Metals Manufacturing Survey and Needs Assessment Findings

WSI's Business and Industry Team conducted a web-based survey of metals manufacturing companies in the Portland Metro area. The survey was designed to collect information about workforce size, recent and anticipated hires, age distribution of workforce, wages, use of training and recruiting resources, and workforce and business issues. Of the 268 companies invited to respond, 56 companies responded. However, 13 respondents provided no data and many did not respond to specific items. Therefore, for most items, we had a response from 28 to 43 companies. In-depth workforce needs assessment interviews were conducted at 5 companies. The surveys and interviews had some content areas in common.

Company Size

Forty-three companies reported an aggregate workforce of 7,076 workers (the Oregon Employment Department reports total metals industry employment of 30,411 in the Portland Metro area). The median workforce size of survey respondents was 40; the average was 165. Twenty-eight companies reported 50 or fewer employees. Ten companies reported more than 100 employees. One company reported more than 1,000 employees. All but one of the respondent companies are small businesses according to the Small Business Administration, which defines metals manufacturers of from 500 to 1,000 employees as small businesses (depending on the type of manufacturing).

Average Wage

The average entry wage reported by 28 companies was $10.78/hr. They reported an average wage of $18.94/hr. for experienced workers. The Oregon Employment Department reports an average annual wage of $45,360 ($21.81/hr.) for the metals industry in the Portland Metro region, a higher than average wage compared to other industries.

Recent and Anticipated Hiring

Forty-one companies reported hiring a combined total of 188 workers for new positions last year. The average number of new position hires per company was 4.6. Forty companies reported a combined total of 347 replacement hires. The average number of replacement hires per company was 8.7. Clearly, there were more hires attributed to the exit of workers (retirements, etc.) than to growth. However, 38 companies anticipated hiring a combined total of 296 workers for new positions in the coming year, with an average of 7.8 new hires anticipated. This indicates that a higher level of growth than last year is expected. The number of new and replacement positions filled in the last year and planned for next year as a percentage of current workforce was higher for companies of 50 or fewer workers than for companies of 51 or more workers.

Hires as a percentage of current workforce

	New hires last yr	Replacement hires last yr	Planned hires next yr
Companies of 50 or less workers	8%	8%	16%
Companies of 51 or more workers	2%	5%	3%

Aging of the Workforce

Thirty companies with a total workforce of 2,581 reported 742 workers aged 50 and over (29% of the workforce). As a group, companies of 51 or more employees had a higher percentage of workers age 50 or older than companies of 50 or fewer employees, 31% versus 22%. These percentages suggest that the decade ahead will require investments in training to upgrade the skills of incumbent workers to replace senior workers. In fact, survey respondents indicated that the aging workforce and the retirement of skilled workers were among their most five most pressing workforce issues. Only one of the 5 companies interviewed expressed a need to engage in succession planning.

Survey data is consistent with Oregon Employment Department data indicating that workers in this industry are older than the average for all major industry groups and that metals manufacturing has a lower turnover rate and higher retention rate than most other industries.

Skill Gaps

Twenty-eight survey respondents indicated that their most pressing workforce issues were the need for skilled, experienced workers and the low level of basic skills (including literacy and numeracy), soft skills, and work ethic among candidates and new hires. The positions most frequently cited as difficult to fill were welder, fabricator, machinist, and CNC operator/ programmer.

The needs assessment interviews supported the survey findings. Welder and machinist positions were noted as in demand and hard to fill. Basic math, reading, writing, and communication skills were noted as issues for both new hires and incumbent workers. One company makes a skill assessment tool available to the organizations that refer job candidates and they have found that they have fewer new hires with basic skills deficiencies. The needs assessments also indicated that companies often hire candidates that lack full proficiency for their entry-level jobs, even though they might have related training and experience. This, coupled with the fact that the technologies and manufacturing processes are constantly changing, forces companies to provide on-the-job training to new hires and/or hire them on a temporary basis to verify that the person has the technical and behavioral skill set to succeed. These accommodations to skill gaps are costly to the industry.

Use of Training Resources

Of thirty-one survey respondents, all indicated that they use on-the-job training and most use at least one other training resource, typically professional/technical training or community college training. Thirty companies reported that, on an annual basis, 35% of their employees are involved in technical training, 8% in ESL training, and 8% in other training (team building, regulatory, quality, and others). Companies of 50 or fewer workers had more workers involved in ESL training and less workers involved in other training.

The needs assessment interviews indicated that companies use internal training more frequently because college courses are not sufficiently aligned with their specific technical needs and it takes a significant length of time to develop new curricula. Two companies with extensive training programs expressed satisfaction with training partnerships in which colleges work with company trainers and content experts to develop curricula and methods of instruction (self-paced manuals, OJT, video, online courses, etc.).

Four of the five companies interviewed described generous tuition reimbursement plans with mixed levels of worker participation. WSI has found that worker participation in training increases when:

- Employers and/or labor organizations sponsor and actively market the training;
- Training is offered onsite and/or on work hours;
- Workers believe that training is related to wage gains and/or career advancement.

Use of Publicly Funded Workforce System

Seven of 31 survey respondents (23%) use publicly funded agencies as part of their recruitment strategies and 6 of 23 respondents (26%) indicated that they wanted to be contacted to discuss their workforce needs.

Two of 5 companies interviewed stated that they relied on temporary agencies to refer candidates. The "good" temporary agencies get to know the companies and industries with which they are involved and are able to respond quickly with prescreened candidates that meet company specifications. In general, companies indicated that they would prefer that candidates are thoroughly screened before being referred, a level of service that is provided for a fee by both temporary agencies and the One-Stop system. All of the companies had some experience with referrals from the Employment Department and/or the One-Stop system. Two companies indicated that their current relationship with the Employment Department is influenced by unsatisfactory referrals received many years ago. At one company, staff met with 10 HR managers, only one of whom had heard of the One-Stops. Two companies frequently used agencies that serve immigrant populations (particularly IRCO) and expressed satisfaction with the quality of referrals. Three companies expressed an interest in listing with local electronic job boards, such as www.connect2jobs.org.