

Washington State Employers' Workforce Training Needs and Practices 2006

Survey Highlights

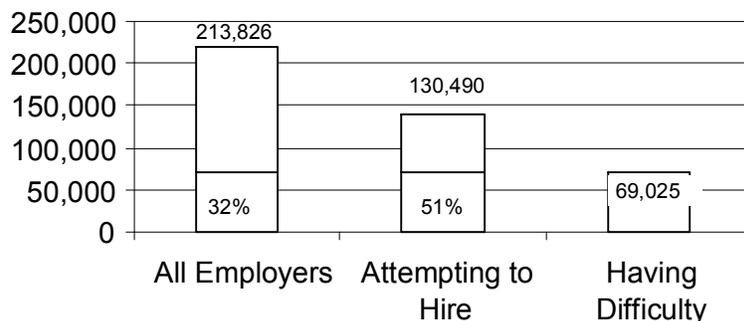
Roughly 2,100 Washington State employers responded to our survey during the summer and fall of 2005. We asked about their needs during the previous 12 months, a period when the state economy was performing well, producing tens of thousands of new jobs. What did we learn?

We learned that with the economic upswing, more employers had difficulty finding qualified job applicants.

- More employers reported hiring new employees compared to the previous survey conducted two years before during the economic recession. Sixty-one percent of firms reported hiring new employees in the last twelve months, compared with fifty-five percent in 2003.
- More employers reported difficulty filling these positions than did so during the previous survey. Among firms attempting to hire, 51 percent reported difficulty finding qualified job applicants, compared with 45 percent two years ago.
- Extrapolating from the survey results, an estimated 69,000 Washington employers—about one in every three—had difficulty finding qualified job applicants during the past year.

Figure 1

Washington State Employers, Those Attempting to Hire, and Those Having Difficulty Finding Qualified Applicants



As we have found in every biennial survey, the shortage is greatest for jobs requiring postsecondary training, but not a baccalaureate degree. (This finding is consistent with a labor market analysis conducted jointly by the Workforce Board, the State Board for Community and Technical Colleges, and the Higher Education Coordinating Board. They found a general shortage at the subbaccalaureate level, but a shortage only in certain fields at the BA/BS level. See www.wtb.wa.gov/Pubs/2005_Related_SEW-1.pdf)

- Nine percent of Washington employers, about nineteen thousand firms, had difficulty attempting to hire workers with a postsecondary vocational certificate. In contrast, about 13,700 firms—5 percent of employers—had difficulty hiring workers with a baccalaureate degree.

As we have found in every survey, employers most frequently had difficulty finding job applicants with specific occupational skills. The next most frequent area of difficulty was general workplace skills.

- Twenty-two percent of employers reported difficulty finding applicants with occupation-specific skills (e.g., they wanted to hire a registered nurse, but had trouble finding one).
- About 20 percent had difficulty finding applicants with problem-solving skills, positive work habits and attitudes, communication skills, or teamwork skills. Fewer employers had difficulty finding applicants with basic math (12 percent), writing (12 percent), or reading skills (7 percent).

We learned that this shortage is limiting economic growth; it reduces productivity, sales, and the quality of products and services.

- Seventeen percent of Washington employers reported that the difficulty finding qualified job applicants lowered output or sales, sixteen percent said it lowered productivity, and fourteen percent reported it reduced quality.

Background

Every two years, the Workforce Training and Education Coordinating Board (Workforce Board) surveys Washington State employers. The Workforce Board uses the survey responses to identify employers' workforce needs and practices and their satisfaction with workforce programs. The Board shares the information with policymakers and program administrators in order to improve the workforce development system's responsiveness to employer needs. This report summarizes the survey results. The survey information on employer satisfaction with the skills of program participants is published as part of a separate evaluation of the state's workforce programs, *Workforce Training Results*.

The Workforce Board administered the survey during the summer and fall of 2005. The Association of Washington Business assisted with a transmittal letter encouraging employers to respond. A total of 2,095 employers—17 percent—responded. The margin of error is 2.1 percent at the 95 percent confidence level. The sample was stratified by firm size, region of the state, and industry. Sample weights were used to make the reported statistics representative of all employers in the state.

Appendix A provides definitions of industry sectors and the distribution of survey responses by workforce development area, firm size, and industry. Appendix B contains the survey instrument, and Appendix C survey results by industry sector.

Figure 2

Distribution of Survey Responses by Industry Sector*

Industry	# of Responses
Agriculture and Food Processing	286
Construction	303
High-Tech	226
Manufacturing	354
Services	265
Trade	322
Other Finance, Insurance, and Real Estate (F.I.R.E); Transportation; Utilities; and Government	339
<i>All Industries</i>	2,095

*See Appendix, Figure A-4 for definitions of industry sectors

Survey Responses

The following are the responses to the survey. In some cases, responses are compared with previous surveys.

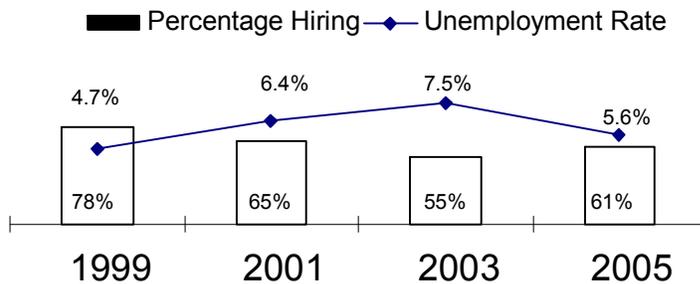
Number of employers who hired new employees

Question: Has your firm/organization hired any new employees in the last 12 months? (Q1 on survey)

- The most recent survey asked employers about their needs during a period when the state's economy was churning out new jobs. Not surprisingly, more firms reported hiring new employees compared to the previous survey conducted when the economy had not yet recovered from the recent recession. Sixty-one percent of firms reported hiring new employees in the last twelve months.

Figure 3

Employers Hiring and Washington's Unemployment Rate



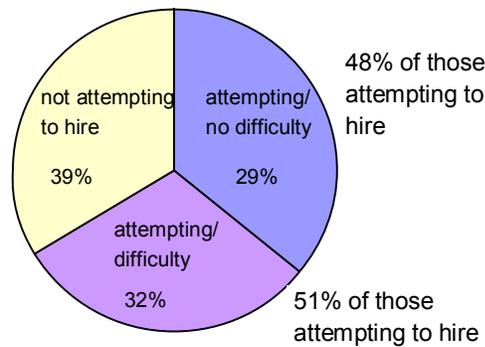
Scarcity of skilled job applicants

Question: In the last 12 months, did your firm/organization have any difficulty finding qualified applicants for any of the jobs you were trying to fill?(Q3 on survey)

- Among those firms attempting to hire workers during the last 12 months, 51 percent reported difficulty finding qualified job applicants, compared with 45 percent in 2003. An estimated 69,000 employers had difficulty finding qualified job applicants. As the economic recovery continues, the problem is likely to become even more intense.

Figure 4

Employers Attempting to Hire and Having Difficulty Finding Qualified Job Applicants



- The difficulty in finding qualified job applicants was most severe in the construction and agriculture/food processing industries and least severe in retail and wholesale trade.

Figure 5

Employers Attempting to Hire, Those Reporting Difficulty Finding Qualified Job Applicants by Industry Sector,*

Industry	2001	2003	2005
Agriculture and Food Processing	66%	44%	67%
Construction	48%	65%	71%
High-Tech	47%	54%	56%
Manufacturing	60%	49%	55%
Services	63%	38%	53%
Trade	58%	51%	42%
Other: F.I.R.E., Transportation, Utilities, and Government	61%	42%	56%
<i>All Industries</i>	<i>60%</i>	<i>45%</i>	<i>51%</i>

*See Appendix, Figure A-4 for definitions of industry sectors.

- Employers in all parts of Washington State reported difficulty finding qualified applicants, but the highest incidences were in the North Central, Olympic, Southwest Washington, Tri-County, and Eastern Washington workforce development areas.¹ The shortage appeared least severe in the Benton-Franklin area.

Figure 6

**Employers Reporting Difficulty Finding
Qualified Job Applicants by Workforce Development
Area*, Among Those Attempting to Hire**

WDA	2001	2003	2005
Olympic	61%	56%	63%
Seattle-King County	71%	54%	49%
Eastern Washington Partnership	54%	53%	59%
Tri-County	51%	46%	60%
Northwest	43%	46%	48%
North Central	42%	45%	67%
Benton-Franklin	61%	44%	28%
Snohomish County	61%	42%	49%
Spokane Area	47%	41%	50%
Pacific Mountain	69%	38%	40%
Tacoma-Pierce County	54%	30%	50%
Southwest Washington	54%	28%	62%
<i>Statewide</i>	<i>60%</i>	<i>45%</i>	<i>51%</i>

**See Appendix, Figure A-4 for definitions of industry sectors.*

Economic costs of skill shortages

Question: How did your firm/organization respond to the difficulty finding qualified applicants?(Q4on survey)

- Faced with a shortage of qualified applicants, firms hired less qualified workers, increased recruiting, added overtime, and left openings unfilled. Among firms having difficulty, the responses to skill shortages were similar to those reported two years ago.

¹ Washington is divided into 12 workforce development areas; several areas include multiple counties. Eastern Washington includes Ferry, Stevens, Pend Oreille, Lincoln, Whitman, Walla Walla, Columbia, Garfield, and Asotin. North Central includes Okanogan, Chelan, Douglas, Grant, and Adams. Northwest includes Whatcom, Skagit, San Juan, and Island. Olympic includes Clallam, Jefferson, and Kitsap. Pacific Mountain includes Grays Harbor, Mason, Thurston, Lewis, and Pacific. Southwest Washington includes Wahkiakum, Cowlitz, Clark, and Skamania. Tri-County includes Kittitas, Yakima, and Klickitat. Seattle-King, Snohomish, Tacoma-Pierce, and Benton-Franklin are single or dual counties.

Figure 7

Employer Response to the Shortage of Qualified Applicants

Response	Among all Employers
Hired a less qualified applicant	18%
Increased recruiting efforts	15%
Increased overtime for employees	14%
Did not fill the opening	12%
Increased wages to attract applicants	8%
Outsourced work to another firm*	6%

**This does not necessarily involve outsourcing overseas; the other firms could be in Washington or another state.*

Question: Which of the following has resulted from your firm's difficulty in finding qualified applicants? (Q8 on survey)

- Employers believed skill shortages were hurting their businesses by limiting output or sales, lowering productivity, and reducing product quality. These are similar findings to previous surveys.

Figure 8

Economic Impacts of Skill Shortages

Response	Among all Employers
Reduced production output or sales	17%
Lowered overall productivity	16%
Reduced product or service quality	14%
Prevented firm from expanding its facilities	8%
Prevented firm from developing new products/services	6%
Caused firm to move some operations out of state	<1%

Difficulty finding applicants by level of education

Question: In general, how much difficulty has your firm/organization experienced in the last 12 months finding qualified applicants with the different education levels listed below? (Q6 on survey)

- As found in previous surveys, the shortage of job applicants with some postsecondary education or training but less than a baccalaureate degree affected more firms than were affected by shortages of other workers. An estimated 18,900 employers had difficulty finding applicants with vocational certificates and 17,800 employers had difficulty finding applicants

with vocational associate degrees. Over 22,000 employers had difficulty with one or the other of these vocational credentials.

- An estimated 13,700 employers had difficulty finding applicants with baccalaureate degrees.

Figure 9

Employer Difficulty Finding Applicants by Educational Level

Educational Level	Estimated # of Firms	Among All Employers
Neither a high school diploma or GED	4,700	2%
High school diploma or GED	14,100	7%
Some college course work	18,900	9%
Vocational certificate	18,900	9%
Vocational associate degree	17,800	9%
Academic associate degree	10,700	5%
Baccalaureate degree	13,700	5%
Master's degree	8,700	3%
Doctoral or professional degree	3,800	2%

Difficulty finding workers who have certain abilities and skills

Question: How much difficulty has your firm/organization had finding employees with the following skills? (Q7 on survey)

The recent survey, as others before it, found that:

- Firms had the most difficulty finding applicants with occupation-specific skills.
- Firms also found it difficult to find applicants with problem-solving skills, positive work habits and attitudes, communication skills, and teamwork skills.
- Fewer firms had difficulty in finding workers with the basic skills of reading, writing, and math.

Figure 10

Employers Reporting Difficulty Finding Qualified Applications With Specific Skills and Abilities

Type of Skill or Ability	Among all Employers
Occupation-specific skills	22%
Problem-solving or critical thinking skills	21%
Positive work habits and attitudes	20%
Communication skills	19%
Teamwork skills	18%
Ability to adapt to changes in duties and responsibilities	16%
Ability to accept supervision	16%
Computer skills	12%
Writing skills	12%
Math skills	12%
Reading skills	7%
English as a Second Language	5%

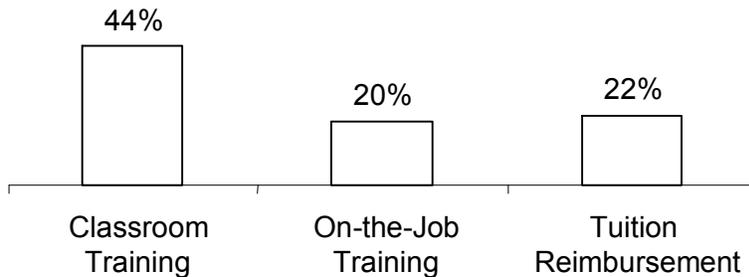
Employer-provided classroom training

Question: Did your firm/organization provide or pay for any classroom training, workshops, or seminars (lasting at least 4 hours) for any employees in the last 12 months? (Q12 on survey)

- A little fewer than half of firms (44 percent) provided or paid for some classroom training.
- There are three broad categories of classroom training—training in work place practices, basic skills training (reading, writing, math, and English language skills), and training in job-specific skills. Among the firms that provided classroom training, 88 percent provided such training in job-specific skills, 67 percent provided it for work place practices, and 19 percent provided it for basic skills.
- Twenty-nine percent of firms reported that the percentage of their workers who received classroom training increased during the past three years. Firms increased classroom training for a number of reasons—the most cited reasons were: the need to improve quality, changes in technology, in order to improve the morale and work habits of employees, new hires did not have the necessary skills, changes in the organization of work, and changes in products or services.
- Twenty-two percent of all employers provided tuition reimbursement to their employees. Among these employers, 40 percent restricted reimbursement to job-related training.
- The proportion receiving classroom training varied by occupation. It was especially high among managerial employees and lower among service, sales, and production workers.

Figure 11

Proportion of All Employers Providing Classroom Training, On-the-Job Training, and Tuition Reimbursement During the Last 12 Months



Employer-provided on-the-job training

Question: Did your firm/organization provide at least 4 hours of on-the-job training that was described in a written plan or agreement for any employee during the past 12 months?(Q29 on survey)

- Twenty percent of firms provided at least four hours of on-the-job training (OJT) described in a written plan or agreement. This is similar to the finding two years ago.
- The incidence of on-the-job training also varied by occupation, though less so than did classroom training. Employers offered OJT more frequently than classroom training to their technical, sales, administrative support staff, service, and production workers.

Hiring of workers trained in Washington's workforce development programs

Question: We would also like to know if anyone in your firm/organization who was hired in the last 12 months attended, or received training from, one of the following 6 types of institutions or programs. (Q35 on survey)

- Among all Washington employers, 18 percent hired someone during the past 12 months who had at some time attended a community or technical college training program. This represents an estimated 37,800 employers.
- Thirteen percent hired a former private vocational school student and twelve percent hired a former secondary career and technical education student.

Figure 12

**Proportion Hiring Workers Trained in the Following Programs,
Among Employers who Hired During the Last 12 Months**

Training Institution or Program	Hiring	Estimated Employers
Secondary career and technical education	12%	25,600
Community or technical college vocational training	18%	37,700
Workforce Investment Act or WorkSource	4%	8,400
Private career schools	13%	27,000
Apprenticeship programs	7%	15,200
Adult basic skills such as GED, literacy, and English as a Second Language	5%	11,600

Future needs—increasing skill requirements

Question: How will your firm's need for employees with each of the types of education listed (Q9 on survey)

- Thirty-three percent of firms reported that the skills required to adequately perform production or support jobs had increased over the last three years. Fifty-four percent said they had stayed the same.
- One reason that skills requirements increased is that the use of computers has become more common. Employers reported that 48 percent of non-supervisory employees used computers in their jobs. This is about the same percentage as two years ago.
- Another factor that increased skill requirements is the adoption of high-performance work organization practices—82 percent of firms cross-trained employees to do a number of jobs, 59 percent organized regular meetings with workers to discuss ways to improve practices, 54 percent linked pay to performance, and 46 percent compared their performance with that of other firms (benchmarking). These are about the same percentages as in the previous survey.