

**SOUTHERN WORKFORCE BOARD  
BIG FIVE COMMUNITY SERVICES  
DURANT, OKLAHOMA**



**DEMAND OCCUPATIONS & SKILL SETS POLICY  
UNDER TITLE I OF  
THE WORKFORCE INVESTMENT ACT  
#SWB-003**

July 27, 2005

**PURPOSE:**

To disseminate policy regarding the determination and usage of the Southern Workforce Board’s Demand Occupations List as required under the Workforce Investment Act of 1998; as disseminated as OETI 08-05 from the Oklahoma Employment Security Commission.

**BACKGROUND:**

The Workforce Investment Act of 1998 (WIA) requires that the Southern Workforce Board identify occupations that are in demand in the region, as well as demand skill sets. This policy establishes the process that the Board (SWB) shall use for developing and maintaining a local list that identifies increasing and decreasing occupations and skill sets in the region.

Demand occupations and skill sets are those that have been determined by the Board to offer the greatest potential for customers to obtain reasonably stable, secure and family-supporting employment. WIA Title I training funds may only be used to assist customers enrolled in courses of study that lead to entry into an occupation on this approved list *through a state approved eligible training provider.*

**DETERMINATION OF DEMAND OCCUPATIONS & SKILL SETS:**

The SWB shall maintain a list of occupations and skill sets that identify the increasing and decreasing demand for such in the local workforce area within the Board’s targeted industries. The Demand Occupations List and Skill Set lists will be developed and approved by the Board utilizing current data from the Labor Market Analysis division of the Oklahoma Employment Security Commission (OESC), the Oklahoma Department of Commerce Division of Research, the Governor’s Council for Workforce and Economic Development, economic development councils, business advisory groups, unemployment insurance call centers, significant employers throughout the region, and community colleges.

**Targeted Industries:**

The Southern Workforce Board has identified through the Board’s State of the Workforce report the industries within the ten county area that is eligible for participant training. They are: (1) Health Care & Social Assistance, (2) Transportation & Warehousing, (3) Manufacturing, (4) Construction, (5) Professional, Scientific & Technical Services, (6) Wholesale (Distribution), and (7) Educational Services.

**Demand Occupations:**

The Southern Workforce Board has identified those occupations contained within the Board’s targeted industries that have *at least an average of 70 annual* job openings in the Southern Workforce Investment Area to be **“In Demand”**. The Board shall employ three major tools to establish a context for determination of demand occupations: (a) statewide and regional employment projections, (b) number of job openings and placements within the last 12 months, and (c) current workforce area labor market studies indicative of high growth industries.

**Demand Skill Sets:**

The Southern Workforce Board has identified those skill sets within the demand occupations contained within the Board’s targeted industries to be the **“demand skill sets”** for the Southern Workforce Investment Area. The Board shall employ four major tools to establish a context for the determination of demand skill sets: (a) State of the Workforce Report of the Governor’s Council

for Workforce and Economic Development, (b) Focus Group information and feedback, (c) local labor market surveys of the area's businesses, and (d) skill sets as identified by the ACT's WorkKeys profiles or O'NET. The Board may also establish tiers of Skill Sets as correlates to the *High-demand Occupations* list or separately.

The lists shall be uniform for the entire workforce development area. Regional exceptions to the list can be included if there is county data which can substantiate a basis for making the exception. The list will be updated on a semi-annual basis, however, it may be updated on a more frequent basis if a situation warrants it (plant closures or openings, significant changes in the local economy, etc.).

**EXCEPTIONS:**

Exceptions to the occupations list attached may be considered in extreme circumstances. The occupation in question must be presented to the Chair of the Southern Workforce Board and to staff in written format. Exceptions must identify the occupation for which the training is to occur, the basis for requesting an exception including documented evidence to support the request, and whether the exception request is temporary or permanent. This request must be in advance of any training expenditure related to the request.

**DATE EFFECTIVE:**

This policy shall be effective immediately on July 27, 2005.

Approved by the Southern Workforce Board this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

\_\_\_\_\_  
Keith Buelow, Chairman

## DEMAND OCCUPATIONS

Occupations With Minimum 70 Total Openings

By Occupational Code

| Occupation   | Occ. code | Estabs. reporting occupation | Est. empl | Mean wage | Equivalent Hourly Wage | New Jobs 2002-12 | Total Openings 2002-12 |
|--|-----------|------------------------------|-----------|-----------|------------------------|------------------|------------------------|
| Chief Executives   | 11-1011   | 110                          | 330       | \$95,582  | \$ 45.95               | 80               | 140                    |
| General and Operations Managers                                    | 11-1021   | 374                          | 1,150     | \$60,695  | \$ 29.18               | 310              | 590                    |
| Sales Managers   | 11-2022   |                              | 160       | \$69,114  | \$ 33.23               | 60               | 80                     |
| Administrative Services Managers                                   | 11-3011   | 56                           | 240       | \$40,441  | \$ 19.44               | 60               | 120                    |
| Financial Managers   | 11-3031   | 95                           | 190       | \$66,906  | \$ 32.17               | 50               | 90                     |
| Education Administrators, Elementary and Secondary School          | 11-9032   | 24                           | 180       | \$57,050  | \$ 27.43               | 30               | 70                     |
| Food Service Managers  | 11-9051   | 33                           | 190       | \$24,786  | \$ 11.92               | 70               | 130                    |
| Medical and Health Services Managers                               | 11-9111   | 23                           | 140       | \$73,603  | \$ 35.39               | 60               | 90                     |
| Managers, All Other  | 11-9199   | 16                           | 60        | \$58,908  | \$ 28.32               | 40               | 70                     |
| Employment, Recruitment, and Placement Specialists                 | 13-1071   |                              | 150       | \$42,561  | \$ 20.46               | 40               | 70                     |
| Accountants and Auditors   | 13-2011   | 109                          | 310       | \$41,405  | \$ 19.91               | 40               | 120                    |
| Loan Officers  | 13-2072   | 18                           | 120       | \$45,865  | \$ 22.05               | 40               | 70                     |
| Social and Human Service Assistants                                | 21-1093   |                              | 230       | \$16,950  | \$ 8.15                | 100              | 140                    |
| Preschool Teachers, Except Special Education                       | 25-2011   | 19                           | 190       | \$24,339  | \$ 11.70               | 60               | 100                    |
| Elementary School Teachers, Except Special Education               | 25-2021   | 23                           | 1,110     | \$33,449  | \$ 16.08               | 120              | 440                    |
| Middle School Teachers, Except Special and Vocational Education    | 25-2022   | 17                           | 450       | \$35,392  | \$ 17.02               | 10               | 70                     |
| Secondary School Teachers, Except Special and Vocational Education | 25-2031   | 21                           | 620       | \$35,503  | \$ 17.07               | 50               | 180                    |
| Teachers, Primary, Secondary, and Adult, All Other (OES Only)      | 25-3999   |                              | 210       | \$18,070  | \$ 8.69                | 60               | 80                     |
| Teacher Assistants   | 25-9041   | 30                           | 870       | \$14,116  | \$ 6.79                | 150              | 330                    |
| Pharmacists  | 29-1051   | 19                           | 130       | \$76,717  | \$ 36.88               | 60               | 90                     |
| Registered Nurses  | 29-1111   | 48                           | 970       | \$47,428  | \$ 22.80               | 250              | 440                    |
| Emergency Medical Technicians and Paramedics                       | 29-2041   | 10                           | 250       | \$58,544  | \$ 28.15               | 90               | 120                    |
| Licensed Practical and Licensed Vocational Nurses                  | 29-2061   | 47                           | 900       | \$28,885  | \$ 13.89               | 210              | 440                    |
| Home Health Aides  | 31-1011   | 16                           | 280       | \$18,936  | \$ 9.10                | 60               | 90                     |

|  |         |     |       |          |    |       |     |       |
|--|---------|-----|-------|----------|----|-------|-----|-------|
| Nursing Aides, Orderlies, and Attendants                                     | 31-1012 | 23  | 1,360 | \$17,751 | \$ | 8.53  | 550 | 820   |
| Dental Assistants  | 31-9091 | 3   | 140   | \$22,955 | \$ | 11.04 | 40  | 70    |
| Fire Fighters  | 33-2011 | 8   | 370   | \$24,320 | \$ | 11.69 | 50  | 110   |
| Correctional Officers and Jailers  | 33-3012 | 9   | 170   | \$14,976 | \$ | 7.20  | 50  | 100   |
| Police and Sheriff's Patrol Officers   | 33-3051 | 18  | 600   | \$22,336 | \$ | 10.74 | 190 | 340   |
| Security Guards  | 33-9032 | 35  | 240   | \$21,551 | \$ | 10.36 | 80  | 160   |
| First-Line Supervisors/Managers of Food Preparation and Serving Workers      | 35-1012 | 61  | 390   | \$20,398 | \$ | 9.81  | 90  | 180   |
| Cooks, Fast Food   | 35-2011 | 22  | 1,050 | \$13,072 | \$ | 6.28  | 120 | 340   |
| Cooks, Institution and Cafeteria   | 35-2012 | 50  | 570   | \$15,036 | \$ | 7.23  | -20 | 200   |
| Cooks, Restaurant  | 35-2014 | 21  | 620   | \$13,810 | \$ | 6.64  | 130 | 280   |
| Food Preparation Workers   | 35-2021 | 43  | 720   | \$14,138 | \$ | 6.80  | 100 | 240   |
| Combined Food Preparation and Serving Workers, Including Fast Food           | 35-3021 | 22  | 830   | \$13,357 | \$ | 6.42  | 320 | 710   |
| Counter Attendants, Cafeteria, Food Concession, and Coffee Shop              | 35-3022 | 11  |       | \$12,769 | \$ | 6.14  | 20  | 70    |
| Waiters and Waitresses   | 35-3031 | 30  | 1,470 | \$13,017 | \$ | 6.26  | 440 | 1,200 |
| Food Servers, Nonrestaurant  | 35-3041 | 7   |       | \$13,164 | \$ | 6.33  | 30  | 100   |
| Dishwashers  | 35-9021 | 23  | 220   | \$13,369 | \$ | 6.43  | 40  | 110   |
| Janitors and Cleaners, Except Maids and Housekeeping Cleaners                | 37-2011 | 174 | 1,250 | \$16,290 | \$ | 7.83  | 160 | 370   |
| Maids and Housekeeping Cleaners  | 37-2012 | 31  | 420   | \$14,325 | \$ | 6.89  | 130 | 320   |
| Landscaping and Groundskeeping Workers                                       | 37-3011 | 45  | 440   | \$18,876 | \$ | 9.08  | 100 | 200   |
| Child Care Workers   | 39-9011 | 16  |       | \$14,091 | \$ | 6.77  | 50  | 140   |
| First-Line Supervisors/Managers of Retail Sales Workers                      | 41-1011 | 77  | 680   | \$29,942 | \$ | 14.40 | 180 | 400   |
| First-Line Supervisors/Managers of Non-Retail Sales Workers                  | 41-1012 | 23  | 140   | \$42,836 | \$ | 20.59 | 40  | 70    |
| Cashiers   | 41-2011 | 93  | 3,290 | \$13,715 | \$ | 6.59  | 640 | 2,260 |
| Gaming Change Persons and Booth Cashiers                                     | 41-2012 |     | 100   | \$14,660 | \$ | 7.05  | 20  | 70    |
| Retail Salespersons  | 41-2031 | 91  | 2,160 | \$19,291 | \$ | 9.27  | 350 | 1,080 |
| Insurance Sales Agents   | 41-3021 | 13  | 80    | \$45,744 | \$ | 21.99 | 40  | 70    |
| Sales Representatives, Wholesale and Mfg, Exc Tech and Scientific Products   | 41-4012 | 58  | 310   | \$39,217 | \$ | 18.85 | 140 | 220   |
| First-Line Supervisors/Managers of Office and Administrative Support Workers | 43-1011 | 131 | 380   | \$30,016 | \$ | 14.43 | 50  | 180   |
| Bill and Account Collectors  | 43-3011 | 33  | 150   | \$20,730 | \$ | 9.97  | 40  | 70    |
| Bookkeeping, Accounting, and Auditing Clerks                                 | 43-3031 | 232 | 820   | \$25,062 | \$ | 12.05 | 0   | 230   |
| Tellers  | 43-3071 | 8   | 200   | \$19,659 | \$ | 9.45  | 10  | 190   |

|  |         |     |       |          |    |       |     |     |
|--|---------|-----|-------|----------|----|-------|-----|-----|
| Customer Service Representatives   | 43-4051 | 83  | 1,360 | \$21,773 | \$ | 10.47 | 230 | 360 |
| Receptionists and Information Clerks                                       | 43-4171 | 121 | 450   | \$16,837 | \$ | 8.09  | 909 | 170 |
| Postal Service Mail Carriers   | 43-5052 | 10  | 260   | \$41,086 | \$ | 19.75 | 10  | 90  |
| Shipping, Receiving, and Traffic Clerks                                    | 43-5071 | 82  | 470   | \$24,785 | \$ | 11.92 | 40  | 100 |
| Stock Clerks and Order Fillers   | 43-5081 | 74  | 1,300 | \$20,399 | \$ | 9.81  | 90  | 500 |
| Executive Secretaries and Administrative Assistants                        | 43-6011 | 139 | 720   | \$28,495 | \$ | 13.70 | 30  | 140 |
| Secretaries, Except Legal, Medical, and Executive                          | 43-6014 | 191 | 1,210 | \$18,645 | \$ | 8.96  | -80 | 320 |
| Office Clerks, General   | 43-9061 | 226 | 1,400 | \$17,795 | \$ | 8.56  | 160 | 540 |
| First-Line Supervisors/Managers of Cons Trades and Extraction Workers      | 47-1011 | 47  | 230   | \$50,714 | \$ | 24.38 | 30  | 70  |
| Construction Laborers  | 47-2061 | 21  | 300   | \$21,177 | \$ | 10.18 | 100 | 180 |
| Operating Engineers and Other Construction Equipment Operators             | 47-2073 | 24  | 230   | \$26,705 | \$ | 12.84 | 20  | 70  |
| Electricians   | 47-2111 | 26  | 280   | \$40,906 | \$ | 19.67 | 70  | 130 |
| Highway Maintenance Workers  | 47-4051 | 9   | 520   | \$19,297 | \$ | 9.28  | 40  | 70  |
| First-Line Supervisors/Managers of Mechanics, Installers, and Repairers    | 49-1011 | 87  | 230   | \$46,300 | \$ | 22.26 | 50  | 110 |
| Automotive Service Technicians and Mechanics                               | 49-3023 | 36  | 500   | \$28,494 | \$ | 13.70 | 150 | 320 |
| Bus and Truck Mechanics and Diesel Engine Specialists                      | 49-3031 | 42  | 170   | \$26,965 | \$ | 12.96 | 30  | 70  |
| Maintenance and Repair Workers, General                                    | 49-9042 | 136 | 850   | \$28,586 | \$ | 13.74 | 180 | 340 |
| First-Line Supervisors/Managers of Production and Operating Workers        | 51-1011 | 99  | 420   | \$44,838 | \$ | 21.56 | 70  | 160 |
| Team Assemblers  | 51-2092 | 31  | 1,160 | \$20,136 | \$ | 9.68  | 100 | 410 |
| Cutting, Punching, Press Machine Setters, Oper, Tenders, Metal and Plastic | 51-4031 | 20  | 200   | \$25,458 | \$ | 12.24 | 20  | 70  |
| Machinists   | 51-4041 | 17  | 110   | \$34,155 | \$ | 16.42 | 40  | 80  |
| Welders, Cutters, Solderers, and Brazers                                   | 51-4121 | 54  | 870   | \$26,671 | \$ | 12.82 | 130 | 380 |
| Laundry and Dry-Cleaning Workers   | 51-6011 | 17  | 210   | \$14,103 | \$ | 6.78  | 40  | 80  |
| Water and Liquid Waste Treatment Plant and System Operators                | 51-8031 | 7   | 120   | \$26,530 | \$ | 12.75 | 30  | 80  |
| Packaging and Filling Machine Operators and Tenders                        | 51-9111 |     | 140   | \$18,730 | \$ | 9.00  | 70  | 150 |
| Painters, Transportation Equipment   | 51-9122 | 7   | 60    | \$28,607 | \$ | 13.75 | 40  | 80  |
| Bus Drivers, School  | 53-3022 | 23  | 210   | \$15,110 | \$ | 7.26  | 20  | 70  |
| Driver/Sales Workers   | 53-3031 | 24  | 480   | \$21,807 | \$ | 10.48 | 40  | 100 |
| Truck Drivers, Heavy and Tractor-Trailer                                   | 53-3032 | 73  | 1,080 | \$30,097 | \$ | 14.47 | 410 | 600 |
| Truck Drivers, Light or Delivery Services                                  | 53-3033 | 43  | 210   | \$17,827 | \$ | 8.57  | 80  | 110 |
| Industrial Truck and Tractor Operators                                     | 53-7051 | 52  | 580   | \$24,661 | \$ | 11.86 | 60  | 150 |

|  |         |    |       |          |    |      |     |     |
|--|---------|----|-------|----------|----|------|-----|-----|
| Cleaners of Vehicles and Equipment                     | 53-7061 | 15 | 100   | \$15,576 | \$ | 7.49 | 20  | 80  |
| Laborers and Freight, Stock, and Material Movers, Hand | 53-7062 | 85 | 1,400 | \$17,510 | \$ | 8.42 | 270 | 870 |
| Packers and Packagers, Hand                            | 53-7064 | 23 | 290   | \$15,164 | \$ | 7.29 | 100 | 170 |

## DECLINING OCCUPATIONS

### Occupations With Zero or Negative Increase in Employment By Occupational Code

| Occupational Outlook Code | Occupation  | Employment |       | Employment Change |         | Total Openings |
|---------------------------|---|------------|-------|-------------------|---------|----------------|
|                           |   | 2002       | 2012  | Numeric           | Percent |                |
| 11-3061                   | Purchasing Managers   | 40         | 40    | 0                 | 8.11%   | 10             |
| 11-9121                   | Natural Sciences Managers   | 20         | 20    | 0                 | 15.00%  | 10             |
| 11-9131                   | Postmasters and Mail Superintendents                                      | 80         | 80    | 0                 | 1.25%   | 20             |
| 13-1022                   | Wholesale and Retail Buyers, Except Farm Products                         | 50         | 50    | 0                 | 6.67%   | 20             |
| 13-2031                   | Budget Analysts   | 20         | 20    | 0                 | 5.56%   | 0              |
| 15-1021                   | Computer Programmers  | 90         | 90    | 0                 | 4.65%   | 20             |
| 17-3013                   | Mechanical Drafters   | 30         | 30    | 0                 | 8.00%   | 10             |
| 19-1010                   | Agricultural and Food Scientists  | 20         | 20    | 0                 | 5.26%   | 0              |
| 19-1031                   | Conservation Scientists   | 20         | 30    | 0                 | 4.17%   | 10             |
| 19-2031                   | Chemists  | 20         | 20    | 0                 | 15.79%  | 10             |
| 19-4093                   | Forest and Conservation Technicians                                       | 20         | 20    | 0                 | 0.00%   | 0              |
| 25-2032                   | Vocational Education Teachers, Secondary School                           | 90         | 100   | 0                 | 4.30%   | 30             |
| 25-3011                   | Adult Literacy, Remedial Education, and GED Teachers and Instructors      | 50         | 60    | 0                 | 7.69%   | 10             |
| 27-1026                   | Merchandise Displayers and Window Trimmers                                | 20         | 20    | 0                 | 11.11%  | 0              |
| 27-3043                   | Writers and Authors   | 40         | 40    | 0                 | 8.11%   | 10             |
| 29-1063                   | Internists, General   | 20         | 20    | 0                 | 23.53%  | 10             |
| 29-1069                   | Physicians and Surgeons, All Other  | 20         | 20    | 0                 | 21.05%  | 10             |
| 29-9010                   | Occupational Health and Safety Specialists and Technicians                | 20         | 20    | 0                 | 12.50%  | 10             |
| 33-9011                   | Animal Control Workers  | 20         | 20    | 0                 | 20.00%  | 10             |
| 35-3011                   | Bartenders  | 30         | 30    | 0                 | 14.29%  | 20             |
| 37-9099                   | Building and Grounds Cleaning and Maintenance Workers, All Other          | 20         | 20    | 0                 | 5.88%   | 0              |
| 41-2022                   | Parts Salespersons  | 160        | 160   | 0                 | 2.56%   | 50             |
| 41-9041                   | Telemarketers   | 330        | 330   | 0                 | 0.00%   | 50             |
| 43-2011                   | Switchboard Operators, Including Answering Service                        | 140        | 140   | 0                 | -2.10%  | 40             |
| 43-3031                   | Bookkeeping, Accounting, and Auditing Clerks                              | 1,220      | 1,220 | 0                 | -0.33%  | 230            |
| 43-3061                   | Procurement Clerks  | 20         | 20    | 0                 | 0.00%   | 10             |
| 43-5021                   | Couriers and Messengers   | 50         | 50    | 0                 | 0.00%   | 10             |
| 43-5041                   | Meter Readers, Utilities  | 80         | 70    | 0                 | -5.33%  | 20             |
| 43-5051                   | Postal Service Clerks   | 40         | 40    | 0                 | 2.63%   | 10             |
| 43-5053                   | Postal Service Mail Sorters, Processors, and Processing Machine Operators | 110        | 110   | 0                 | -3.51%  | 30             |



|         |  |       |       |     |         |     |
|---------|--|-------|-------|-----|---------|-----|
| 43-9051 | Mail Clerks and Mail Machine Operators, Except Postal Service Secretaries, Administrative Assistants, and Other Office Support Workers, All Other (OES Only) | 50    | 50    | 0   | -8.16%  | 20  |
| 43-9999 | Other (OES Only)   | 40    | 40    | 0   | -4.76%  | 10  |
| 47-5071 | Roustabouts, Oil and Gas   | 90    | 90    | 0   | 0.00%   | 30  |
| 49-3042 | Mobile Heavy Equipment Mechanics, Except Engines   | 40    | 40    | 0   | 10.81%  | 10  |
| 49-9044 | Millwrights  | 20    | 20    | 0   | 15.79%  | 10  |
| 51-4033 | Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and PI   | 20    | 20    | 0   | 6.25%   | 0   |
| 51-4122 | Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders  | 60    | 70    | 0   | 4.69%   | 20  |
| 51-5023 | Printing Machine Operators   | 50    | 60    | 0   | 5.66%   | 20  |
| 51-7042 | Woodworking Machine Setters, Operators, and Tenders, Except Sawing   | 30    | 30    | 0   | -6.45%  | 10  |
| 51-8021 | Stationary Engineers and Boiler Operators  | 20    | 20    | 0   | 18.75%  | 10  |
| 51-9021 | Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders  | 30    | 30    | 0   | -8.82%  | 10  |
| 51-9022 | Grinding and Polishing Workers, Hand   | 20    | 30    | 0   | 12.50%  | 10  |
| 51-9131 | Photographic Process Workers   | 20    | 20    | 0   | 0.00%   | 10  |
| 43-4071 | File Clerks  | 160   | 160   | -10 | -4.32%  | 50  |
| 43-4131 | Loan Interviewers and Clerks   | 80    | 70    | -10 | -7.59%  | 10  |
| 43-4151 | Order Clerks   | 90    | 80    | -10 | -9.78%  | 20  |
| 43-9011 | Computer Operators   | 60    | 50    | -10 | -19.64% | 10  |
| 43-9021 | Data Entry Keyers  | 140   | 130   | -10 | -10.00% | 30  |
| 53-7073 | Wellhead Pumpers   | 80    | 70    | -10 | -14.29% | 20  |
| 35-2012 | Cooks, Institution and Cafeteria   | 660   | 640   | -20 | -3.50%  | 200 |
| 43-9022 | Word Processors and Typists  | 60    | 40    | -20 | -35.94% | 10  |
| 43-6014 | Secretaries, Except Legal, Medical, and Executive  | 1,690 | 1,610 | -80 | -4.45%  | 320 |

## DEMAND SKILL SETS

### Skills Necessary in the Demand Occupations

Frequency of Skill Indicates the Number of Times This Skills Is Found In the In Demand Occupations

| Description of Skill  | Frequency Of Skill |
|---|--------------------|
| <b>Active Listening</b> — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times. | 66                 |
| <b>Reading Comprehension</b> — Understanding written sentences and paragraphs in work related documents.  | 64                 |
| <b>Speaking</b> — Talking to others to convey information effectively.  | 56                 |
| <b>Critical Thinking</b> — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.  | 45                 |
| <b>Social Perceptiveness</b> — Being aware of others' reactions and understanding why they react as they do.  | 42                 |
| <b>Time Management</b> — Managing one's own time and the time of others.  | 37                 |
| <b>Coordination</b> — Adjusting actions in relation to others' actions.   | 34                 |
| <b>Instructing</b> — Teaching others how to do something.   | 31                 |
| <b>Service Orientation</b> — Actively looking for ways to help people.  | 31                 |
| <b>Active Learning</b> — Understanding the implications of new information for both current and future problem-solving and decision-making.   | 30                 |
| <b>Writing</b> — Communicating effectively in writing as appropriate for the needs of the audience.   | 29                 |
| <b>Monitoring</b> — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.   | 28                 |
| <b>Mathematics</b> — Using mathematics to solve problems.   | 24                 |
| <b>Judgment and Decision Making</b> — Considering the relative costs and benefits of potential actions to choose the most appropriate one.  | 21                 |
| <b>Learning Strategies</b> — Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.  | 20                 |
| <b>Equipment Selection</b> — Determining the kind of tools and equipment needed to do a job.  | 16                 |
| <b>Equipment Maintenance</b> — Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.   | 15                 |
| <b>Management of Personnel Resources</b> — Motivating, developing, and directing people as they work, identifying the best people for the job.  | 13                 |
| <b>Operation and Control</b> — Controlling operations of equipment or systems.  | 12                 |
| <b>Troubleshooting</b> — Determining causes of operating errors and deciding what to do about it.   | 9                  |
| <b>Installation</b> — Installing equipment, machines, wiring, or programs to meet specifications.   | 7                  |

|   |   |
|---|---|
| <b>Operation Monitoring</b> — Watching gauges, dials, or other indicators to make sure a machine is working properly.   | 7 |
| <b>Persuasion</b> — Persuading others to change their minds or behavior.  | 7 |
| <b>Repairing</b> — Repairing machines or systems using the needed tools.  | 7 |
| <b>Complex Problem Solving</b> — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.                            | 4 |
| <b>Management of Financial Resources</b> — Determining how money will be spent to get the work done, and accounting for these expenditures.   | 4 |
| <b>Management of Material Resources</b> — Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work.                            | 4 |
| <b>Systems Evaluation</b> — Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system. | 4 |
| <b>Quality Control Analysis</b> — Conducting tests and inspections of products, services, or processes to evaluate quality or performance.  | 3 |
| <b>Negotiation</b> — Bringing others together and trying to reconcile differences.  | 2 |
| <b>Systems Analysis</b> — Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.                                 | 2 |
| <b>Science</b> — Using scientific rules and methods to solve problems.  | 1 |

### Education Typically Required for Occupations That are In Demand

| Education Required                                | Number of Instances |
|---|---------------------|
| Short term on-the-job training                    | 32                  |
| Moderate term on-the-job training                 | 19                  |
| Work experience in a related occupation           | 9                   |
| Bachelor's Degree                                 | 8                   |
| Bachelor's or higher degree, plus work experience | 7                   |
| Long term on-the-job training                     | 7                   |
| Postsecondary vocational training                 | 5                   |
| Associate degree                                  | 1                   |
| First professional degree                         | 1                   |