2016
SURVEY OF SOUTHERN VIRGINIA
MANUFACTURING WORKFORCE NEEDS

southern virginia
Manufacturing Partnership
of the dan river region collaborative
2016 Survey of Southern Virginia Manufacturing Workforce Needs

The Southern Virginia Manufacturing Partnership (SVMP) of the Dan River Region Collaborative surveyed manufacturers in Southern Virginia about their hiring expectations and workforce challenges. The SVMP is spearheaded by the Chambers of Commerce in Danville-Pittsylvania County, Halifax County, and Martinsville-Henry County. The SVMP includes the counties of Halifax, Henry, Patrick, and Pittsylvania, and the cities of Danville and Martinsville.

As the largest sector in Southern Virginia, manufacturing is vital to our region’s economy.

There are 13,945 people employed in manufacturing in Southern Virginia, representing 18% of the region’s employment. The average weekly wage for persons employed in manufacturing is $877, while the average weekly wage for all employees in this region is $622.1

The Manufacturing Workforce Needs Survey was distributed to 124 manufacturers in the region with 45 completing the survey, representing a response rate of 37%. Surveys were completed in December 2015.

The companies that participated in the survey:
- Employ 6,845 workers in the region
  - 6,152 full-time
  - 61 part-time
  - 632 temporary
- Represent:
  - Apparel
  - Beverages and tobacco products
  - Chemicals
  - Fabricated metal product
  - Food
  - Furniture and related products
  - Machinery
  - Plastics and rubber products
  - Primary metal
  - Textile mills
  - Textile product mills
  - Wood products

64% of the survey participants indicated that the number of employees at their Southern Virginia facilities increased in 2015. They reported a total of 493 new employees this past year. 34% of the participants indicated their employment levels stayed the same. Only 2% indicated a decrease in their employment, representing less than 10 employees.

1 Virginia Employment Commission (2nd Quarter, 2015)
**Current Workforce**

The region’s manufacturers have a diverse workforce reflecting the skill levels required for the positions. Middle skilled jobs represent the largest percentage of manufacturing positions at 34%. Highly-skilled and entry-level positions represent 29% and 28%, respectively. Only 11% of jobs are classified as administrative or office.

**Retention**

The average retention rate for employers participating in the survey was 82.5% for 2015. 52% of the manufacturers indicated that the 2015 retention rate was the same as previous years. 34% indicated it had increased slightly. Almost 7% indicated it had increased significantly. 7% indicated it had decreased from previous years.

**Average Length of Time It Takes to Fill Vacant Positions**

<table>
<thead>
<tr>
<th>Percentage of Jobs</th>
<th>Range</th>
<th>Average Length of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly-skilled</td>
<td>1 month to years</td>
<td>4 months</td>
</tr>
<tr>
<td>positions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle-skilled</td>
<td>1 week to 1 year</td>
<td>2.5 months</td>
</tr>
<tr>
<td>positions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry level</td>
<td>1 day to 3 months</td>
<td>1 month</td>
</tr>
<tr>
<td>positions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative /office</td>
<td>2 weeks to 6 months</td>
<td>2.5 months</td>
</tr>
</tbody>
</table>

**Unfilled Positions**

36% of the survey participants indicated that they had unfilled jobs at the time of the survey due to a lack of candidates with the required job skills. There were 75 positions across the region that were identified as being unfilled.

**Open Positions Include:**
- CDL Driver
- CNC Operator
- Customer Service
- Electricians
- Engineers
- Human Resources
- Machine Operators
- Machinists
- Maintenance
- Maintenance Engineers
- Mechanical Engineer
- Mechanics
- Production
- Research Associates
- Security Technician
- Software Developer
- Supervisors
- Welders
Hiring Needs

The future of manufacturing is strong in Southern Virginia with 74% of the survey participants anticipating their hiring expectations for production and technical positions will increase in 2016. None of the employers indicated their hiring expectations will decrease.

The companies project at least 361 new positions will be added to their production and technical labor force this year. Over the next five years, production jobs are projected to increase by approximately 13%.

Five-Year Projections

Manufacturers are projecting that they will need to replace at least 462 people in their workforce over the next five years due to retirements. They also project that they will add 758 new positions due to growth or expansion (not replacements or retirements) over the next five years.

At least 1,220 positions will need to be filled in manufacturing over the next five years based on the projections of the survey participants.
Hiring Needs by Job Classifications

The survey listed 19 manufacturing positions and asked respondents to report the number of positions they anticipate they will need to fill (either through replacements, retirements, or growth/expansion) over the next five years. The jobs that will be in demand are predominantly entry level and middle-skilled positions. Machine operators and production technicians represent the largest projected hiring need. Machine operators represent 39% of the hiring needs that were identified. Production technicians represent 19%.
Recruitment
When seeking candidates for production/technical jobs, manufacturers utilize various sources for recruitment. The sources that provided the greatest value for production/technical job candidates were identified, by rank order, as:

1. Employee referrals
2. Word of mouth
3. Community college
4. Staffing services/temporary agencies
5. Virginia Workforce Center/Virginia Employment Commission
6. Newspapers/classified ads
7. Job fairs
8. Websites (Monster, Career Builder, Indeed, etc.)
9. Recruiters/headhunters
10. Radio/television

Pre-employment Skill Verification
Only 29% of respondents use any skill assessments in their hiring process. Of the ones that do use skill assessments:
- 39% use the National Career Readiness Certificate (NCRC)/WorkKeys
- 23% use the Bennett Mechanical Comprehension Test
- 38% use other skill assessments including internal, company skill assessments

Education Requirements
Based on anticipated employment, it is important to understand the education and skill requirements for these entry-level positions. 67.5% of manufacturers require a high school diploma or equivalent. Five (5) percent require an associate’s degree. 27.5% do not have a minimum education requirement.
Credentials

60% of the manufacturers require or give preference for specific credentials or certifications. The Certified Production Technician through the Manufacturing Skills Standards Council (MSSC) is the most preferred certification with over 57% of manufacturers giving preference for the CPT. Almost 43% of employers give preference or require the National Career Readiness Certificate (NCRC). The American Welding Society (AWS), OSHA, and NCCER credentials were also identified by manufacturers as credentials they prefer. For “other” certifications, the list included machine technology degrees, advanced film certification, and software developer certifications.
Work Ready and Foundational Skill Importance

In addition to the technical skills required in manufacturing, survey participants were asked to rate the importance of ‘work ready’ and foundational skills. Employers ranked these skills for highly-skilled jobs, middle-skilled jobs, and entry level jobs.

Attendance ranked as “high importance” for all job positions. Following directions and teamwork were also ranked high across every position.

Basic computer skills, critical thinking, interpersonal interactions, locating and using information, problem solving, verbal communications, and written communications were important for all positions but had greater importance for highly-skilled positions.
Manufacturers expressed concerns in several areas related to their future hiring needs. **Work ethic** posed the greatest concern for employers in entry level, middle-skilled, and highly-skilled positions.
Training Needs & Opportunities

Manufacturers responded to several questions involving their training needs and opportunities.

How frequently does your organization fill jobs with candidates who require a significant amount of additional training?

- **Strongly disagree**
- **Somewhat disagree**
- **Somewhat agree**
- **Strongly agree**

Fully Qualified When Hired

Survey participants indicated that only 31% of the employees they hire are fully qualified in the position for which they are hired.

Specialized Internal Training

Of the employees that are hired in manufacturing, 74% are trained internally with specialized technical training to prepare them for the position in which they were hired.

Our technical workforce currently has the knowledge, skills, and abilities for us to be successful.

- **Strongly disagree**
- **Somewhat disagree**
- **Somewhat agree**
- **Strongly agree**

When we need to fill a technical position, we can quickly and easily find the individual with the technical knowledge, skills, and abilities that we need.

- **Strongly disagree**
- **Somewhat disagree**
- **Somewhat agree**
- **Strongly agree**
Training for Current Employees

Most manufacturers (94.9%) utilize on-the-job training to train and promote current employees. Almost 18% use internships, and slightly more than 10% use apprenticeships. Slightly more than 10% use internal training programs and/or leadership development.

![Bar chart showing training providers used for external training and certification programs.]

- Vendor training providers: 70%
- Online training courses: 60%
- Other nonprofit educational institutions: 20%
- University/four-year colleges: 10%
- Community colleges: 80%

![Bar chart showing methods used to fill or reduce existing skills gaps in the past year.]

- Outsourcing of some functions: 30%
- Focused recruiting on particular workforce segments: 50%
- External training and certification programs: 60%
- Use of contingent labor, such as staffing agencies: 70%
- Use of overtime: 80%
- Internal employee training and development programs: 90%