</td>
<td>$89,700</td>
<td>1</td>
<td>55</td>
</tr>
<tr>
<td>Esterline Technologies Corporation</td>
<td>Aerospace, Electronics/High Tech</td>
<td>$133,900</td>
<td>1</td>
<td>162</td>
</tr>
<tr>
<td>Fabriform</td>
<td>Composites</td>
<td>$56,200</td>
<td>1</td>
<td>49</td>
</tr>
<tr>
<td>Fibro Corporation</td>
<td>Wood/Paper Products, Packaging</td>
<td>$95,000</td>
<td>1</td>
<td>92</td>
</tr>
<tr>
<td>Hampton Lumber</td>
<td>Wood/Paper Products</td>
<td>$46,774</td>
<td>1</td>
<td>29</td>
</tr>
<tr>
<td>Hexcel</td>
<td>Aerospace</td>
<td>$115,100</td>
<td>1</td>
<td>213</td>
</tr>
<tr>
<td>Himalayan Dog Chew</td>
<td>Food Processing</td>
<td>$49,500</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td>HySecurity</td>
<td>Electronics/High Tech</td>
<td>$118,800</td>
<td>1</td>
<td>58</td>
</tr>
<tr>
<td>McCain Foods</td>
<td>Food</td>
<td>$158,661</td>
<td>1</td>
<td>242</td>
</tr>
<tr>
<td>Mega Machine</td>
<td>Other: Custom Fabrication</td>
<td>$59,215</td>
<td>1</td>
<td>55</td>
</tr>
<tr>
<td>Moses Lake Industries</td>
<td>Chemicals</td>
<td>$98,063</td>
<td>1</td>
<td>128</td>
</tr>
<tr>
<td>Natural Factors</td>
<td>Other: Supplements</td>
<td>$59,700</td>
<td>1</td>
<td>149</td>
</tr>
<tr>
<td>Northwest Motor Service</td>
<td>Other: Industrial Maintenance</td>
<td>$55,000</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>O-I Kalama</td>
<td>Other: Glass</td>
<td>$35,500</td>
<td>1</td>
<td>92</td>
</tr>
<tr>
<td>Out of the Box Manufacturing</td>
<td>Electronics/High Tech</td>
<td>$28,000</td>
<td>1</td>
<td>34</td>
</tr>
<tr>
<td>Oxbo International</td>
<td>Harvesting Equipment</td>
<td>$52,730</td>
<td>1</td>
<td>76</td>
</tr>
<tr>
<td>Pacific Aerospace</td>
<td>Aerospace</td>
<td>$180,256</td>
<td>1</td>
<td>256</td>
</tr>
<tr>
<td>Qualitel</td>
<td>Electronics/High Tech</td>
<td>$92,000</td>
<td>1</td>
<td>83</td>
</tr>
<tr>
<td>REC Silicon</td>
<td>Chemicals</td>
<td>$142,165</td>
<td>1</td>
<td>351</td>
</tr>
<tr>
<td>Royal Window and Door Profiles</td>
<td>Wood/Paper Products</td>
<td>$41,400</td>
<td>1</td>
<td>67</td>
</tr>
<tr>
<td>SAFE Boats International</td>
<td>Marine Vessels</td>
<td>$163,864</td>
<td>1</td>
<td>173</td>
</tr>
<tr>
<td>Seaport Steel</td>
<td>Steel</td>
<td>$98,108</td>
<td>1</td>
<td>84</td>
</tr>
<tr>
<td>Simpson Door</td>
<td>Wood/Paper Products</td>
<td>$18,217</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Spectralux Avionics</td>
<td>Aerospace, Electronics/High Tech</td>
<td>$60,504</td>
<td>1</td>
<td>42</td>
</tr>
<tr>
<td>Takata Airbags</td>
<td>Chemicals, Automotive</td>
<td>$237,423</td>
<td>1</td>
<td>346</td>
</tr>
<tr>
<td>Terex</td>
<td>Other: Aerial Lifts</td>
<td>$165,180</td>
<td>1</td>
<td>152</td>
</tr>
<tr>
<td>Tri-Tec</td>
<td>Marine</td>
<td>$83,300</td>
<td>1</td>
<td>35</td>
</tr>
<tr>
<td>Company</td>
<td>Industry</td>
<td>Amount</td>
<td>Projects</td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------------------------------</td>
<td>----------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Umbra Cuscinetti</td>
<td>Aerospace</td>
<td>$50,432</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Zodiac</td>
<td>Aerospace</td>
<td>$72,751</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal for Manufacturing:</strong></td>
<td></td>
<td><strong>$4,129,861</strong></td>
<td>42</td>
<td></td>
</tr>
<tr>
<td><strong>All Other Industries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cordant Health</td>
<td>Healthcare/Biomedical</td>
<td>$35,806</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DCG One</td>
<td>Commercial Printing</td>
<td>$171,242</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Lineage Logistics</td>
<td>Transportation/Logistics</td>
<td>$48,409</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Key Compounding Pharmacy</td>
<td>Biomedical, Healthcare</td>
<td>$16,000</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Northwest Hospitals</td>
<td>Hospitals and Clinics</td>
<td>$28,181</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Samaritan Health</td>
<td>Hospitals and Clinics</td>
<td>$140,541</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SNBL</td>
<td>Biomedical</td>
<td>$63,100</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>T&amp;A Supply</td>
<td>Retail/Wholesale</td>
<td>$84,900</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>The Part Works, Inc.</td>
<td>Retail/Wholesale</td>
<td>$52,980</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal for All Other Industries:</strong></td>
<td></td>
<td><strong>$641,159</strong></td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

**Consortia:****

<table>
<thead>
<tr>
<th>Consortium</th>
<th>Industry</th>
<th>Amount</th>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>APICS Supply Chain Management</td>
<td>Manufacturing: Aerospace (4), Wood/Paper Products (1)</td>
<td>$60,300</td>
<td>5</td>
</tr>
<tr>
<td>ISO Consortium # 1</td>
<td>Manufacturing: Aerospace (6), Marine (2), High Tech/Electronics (1)</td>
<td>$90,500</td>
<td>9</td>
</tr>
<tr>
<td>ISO Consortium # 2</td>
<td>Manufacturing: Electronics/High Tech (3), Composites (2)</td>
<td>$51,400</td>
<td>5</td>
</tr>
<tr>
<td>ISO Consortium # 3</td>
<td>Manufacturing: Aerospace (3), Composites (3), Other (1)</td>
<td>$60,000</td>
<td>7</td>
</tr>
<tr>
<td>Lean Consortium # 1</td>
<td>Manufacturing: Wood/Paper Products (2), Other (6) : Steel, Composites, Maintenance/Repair, Chemicals, Building Materials, Industrial Mechanics</td>
<td>$41,490</td>
<td>8</td>
</tr>
<tr>
<td>Lean Consortium # 2</td>
<td>Retail/Wholesale (2), Manufacturing (1): Flooring</td>
<td>$88,100</td>
<td>3</td>
</tr>
<tr>
<td>Oneonta Starr Ranch</td>
<td>Agriculture (1); Food Processing (1)</td>
<td>$22,500</td>
<td>2</td>
</tr>
<tr>
<td>Property Management Consortium</td>
<td>Housing (2)</td>
<td>$26,850</td>
<td>2</td>
</tr>
<tr>
<td>Six Sigma Consortium #1</td>
<td>Manufacturing: Aerospace (2), Wood/Paper Products (1), Food Processing (1); Hospitality (1)</td>
<td>$52,800</td>
<td>5</td>
</tr>
<tr>
<td>Six Sigma Consortium #2</td>
<td>Manufacturing: Aerospace (4), High Tech (3), Food Processing (1)</td>
<td>$49,200</td>
<td>8</td>
</tr>
<tr>
<td>Six Sigma Consortium #3</td>
<td>Manufacturing: Aerospace (2), Wood/Paper Products (1), Medical (1), Food (1), Other (1)</td>
<td>$48,900</td>
<td>6</td>
</tr>
<tr>
<td><strong>Subtotal for Consortia:</strong></td>
<td></td>
<td><strong>$592,040</strong></td>
<td>60</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td></td>
<td><strong>$5,363,060</strong></td>
<td>111*</td>
</tr>
</tbody>
</table>

* Duplicated count. Several companies engaged in multiple projects, including individual trainings and consortium participation. Unduplicated count is 96.
2015-2017 Distribution of Grants

Distribution by Educational Sector
Job Skills grants may be awarded to eligible post-secondary institutions, which include community and technical colleges; public and non-profit universities and regional colleges/universities; and licensed private career schools and colleges located in Washington. In 2015-17, all JSP applications were made through community and technical colleges.

Distribution by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of JSP Projects in Region</th>
<th>Percent of JSP Projects in Region</th>
<th>Number of JSP Trainees by Region</th>
<th>Percent of JSP Trainees by Region</th>
<th>JSP Funds Awarded by Region</th>
<th>Percent of JSP Funds Awarded by Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puget Sound (King, Pierce &amp; Snohomish)</td>
<td>40</td>
<td>62.50%</td>
<td>3157</td>
<td>51.47%</td>
<td>$3,336,011</td>
<td>62.20%</td>
</tr>
<tr>
<td>Balance of State – West</td>
<td>10</td>
<td>15.63%</td>
<td>459</td>
<td>7.48%</td>
<td>$496,778</td>
<td>9.26%</td>
</tr>
<tr>
<td>Balance of State – East</td>
<td>14</td>
<td>21.88%</td>
<td>2518</td>
<td>41.05%</td>
<td>$1,530,271</td>
<td>28.53%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>64</strong></td>
<td><strong>100%</strong></td>
<td><strong>6134</strong></td>
<td><strong>100%</strong></td>
<td><strong>$5,363,060</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Distribution by Employer Size

<table>
<thead>
<tr>
<th>Employer Size by Number of Employees in Washington</th>
<th>Number of Companies Served</th>
<th>Percent Companies Served</th>
<th>Number of JSP Trainees</th>
<th>Percent of JSP Trainees</th>
<th>JSP Funding Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small (1-50)</td>
<td>18</td>
<td>18.75%</td>
<td>417</td>
<td>6.80%</td>
<td>$631,053</td>
</tr>
<tr>
<td>Medium (51-250)</td>
<td>41</td>
<td>42.71%</td>
<td>1664</td>
<td>27.13%</td>
<td>$1,778,710</td>
</tr>
<tr>
<td>Large (251+)</td>
<td>37</td>
<td>38.54%</td>
<td>4053</td>
<td>66.07%</td>
<td>$2,953,298</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>96</strong></td>
<td><strong>100%</strong></td>
<td><strong>6134</strong></td>
<td><strong>100%</strong></td>
<td><strong>$5,363,060</strong></td>
</tr>
</tbody>
</table>

Distribution of Companies by Industry

<table>
<thead>
<tr>
<th>Manufacturing 80 companies</th>
<th>All Other Industries 16 companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 - Aerospace</td>
<td>9 – Wood/Paper Products</td>
</tr>
<tr>
<td>8 – Electronics/High Tech</td>
<td>5 - Marine</td>
</tr>
<tr>
<td>4 – Medical Devices</td>
<td>28 – Other Including: Industrial Equipment, Composites, Chemicals, Auto, Steel, etc.</td>
</tr>
<tr>
<td></td>
<td>8 – Other Including: Housing/Real Estate, Transportation, Hospitality, Agriculture</td>
</tr>
</tbody>
</table>

*64 JSP projects engaged 96 individual companies (unduplicated count). Several companies participated in multiple projects, including consortia trainings. Unduplicated count for participating companies is 111.*
2015–2017 Individual Project Descriptions and Outcomes

Following are brief descriptions of each project along with the number of trainees, state and business investments, and selected outcomes taken from the projects’ final reports. Projects are listed in alphabetical order first by county and second by business name.

2015-2017 Projects

<table>
<thead>
<tr>
<th>Big Bend Community College</th>
<th>Adams County</th>
</tr>
</thead>
<tbody>
<tr>
<td>McCain Foods</td>
<td>Grant: $158,661</td>
</tr>
<tr>
<td>Trainees: 242</td>
<td>Spent: $114,461</td>
</tr>
<tr>
<td></td>
<td>Match: $155,478</td>
</tr>
</tbody>
</table>

McCain Foods’ employees required new skills to adapt to current manufacturing processes, such as IT-based equipment and computer numerical controls. Skills in math, science, communication, problem-solving, and customer awareness are necessary for the employees and the business to succeed. Through this grant, Big Bend Community College provided training in microbiology, manufacturing process, equipment automation, Excel, and supervision.

**Outcomes:**
- 79 new hires received training.
- 155 incumbent employees upgraded their skills, and 8 retrained.

<table>
<thead>
<tr>
<th>Wenatchee Valley College</th>
<th>Chelan County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fibro Corporation</td>
<td>Grant: $95,000</td>
</tr>
<tr>
<td>Trainees: 92</td>
<td>Spent: $95,000</td>
</tr>
<tr>
<td></td>
<td>Match: $113,449</td>
</tr>
</tbody>
</table>

Fibro Corporation manufactures packaging for the food industry from recycled paper, such as egg cartons. Fibro’s largest client is Wilcox Farms, a recent JSP recipient. At the start of the project, the company employed 55 in Wenatchee and has experienced difficulties finding employees with a sufficient level of manufacturing skills in the Wenatchee Valley area. During the course of the project, 125 new employees were hired. This project trained Fibro’s incumbent workers and new hires in continuous improvement methodology.

_It was refreshing to see learnings from this training to get applied directly to the day-to-day activities so quickly._

*Mark Schmaus*
*Plant Manager*
*McCain Foods*

_We reduced production costs and increased sales from 1 million to 1.2 million. We have implemented new trainings and policies to inform staff and create a better understanding of safety, production forecast, and accountability. Cross training has improved the skill level and knowledge of our staff and management._

*Evietta Inabnit*
*Human Resources*
*Fibro Corporation*
Outcomes:
- 6 employees received promotions.
- Throughput increased by 22%.
- Delivery times improved to 98% on time.
- Accidents reduced to zero.

Classroom work ranged from introduction to lean manufacturing, value stream mapping, lots of kaizen activities and more, and also many hours of discussion and floor time working to develop lean culture within our plant. Direct and calculable yearly dollar impact in cost savings is estimated at $4,442,619 with an additional $2,269,593 in opportunities identified and already in process.

Logan Raymond
Continuous Improvement Manager
Crunch Pak

Crunch Pak is the largest US supplier of sliced apples to grocery chains and restaurants. The company employs close to one thousand people in Cashmere, and is one of the largest year-round employers in the area. As the business is expanding and adding more shifts, Crunch Pak identified needs in training employees in English, workplace Spanish, and Lean.

Outcomes:
- 80 employees received promotions
- 50 new employees hired.
- Accidents reduced by 32%.
- Increased skill and capabilities in understanding and operating in Lean environment.

Wenatchee Valley College
Crunch Pak
Trainees: 245

Chelan County
Grant: $162,851
Spent: $124,212
Match: $146,034

Pacific Aerospace & Electronics specializes in precision machining, advanced material science, process engineering, and hermetic products. The training involved multiple topics related to implementation of the new enterprise resource planning (ERP) system. The ERP will handle all company functions, from production and inventory management to IT functions and finance.

Outcomes:
- Employees gained better ability to gather analytical data.
- Transitioning to the ERP is eliminating manual functions, increasing efficiency and reducing error.

Wenatchee Valley College
Pacific Aerospace & Electronics
Trainees: 256

Chelan County
Grant: $180,256
Spent: $180,256
Match: $203,732

At PA&E we value continuous education and by utilizing the skills grant it allowed us to really expand our knowledge of the MS Office products to a larger audience.

Kevin Batman
Materials Manager
Pacific Aerospace & Electronics
**Lower Columbia College**

**Northwest Motor Service**

Trainees: 24

Currently employing 28 in Cowlitz County, Northwest Motor Service is in the process of building a larger facility with the capacity to handle large projects, increase business, and add employees. The company has identified the need to implement Lean culture throughout the organization.

**Outcomes:**

- Ten new hires joined the company, increasing headcount from 18 at the start of the training to 28.
- Improved process through Lean training that allowed skilled employees to spend more time on value-added activities.
- 15% efficiency gains in existing facility. Expect 30% gain once move to new facility is complete.

---

**Lower Columbia College**

**O-I Kalama**

Trainees: 92

O-I Kalama, formerly Bennu Glass, is a glass container manufacturer, serving the wine industry of California, Oregon, Washington, and Western Canada, producing over 100 million wine bottles per year. The company identified the need for management and leadership training for employees who have recently advanced into management/supervisory roles.

**Outcomes:**

- 66 more employees than originally planned received the training without increasing the cost.
- In addition to leadership and supervision training, Lower Columbia College worked with current employees and the leadership team to identify skills in specific occupations and build a training regimen using the Work Keys job profiling and assessment system. This process will serve the company in the future as a way to identify skill gaps, build employees through training to take on additional roles, and use as a hiring benchmark for new employees.

---

**Cowlitz County**

**Northwest Motor Service**

Grant: $55,000
Spent: $52,826
Match: $131,842

Our project using JSP grant funds and coordinated by Lower Columbia College and Impact Washington was an overwhelming success. The tools we were given have improved our efficiency, profitability, and allowed us to add headcount as we became more competitive in the marketplace. This gives us a solid foundation to continue our growth in the manufacturing sector in Southwest Washington.

*Spencer Wiggins*

*President*

*Northwest Motor Sales and Service*

---

**Cowlitz County**

**O-I Kalama**

Grant: $35,500
Spent: $35,327
Match: $83,704

The training we received as part of the Job Skills grant was extremely valuable to the managers and supervisors here at O-I Kalama. We had a wonderful experience working with Lower Columbia College to customize trainings to meet the goals of the plant.

*Shawndra Thompson*

*Human Resources Manager*

*O-I Kalama*
Big Bend Community College

Asta Real
Trainees: 58

Asta Real is a manufacturer of astaxanthin for the naturaceutical industry. The company requested training in microbiology, electrical, Excel, and communication and employability skills.

Outcomes:
- Microbiology training increased critical knowledge team and will assist in the identification of deviations.
- Electrical training provided foundation of understanding and appreciation of electricity to ensure employee safety and to limit risk. No electrical safety accidents have been reported.
- Five job openings filled. Enhanced onboarding program has increased employee engagement.

Big Bend Community College provided our employees some amazing training that was of great value to our continuing effort in raising the bar for our workforce development.

Gary Allison
Executive Vice President
Asta Real

Grant County

Grants:
- $28,257
- $23,547
- $26,187

Big Bend Community College

Lineage Logistics
Trainees: 11

Lineage Logistics is a warehousing and logistics company that distributes fruits and vegetables to distribution centers and retail outlets. The company determined the need for their employees to obtain commercial driver’s licenses (Class A) in order to continue providing transportation services to local potato processors.

Outcomes:
- All participants who have completed their training have passed their CDL tests and are now certified drivers.

This Job Skills grant allows us to better serve our customers with certified truck drivers. With the newly obtained certifications we expect to see a heightened awareness around safety. As a company, having professional drivers will ensure our customers are receiving the highest level of service we can offer. The certification also allows us to position ourselves to take on new business that would require further travel than what we are currently doing.

Deb Langshaw
Compliance Manager
Lineage Logistics

Grant County

Grants:
- $48,409
- $45,697
- $56,044

10
Big Bend Community College
Moses Lake Industries
Trainees: 128

Moses Lake Industries (MLI) is a manufacturer of chemicals for the semiconductor industry. MLI and Big Bend Community College developed a training plan that included courses in Basic Chemistry for its Chemical Operators, as well as MS Office, Project Management, and Leadership training for operators, leads, and supervisors.

Outcomes:
- Turnover rate reduced from 13% to 6.4%.
- Several temporary part-time employees expanded their skills and were hired for full-time permanent positions.

Grant County
Grant: $98,063
Spent: $95,171
Match: $105,369

The JSP grant has allowed us to expand our training program at MLI; it has been a blessing. We are a smaller company in Moses Lake with a pretty good in-house training program. However, the grant has allowed us to reach new levels of training for our employees [...] We have had great success with different courses. [...] We take great pride in providing our customers with exceptional customer service. In order to keep up with their needs, we all must continue to expand our knowledge. Training is one of the best ways to do that. We are extremely grateful for the grant and the opportunities it has provided.

Garrett Watkins
Copper Division Manager
Moses Lake Industries

Big Bend Community College
REC Silicon
Trainees: 351

REC is a producer of advanced silicon materials, supplying high-purity polysilicon and silicon gases to the solar and electronics industries. A significant number of employees received promotions from production into supervisory roles, but were lacking fundamental supervision skills. In order to ensure the success of the new supervisors and to prepare production workers for advancement opportunities, the company identified a need for structured training that included Project Management, Supervision, Leadership, and other topics. Employees also received training in Electrical Energy Basics and Lean/Six Sigma.

Grant County
Grant: $142,165
Spent: $128,569
Match: $167,583

REC employees benefited greatly from the courses offered through this Job Skills grant. A large number of participants took part due to the variety of the topics offered. I can’t say enough about the opportunities provided to our less experienced and future leaders through the offerings that focused on ‘soft skills’. These specific areas are exactly what our employees have been seeking. Additionally, in our manufacturing industry, Lean and Six Sigma principles have been identified as essential in our efforts to improve efficiencies and eliminate waste. Delivering training to assist in building a stronger and broader understanding of these principles to our employees is viewed as an important part of our path forward.

Barb Shimpek
Human Resources Manager
REC Silicon
The JSP grant has been extremely beneficial for our hospital. We were able to bring in speakers and education that we would not otherwise have been able to afford. The grant helped us provide education and training to all levels of staff at Samaritan.

Becky DeMers
Chief Quality Officer/Chief Operations Officer
Samaritan Healthcare

Outcomes:

- 22 employees were promoted to positions of higher responsibility.
- Lean principles are being successfully integrated into the organization.
- Energy-related injuries reduced from 5 per year to 0.

Big Bend Community College
Samaritan Healthcare

Trainees: 467

Samaritan Healthcare (hospital and clinics) received a grant for a comprehensive training in nursing skills, patient safety, Lean, and other topics. The goals of the project included internal growth for its employees, cost reduction, staying current on care, and improving customer satisfaction.

Outcomes:

- Improved efficiency in hiring new employees. 82 new hires joined the hospital during the grant period.
- Turnover rate decreased from 12% to 9.2%.
- Percentage of patients seen in less than 10 minutes improved from 20.8% to 85.3%, exceeding the pre-training goal of improving the rate to 70%.
- Customer satisfaction improved from 35% to 56.7%.
- Quality improved from 14.31% harm rate to 13.59%.

Grant County

<table>
<thead>
<tr>
<th>Trainees</th>
<th>Grant</th>
<th>Spent</th>
<th>Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samaritan Healthcare</td>
<td>$140,541</td>
<td>$115,122</td>
<td>$117,755</td>
</tr>
</tbody>
</table>

Big Bend Community College
Takata Airbags

Takata Airbags is a supplier of safety parts to the auto industry. Company’s Moses Lake plant employs over 500 people in airbag manufacturing and testing. Due to new product demands brought on by the large scale recall, Phase 1 training focused on training for its new hires in assembly and propellants. Training in Chemistry and Supervision was also requested. Phase 2 included electrical supply, lean, ISO, communication, and forklift certification courses.

Phase 1

Trainees: 181

Grant: $150,673
Spent: $150,673
Match: $171,476

Phase 2

Trainees: 165

Grant: $86,750
Spent: $86,750
Match: $99,336
Outcomes:

- 93 new employees were hired during the course of the grant; 15 Lead positions were filled.
- Turnover rate was reduced from 3.3% to 2.5%.
- Training provided professional growth opportunities and wage progression for the participants: 6 operators were promoted to Lead. 6 employees promoted from Lead to Supervisor. 53 new Operators progressed to the Operator 2 level. Employees promoted from Operator 1 to Operator 2 received a wage increase from $13.87/hr. to $16.33/hr.

The JSP grant made it possible to bring college-level chemistry instruction to the facility. The onsite location and schedule made the course amenable to prospective students.

William Osborne
EHS Manager
Takata

Our success and growth of our techs/supervisors/managers was greatly enhanced with the generous grant received from the Washington State Board for Community and Technical Colleges for the Lean Six Sigma and Black Belt Certification training. These tools will be used throughout the facility and Takata organization.

Don Kersey
Plant Manager
Takata

Grays Harbor College
Simpson Door

Trainees: 10

Simpson Door designs and fabricates interior and exterior doors for commercial and retail markets. The company employs 210 at its Mc Cleary site and determined a need to develop a cohesive training program in Leadership and Supervision for its employees. The training focused on developing their existing employees into supervisory positions and enhancing the skills of current supervisors.

Outcomes:

- 4 employees promoted to higher levels of responsibility.
- Wage progression for participants ranged from 3% to 17% after the training.
- Trainees improved skills in conflict management, employee evaluation, decision making, and planning and time management.

Grays Harbor County

Grant: $18,217
Spent: $15,450
Match: $27,644

Simpson Door continues to rely on the strong partnership with Grays Harbor College as we continue with the skill development of our employees.

Tanya Dierick
Director of HR, Compliance and Risk
Simpson Door

Staying competitive requires many approaches. A key approach is to upgrade the skills of employees. With the recent doubling of our frontline supervisors the JSP grant enabled us to provide essential leadership and supervisor skill training to help build a stronger team […] Simpson Door continues to rely on the strong partnership with Grays Harbor College as we continue with the skill development of our employees.

Tanya Dierick
Director of HR, Compliance and Risk
Simpson Door
Aerojet Rocketdyne employs over 500 people at its Redmond facility in small liquid engine manufacturing and liquid propulsion systems development. The company requested training in multiple areas from engineering and project management to assembly in order to improve efficiencies, reduce waste, and streamline supply chains. IPC certifications for soldering, blueprint reading, electronics, root cause analysis, and other topics were part of the training plan.

**Outcomes:**
- Delivery time improved from 50% on-time pre-training to 96% on average January-May.

The Job Skills Program was very beneficial to Aerojet Rocketdyne. It allowed us to provide highly technical training to our incumbent employees that we otherwise would not have been able to deliver. Multiple departments within our company were able to participate, from our Operations group who received IPC certification training, to our Program Managers who received Project Management training, to our Supply Chain group who were able to participate in APICS training, and our Manufacturing Engineers who received training for GD&T. The flexibility of the program and the willingness of Everett/Cascadia to work directly with us to customize the content of many of these classes to fit our specific needs were invaluable.

Darin Holcombe
HR Specialist
Aerojet

---

Bellmont Cabinets is a manufacturer and wholesaler of cabinetry. The company achieved great results in their previous JSP and has seen a significant increase in both employee headcount and business during the course of the previous grant. The company added 70 new employees since the date of their first application in 2014. Rapid growth put additional stress on their infrastructure and staff. In Phase 2 of training, Bellmont was looking to keep the momentum they achieved to continue training in Lean, plus build their employees’ supervision and leadership skills.

**Outcomes:**
- Production increased by 5.4% from 520 cabinets per day to 550.
- Achieved a 42% improvement in rework.
Bodypoint is a wheelchair postural support device manufacturer, located in Seattle’s urban core. The company is venturing into international markets and seeking ISO certification. Because the majority of Bodypoint’s workforce consists of non-native English speakers, the training project included technical courses taught with the ESL emphasis. Students received training in advanced manufacturing, computer applications, blueprint reading, measuring, ISO, and Lean.

**Outcomes:**
- As the result of the training, Bodypoint received ISO certification effective October, 2016. The company anticipates that expansion into international markets with increase growth by 30%.
- Employees skill enhancement and overall process improvement result in quality improvement with expected savings of $400,000.

**Green River College**  
**Cascade Gasket**  

Cascade Gasket specializes in non-metallic seal, gasket, and clamp block parts for the aerospace industry. Its major customers include Boeing, Spirit, and AMT. The company and the college utilized JSP funds to create a training program for current and new employees through Training within Industry model (TWI), and to develop employees’ skills in geometric dimensioning and tolerancing, project management, computer operations, customer service, and Lean.

**Phase 1**  
Trainees: 87  

- **Grant:** $63,000  
- **Spent:** $62,404  
- **Match:** $101,407

**Phase 2**  
Trainees: 110

- **Grant:** $76,400  
- **Spent:** $75,472  
- **Match:** $138,872
Outcomes:
- 11 employees (5% of total headcount) were promoted to higher level positions.
- New employee training program enabled the company to fill vacancies (9) that previously went unfilled due to lack of qualified candidates.
- Average wage for production employees increased from $13.71/hr. to $15.04/hr.
- Annual revenue is 6.5% higher compared to twelve months prior to reporting.

It is always a pleasure to work with the staff at Green River College in collaboration efforts regarding employee training and education. Cascade Gasket employees were energized from the training they received and felt it has helped them with their professional growth.

Jill Soria
HR Manager
Cascade Gasket

Seattle College District
DCG One

DCG One provides commercial printing, direct mailing, IT/web design, and other promotional services. The company has grown quickly in the last two years, consolidating four companies, and adding 80 new hires through the acquisition. Now employing 270, DCG One has incorporated this project into their strategic plan and has identified the training as a tool for improvement and stabilization, as well as professional growth for shop employees.

Phase 1
Trainees: 88

Phase 2
Trainees: 96

Outcomes:
- 13 new hires were added during and after Phase 1 and 6 after Phase 2.
- Reduced bottlenecks by 96%.
- Increased throughput by 30% or 225K per month.
- Achieved 82% reduction in lead time, improving on-time delivery from 75% to 96%.
- Sales increased by 10% after Phase 2.

When we received our grant from SBCTC for the Job Skills Program, we were very excited about the positive impact it could have on our company. But after completing Phase 1 of Lean Training and Implementation, I can honestly say that the results have far exceeded our expectations. Not only have we seen dramatic financial returns through waste reduction and reorganization, but our employees who were trained have truly learned the skills that will have a positive impact on our company and their professional lives far into the future.

Terry Storms
CEO
DCG ONE
**Green River College**

**EKOS Corporation**

Trainees: 55

EKOS Corporation pioneered the development and the clinical application of ultrasound accelerated thrombolysis, used for the treatment of vascular thrombosis. The company requested funding for Six Sigma training to improve their manufacturing capabilities.

**Outcomes:**
- Employee headcount increased from 175 to 226
- Trainees enhanced skills in statistics, including regression, designed experiments, and product reliability analysis.
- Defects reduced by 50%.

**King County**

Grant: $89,700

Spent: $87,946

Match: $126,189

---

**Seattle Colleges**

**Fabriform**

Trainees: 49

Fabriform employs 73 in injection molding, plastic fabrication, assembly, and application of high performance coatings. The training plan combined lean and leadership training to respond to rapid growth over the last two years. The company produces plastic components for the aerospace industry, and has recently entered into the gaming market, producing security doors and walls for gaming equipment.

**Outcomes:**
- Eight new hires were added, increasing headcount from 65 at the start of the training to 73 at the time of reporting.
- Lead time reduced by 63%.
- On-time delivery improved from 62% to 93.5%.
- Training allowed the company to streamline operations and achieve cost saving of approximately 227K, positioning it for additional growth.

**King County**

Grant: $56,200

Spent: $53,492

Match: $64,858

---

*Our trainees now have refined analytical skills to identify root causes and execute detailed improvement plans, with a common language. The JSP grant allowed us to train more individuals than we would have otherwise. In addition, trainers were very knowledgeable and experienced, adjusting their pace to meet our specific needs.*

Mike Wolniewicz
VP of Engineering
EKOS Corporation

*Our company started with lean roadmap by going through value stream mapping training. The Kaizen events following gave us many improvements on which we hope to build with continued training.*

Mike Clacy
Vice President
Fabriform
The project management courses were great for helping individuals work together better as teams. The takeaways from this course were the inspiration to work with the process already in place or be positive influence for change to work as teams rather than “do it all yourself”.

James Heighton
IT Solutions Manager
Hy Security

The program provided significant value to the business helping improve efficiency, quality, and employee interactions. Even with the downturn in business, offering training helped keep morale high and provided the foundation for employee growth and retention.

Steve Goldberg
Plant Manager
Hexcel Corporation

Green River College/Skagит Valley College

**Hexcel**

Trainees: 213

Hexcel is a major supplier to the aircraft structures and interiors market for commercial and military aircraft. The project spanned two years, during which the company has experienced a change in product demand. Training plan was adjusted by the colleges to support the growing Burlington production that is benefiting from the overall growth in commercial aerospace market. Training for the Kent facility that relies on the defence helicopter markets was reduced.

**Outcomes:**
- 86 new positions added at the Burlington facility.
- 15 production operators were promoted to skilled positions in Kent, and 11 production employees were promoted to Lead of Coordinator positions in Burlington.
- Scrap reduced from $17,570 to $5,439/labor hour due to employee skill level increase in lamination.

Green River College

**Hy Security**

Trainees: 58

HySecurity, a designer and manufacturer of gate operators, requested funding for Lean training, as well as SharePoint, Excel, and leadership classes. The company was constrained in their ability to hire new workers and expand due to limitations in their physical space within the plant. The goal of the training was to streamline the process and free up floor space to expand production capacity, bring previously outsourced functions, such as inventory management, in-house, and hire new employees.

**Outcomes:**
- Five new positions created and filled.
- Reduced stoppages due to inventory not being in the right location from 3 to 0 per month.
- Increased sales by 39%.
Through an exceptional partnership with SEIU 1199 Training Fund, Literacy Source, and Seattle Community Colleges, Northwest Hospital was able to access a Job Skills grant to provide employees a comprehensive 22 hour computer literacy training course that not only allowed Environmental Services staff to successfully implement EPIC, and also enriched them with a new skill set that could assist them in further developing their careers and positively impacting their lives.

Juan Escalante
Director of Environmental Services
Northwest Hospital

Key Compounding Pharmacy manufactures and distributes customized medicines that meet a specific patient’s needs. As a very small business, the company found that Lean training is prohibitively expensive, but has a potential great impact. The industry is highly regulated, and Key determined that the transition to Lean will offset some of the burdens imposed by the regulations.

**Outcomes:**
- All staff were trained in Lean manufacturing process.
- Throughput increased by 4.5 (total orders from May to June and highest number of orders for the year).
- Reduced defects by 30% from May to June (lowest this year).

This has been a very positive experience for our team. [...] We were able to identify the areas where we struggled and started a few experiments to decrease the defects. We are currently developing a new training program to help our team with lowering defects and improve the quality of work.

Irene Foo
Pharmacy Manager
Key Compounding Pharmacy

Seattle College District
Northwest Hospital & Medical Center
Trainees: 73

Northwest Hospital and Medical Center offers services ranging from primary to highly specialized care. The hospital was looking to integrate ESL and computer training to prepare its non-native English-speaking employees for new electronic medical records (EPIC) roll out. The training used methodology similar to that employed in the state’s highly successful I-BEST (Integrated Basic Education and Skills Training) model, when basic skills and technical skills instructors are co-teaching.

**Outcomes:**
- 3 employees received an opportunity to transfer to higher-level positions.
- Overall patient satisfaction increased from 73% to 79%.
- 100% of housekeepers are using computers to access EPIC on daily basis.
- Room turnover times have decreased and patient admission times from the Emergency room have decreased as the result of housekeeper’s effective use of technology in the workplace.

Juan Escalante
Director of Environmental Services
Northwest Hospital

<table>
<thead>
<tr>
<th>Green River College</th>
<th>King County</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Compounding Pharmacy</strong></td>
<td>Grant: $16,000</td>
</tr>
<tr>
<td>Trainees: 30</td>
<td>Spent: $13,669</td>
</tr>
<tr>
<td></td>
<td>Match: $21,375</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>King County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant: $28,181</td>
</tr>
<tr>
<td>Spent: $23,469</td>
</tr>
<tr>
<td>Match: $28,232</td>
</tr>
</tbody>
</table>
The JPS grant allowed Spectralux to train process improvement skills to a number of different individuals all from different departments. Having all departments represented allowed us to collaborate in ways we haven’t been able to do in the past. The classes allowed us to tackle our issues as a company and created a strong process improvement environment.

Scott Hudson
Human Resources Manager
Spectralux

JSP grant funds allowed us to pursue highly desired quality certifications that we would not have otherwise been able to obtain. We will be the first manufacturer in the area to obtain these credentials. As a small business owner with limited capital, these types of programs make a world of difference for our company. I am projecting hiring additional 5 employees and now have the ability to retain customers that would have needed to move their production elsewhere due to certification requirements. Not only my company and employees will benefit from this program, but the entire local economy.

Allison Budvarson
Vice President/Co-Owner
Out of the Box Manufacturing

Out of the Box Manufacturing
Trainees: 34

Out of the Box specializes in manufacturing of printed circuit boards for the general manufacturing, medical, and aerospace industries. Training in continuous improvement and ISO/AS standards, supplemented by time management and technical writing, was aimed at facilitating company’s growth in the aerospace and medical device markets.

Outcomes:
- Four new positions created.
- The company successfully passed the AS9100 audit and has scheduled ISO 13485 (medical) audit.

Out of the Box Manufacturing
Grant: $28,000
Spent: $25,125
Match: $25,761

Cascadia College
Spectralux Avionics
Trainees: 42

Spectralux Avionics employs 81 in manufacturing of flight deck electronics and data communications for commercial and private airplane manufacturers. Through previous Lean training, Spectralux has been able to significantly improve their quality rating, but further improvement was necessary. This JSP project included courses in Six Sigma, geometric dimensioning and tolerancing, statistics, and project management.

Outcomes:
- Two vacant leadership roles were filled with current staff.
- Two attendees in Six Sigma classes were promoted to Production Lead and Supervisor.
- Quality has improved and exceeded goal.
- Quality rating improved to 99.88%, compared to 66% prior to lean initiatives.

Spectralux Avionics
Grant: $60,504
Spent: $49,379
Match: $59,464
T&A Supply Company markets and distributes flooring and floor installation accessories to dealers, lumber yards, home improvement retailers, designers, and other customers. The company is transitioning from distribution-only to manufacturing of their own flooring brand. With growth and expansion they have found a need to streamline production and distribution. Additionally, 15% increase in employee headcount creates a need for training for new supervisors.

**Outcomes:**
- Sales increased by $606,000 during the course of the training.
- Savings of $1,116,400 are attributed to the Kaizen events.

---

Genie-Terex is a manufacturer of small portable material lifts with locations in Redmond and Moses Lake. The company requested training in geometric dimensioning and tolerancing, MS Office, root cause analysis, project management, and other topics.

**Outcomes:**
- 20 team members completed project management training, leading to an overall improvement in efficiency and timeliness of projects.
The Part Works, Inc. is a supplier of plumbing and industrial repair parts. The company employs 26 workers and competes with large out-of-state retailers for business. The Part Works’ prime advantage is the staff’s expertise and technical knowledge related to their products. The company, however, needed to establish processes and structures to serve their customers more accurately and efficiently.

**Outcomes:**
- Two new positions were created and filled.
- Sales increased by 8.2%.

Tri-Tec designs, manufactures, and maintains marine products sold to the Department of Defense, such as valve actuators and gear boxes. The company requested funding for training in Lean Manufacturing to aide with transition to new product lines.

**Outcomes:**
- Better production processes and improved productivity resulted in a reduced scrap rate of less than 4%.
- Errors reduced by 12.5% among all departments.
As a tier one supplier to Boeing, Umbra Cuscinetti designs and produces aerospace and industrial screws, ball bearings, and other precision-movement products. Umbras’ goal for participation in the JSP training was to improve capacity, realize their strategic planning objectives, and grow.

Outcomes:
- A key customer complaint was resolved with the visibility gained in the Kata management process. This allowed the company to grow, rather than continue to spend energy working on non-value added activities for the customer.
- Delivery times reduced, product is 0 days late to customers, down from 42 days late.

Seattle Colleges
Umbra Cuscinetti
Trainees: 27

King County
Grant: $50,432
Spent: $50,432
Match: $115,607

Composite Solutions manufactures high strength, lightweight composite structures and components for commercial and military aircraft, helicopters, and business jets. The company experienced difficulty finding employees with composites manufacturing experience. Together with Seattle Colleges, they developed a comprehensive plan that includes composites training for laminator technicians, as well as Lean continuous improvement, and Leadership.

Outcomes:
- Growth has resulted in creating and filling 16 new positions.
- Promotion time reduced to 9-12 months from 12-18 month prior to the training.
- Three employees received promotions.
- Sales increased by 40%.
- Customer satisfaction improved.

Seattle Colleges
Composite Solutions
Trainees: 74

King County
Grant: $90,740
Spent: $90,740
Match: $103,333

The training provided through the JSP grant was invaluable to a fundamental shift in the way Umbra Cuscinetti runs its business. The training enabled us to reduce cost through behavioral change catalyzed by data driven metrics and champion our manufacturing floor toward a more efficient, safe, and productive environment. We are seeing an immediate impact in the leadership development of our people, finding more opportunities for our employees to take ownership of the business and drive results.

Jennifer Mazur
HR Specialist – Training and Development
Umbra Cuscinetti, Inc.

This is exactly what we needed. While it was difficult to get through, it was what we needed to do.

Melissa Ricks
Human Resources
Composite Solutions
Hampton Lumber, a high volume timber mill, sought training for 29 employees in Lean Manufacturing and Industrial Automation, with the main objective of improving production quality by reducing defects in sawmill, kiln, planner, sorting, and grading departments. The project was not able to complete due to the large volume of orders that came to Hampton and the need to add an extra shift to meet the demand.

Cordant Health is a full-service toxicology lab that provides testing services for treatment providers, criminal justice institutions, employers, etc. Cordant identified continuous improvement as a major lab goal and hoped to achieve error reduction, lower costs, and improved productivity.

**Outcomes:**

- Rework rate has decreased down to approximately 5%, a decrease of nearly 100/samples a day requiring rework.
- 17 new positions were created and filled, increasing employment from 85 at the beginning of the grant to 102 at the time of reporting.

**The colleges** really worked with our lab to coordinate an innovative and flexible blended learning course to launch a Lean/Six Sigma program in our facility. [...] Ultimately, this project was very successful for our company, and both the employees and the lab as a whole will continue to see the benefits of this training as we launch more projects in the future.

*Randy Saager*
*Director of Operations*
*Cordant Health Solutions*
SAFE Boats International manufactures vessels for military, law enforcement, fire and rescue, and other agencies. The training request consisted of three certification courses: Marine Electrical, Marine Corrosion, and Marine Systems. Upon completion of each course, participants sat for an exam to earn a 5-year industry credential.

**Phase 1**
Trainees: 50

<table>
<thead>
<tr>
<th>Grant</th>
<th>$58,934</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spent</td>
<td>$57,753</td>
</tr>
<tr>
<td>Match</td>
<td>$77,591</td>
</tr>
</tbody>
</table>

**Phase 2**
Trainees: 123

<table>
<thead>
<tr>
<th>Grant</th>
<th>$104,930</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spent</td>
<td>$99,235</td>
</tr>
<tr>
<td>Match</td>
<td>$115,691</td>
</tr>
</tbody>
</table>

**Outcomes:**
- Turnover was reduced from 12 (quarterly) to 5, exceeding the pre-training goal of Phase 1.
- Quality increased/number of defects reduced by 63% upon completion of Phase 2.
- 41 participants were certified by ABYC during Phase 1. Phase 2 participants have not taken their exams at the time of reporting.

*Safe Boats International has greatly benefited from this training. In the marine industry it is difficult to find individuals who have American Boat and Yacht Council (ABYC) specific training. By achieving this grant, and by being able to put a portion of our technicians, installers, and supervisors/managers through this training, our customers have the greatest benefit. Not only will our boats have highly skilled individuals producing them, but also our technicians that fly around the world completing the maintenance work on these boats, will possess a larger skill set to be able to accomplish their missions in a timelier, more cost-effective manner.*

Danielle Tudor  
Human Resources Manager – Tacoma Facility  
SAFE Boats International
Working with Skagit Valley College and Impact Washington has been a valuable experience for us at DeLaval. Our employees embraced the leadership training and have used these skills to grow in their team leader roles. We have adopted the Toyota Kata method of problem solving as a result of our training, and improvements are ongoing. The impact of this training will be long lasting.

Wendy Schweigert
Factory Manager
DeLaval Manufacturing

DeLaval is a manufacturer of milking equipment to the dairy industry. The company employs 50 in Mount Vernon. DeLaval requested funding to train its employees in Lean Manufacturing concepts and leadership. Several employees were recently promoted from operations to front-line leadership positions, and the company wants to ensure that new supervisors are effective in their new roles. Lean training will reduce costs, lead time, and non-value added steps.

Outcomes:
- Leadership training lead to higher level responsibilities for participants and one promotion to a position with supervisory duties.
- Lean training resulted in a significant cost reduction (77%), increased effective floor space, and cumulative cost savings of $60,000/yr.

Cascadia College/Everett Community College

Achilles USA, Inc.
Trainees: 26

Achilles is mid-size plastic film manufacturer in Everett. The company supplies plastics to medical, auto, marine, and other industries, and requested courses in Manual Machining (blueprint reading, precision measuring tools, drill presses, lathes and mills, etc) and Supervisory/Team Lead training.

Outcomes:
- Turnover reduced compared to the previous year.
- 2.5% increase in wages.
- Only 1 recordable accident (no loss time) compared to 4 in the year prior to the training.
- One employee promoted to a management position.

The JSP grant overall has been a tremendous success within the departments that participated in the training. Not only did the training increase the level of expertise in the company, the positive response to the training has allowed us to pursue other training that has been lacking over the previous years. We look forward to developing additional training classes for all employees to participate in.

Michael Burrows
Human Resources Manager/EHS Safety
Achilles USA, Inc.
Cascadia College/Everett Community College  
Aerospace Manufacturing Technologies (AMT)  

AMT is a producer of structural parts for the leading original equipment manufacturers in the large business and regional jet markets. AMT was seeking training in MS Excel, Leadership, Internet Security, Geometric Dimensioning and Tolerancing (GD&T), and other topics, with the goals of increasing inspection skills, leading to better retention and promotion, as well as increases in efficiency and savings.

**Phase 1**  
Trainees: 122  
Grant: $52,050  
Spent: $52,050  
Match: $66,210

**Phase 2**  
Trainees: 186  
Grant: $175,248  
Spent: $156,510  
Match: $169,265

**Outcomes:**
- Increased retention by 6% upon completion of Phase 1, and by 14% upon completion of Phase 2.
- Promoted 22 employees.
- Achieved savings of $12,000 per year through more efficient inspection.
- Wages increased by $4 to $32/hr. for upper level manufacturing positions.
- Reduced accidents by 50%.

*The Job Skills Program grant allowed us to offer high impact training to our production floor employees and to our group of highly technical skilled employees approaching the transition to management positions for the production floor. The instructors were excellent and the curriculum was tailored to meet our needs as a company. We are working more efficiently and with higher skill due to the JSP grant.*

Matt Washburn  
Training Manager  
Aerospace Manufacturing Technologies
Avtech Tyee, Inc. designs, develops, and manufactures electronic systems for the aerospace industry. The company requested three types of training: electronic soldering and machine operation for assembly employees, project management and computer training, and leadership skills for new supervisors.

**Outcomes:**
- 10 employees have been promoted to new positions or levels within their fields.
- Turnover reduced from 17.2% in manufacturing to less than 10% on average.
- Safety record improved by 17%, with 4 fewer accidents than the pre-grant year.

**Cascadia College/Everett Community College**
**Bridgeways**
Trainees: 21

Bridgeways Enterprises is a private non-profit organization that employs individuals with mental illness in aerospace and medical device manufacturing. The company is ISO-9001-/AS9100-C certified and provides services in mechanical, tool refurbishing, bond and seal, etc. for clients in aerospace, defense, medical, and industrial markets. The goal of training was increase in retention and promotions for incumbent employees.

**Outcomes:**
- Two employees promoted to supervisory roles.
- Employees are better able to interpret and analyze income statements, balance sheets and statement of cash flows, and are able to make sound decisions based on financial data.
Cascadia College/Everett Community College

Damar Aerosystems
Trainees: 84

Damar Aerosystems manufactures airbeams and component parts for Boeing aircraft. Damar requested blueprint reading, geometric dimensioning and tolerancing, statistics, Excel, and forklift operator training.

Outcomes:
- A new shift with 13 new employees was added.
- Overall number of employees grew from 153 to 178.
- Accidents reduced to 0.

Lisa Seed
Human Resources Manager
Damar Aerosystems

Snohomish County
Grant: $92,430
Spent: $86,166
Match: $134,519

Green River College/Everett Community College

Esterline Technologies Corporation
Trainees: 162

Esterline Technologies Corporation produces human machine interface hardware, software, and electronics for domestic and foreign aerospace markets. The company determined the need to upgrade the skills of their electronic assembly technicians. The largest share of the award is to train and certify employees in the industry standard for electrical assembly. The company donated equipment and materials to EvCC for training purposes.

The training that was provided as part of the grant through Green River College in partnership with Everett Community College provided a win-win opportunity for Esterline employees to increase their skill set. The Master Cam training allowed a number of employees in our Manufacturing Engineering department, Tooling department and Fabrication department to learn the software and make their daily tasks more efficient.

IPC training was a major component of the training provided to our assembly line employees. J-Std-001, Requirements for Soldered Electrical and Electronic Assemblies; IPC-A-610, Acceptability of Electronic Assemblies and IPC/WHMA-A-620, Requirements and Acceptance for Cable and Wire Harness Assemblies were all certifications that were offered to employees. All employees that took these classes were trained and received certification to the highest level, Class 3 and their certifications are transferrable even if they decide to change jobs. I would recommend this program as a great way to increase employee skills in support of both the employee and the company.

Travis McNeal
Manager, Manufacturing Engineering
Esterline Technologies Corporation

Snohomish County
Grant: $133,900
Spent: $133,855
Match: $142,513

The Washington State training grant allowed us to take nearly all of our production staff through some very important skills training in order to prepare them for either the next level in their career development or to enhance their skill level in their current jobs. The blueprint reading and GD&T courses were well attended and the feedback was very positive. We appreciated the opportunity to have so much of our staff be able to take advantage of the training opportunities that this grant offered.”

Travis McNeal
Manager, Manufacturing Engineering
Esterline Technologies Corporation
**Outcomes:**
- Over 50 personnel received certification training that allows them to work across multiple assembly areas.
- IPC and Master Cam training allows personnel broader transfer opportunities within Korry and Esterline.
- A significant number of machinists and Manufacturing Engineers received Master Cam training that allows them to perform more operations on their own.

**Green River College/Everett Community College**

**Himalayan Dog Chew**

Trainees: 36

Himalayan Dog Chew is a small but growing Mukilteo business that distributes its products (dog chews, treats, and toys) to about 5,000 retailers nationwide. The company requested funding for Six Sigma Green and Yellow Belt, Supervisory Team Lead, Statistics, ESL for Manufacturing, and other courses to increase quality and efficiency and to become more competitive in the pet treat business.

**Outcomes:**
- 7 new hires joined the company during the course of the training, increasing company size from 48 to 55 employees.
- Reduced waste by 5% by applying Lean principles to production.

**Snohomish County**

Grant: $49,500
Spent: $49,410
Match: $51,471

---

**Natural Factors**

Trainees: 149

Natural Factors is a producer of vitamins, natural supplements, and nutritional products. It employs 160 in King County. The company requested funding for Lean Six Sigma Yellow Belt and Green Belt training for the majority of its employees. Training in Statistics, and Leadership was also part of the grant. Prior to the training, Natural

**Snohomish County**

Grant: $59,700
Spent: $58,798
Match: $68,139

---

**The Job Skills Program has enabled our company to give opportunities and accomplishment to our employees that otherwise would have not been able to advance their knowledge and skills. Our employees have gained a renewed sense of teamwork and understand the importance of continuous improvement due to the Six Sigma courses they have completed. Overall, the Job Skills Program is a great way to bring people, companies, and communities together to grow and evolve.**

_Samantha Bryant_

_Human Resources Manager_

_Himalayan Corporation_

---

**The Six Sigma program has been instrumental in empowering employees to think more along the lines of efficiency and improvement. It has assisted in creating an environment where people feel like their ideas will be heard and addressed. Overall, this has been a very positive change.**

_Sarah Roberts_

_Manager, Quality Control and Validation_

_Natural Factors_
Factors identified their existing staff development level as minimal, and hoped that the training would create a culture of advanced educational attainment while increasing retention, improving efficiency and quality, and reducing accidents.

**Outcomes:**
- Streamlined and improved existing production processes.
- Made progress towards improving safety and reducing accidents.

---

**South Seattle College/Everett Community College**

**Qualitel**

Trainees: 83

Qualitel is a manufacturer of electronics, specializing in a full range of high-mix, low-volume, and high-reliability products and services for aerospace, medical and life sciences, industrial, and military markets. The company grew recently from 90 to over 200 employees and requested funding for training to augment its investment in jobs and equipment by providing Lean Six Sigma, IPC electronics certification, blueprint reading, and supervisory training.

**Outcomes:**
- Four promotions as the result of the training.
- Promotion time increased from 9 months from hire to 7-8 months.
- Throughput increased by over 10%, exceeding goal.
- Delivery is on time, improving from pre-training benchmark of 90% and exceeded the goal of 98% on time.

---

**Green River College/Everett Community College**

**Royal Window and Door Profiles**

Trainees: 67

Royal Window produces extrusions for window and door manufacturers. The need for training was determined in response to the company’s recent growth, high turnover rate, and lack of standardized training for leads and supervisors. Training in quality control, workplace communication,.
Training-within-Industry (TWI), and supervisory courses were requested to improve quality, reduce attrition, and increase promotional opportunities for the participants.

Outcomes:
- Five new positions were created and filled.
- Reduced attrition rate, exceeding goal.
- Through quality control and TWI, reduced number of defects.

South Seattle College/Everett Community College

SNBL
Trainees: 101

SNBL’s Everett facility is dedicated to pre-clinical drug development studies. The company recently was awarded a Federal contract by the US Department of Health and Human Services to develop treatment for injuries from chemical, radiological, and nuclear terrorist attacks. The company requested training to support the contract by enhancing skills of emerging supervisors and employees throughout the organization.

Outcomes:
- Reduced turnover by 5%.
- Project management training has allowed key projects to be delivered on time, under budget and within scope.

Community Colleges of Spokane

Accra-Fab
Trainees: 58

Accra-Fab is an advanced manufacturer for aerospace, healthcare, food, communication, and energy industries. The company identified the need for leadership development, strategic development, and computer skills, and lean training.

Outcomes:
- 35 new hires were added.
- Efficiency in operations improved.

The grant really helped in our ongoing effort to provide skills training to our employees.

Teresa Ritter
Human Resources
SNBL

The Strategic Planning and Leadership Development for managers, supervisors, and leads was invaluable and will allow Accra-Fab to grow in this competitive market. The trainings will now be deployed throughout the plant where all employees will benefit. The Microsoft training were much needed and had a positive impact right away.

Barry Stewart
Director of Human Resources
Accra-Fab

South Seattle College/Everett Community College  
SNBL  
Trainees: 101

Snohomish County
Grant: $63,100
Spent: $62,419
Match: $121,227

Community Colleges of Spokane  
Accra-Fab  
Trainees: 58

Spokane County
Grant: $50,000
Spent: $45,776
Match: $60,254
Seaport Steel, a Seattle-based steel manufacturer, added a production facility in Spokane. The new facility has several new pieces of equipment coming online that required training for new employees. The company requested production training for new employees, and a skills upgrade for the incumbent workers at both Seattle and Spokane locations. The comprehensive plan included Messer Cutting Machine training, metallurgy, HEM Saw, AutoCad, Microsoft Office, and soft skills courses.

**Outcomes:**
- 38 new hires were added: 17 at Spokane location, and 21 in Seattle.
- Safety record improved significantly, with 0 accidents in 2016.
- Spokane location has doubled its output compared to 2015.

Mega Machine is located in Tumwater, WA and produces parts for overhead cranes, as well as other components per customer specifications. The company has reached capacity in its facility and in order to reach production goals and order timelines, they needed to increase efficiency. Mega Machine requested training in value stream mapping and lean principles to address waste reduction, improve process flow, reduce costs, and improve quality.

**Outcomes:**
- Reduced lead time from 48 to 5 days, resulting in significant improvement in on time deliveries.
- Developed a New Work Order Release process resulting in 30% improvement in efficiency by establishing documented process requirements.
- Developed on-the-job training for new hires for CNC Mills and Lathes Operators.
Oxbo International develops, manufactures, and distributes agricultural harvesting equipment for food processing markets. The company requested assistance with funding for training in ISO 9001 and Lean in order to upskill employees in continuous improvement methodology, reduce defects, and improve delivery times.

**Outcomes:**
- 25 new employees hired since beginning of project.
- 25 key employees have been trained to use ISO 9001 management system as a basis for continuous improvement. 51 employees have been trained to work within an ISO 9001:2015 environment.

Zodiac Aerospace manufactures aircraft interiors, including overhead bins, lavatories, and galleys. JSP funding was requested to train 100+ employees in lean principles and to conduct Kaizen events.

**Outcomes:**
- Training led to $630,850 in cost savings, exceeding target.

---

We are very pleased with the training we received from Bellingham Technical College and Impact Washington. Combining Lean and ISO training together helped us to create a very efficient management system that will help us continue to improve our process and be successful in the future.

Brad Greenough  
Operations Manager  
Oxbo International

Thanks to the JSP grant funds, Zodiac has been able to reduce scrap and rework, improve productivity, and meet our customers’ demand in a timely manner. Training is critical to our industry due to the cyclical nature of our business. We are constantly training new and incumbent workers and the JSP grant allowed us to increase the level of training in Lean Transformation, which will provide employees with skills that are not only transferable, but will make them more valuable.

Karan Dabas  
Project Manager/Industrial Engineer  
Zodiac Aerospace
Cubcrafters, a manufacturer of light sport aircraft, was in need of mid-level managers with aviation manufacturing experience, as well as production employees who understand lean manufacturing concepts. The goal of courses in Lean, supervisory training, and project management was to aid in reducing turnover, improving productivity, and to expand the skills of the existing workforce, thus increasing sales and leading to new hiring in order to meet production demands.

**Outcomes:**
- Eight new production positions were filled to increase assembly capacity, and two new engineers were hired, with ten new positions anticipated.
- Manufacturing lead times reduced by 50%.

---

The Job Skills grant allowed us to provide training to all of our direct labor employees in lean principles. Our Lean 101 training gave all of the employees a common vision and vocabulary when talking about the transition that was going to take place in the factory. The Lean 101 training allowed every employee to understand what it was we were trying to accomplish and how it would benefit the company. The training was concise and the exercises helped every employee visualize what was happening and why. The training was instrumental in helping us make a much smoother transition to the new manufacturing model.

Randy Pollock  
Director of Manufacturing  
CubCrafters
Consortia Projects
Training consortia help maximize the benefit of the state’s investment by bringing together a small number representatives from several companies to receive training in Lean, Six Sigma, ISO, and other topics. Training participants also receive train-the-trainer preparation, to support the trainees in the further deployment of the newly developed expertise with their respective companies.

Oneonta Starr Ranch Consortium:
Custom Apple Growers, Custom Apple Packers
Wenatchee Valley College
Trainees: 65

Oneonta Starr Ranch and Custom Apple Packers integrate growing, packing, and shipping operations for apples, cherries, stone fruit, and other conventional and organic crops. Employees participated in the training project that focused on leadership and personnel management for front line supervisors, many of whom have not had formal education in these areas. Upon completion of the training, supervisors are able to demonstrate ongoing improvement and increased confidence in leading, coaching, and communicating with employees.

Anne Guerrero
Human Resources
Oneonta Starr Ranch

I couldn’t place a dollar amount on the value of the leadership trainings we’ve received through the JSP grant. Our first-line supervisors and managers are performing at a new level entirely.

APICS Supply Chain Management Consortium:
Cadence Aerospace, Toray Composites, Cascade Gasket, Weyerhaeuser, Hexcel Corporation
Green River College
Trainees: 15

Five companies formed a consortium to receive cost-effective training in supply chain management and logistics. The training was aimed at improving the skills of employees involved in procurement, management, and disposition of all of the materials that companies need in order to make their products. In addition to learning these critical skills, the program gives each student the opportunity to take five APICS exams, resulting in the awarding of the nationally recognized CPIM credential (Certified in Production and Inventory Management).

Janie Vigil
Cadence Aerospace

APICS training has been virtually non-existent in the South Puget Sound region. While there was a class offered along the way here and there, it was never possible for an employee to attend a full series of APICS classes in a timely, organized fashion, making it nearly impossible to master the APICS CPIM certification. We had 4 employees attend the training and the value to our organization is intangible. The individuals who attended the classes make daily decisions that impact cost, quality, and schedule. Having a broader understanding of supply chain, and value stream, as well as terminology and techniques, will greatly impact their ability to make more educated decisions on a daily basis.

Janie Vigil
Cadence Aerospace
I want you to know how much it has meant to us to have [Clark College and the ETI Group working with the State of Washington to make this type of training affordable. We could not have had this level of participation without your help. I’m anticipating that the result of these programs will be a more competitive Kyocera, bringing more business and jobs to the Vancouver area.

Steven Ohm
Quality Assurance Manager
Kyocera International

[Gompf Brackets] is glad to be participating and will benefit tremendously. We have new employees and the training will help us stay up to date and competitive.

Lee Gompf
President
Gompf Brackets
Lean Consortium #1:
Steelscape, NORPAC, Northfork Composites, Northwest Motor Service, Columbia River Carbonates, S&R Sheet Metal, Emerald Kalama Chemical, JH Kelly
Lower Columbia College
Trainees: 16

Lower Columbia College requested funding for eight Cowlitz County businesses, ranging in size from fewer than 20 to 253, to participate in Lean Enterprise Certification Program (LECP). Each company sent 1-4 employees to receive the training. Participants brought their expertise back to their companies to guide projects with the goals of enhancing the Lean production techniques already in place, improving bottom line, and increasing customer satisfaction.

Participation in the [...] grant project enabled NORPAC to reduce damage to paper rolls, avoid potential injuries, and reduce operating and overtime costs by $60,000.

Curt Ransom
NORPAC
Production Planning Manager

The biggest improvement [S&R Sheet Metal] made was concerning material movement. Prior to this, we were constantly moving and removing pallets of heavy metal and it always seemed we couldn’t easily get to the metal we needed. Now it’s more efficient: saving more than $450 per week.

Tony Foster
President
S&R Sheet Metal

Lean Consortium #2:
Pacific Mat and Commercial Flooring, PBS Supply, T&A Supply
Green River College
Trainees: 65

Pacific Mat, together with T&A Supply and PBS Supply Company, formed a consortium to participate in Lean training. The training addressed gaps each company has around their manufacturing processes, which are small but growing portions of each company.

The trainings [...] have helped take our company to a whole new level. We knew that what got us here, won’t get us there. The depth and breadth of these trainings will go a long way to getting us there.

Adrienne Lowber
Director of Finance and Accounting
T&A Supply Company
This partnership between Everett Community College and two property management companies involved training unemployed adults living in transitional housing. A cohort of eighteen students enrolled at the college for a 19-credit Certificate in Property Management. Participants completed 15 credits of coursework and a 100-hour internship worth 4 credits. Participating employers developed, conducted, and supervised the on-site training. All credits earned during this training can be applied towards an Associate in Business degree. 18 of the participants became employed by the business partners, earning on average $14.00/hr., plus housing benefits, such as free or reduced rent. 20% have been promoted within first 6 months from hire.
Three associates from my company, which manufactures composite material, recently attended the Six Sigma Green/Black Belt classes to further our understanding of statistics, reliability, and to assist in solving some of the defect, optimization, and reliability problems experienced by various departments. The Six Sigma instructor provided in-depth explanations of how, when, and why, enabled the students to go beyond the use of the tools and move forward with the working knowledge of the Six Sigma material.

Mark Haller
Toray Composites

The impact of Six Sigma Black Belt certification training on Skills Inc. participants has been significant. It has allowed students to analyze production processes more thoroughly and provided them with tools to identify and resolve issues by looking at both the correlation and causation. A noteworthy project analyzing our chemical processing line resulted in identification of methods to reduce lag time and increase capacity. The tools Six Sigma Black Belt students walked away with resulted in cost savings, increased capacity, and confidence building in our employees.

Priscilla Armstrong
Director of Workforce Development
Skills Inc.

Participants in the consortia received Six Sigma Black Belt training, supplemented by Statistical Functions in Excel and Train-the-Trainer. They brought their expertise back to their companies to create teams and guide Six Sigma projects with the goals of enhancing the LEAN production techniques already in place, improving bottom line, and increasing customer satisfaction. All companies involved in the training had limited experience with LEAN/Six Sigma, and are committed to continuous improvement as part of their overall business strategy. Individual outcomes for each company vary.