



# How Will Manufacturers Find Enough Workers?

by [Art Ayre](#)

Published Jun-21-2007

Manufacturing workers produce a wide variety of goods including wood products, food items, fabricated metals, transportation equipment, computer chips, and plastics. Manufacturing currently provides slightly more than 200,000 jobs in Oregon – more than one-ninth of the total.

Economists expect little or no growth in Oregon's manufacturing sector over the coming decade. However, the Employment Department expects nearly 47,000 current manufacturing workers to retire or move to another occupation during the decade. Many more will move to a different company but stay in the same occupation. How will Oregon's manufacturers find enough new workers to replace those who leave?

The following are a few potential sources of new workers for Oregon's manufacturing industry.

Keep in mind that changes in technology, globalization, worker mobility and skills, and public policy could influence these sources.

## Several Sources of Workers and Output

### *High school and college graduates*

Over the past few years, about 40,000 students were enrolled in 12<sup>th</sup> grade in Oregon, and about 32,000 of these students graduated each year. These graduates are potential manufacturing employees.

Many graduates go directly from high school into the labor force. Many others go on to college, although some leave college and enter the labor force without obtaining a degree. Even college students may be potential manufacturing employees during summer break or part-time during the school year and full-time after they leave college.

It is estimated that more than half of Oregon's existing manufacturing workers have a high school diploma or less. About one-quarter have taken some college classes. The remainder – about one-fifth – has at least a college degree. Although educational requirements for some manufacturing jobs may change in the future, it appears likely that high school and college graduates will remain a viable source of workers for the industry.

### *The unemployed*

Oregon's unemployment rate has declined to a low level, but it remains higher than the rates of most other states. Therefore, labor is more available here relative to demand than it is elsewhere. In 2006, Oregon had roughly 100,000 unemployed workers.

The unemployed are more likely than the employed to lack a high school diploma. Therefore, some training of workers may be necessary to ensure adequate productivity in manufacturing occupations. The most common skills of existing production occupation workers – most of whom work in

manufacturing – include applying quality assurance techniques, applying basic mathematics such as arithmetic and ratios, reading schematics and specifications, and operating precision measuring devices, tools, and equipment.

### *In-migrants*

In the 1990s, Oregon's population grew by an average of almost 58,000 per year. Between 2001 and 2005, the population increased by almost 40,000 per year. Between 2005 and 2013, population is projected to increase by more than 50,000 per year – with nearly half of the growth due to net in-migration – more people moving into Oregon than moving out.

Between 2004 and 2005, almost 170,000 people moved into Oregon. Many of them either had a job or were looking for work. A slightly smaller number moved out of Oregon, leaving a net gain in population due to migration. The annual churn in population suggests a willingness of people to move to Oregon. This provides an opportunity for employers to attract the workers they need from other parts of the country.

### *Workers from other industries*

During their working lives, people may shift their employment from one industry to another. Between the second quarter of 2004 and the second quarter of 2005, about 10,300 workers in Oregon left a job in another industry to work for a manufacturing employer. About 4,200 came to their manufacturing jobs from the professional and business services industry. This sector includes temporary help agencies and employee leasing companies, which may be the source of many of these workers. The sector also includes landscaping and janitorial services. Almost 1,600 came from retail trade; 900 came from leisure and hospitality; 900 came from wholesale trade, and almost 700 came from construction. Training programs may allow more workers to make the move from another industry.

### *Productivity gains*

Projections of employment for the manufacturing industry include some assumptions about levels of productivity. If Oregon's manufacturers increase their productivity beyond the level assumed in the employment projections, such as through enhanced training programs, the number of workers needed in manufacturing might decline. Paradoxically, such an increase in productivity could increase Oregon manufacturers' competitiveness and market share, resulting in greater demand for Oregon products and manufacturing workers.

### *Existing workers who choose to delay retirement*

Financial necessity and a predisposition to remain challenged and engaged in life may cause some baby boomers to remain in the labor force as they pass the "traditional" retirement age. Employers' efforts to accommodate the special needs of older workers as well as other efforts to encourage them to remain employed – such as alternative work schedules and benefit plans – may play a major role in keeping older workers on the job.

The U.S. Census Bureau reports that people age 65 or older held only about 4,600 jobs in Oregon. Those ages 55-64 held nearly 28,000 jobs, while those ages 45-54 held somewhat more than 55,000 jobs.

### *Other manufacturers' employees*

Like it or not, employees may move from one manufacturing employer to another. Between the second quarter of 2004 and the second quarter of 2005, about 8,200 workers in Oregon left a job at one manufacturing employer and began work at a different manufacturing employer. With some exceptions, employers seek the most productive employees and employees seek the highest compensation and the

best working conditions. Individual manufacturers that are profitable enough to offer excellent compensation and working conditions are likely to have sufficient job applicants.

