

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|--|-------------|--------------------|------------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 00-0000 | Total, All Occupations | N/A | 5,923,090 | 6,374,810 | 7.6% | 45,172 | 265,279 | 401,647 | 712,098 |
| 11-0000 | Management Occupations | N/A | 329,650 | 358,770 | 8.8% | 2,913 | 8,993 | 18,306 | 30,212 |
| 11-1000 | Top Executives | N/A | 95,660 | 102,520 | 7.2% | 686 | 2,057 | 5,906 | 8,649 |
| 11-1011 | Chief Executives | BD+ | 10,070 | 9,490 | -5.8% | -59 | 267 | 394 | 602 |
| 11-1021 | General & Operations Managers | BD+ | 83,640 | 90,970 | 8.8% | 734 | 1,744 | 5,413 | 7,891 |
| 11-1031 | Legislators | BD+ | 1,950 | 2,060 | 5.6% | 11 | 46 | 98 | 155 |
| 11-2000 | Advertising, Marketing, Promotions, Public Relations & Sales Managers | N/A | 21,560 | 23,440 | 8.7% | 188 | 460 | 1,415 | 2,063 |
| 11-2021 | Marketing Managers | BD+ | 9,180 | 10,040 | 9.4% | 87 | 192 | 606 | 885 |
| 11-2022 | Sales Managers | BD+ | 9,930 | 10,730 | 8.1% | 79 | 206 | 651 | 936 |
| 11-3000 | Operations Specialties Managers | N/A | 70,200 | 78,580 | 11.9% | 838 | 1,522 | 3,924 | 6,284 |
| 11-3010 | Administrative Services & Facilities Managers | BD+ | 8,610 | 9,280 | 7.8% | 67 | 254 | 447 | 768 |
| 11-3021 | Computer & Information Systems Managers | BD+ | 17,410 | 19,340 | 11.1% | 193 | 298 | 1,044 | 1,535 |
| 11-3031 | Financial Managers | BD+ | 21,700 | 25,660 | 18.2% | 396 | 485 | 1,190 | 2,071 |
| 11-3051 | Industrial Production Managers | BD+ | 7,180 | 7,600 | 5.8% | 41 | 143 | 349 | 533 |
| 11-3061 | Purchasing Managers | BD+ | 2,390 | 2,560 | 7.1% | 17 | 54 | 134 | 205 |
| 11-3071 | Transportation, Storage & Distribution Managers | WK EXP | 5,310 | 5,870 | 10.5% | 56 | 107 | 308 | 471 |
| 11-3111 | Compensation & Benefits Managers | BD+ | 600 | 640 | 6.7% | 4 | 13 | 32 | 49 |
| 11-3121 | Human Resources Managers | BD+ | 5,840 | 6,380 | 9.2% | 54 | 142 | 341 | 537 |
| 11-3131 | Training & Development Managers | BD+ | 1,150 | 1,260 | 9.6% | 11 | 26 | 80 | 117 |
| 11-9000 | Other Management Occupations | N/A | 142,230 | 154,230 | 8.4% | 1,200 | 4,955 | 7,061 | 13,216 |
| 11-9013 | Farmers, Ranchers & Other Agricultural Managers | WK EXP | 34,260 | 33,880 | -1.1% | -38 | 2,102 | 1,184 | 3,248 |
| 11-9021 | Construction Managers | BD+ | 12,380 | 13,860 | 12.0% | 148 | 270 | 664 | 1,082 |
| 11-9031 | Education Admin., Preschool & Childcare Center/Program | BD+ | 2,650 | 2,910 | 9.8% | 26 | 69 | 129 | 224 |
| 11-9032 | Education Administrators, Elementary & Secondary School | MD+ | 8,080 | 8,530 | 5.6% | 44 | 205 | 386 | 635 |
| 11-9033 | Education Administrators, Postsecondary | MD+ | 4,950 | 5,160 | 4.2% | 20 | 125 | 235 | 380 |
| 11-9039 | Education Administrators, Other | BD+ | 1,310 | 1,450 | 10.7% | 14 | 34 | 64 | 112 |
| 11-9041 | Architectural & Engineering Managers | BD+ | 6,470 | 6,730 | 4.0% | 26 | 119 | 335 | 480 |
| 11-9051 | Food Service Managers | WK EXP | 7,670 | 8,790 | 14.6% | 112 | 252 | 657 | 1,021 |
| 11-9071 | Gaming Managers | WK EXP | 60 | 80 | 33.3% | 2 | 2 | 3 | 7 |
| 11-9081 | Lodging Managers | WK EXP | 1,190 | 1,250 | 5.0% | 5 | 47 | 84 | 136 |
| 11-9111 | Medical & Health Services Managers | BD+ | 17,890 | 23,830 | 33.2% | 594 | 521 | 1,060 | 2,175 |
| 11-9121 | Natural Sciences Managers | BD+ | 5,250 | 5,550 | 5.7% | 30 | 106 | 265 | 401 |
| 11-9131 | Postmasters & Mail Superintendents | WK EXP | 760 | 700 | -7.9% | -6 | 17 | 36 | 47 |
| 11-9141 | Property, Real Estate & Community Association Managers | WK EXP | 5,450 | 5,690 | 4.4% | 25 | 212 | 210 | 447 |
| 11-9151 | Social & Community Service Managers | BD+ | 8,500 | 9,280 | 9.2% | 77 | 267 | 476 | 820 |

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| 11-9161 | Emergency Management Directors | BD+ | 450 | 470 | 4.4% | 2 | 17 | 22 | 41 |
| 11-9171 | Funeral Home Managers | AD+ | 930 | 960 | 3.2% | 3 | 22 | 46 | 71 |
| 11-9198 | Misc. Personal Svc, Entertainment & Other Managers | BD+ | 24,000 | 25,140 | 4.8% | 114 | 570 | 1,205 | 1,889 |
| 13-0000 | Business & Financial Operations Occupations | N/A | 307,330 | 331,010 | 7.7% | 2,369 | 8,466 | 18,899 | 29,734 |
| 13-1000 | Business Operations Specialists | N/A | 191,990 | 208,960 | 8.8% | 1,697 | 5,446 | 12,236 | 19,379 |
| 13-1020 | Buyers & Purchasing Agents | BD+ | 15,510 | 14,770 | -4.8% | -74 | 514 | 970 | 1,410 |
| 13-1031 | Claims Adjusters, Examiners & Investigators | LT OJT | 13,630 | 13,220 | -3.0% | -41 | 316 | 698 | 973 |
| 13-1032 | Insurance Appraisers, Auto Damage | PS+ | 170 | 170 | 0.0% | 0 | 4 | 9 | 13 |
| 13-1041 | Compliance Officers | BD+ | 13,980 | 14,780 | 5.7% | 80 | 347 | 766 | 1,193 |
| 13-1051 | Cost Estimators | BD+ | 8,250 | 8,410 | 1.9% | 16 | 235 | 503 | 754 |
| 13-1071 | Human Resources Specialists | BD | 25,550 | 28,020 | 9.7% | 247 | 725 | 1,780 | 2,752 |
| 13-1075 | Labor Relations Specialists | BD+ | 4,030 | 3,900 | -3.2% | -13 | 107 | 263 | 357 |
| 13-1081 | Logisticians | BD | 7,170 | 8,490 | 18.4% | 132 | 164 | 509 | 805 |
| 13-1111 | Management Analysts | BD+ | 29,600 | 33,710 | 13.9% | 411 | 1,018 | 1,821 | 3,250 |
| 13-1121 | Meeting, Convention & Event Planners | BD | 4,970 | 5,680 | 14.3% | 71 | 159 | 391 | 621 |
| 13-1131 | Fundraisers | BD | 4,600 | 4,930 | 7.2% | 32 | 148 | 303 | 483 |
| 13-1141 | Compensation, Benefits & Job Analysis Specialists | BD+ | 3,950 | 4,430 | 12.2% | 49 | 125 | 245 | 419 |
| 13-1151 | Training & Development Specialists | BD+ | 9,760 | 10,700 | 9.6% | 95 | 308 | 627 | 1,030 |
| 13-1161 | Market Research Analysts & Marketing Specialists | BD | 25,780 | 31,250 | 21.2% | 547 | 676 | 2,084 | 3,307 |
| 13-1198 | Project Mgmt & Other Business Oprs Specialists | BD | 24,940 | 26,350 | 5.7% | 141 | 595 | 1,258 | 1,994 |
| 13-2000 | Financial Specialists | N/A | 115,340 | 122,060 | 5.8% | 672 | 3,020 | 6,663 | 10,355 |
| 13-2011 | Accountants & Auditors | BD | 55,210 | 59,120 | 7.1% | 391 | 1,593 | 3,386 | 5,370 |
| 13-2020 | Property Appraisers & Assessors | BD+ | 1,580 | 1,670 | 5.7% | 9 | 62 | 59 | 130 |
| 13-2031 | Budget Analysts | BD | 1,890 | 1,990 | 5.3% | 10 | 46 | 101 | 157 |
| 13-2041 | Credit Analysts | BD | 2,460 | 2,370 | -3.7% | -9 | 41 | 162 | 194 |
| 13-2052 | Personal Financial Advisors | BD+ | 11,980 | 12,710 | 6.1% | 72 | 280 | 606 | 958 |
| 13-2053 | Insurance Underwriters | BD+ | 4,600 | 4,440 | -3.5% | -16 | 92 | 235 | 311 |
| 13-2061 | Financial Examiners | BD+ | 1,790 | 2,150 | 20.1% | 35 | 52 | 92 | 179 |
| 13-2071 | Credit Counselors | BD+ | 1,180 | 1,250 | 5.9% | 8 | 26 | 66 | 100 |
| 13-2072 | Loan Officers | BD+ | 11,070 | 11,350 | 2.5% | 27 | 241 | 610 | 878 |
| 13-2081 | Tax Examiners, Collectors & Revenue Agents | BD+ | 2,910 | 2,920 | 0.3% | 1 | 113 | 130 | 244 |
| 13-2082 | Tax Preparers | MT OJT | 2,610 | 2,700 | 3.4% | 10 | 145 | 146 | 301 |
| 13-2098 | Financial, Investment & Risk Specialists, All Other | BD | 18,070 | 19,410 | 7.4% | 133 | 329 | 1,070 | 1,532 |
| 15-0000 | Computer & Mathematical Occupations | N/A | 168,390 | 191,020 | 13.4% | 2,263 | 3,682 | 8,852 | 14,797 |
| 15-1200 | Computer Occupations | N/A | 159,730 | 179,820 | 12.6% | 2,010 | 3,483 | 8,401 | 13,894 |

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| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 15-1211 | Computer Systems Analysts | BD | 22,030 | 23,710 | 7.6% | 168 | 446 | 1,125 | 1,739 |
| 15-1212 | Information Security Analysts | BD+ | 3,260 | 4,320 | 32.5% | 105 | 58 | 209 | 372 |
| 15-1221 | Computer & Information Research Scientists | MD | 640 | 750 | 17.2% | 12 | 12 | 35 | 59 |
| 15-1231 | Computer Network Support Specialists | AD | 8,060 | 8,780 | 8.9% | 72 | 158 | 446 | 676 |
| 15-1232 | Computer User Support Specialists | PS | 25,070 | 27,530 | 9.8% | 245 | 494 | 1,392 | 2,131 |
| 15-1241 | Computer Network Architects | BD+ | 7,060 | 7,550 | 6.9% | 49 | 101 | 332 | 482 |
| 15-1244 | Network & Computer Systems Administrators | BD | 11,610 | 12,220 | 5.3% | 61 | 200 | 563 | 824 |
| 15-1245 | Database Administrators & Architects | BD | 7,640 | 8,280 | 8.4% | 64 | 184 | 390 | 638 |
| 15-1251 | Computer Programmers | BD | 12,290 | 11,350 | -7.6% | -94 | 236 | 540 | 682 |
| 15-1256 | Software Developers & QA Analysts | BD | 39,220 | 50,170 | 27.9% | 1,095 | 1,036 | 2,192 | 4,323 |
| 15-1257 | Web & Digital Interface Designers | BD | 5,670 | 6,310 | 11.3% | 64 | 139 | 294 | 497 |
| 15-1299 | Computer Occupations, All Other | BD | 17,180 | 18,860 | 9.8% | 168 | 418 | 884 | 1,470 |
| 15-2000 | Mathematical Scientists | N/A | 8,670 | 11,200 | 29.2% | 254 | 199 | 451 | 904 |
| 15-2011 | Actuaries | BD+ | 1,520 | 1,900 | 25.0% | 38 | 27 | 67 | 132 |
| 15-2021 | Mathematicians | MD | 110 | 120 | 9.1% | 0 | 2 | 6 | 8 |
| 15-2031 | Operations Research Analysts | BD | 3,690 | 4,650 | 26.0% | 96 | 90 | 182 | 368 |
| 15-2041 | Statisticians | MD | 3,000 | 4,120 | 37.3% | 112 | 72 | 178 | 362 |
| 15-2098 | Data Scientists & Math Science Workers, All Other | BD | 340 | 410 | 20.6% | 7 | 8 | 19 | 34 |
| 17-0000 | Architecture & Engineering Occupations | N/A | 102,710 | 108,790 | 5.9% | 608 | 2,513 | 5,093 | 8,214 |
| 17-1000 | Architects, Surveyors & Cartographers | N/A | 7,480 | 7,660 | 2.4% | 18 | 222 | 336 | 576 |
| 17-1011 | Architects | BD+ | 4,480 | 4,660 | 4.0% | 18 | 125 | 194 | 337 |
| 17-1012 | Landscape Architects | BD+ | 930 | 920 | -1.1% | -1 | 25 | 39 | 63 |
| 17-1021 | Cartographers & Photogrammetrists | BD | 160 | 160 | 0.0% | 0 | 6 | 8 | 14 |
| 17-1022 | Surveyors | BD+ | 1,900 | 1,920 | 1.1% | 2 | 66 | 95 | 163 |
| 17-2000 | Engineers | N/A | 68,260 | 73,580 | 7.8% | 532 | 1,457 | 3,020 | 5,009 |
| 17-2011 | Aerospace Engineers | BD | 860 | 960 | 11.6% | 10 | 19 | 31 | 60 |
| 17-2031 | Biomedical Engineers | BD | 1,170 | 1,230 | 5.1% | 6 | 25 | 49 | 80 |
| 17-2041 | Chemical Engineers | BD | 930 | 1,020 | 9.7% | 9 | 19 | 36 | 64 |
| 17-2051 | Civil Engineers | BD | 11,750 | 12,780 | 8.8% | 102 | 244 | 611 | 957 |
| 17-2061 | Computer Hardware Engineers | BD | 2,400 | 2,490 | 3.8% | 10 | 46 | 115 | 171 |
| 17-2071 | Electrical Engineers | BD | 8,920 | 9,670 | 8.4% | 75 | 221 | 372 | 668 |
| 17-2072 | Electronics Engineers | BD | 3,550 | 3,910 | 10.1% | 36 | 89 | 149 | 274 |
| 17-2081 | Environmental Engineers | BD | 2,460 | 2,560 | 4.1% | 10 | 59 | 122 | 191 |
| 17-2111 | Health & Safety Engineers | BD | 1,210 | 1,290 | 6.6% | 9 | 27 | 50 | 86 |
| 17-2112 | Industrial Engineers | BD | 10,250 | 11,550 | 12.7% | 131 | 238 | 436 | 805 |

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| 17-2121 | Marine Engineers & Naval Architects | BD | 100 | 100 | 0.0% | 0 | 1 | 4 | 5 |
| 17-2131 | Materials Engineers | BD | 1,670 | 1,850 | 10.8% | 18 | 36 | 69 | 123 |
| 17-2141 | Mechanical Engineers | BD | 15,600 | 16,700 | 7.1% | 110 | 278 | 665 | 1,053 |
| 17-2151 | Mining & Geological Engineers | BD | 220 | 220 | 0.0% | 0 | 4 | 10 | 14 |
| 17-2161 | Nuclear Engineers | BD | 900 | 760 | -15.6% | -14 | 18 | 34 | 38 |
| 17-2171 | Petroleum Engineers | BD | 780 | 790 | 1.3% | 1 | 15 | 35 | 51 |
| 17-2199 | Engineers, Other | BD | 5,460 | 5,680 | 4.0% | 21 | 118 | 230 | 369 |
| 17-3000 | Drafters, Engineering & Mapping Technicians | N/A | 26,970 | 27,550 | 2.2% | 58 | 834 | 1,737 | 2,629 |
| 17-3011 | Architectural & Civil Drafters | AD | 5,050 | 5,160 | 2.2% | 11 | 157 | 324 | 492 |
| 17-3012 | Electrical & Electronics Drafters | AD | 1,120 | 1,190 | 6.2% | 6 | 35 | 73 | 114 |
| 17-3013 | Mechanical Drafters | AD | 2,910 | 2,800 | -3.8% | -11 | 88 | 181 | 258 |
| 17-3022 | Civil Engineering Technicians | AD | 2,010 | 2,030 | 1.0% | 2 | 61 | 124 | 187 |
| 17-3023 | Electrical & Electronic Engineering Technicians | AD | 4,180 | 4,190 | 0.2% | 0 | 126 | 257 | 383 |
| 17-3024 | Electro-Mechanical Technicians | AD | 650 | 670 | 3.1% | 1 | 20 | 41 | 62 |
| 17-3025 | Environmental Engineering Technicians | AD | 450 | 480 | 6.7% | 3 | 14 | 28 | 45 |
| 17-3026 | Industrial Engineering Technicians | AD | 1,940 | 2,050 | 5.7% | 11 | 60 | 123 | 194 |
| 17-3027 | Mechanical Engineering Technicians | AD | 2,300 | 2,430 | 5.7% | 13 | 71 | 145 | 229 |
| 17-3031 | Surveying & Mapping Technicians | MT OJT | 1,620 | 1,660 | 2.5% | 4 | 58 | 142 | 204 |
| 17-3098 | Calibration & Engineering Techs, All Other | AD | 4,390 | 4,570 | 4.1% | 18 | 135 | 276 | 429 |
| 19-0000 | Life, Physical & Social Science Occupations | N/A | 56,570 | 61,040 | 7.9% | 448 | 1,189 | 4,118 | 5,755 |
| 19-1000 | Life Scientists | N/A | 14,250 | 15,950 | 11.9% | 170 | 228 | 962 | 1,360 |
| 19-1011 | Animal Scientists | BD | 220 | 230 | 4.5% | 1 | 5 | 18 | 24 |
| 19-1012 | Food Scientists & Technologists | BD | 410 | 440 | 7.3% | 2 | 9 | 35 | 46 |
| 19-1013 | Soil & Plant Scientists | BD | 300 | 330 | 10.0% | 2 | 7 | 26 | 35 |
| 19-1021 | Biochemists & Biophysicists | DOCT | 1,810 | 1,880 | 3.9% | 7 | 30 | 130 | 167 |
| 19-1022 | Microbiologists | BD | 710 | 740 | 4.2% | 4 | 12 | 51 | 67 |
| 19-1023 | Zoologists & Wildlife Biologists | BD | 280 | 280 | 0.0% | 0 | 4 | 20 | 24 |
| 19-1029 | Biological Scientists, Other | BD | 1,080 | 1,090 | 0.9% | 2 | 18 | 76 | 96 |
| 19-1031 | Conservation Scientists | BD | 910 | 950 | 4.4% | 4 | 18 | 66 | 88 |
| 19-1032 | Foresters | BD | 390 | 410 | 5.1% | 2 | 8 | 28 | 38 |
| 19-1041 | Epidemiologists | MD | 120 | 160 | 33.3% | 4 | 2 | 8 | 14 |
| 19-1042 | Medical Scientists | DOCT | 7,860 | 9,270 | 17.9% | 141 | 114 | 493 | 748 |
| 19-1099 | Life Scientists, Other | BD | 170 | 180 | 5.9% | 1 | 2 | 10 | 13 |
| 19-2000 | Physical Scientists | N/A | 10,090 | 10,820 | 7.2% | 73 | 161 | 772 | 1,006 |
| 19-2012 | Physicists | DOCT | 420 | 460 | 9.5% | 4 | 8 | 21 | 33 |

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| 19-2021 | Atmospheric & Space Scientists | BD | 300 | 330 | 10.0% | 3 | 5 | 21 | 29 |
| 19-2031 | Chemists | BD | 5,130 | 5,470 | 6.6% | 34 | 78 | 393 | 505 |
| 19-2032 | Materials Scientists | BD | 290 | 300 | 3.4% | 2 | 4 | 22 | 28 |
| 19-2041 | Environmental Scientists & Specialists | BD | 2,060 | 2,240 | 8.7% | 18 | 36 | 171 | 225 |
| 19-2042 | Geoscientists | BD | 1,150 | 1,250 | 8.7% | 10 | 20 | 96 | 126 |
| 19-2099 | Physical Scientists, Other | BD | 630 | 650 | 3.2% | 2 | 8 | 40 | 50 |
| 19-3000 | Social Scientists & Related Workers | N/A | 11,080 | 11,880 | 7.2% | 80 | 265 | 598 | 943 |
| 19-3011 | Economists | MD | 530 | 560 | 5.7% | 4 | 10 | 28 | 42 |
| 19-3022 | Survey Researchers | MD | 2,230 | 2,500 | 12.1% | 27 | 52 | 155 | 234 |
| 19-3031 | Clinical, Counseling & School Psychologists | DOCT | 4,830 | 5,210 | 7.9% | 38 | 131 | 196 | 365 |
| 19-3032 | Industrial-Organizational Psychologists | MD+ | 170 | 170 | 0.0% | 1 | 4 | 7 | 12 |
| 19-3039 | Psychologists, Other | MD+ | 550 | 560 | 1.8% | 1 | 14 | 22 | 37 |
| 19-3051 | Urban & Regional Planners | MD | 1,380 | 1,460 | 5.8% | 8 | 22 | 98 | 128 |
| 19-3091 | Anthropologists & Archeologists | MD | 140 | 140 | 0.0% | 0 | 3 | 9 | 12 |
| 19-3092 | Geographers | BD | 50 | 50 | 0.0% | 0 | 1 | 4 | 5 |
| 19-3093 | Historians | MD | 140 | 150 | 7.1% | 1 | 3 | 10 | 14 |
| 19-3094 | Political Scientists | MD | 200 | 210 | 5.0% | 1 | 4 | 14 | 19 |
| 19-3099 | Social Scientists & Related Workers, Other | BD | 850 | 850 | 0.0% | 0 | 18 | 56 | 74 |
| 19-4000 | Life, Physical & Social Science Technicians | N/A | 15,810 | 16,620 | 5.1% | 81 | 384 | 1,548 | 2,013 |
| 19-4010 | Agricultural & Food Science Technicians | AD+ | 980 | 1,050 | 7.1% | 7 | 22 | 106 | 135 |
| 19-4021 | Biological Technicians | BD | 4,420 | 4,640 | 5.0% | 22 | 108 | 453 | 583 |
| 19-4031 | Chemical Technicians | AD+ | 3,230 | 3,380 | 4.6% | 15 | 58 | 298 | 371 |
| 19-4042 | Environmental Science & Protection Technicians | AD | 1,340 | 1,440 | 7.5% | 11 | 37 | 130 | 178 |
| 19-4045 | Geological & Hydrologic Technicians | AD+ | 420 | 430 | 2.4% | 1 | 11 | 40 | 52 |
| 19-4051 | Nuclear Technicians | AD+ | 450 | 380 | -15.6% | -7 | 11 | 39 | 43 |
| 19-4061 | Social Science Research Assistants | BD | 1,260 | 1,340 | 6.3% | 8 | 35 | 122 | 165 |
| 19-4071 | Forest & Conservation Technicians | AD | 1,070 | 1,080 | 0.9% | 1 | 29 | 101 | 131 |
| 19-4092 | Forensic Science Technicians | BD+ | 280 | 330 | 17.9% | 4 | 8 | 29 | 41 |
| 19-4099 | Life, Physical & Social Science Technicians, Other | AD | 2,360 | 2,550 | 8.1% | 19 | 66 | 231 | 316 |
| 19-5000 | Occupational Health & Safety Specialists & Technicians | N/A | 5,330 | 5,770 | 8.3% | 44 | 152 | 239 | 435 |
| 19-5011 | Occupational Health & Safety Specialists | BD | 4,680 | 5,070 | 8.3% | 39 | 133 | 210 | 382 |
| 19-5012 | Occupational Health & Safety Technicians | MT OJT | 650 | 700 | 7.7% | 5 | 18 | 29 | 52 |
| 21-0000 | Community & Social Services Occupations | N/A | 129,510 | 142,510 | 10.0% | 1,300 | 4,553 | 8,687 | 14,540 |
| 21-1000 | Counselors, Social Workers & Community Service Specialists | N/A | 108,860 | 121,550 | 11.7% | 1,270 | 3,655 | 7,349 | 12,274 |
| 21-1012 | Educational, Guidance, School & Vocational Counselors | MD | 7,860 | 8,460 | 7.6% | 60 | 266 | 483 | 809 |

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| 21-1013 | Marriage & Family Therapists | MD+ | 2,300 | 2,590 | 12.6% | 29 | 80 | 145 | 254 |
| 21-1015 | Rehabilitation Counselors | MD | 7,160 | 7,650 | 6.8% | 49 | 241 | 439 | 729 |
| 21-1018 | Substance Abuse, Behavioral Disorder, & Mental Health Counselors | BD | 23,260 | 27,640 | 18.8% | 438 | 828 | 1,508 | 2,774 |
| 21-1019 | Counselors, Other | MD | 940 | 1,000 | 6.4% | 6 | 32 | 57 | 95 |
| 21-1021 | Child, Family & School Social Workers | BD | 20,600 | 22,440 | 8.9% | 184 | 603 | 1,360 | 2,147 |
| 21-1022 | Healthcare Social Workers | MD+ | 7,530 | 8,380 | 11.3% | 85 | 223 | 503 | 811 |
| 21-1023 | Mental Health & Substance Abuse Social Workers | MD+ | 9,670 | 10,890 | 12.6% | 123 | 288 | 650 | 1,061 |
| 21-1029 | Social Workers, Other | BD | 1,820 | 1,880 | 3.3% | 6 | 52 | 117 | 175 |
| 21-1091 | Health Educators | BD | 2,340 | 2,570 | 9.8% | 23 | 83 | 169 | 275 |
| 21-1092 | Probation Officers & Correctional Treatment Specialists | BD | 4,290 | 4,520 | 5.4% | 22 | 95 | 265 | 382 |
| 21-1093 | Social & Human Service Assistants | ST OJT | 16,970 | 18,800 | 10.8% | 183 | 713 | 1,349 | 2,245 |
| 21-1094 | Community Health Workers | ST OJT | 2,620 | 3,130 | 19.5% | 51 | 98 | 198 | 347 |
| 21-1099 | Community & Social Service Specialists, Other | BD | 1,510 | 1,620 | 7.3% | 11 | 53 | 108 | 172 |
| 21-2000 | Religious Workers | N/A | 20,650 | 20,960 | 1.5% | 31 | 898 | 1,338 | 2,267 |
| 21-2011 | Clergy | BD+ | 11,260 | 11,460 | 1.8% | 21 | 466 | 656 | 1,143 |
| 21-2021 | Directors, Religious Activities & Education | BD+ | 6,610 | 6,690 | 1.2% | 8 | 265 | 484 | 757 |
| 21-2099 | Religious Workers, Other | BD | 2,790 | 2,810 | 0.7% | 2 | 167 | 197 | 366 |
| 23-0000 | Legal Occupations | N/A | 48,600 | 53,420 | 9.9% | 482 | 1,386 | 1,946 | 3,814 |
| 23-1000 | Lawyers, Judges & Related Workers | N/A | 32,900 | 36,090 | 9.7% | 319 | 755 | 862 | 1,936 |
| 23-1011 | Lawyers | DOCT | 30,730 | 33,820 | 10.1% | 309 | 698 | 795 | 1,802 |
| 23-1012 | Judicial Law Clerks | DOCT | 970 | 1,020 | 5.2% | 6 | 31 | 38 | 75 |
| 23-1021 | Administrative Law Judges, Adjudicators & Hearing Officers | DOCT | 810 | 840 | 3.7% | 3 | 18 | 20 | 41 |
| 23-1022 | Arbitrators, Mediators & Conciliators | BD+ | 170 | 180 | 5.9% | 1 | 4 | 4 | 9 |
| 23-1023 | Judges, Magistrate Judges & Magistrates | DOCT | 220 | 230 | 4.5% | 1 | 5 | 6 | 12 |
| 23-2000 | Legal Support Workers | N/A | 15,700 | 17,330 | 10.4% | 163 | 630 | 1,083 | 1,876 |
| 23-2011 | Paralegals & Legal Assistants | AD | 12,110 | 13,750 | 13.5% | 164 | 500 | 872 | 1,536 |
| 23-2093 | Title Examiners, Abstractors & Searchers | MT OJT | 2,430 | 2,420 | -0.4% | -1 | 88 | 142 | 229 |
| 23-2099 | Legal Support Workers, Other | AD | 1,170 | 1,170 | 0.0% | 0 | 42 | 68 | 110 |
| 25-0000 | Education, Training & Library Occupations | N/A | 322,980 | 347,680 | 7.6% | 2,469 | 13,334 | 15,198 | 31,001 |
| 25-1000 | Postsecondary Teachers | N/A | 63,460 | 68,450 | 7.9% | 499 | 2,950 | 3,082 | 6,531 |
| 25-1011 | Business Teachers, Postsecondary | DOCT | 4,870 | 5,030 | 3.3% | 16 | 222 | 231 | 469 |
| 25-1021 | Computer Science Teachers, Postsecondary | DOCT | 1,760 | 1,830 | 4.0% | 7 | 80 | 84 | 171 |
| 25-1022 | Mathematical Science Teachers, Postsecondary | DOCT | 2,070 | 2,160 | 4.3% | 9 | 94 | 99 | 202 |
| 25-1031 | Architecture Teachers, Postsecondary | DOCT | 340 | 350 | 2.9% | 1 | 15 | 16 | 32 |
| 25-1032 | Engineering Teachers, Postsecondary | DOCT | 3,320 | 3,600 | 8.4% | 28 | 155 | 162 | 345 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 25-1042 | Biological Science Teachers, Postsecondary | DOCT | 2,690 | 2,950 | 9.7% | 26 | 126 | 132 | 284 |
| 25-1051 | Atmospheric, Earth, Marine & Space Sciences Teachers, Postsecondary | DOCT | 830 | 860 | 3.6% | 3 | 38 | 40 | 81 |
| 25-1052 | Chemistry Teachers, Postsecondary | DOCT | 1,510 | 1,580 | 4.6% | 7 | 69 | 72 | 148 |
| 25-1053 | Environmental Science Teachers, Postsecondary | DOCT | 200 | 210 | 5.0% | 1 | 9 | 10 | 20 |
| 25-1054 | Physics Teachers, Postsecondary | DOCT | 830 | 870 | 4.8% | 4 | 38 | 40 | 82 |
| 25-1061 | Anthropology & Archeology Teachers, Postsecondary | DOCT | 300 | 310 | 3.3% | 1 | 14 | 14 | 29 |
| 25-1062 | Area, Ethnic & Cultural Studies Teachers, Postsecondary | DOCT | 540 | 560 | 3.7% | 3 | 25 | 26 | 54 |
| 25-1063 | Economics Teachers, Postsecondary | DOCT | 730 | 760 | 4.1% | 4 | 33 | 35 | 72 |
| 25-1064 | Geography Teachers, Postsecondary | DOCT | 230 | 230 | 0.0% | 0 | 10 | 11 | 21 |
| 25-1065 | Political Science Teachers, Postsecondary | DOCT | 850 | 890 | 4.7% | 4 | 39 | 41 | 84 |
| 25-1066 | Psychology Teachers, Postsecondary | DOCT | 2,200 | 2,360 | 7.3% | 15 | 102 | 106 | 223 |
| 25-1067 | Sociology Teachers, Postsecondary | DOCT | 580 | 610 | 5.2% | 3 | 26 | 28 | 57 |
| 25-1069 | Social Sciences Teachers, Postsecondary, Other | DOCT | 430 | 450 | 4.7% | 1 | 20 | 21 | 42 |
| 25-1071 | Health Specialties Teachers, Postsecondary | DOCT | 9,040 | 10,850 | 20.0% | 181 | 445 | 465 | 1,091 |
| 25-1072 | Nursing Instructors & Teachers, Postsecondary | DOCT | 2,840 | 3,410 | 20.1% | 57 | 140 | 146 | 343 |
| 25-1081 | Education Teachers, Postsecondary | DOCT | 2,500 | 2,600 | 4.0% | 10 | 114 | 119 | 243 |
| 25-1082 | Library Science Teachers, Postsecondary | DOCT | 240 | 240 | 0.0% | 0 | 11 | 11 | 22 |
| 25-1111 | Criminal Justice & Law Enforcement Teachers, Postsecondary | DOCT | 800 | 880 | 10.0% | 8 | 38 | 39 | 85 |
| 25-1112 | Law Teachers, Postsecondary | DOCT | 580 | 620 | 6.9% | 4 | 27 | 28 | 59 |
| 25-1113 | Social Work Teachers, Postsecondary | DOCT | 670 | 700 | 4.5% | 3 | 30 | 32 | 65 |
| 25-1121 | Art, Drama & Music Teachers, Postsecondary | MD | 4,120 | 4,430 | 7.5% | 31 | 191 | 200 | 422 |
| 25-1122 | Communications Teachers, Postsecondary | DOCT | 1,480 | 1,540 | 4.1% | 6 | 67 | 70 | 143 |
| 25-1123 | English Language & Literature Teachers, Postsecondary | DOCT | 3,500 | 3,650 | 4.3% | 15 | 160 | 167 | 342 |
| 25-1124 | Foreign Language & Literature Teachers, Postsecondary | DOCT | 1,350 | 1,420 | 5.2% | 7 | 62 | 65 | 134 |
| 25-1125 | History Teachers, Postsecondary | DOCT | 990 | 1,040 | 5.1% | 5 | 45 | 47 | 97 |
| 25-1126 | Philosophy & Religion Teachers, Postsecondary | DOCT | 940 | 1,010 | 7.4% | 6 | 44 | 45 | 95 |
| 25-1193 | Recreation & Fitness Studies Teachers, Postsecondary | DOCT | 660 | 690 | 4.5% | 3 | 30 | 31 | 64 |
| 25-1194 | Vocational Education Teachers, Postsecondary | BD+ | 4,170 | 4,330 | 3.8% | 17 | 190 | 199 | 406 |
| 25-1199 | Postsecondary Teachers, Other | DOCT | 5,050 | 5,190 | 2.8% | 14 | 229 | 239 | 482 |
| 25-2000 | Primary, Secondary & Special Education School Teachers | N/A | 162,340 | 172,810 | 6.4% | 1,047 | 5,161 | 7,115 | 13,323 |
| 25-2011 | Preschool Teachers | AD | 16,140 | 18,810 | 16.5% | 267 | 716 | 1,019 | 2,002 |
| 25-2012 | Kindergarten Teachers | BD | 3,160 | 3,340 | 5.7% | 18 | 133 | 190 | 341 |
| 25-2021 | Elementary School Teachers | BD | 50,980 | 53,590 | 5.1% | 261 | 1,605 | 2,095 | 3,961 |
| 25-2022 | Middle School Teachers | BD | 22,000 | 23,140 | 5.2% | 114 | 693 | 904 | 1,711 |
| 25-2023 | Career/Technical Education Teachers, Middle School | BD+ | 420 | 440 | 4.8% | 2 | 13 | 17 | 32 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|--|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 25-2031 | Secondary School Teachers | BD | 49,250 | 51,990 | 5.6% | 274 | 1,343 | 2,053 | 3,670 |
| 25-2032 | Career/Technical Education Teachers, Secondary School | BD+ | 3,850 | 4,040 | 4.9% | 19 | 105 | 160 | 284 |
| 25-2051 | Special Education Teachers, Preschool | BD | 420 | 470 | 11.9% | 6 | 14 | 18 | 38 |
| 25-2052 | Special Education Teachers, Kindergarten & Elementary School | BD | 5,570 | 5,870 | 5.4% | 30 | 186 | 228 | 444 |
| 25-2057 | Special Education Teachers, Middle School | BD | 2,590 | 2,720 | 5.0% | 13 | 86 | 106 | 205 |
| 25-2058 | Special Education Teachers, Secondary School | BD | 7,660 | 8,070 | 5.4% | 42 | 256 | 313 | 611 |
| 25-2059 | Special Education Teachers, Other | BD | 300 | 330 | 10.0% | 3 | 10 | 13 | 26 |
| 25-3000 | Other Teachers & Instructors | N/A | 33,190 | 38,250 | 15.2% | 506 | 2,132 | 1,914 | 4,552 |
| 25-3011 | Adult Basic & Secondary Education & Literacy Teachers | BD | 920 | 870 | -5.4% | -5 | 54 | 48 | 97 |
| 25-3021 | Self-Enrichment Education Teachers | WK EXP | 12,430 | 14,950 | 20.3% | 252 | 817 | 734 | 1,803 |
| 25-3031 | Substitute Teachers, Short-Term | BD | 12,460 | 13,810 | 10.8% | 135 | 784 | 704 | 1,623 |
| 25-3097 | Teachers & Instructors, Other | BD | 7,380 | 8,620 | 16.8% | 124 | 477 | 429 | 1,030 |
| 25-4000 | Librarians, Curators & Archivists | N/A | 8,400 | 8,820 | 5.0% | 42 | 479 | 430 | 951 |
| 25-4011 | Archivists | MD | 280 | 290 | 3.6% | 1 | 14 | 17 | 32 |
| 25-4012 | Curators | MD | 540 | 560 | 3.7% | 2 | 28 | 33 | 63 |
| 25-4013 | Museum Technicians & Conservators | BD | 630 | 660 | 4.8% | 4 | 32 | 39 | 75 |
| 25-4022 | Librarians & Media Collections Specialists | MD | 5,320 | 5,670 | 6.6% | 35 | 271 | 240 | 546 |
| 25-4031 | Library Technicians | PS | 1,630 | 1,630 | 0.0% | 0 | 134 | 100 | 234 |
| 25-9000 | Other Education, Training & Library Occupations | N/A | 55,600 | 59,340 | 6.7% | 374 | 2,612 | 2,658 | 5,644 |
| 25-9031 | Instructional Coordinators | MD+ | 6,020 | 6,530 | 8.5% | 51 | 309 | 274 | 634 |
| 25-9045 | Teaching Assistants, Non-Postsecondary | PS | 45,550 | 48,700 | 6.9% | 315 | 2,108 | 2,202 | 4,625 |
| 25-9099 | Education, Training & Library Workers, Other | BD | 1,880 | 2,000 | 6.4% | 12 | 96 | 85 | 193 |
| 27-0000 | Arts, Design, Entertainment, Sports & Media Occupations | N/A | 76,840 | 84,960 | 10.6% | 812 | 3,068 | 5,085 | 8,965 |
| 27-1000 | Art & Design Workers | N/A | 23,880 | 25,030 | 4.8% | 115 | 847 | 1,413 | 2,375 |
| 27-1011 | Art Directors | BD+ | 2,490 | 2,770 | 11.2% | 28 | 127 | 137 | 292 |
| 27-1013 | Fine Artists | BD+ | 890 | 1,040 | 16.9% | 15 | 47 | 50 | 112 |
| 27-1014 | Multimedia Artists & Animators | BD | 1,320 | 1,540 | 16.7% | 22 | 69 | 74 | 165 |
| 27-1019 | Artists & Related Workers, Other | LT OJT | 330 | 340 | 3.0% | 1 | 16 | 17 | 34 |
| 27-1021 | Commercial & Industrial Designers | BD | 890 | 960 | 7.9% | 7 | 28 | 55 | 90 |
| 27-1023 | Floral Designers | MT OJT | 1,500 | 1,380 | -8.0% | -12 | 44 | 86 | 118 |
| 27-1024 | Graphic Designers | BD | 8,910 | 9,200 | 3.3% | 28 | 276 | 538 | 842 |
| 27-1025 | Interior Designers | BD | 1,850 | 1,890 | 2.2% | 3 | 57 | 111 | 171 |
| 27-1026 | Merchandise Displayers & Window Trimmers | ST OJT | 4,420 | 4,570 | 3.4% | 15 | 137 | 267 | 419 |
| 27-1027 | Set & Exhibit Designers | BD | 250 | 270 | 8.0% | 3 | 8 | 16 | 27 |
| 27-1029 | Designers, Other | BD | 300 | 310 | 3.3% | 0 | 9 | 18 | 27 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|--|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 27-2000 | Entertainers & Performers, Sports & Related Workers | N/A | 21,410 | 24,860 | 16.1% | 346 | 1,188 | 1,582 | 3,116 |
| 27-2011 | Actors | PS+ | 1,380 | 1,810 | 31.2% | 43 | 67 | 106 | 216 |
| 27-2012 | Producers & Directors | BD+ | 3,040 | 3,560 | 17.1% | 52 | 72 | 208 | 332 |
| 27-2021 | Athletes & Sports Competitors | LT OJT | 960 | 1,220 | 27.1% | 27 | 62 | 88 | 177 |
| 27-2022 | Coaches & Scouts | BD | 7,580 | 9,130 | 20.4% | 155 | 475 | 672 | 1,302 |
| 27-2023 | Umpires, Referees & Other Sports Officials | MT OJT | 290 | 380 | 31.0% | 10 | 19 | 27 | 56 |
| 27-2031 | Dancers | LT OJT | 90 | 110 | 22.2% | 2 | 6 | 10 | 18 |
| 27-2032 | Choreographers | WK EXP | 60 | 70 | 16.7% | 1 | 4 | 7 | 12 |
| 27-2041 | Music Directors & Composers | BD+ | 2,060 | 2,160 | 4.9% | 10 | 124 | 118 | 252 |
| 27-2042 | Musicians & Singers | LT OJT | 5,770 | 6,180 | 7.1% | 41 | 351 | 335 | 727 |
| 27-2090 | Entertainers, Performers, Sports & Related Workers | ST OJT | 180 | 230 | 27.8% | 5 | 8 | 11 | 24 |
| 27-3000 | Media & Communication Workers | N/A | 22,330 | 24,180 | 8.3% | 185 | 732 | 1,438 | 2,355 |
| 27-3011 | Radio & Television Announcers | BD | 910 | 960 | 5.5% | 5 | 36 | 51 | 92 |
| 27-3023 | News Analysts, Reporters & Journalists | BD | 1,330 | 1,330 | 0.0% | 0 | 40 | 102 | 142 |
| 27-3031 | Public Relations Specialists | BD | 7,690 | 8,380 | 9.0% | 70 | 201 | 528 | 799 |
| 27-3041 | Editors | BD+ | 3,240 | 3,280 | 1.2% | 4 | 107 | 204 | 315 |
| 27-3042 | Technical Writers | BD+ | 2,320 | 2,590 | 11.6% | 27 | 64 | 153 | 244 |
| 27-3043 | Writers & Authors | BD+ | 4,370 | 4,700 | 7.6% | 33 | 182 | 249 | 464 |
| 27-3091 | Interpreters & Translators | BD | 1,190 | 1,460 | 22.7% | 27 | 51 | 72 | 150 |
| 27-3092 | Court Reporters & Simultaneous Captioners | PS | 860 | 920 | 7.0% | 6 | 32 | 52 | 90 |
| 27-3099 | Media & Communication Workers, Other | ST OJT | 420 | 560 | 33.3% | 14 | 19 | 27 | 60 |
| 27-4000 | Media & Communication Equipment Workers | N/A | 9,240 | 10,900 | 18.0% | 166 | 302 | 651 | 1,119 |
| 27-4011 | Audio & Video Equipment Technicians | PS | 2,530 | 3,200 | 26.5% | 67 | 75 | 210 | 352 |
| 27-4012 | Broadcast Technicians | AD | 800 | 860 | 7.5% | 5 | 22 | 61 | 88 |
| 27-4021 | Photographers | MT OJT | 3,720 | 4,330 | 16.4% | 61 | 136 | 226 | 423 |
| 27-4031 | Camera Operators: TV, Video & Motion Picture | BD | 1,040 | 1,230 | 18.3% | 18 | 36 | 71 | 125 |
| 27-4032 | Film & Video Editors | BD | 410 | 510 | 24.4% | 10 | 14 | 28 | 52 |
| 29-0000 | Healthcare Practitioners & Technical Occupations | N/A | 410,120 | 452,590 | 10.4% | 4,247 | 10,884 | 12,915 | 28,046 |
| 29-1000 | Health Diagnosing & Treating Practitioners | N/A | 271,750 | 301,380 | 10.9% | 2,962 | 6,792 | 6,800 | 16,554 |
| 29-1011 | Chiropractors | DOCT | 1,940 | 2,110 | 8.8% | 16 | 29 | 16 | 61 |
| 29-1021 | Dentists, General | DOCT | 4,000 | 4,440 | 11.0% | 44 | 78 | 35 | 157 |
| 29-1022 | Oral & Maxillofacial Surgeons | DOCT | 330 | 370 | 12.1% | 4 | 6 | 3 | 13 |
| 29-1023 | Orthodontists | DOCT | 320 | 360 | 12.5% | 4 | 6 | 3 | 13 |
| 29-1031 | Dietitians & Nutritionists | BD+ | 3,980 | 4,440 | 11.6% | 47 | 136 | 146 | 329 |
| 29-1041 | Optometrists | DOCT | 1,660 | 1,770 | 6.6% | 11 | 30 | 21 | 62 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

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|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 29-1051 | Pharmacists | DOCT | 15,440 | 15,500 | 0.4% | 6 | 285 | 297 | 588 |
| 29-1071 | Physician Assistants | MD | 7,370 | 9,840 | 33.5% | 247 | 134 | 339 | 720 |
| 29-1081 | Podiatrists | DOCT | 660 | 650 | -1.5% | -1 | 18 | 28 | 45 |
| 29-1122 | Occupational Therapists | MD | 7,590 | 8,930 | 17.7% | 134 | 178 | 270 | 582 |
| 29-1123 | Physical Therapists | DOCT | 11,970 | 14,320 | 19.6% | 235 | 260 | 273 | 768 |
| 29-1124 | Radiation Therapists | AD | 600 | 650 | 8.3% | 4 | 12 | 20 | 36 |
| 29-1125 | Recreational Therapists | BD | 970 | 1,030 | 6.2% | 6 | 31 | 44 | 81 |
| 29-1126 | Respiratory Therapists | AD | 6,160 | 7,520 | 22.1% | 136 | 146 | 172 | 454 |
| 29-1127 | Speech-Language Pathologists | MD+ | 6,230 | 7,900 | 26.8% | 167 | 164 | 253 | 584 |
| 29-1128 | Exercise Physiologists | BD | 740 | 840 | 13.5% | 10 | 24 | 27 | 61 |
| 29-1129 | Therapists, Other | BD | 560 | 650 | 16.1% | 9 | 18 | 21 | 48 |
| 29-1131 | Veterinarians | DOCT | 3,770 | 4,320 | 14.6% | 55 | 64 | 63 | 182 |
| 29-1141 | Registered Nurses | BD | 147,280 | 160,380 | 8.9% | 1,310 | 4,104 | 3,870 | 9,284 |
| 29-1151 | Nurse Anesthetists | MD | 2,240 | 2,530 | 12.9% | 29 | 47 | 72 | 148 |
| 29-1161 | Nurse Midwives | MD | 350 | 400 | 14.3% | 5 | 8 | 12 | 25 |
| 29-1171 | Nurse Practitioners | MD | 6,210 | 8,240 | 32.7% | 203 | 151 | 227 | 581 |
| 29-1181 | Audiologists | DOCT | 530 | 590 | 11.3% | 6 | 12 | 11 | 29 |
| 29-1211 | Anesthesiologists | DOCT | 1,060 | 1,080 | 1.9% | 3 | 17 | 12 | 32 |
| 29-1215 | Family Medicine Physicians | DOCT | 3,710 | 3,970 | 7.0% | 26 | 62 | 43 | 131 |
| 29-1216 | General Internal Medicine Physicians | DOCT | 1,280 | 1,250 | -2.3% | -3 | 20 | 14 | 31 |
| 29-1218 | Obstetricians & Gynecologists | DOCT | 410 | 410 | 0.0% | 0 | 7 | 5 | 12 |
| 29-1221 | Pediatricians, General | DOCT | 410 | 420 | 2.4% | 1 | 7 | 5 | 13 |
| 29-1223 | Psychiatrists | DOCT | 1,350 | 1,530 | 13.3% | 18 | 23 | 16 | 57 |
| 29-1228 | Physicians & Ophthalmologists, All Other | DOCT | 23,230 | 24,570 | 5.8% | 133 | 384 | 269 | 786 |
| 29-1292 | Dental Hygienists | AD | 6,510 | 7,440 | 14.3% | 93 | 250 | 175 | 518 |
| 29-1298 | Acupuncturists & Other Healthcare Practitioners | MD | 1,140 | 1,170 | 2.6% | 2 | 50 | 18 | 70 |
| 29-2000 | Health Technologists & Technicians | N/A | 135,380 | 147,810 | 9.2% | 1,243 | 4,005 | 5,978 | 11,226 |
| 29-2010 | Clinical Laboratory Technologists & Technicians | BD | 13,860 | 15,040 | 8.5% | 118 | 373 | 536 | 1,027 |
| 29-2031 | Cardiovascular Technologists & Technicians | AD | 3,760 | 4,100 | 9.0% | 34 | 107 | 169 | 310 |
| 29-2032 | Diagnostic Medical Sonographers | AD | 2,960 | 3,470 | 17.2% | 50 | 88 | 138 | 276 |
| 29-2033 | Nuclear Medicine Technologists | AD | 920 | 970 | 5.4% | 6 | 26 | 40 | 72 |
| 29-2034 | Radiologic Technologists | AD | 10,170 | 10,890 | 7.1% | 72 | 287 | 452 | 811 |
| 29-2035 | Magnetic Resonance Imaging Technologists | AD+ | 1,600 | 1,690 | 5.6% | 9 | 45 | 71 | 125 |
| 29-2040 | Emergency Medical Technicians & Paramedics | PS | 14,310 | 15,130 | 5.7% | 82 | 273 | 682 | 1,037 |
| 29-2051 | Dietetic Technicians | AD | 800 | 870 | 8.8% | 8 | 23 | 36 | 67 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 29-2052 | Pharmacy Technicians | MT OJT | 19,460 | 20,990 | 7.9% | 153 | 552 | 869 | 1,574 |
| 29-2053 | Psychiatric Technicians | PS+ | 2,590 | 2,750 | 6.2% | 16 | 73 | 115 | 204 |
| 29-2055 | Surgical Technologists | PS | 4,230 | 4,560 | 7.8% | 33 | 120 | 189 | 342 |
| 29-2056 | Veterinary Technologists & Technicians | AD | 4,520 | 5,080 | 12.4% | 56 | 131 | 206 | 393 |
| 29-2057 | Ophthalmic Medical Technicians | PS | 1,380 | 1,590 | 15.2% | 21 | 40 | 64 | 125 |
| 29-2061 | Licensed Practical & Licensed Vocational Nurses | PS | 37,620 | 41,950 | 11.5% | 433 | 1,342 | 1,661 | 3,436 |
| 29-2081 | Opticians, Dispensing | LT OJT | 2,420 | 2,590 | 7.0% | 17 | 104 | 86 | 207 |
| 29-2091 | Orthotists & Prosthetists | MD+ | 530 | 650 | 22.6% | 11 | 16 | 25 | 52 |
| 29-2092 | Hearing Aid Specialists | MT OJT | 260 | 300 | 15.4% | 3 | 8 | 12 | 23 |
| 29-2098 | Medical Dosimetrists, Records Specialists & Other Techs | PS | 13,980 | 15,190 | 8.7% | 121 | 398 | 627 | 1,146 |
| 29-9000 | Other Healthcare Practitioners & Technical Occupations | N/A | 2,990 | 3,400 | 13.7% | 41 | 87 | 137 | 265 |
| 29-9091 | Athletic Trainers | BD | 1,570 | 1,840 | 17.2% | 27 | 46 | 73 | 146 |
| 31-0000 | Healthcare Support Occupations | N/A | 323,520 | 383,090 | 18.4% | 5,957 | 21,206 | 21,284 | 48,447 |
| 31-1100 | Nursing, Psychiatric, & Home Health Aides | N/A | 254,670 | 301,880 | 18.5% | 4,720 | 17,815 | 15,756 | 38,291 |
| 31-1120 | Home Health & Personal Care Aides | ST OJT | 175,140 | 214,740 | 22.6% | 3,960 | 12,480 | 11,038 | 27,478 |
| 31-1131 | Nursing Assistants | PS | 74,810 | 82,140 | 9.8% | 733 | 5,024 | 4,443 | 10,200 |
| 31-1132 | Orderlies | ST OJT | 2,590 | 2,750 | 6.2% | 16 | 171 | 151 | 338 |
| 31-1133 | Psychiatric Aides | ST OJT | 2,130 | 2,250 | 5.6% | 12 | 140 | 124 | 276 |
| 31-2000 | Occupational & Physical Therapist Assistants & Aides | N/A | 9,310 | 12,200 | 31.0% | 289 | 482 | 805 | 1,576 |
| 31-2011 | Occupational Therapy Assistants | AD | 2,230 | 2,960 | 32.7% | 74 | 129 | 190 | 393 |
| 31-2012 | Occupational Therapy Aides | ST OJT | 460 | 540 | 17.4% | 8 | 25 | 36 | 69 |
| 31-2021 | Physical Therapist Assistants | AD | 4,710 | 6,370 | 35.2% | 166 | 237 | 418 | 821 |
| 31-2022 | Physical Therapist Aides | ST OJT | 1,910 | 2,320 | 21.5% | 41 | 91 | 160 | 292 |
| 31-9000 | Other Healthcare Support Occupations | N/A | 59,540 | 69,020 | 15.9% | 948 | 2,909 | 4,723 | 8,580 |
| 31-9011 | Massage Therapists | PS | 4,430 | 6,100 | 37.7% | 166 | 309 | 275 | 750 |
| 31-9091 | Dental Assistants | PS | 10,940 | 12,460 | 13.9% | 152 | 533 | 822 | 1,507 |
| 31-9092 | Medical Assistants | PS | 27,980 | 33,160 | 18.5% | 518 | 1,254 | 2,284 | 4,056 |
| 31-9093 | Medical Equipment Preparers | MT OJT | 2,290 | 2,440 | 6.6% | 15 | 131 | 156 | 302 |
| 31-9094 | Medical Transcriptionists | PS | 2,050 | 1,770 | -13.7% | -28 | 100 | 164 | 236 |
| 31-9095 | Pharmacy Aides | ST OJT | 1,470 | 1,270 | -13.6% | -20 | 71 | 106 | 157 |
| 31-9096 | Veterinary Assistants & Laboratory Animal Caretakers | ST OJT | 2,930 | 3,270 | 11.6% | 33 | 152 | 342 | 527 |
| 31-9097 | Phlebotomists | PS | 6,260 | 7,300 | 16.6% | 104 | 292 | 493 | 889 |
| 31-9099 | Healthcare Support Workers, Other | ST OJT | 1,200 | 1,260 | 5.0% | 7 | 68 | 81 | 156 |
| 33-0000 | Protective Service Occupations | N/A | 123,720 | 130,350 | 5.4% | 663 | 6,682 | 8,142 | 15,487 |
| 33-1000 | Supervisors - Protective Service Workers | N/A | 8,230 | 8,650 | 5.1% | 42 | 238 | 399 | 679 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|--|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 33-1011 | Supervisors - Correctional Officers | WK EXP | 650 | 640 | -1.5% | 0 | 21 | 30 | 51 |
| 33-1012 | Supervisors - Police & Detectives | WK EXP | 3,840 | 4,030 | 4.9% | 19 | 87 | 162 | 268 |
| 33-1021 | Supervisors - Fire Fighting & Prevention | PS+ | 950 | 1,000 | 5.3% | 5 | 23 | 39 | 67 |
| 33-1090 | Supervisors - Protective Service Workers | WK EXP | 2,800 | 2,970 | 6.1% | 18 | 106 | 168 | 292 |
| 33-2000 | Fire Fighting & Prevention Workers | N/A | 4,780 | 5,040 | 5.4% | 26 | 116 | 253 | 395 |
| 33-2011 | Firefighters | PS+ | 4,540 | 4,780 | 5.3% | 24 | 103 | 240 | 367 |
| 33-3000 | Law Enforcement Workers | N/A | 51,270 | 51,530 | 0.5% | 26 | 1,529 | 2,651 | 4,206 |
| 33-3011 | Bailiffs | MT OJT | 330 | 330 | 0.0% | 0 | 12 | 18 | 30 |
| 33-3012 | Correctional Officers & Jailers | MT OJT | 18,290 | 17,180 | -6.1% | -111 | 668 | 959 | 1,516 |
| 33-3021 | Detectives & Criminal Investigators | WK EXP | 3,700 | 3,800 | 2.7% | 9 | 96 | 173 | 278 |
| 33-3031 | Fish & Game Wardens | BD+ | 80 | 90 | 12.5% | 0 | 4 | 4 | 8 |
| 33-3041 | Parking Enforcement Workers | ST OJT | 530 | 340 | -35.8% | -19 | 22 | 21 | 24 |
| 33-3051 | Police & Sheriff's Patrol Officers | MT OJT | 28,290 | 29,760 | 5.2% | 147 | 725 | 1,474 | 2,346 |
| 33-9000 | Other Protective Service Workers | N/A | 59,450 | 65,130 | 9.6% | 569 | 4,800 | 4,839 | 10,208 |
| 33-9011 | Animal Control Workers | MT OJT | 140 | 150 | 7.1% | 1 | 4 | 8 | 13 |
| 33-9021 | Private Detectives & Investigators | WK EXP | 2,010 | 2,200 | 9.5% | 19 | 58 | 123 | 200 |
| 33-9031 | Gaming Surveillance Officers & Gaming Investigators | WK EXP | 240 | 300 | 25.0% | 6 | 14 | 21 | 41 |
| 33-9032 | Security Guards | ST OJT | 38,990 | 41,340 | 6.0% | 235 | 2,127 | 3,111 | 5,473 |
| 33-9091 | Crossing Guards | ST OJT | 7,880 | 8,880 | 12.7% | 100 | 1,220 | 432 | 1,752 |
| 33-9092 | Lifeguards, Ski Patrol & Other Recreational Protective Service | ST OJT | 4,420 | 6,030 | 36.4% | 161 | 720 | 580 | 1,461 |
| 33-9093 | Transportation Security Screeners | ST OJT | 1,670 | 1,660 | -0.6% | -1 | 60 | 83 | 142 |
| 33-9098 | School Bus Monitors & Other Protective Svc Workers | ST OJT | 4,100 | 4,580 | 11.7% | 48 | 597 | 481 | 1,126 |
| 35-0000 | Food Preparation & Serving Related Occupations | N/A | 403,000 | 484,750 | 20.3% | 8,175 | 34,079 | 45,409 | 87,663 |
| 35-1000 | Supervisors, Food Preparation & Serving Workers | N/A | 36,840 | 44,350 | 20.4% | 751 | 1,768 | 4,126 | 6,645 |
| 35-1011 | Chefs & Head Cooks | WK EXP | 2,570 | 3,230 | 25.7% | 67 | 87 | 284 | 438 |
| 35-1012 | Supervisors - Food Preparation & Serving Workers | WK EXP | 34,270 | 41,120 | 20.0% | 685 | 1,682 | 3,841 | 6,208 |
| 35-2000 | Cooks & Food Preparation Workers | N/A | 83,760 | 105,750 | 26.3% | 2,199 | 5,925 | 8,223 | 16,347 |
| 35-2011 | Cooks, Fast Food | ST OJT | 7,600 | 7,400 | -2.6% | -20 | 441 | 642 | 1,063 |
| 35-2012 | Cooks, Institution & Cafeteria | ST OJT | 14,270 | 15,240 | 6.8% | 97 | 868 | 1,263 | 2,228 |
| 35-2013 | Cooks, Private Household | PS+ | 860 | 890 | 3.5% | 3 | 51 | 75 | 129 |
| 35-2014 | Cooks, Restaurant | MT OJT | 40,280 | 60,080 | 49.2% | 1,980 | 2,953 | 4,295 | 9,228 |
| 35-2015 | Cooks, Short Order | ST OJT | 3,380 | 3,590 | 6.2% | 21 | 205 | 298 | 524 |
| 35-2019 | Cooks, Other | MT OJT | 230 | 260 | 13.0% | 3 | 14 | 21 | 38 |
| 35-2021 | Food Preparation Workers | ST OJT | 17,140 | 18,300 | 6.8% | 116 | 1,392 | 1,629 | 3,137 |
| 35-3000 | Food & Beverage Serving Workers | N/A | 241,930 | 285,050 | 17.8% | 4,312 | 22,259 | 28,864 | 55,435 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 35-3011 | Bartenders | ST OJT | 22,100 | 29,050 | 31.4% | 695 | 1,159 | 3,099 | 4,953 |
| 35-3023 | Fast Food & Counter Workers | ST OJT | 140,080 | 161,790 | 15.5% | 2,171 | 14,634 | 15,957 | 32,762 |
| 35-3031 | Waiters & Waitresses | ST OJT | 66,680 | 79,330 | 19.0% | 1,265 | 5,360 | 8,718 | 15,343 |
| 35-3041 | Food Servers, Nonrestaurant | ST OJT | 13,060 | 14,870 | 13.9% | 181 | 1,105 | 1,090 | 2,376 |
| 35-9000 | Other Food Preparation & Serving Related Workers | N/A | 40,490 | 49,610 | 22.5% | 913 | 4,126 | 4,197 | 9,236 |
| 35-9011 | Dining Room & Cafeteria Attendants & Bartender Helpers | ST OJT | 11,920 | 15,130 | 26.9% | 321 | 1,167 | 1,170 | 2,658 |
| 35-9021 | Dishwashers | ST OJT | 15,890 | 18,800 | 18.3% | 290 | 1,305 | 1,450 | 3,045 |
| 35-9031 | Hosts & Hostesses: Restaurant, Lounge & Coffee Shop | ST OJT | 11,960 | 14,830 | 24.0% | 287 | 1,587 | 1,508 | 3,382 |
| 35-9099 | Food Preparation & Serving Related Workers, Other | ST OJT | 720 | 860 | 19.4% | 14 | 68 | 68 | 150 |
| 37-0000 | Building & Grounds Cleaning & Maintenance Occupations | N/A | 185,730 | 199,580 | 7.5% | 1,385 | 11,032 | 13,983 | 26,400 |
| 37-1000 | Supervisors of Building & Grounds Cleaning & Maintenance Workers | N/A | 13,730 | 14,460 | 5.3% | 73 | 537 | 989 | 1,599 |
| 37-1011 | Supervisors - Housekeeping & Janitorial Workers | WK EXP | 8,200 | 8,620 | 5.1% | 42 | 361 | 581 | 984 |
| 37-1012 | Supervisors - Landscaping & Groundskeeping Workers | WK EXP | 5,530 | 5,840 | 5.6% | 31 | 176 | 408 | 615 |
| 37-2000 | Building Cleaning & Pest Control Workers | N/A | 131,400 | 140,690 | 7.1% | 928 | 8,665 | 9,349 | 18,942 |
| 37-2011 | Janitors & Cleaners | ST OJT | 87,360 | 92,830 | 6.3% | 547 | 5,623 | 6,315 | 12,485 |
| 37-2012 | Maids & Housekeeping Cleaners | ST OJT | 41,880 | 45,470 | 8.6% | 359 | 2,967 | 2,810 | 6,136 |
| 37-3000 | Grounds Maintenance Workers | N/A | 40,600 | 44,440 | 9.5% | 384 | 1,829 | 3,645 | 5,858 |
| 37-3011 | Landscaping & Groundskeeping Workers | ST OJT | 36,970 | 40,550 | 9.7% | 358 | 1,668 | 3,323 | 5,349 |
| 37-3012 | Pesticide Handlers, Sprayers & Applicators, Vegetation | MT OJT | 670 | 730 | 9.0% | 7 | 30 | 60 | 97 |
| 37-3013 | Tree Trimmers & Pruners | ST OJT | 2,820 | 3,020 | 7.1% | 20 | 126 | 250 | 396 |
| 37-3019 | Grounds Maintenance Workers, Other | ST OJT | 140 | 130 | -7.1% | 0 | 6 | 12 | 18 |
| 39-0000 | Personal Care & Service Occupations | N/A | 159,270 | 196,050 | 23.1% | 3,678 | 10,702 | 13,348 | 27,728 |
| 39-1000 | Supervisors, Personal Care & Service Workers | N/A | 11,970 | 14,470 | 20.9% | 250 | 482 | 916 | 1,648 |
| 39-1013 | Supervisors - Gambling Services Workers | WK EXP | 730 | 1,040 | 42.5% | 31 | 32 | 61 | 124 |
| 39-1098 | Supervisors - Personal Svc/Entertain't/Recr'n Workers | WK EXP | 11,240 | 13,430 | 19.5% | 219 | 450 | 855 | 1,524 |
| 39-2000 | Animal Care & Service Workers | N/A | 11,910 | 15,230 | 27.9% | 332 | 847 | 1,112 | 2,291 |
| 39-2011 | Animal Trainers | MT OJT | 1,260 | 1,480 | 17.5% | 22 | 64 | 99 | 185 |
| 39-2021 | Nonfarm Animal Caretakers | ST OJT | 10,650 | 13,750 | 29.1% | 310 | 783 | 1,013 | 2,106 |
| 39-3000 | Entertainment Attendants & Related Workers | N/A | 13,620 | 20,450 | 50.1% | 683 | 1,623 | 1,809 | 4,115 |
| 39-3011 | Gaming Dealers | ST OJT | 2,220 | 3,140 | 41.4% | 91 | 146 | 242 | 479 |
| 39-3031 | Ushers, Lobby Attendants & Ticket Takers | ST OJT | 2,410 | 3,940 | 63.5% | 153 | 402 | 323 | 878 |
| 39-3091 | Amusement & Recreation Attendants | ST OJT | 7,820 | 11,880 | 51.9% | 406 | 961 | 1,103 | 2,470 |
| 39-3092 | Costume Attendants | ST OJT | 110 | 160 | 45.5% | 4 | 13 | 15 | 32 |
| 39-3093 | Locker Room, Coatroom & Dressing Room Attendants | ST OJT | 700 | 860 | 22.9% | 16 | 76 | 87 | 179 |
| 39-4000 | Funeral Service Workers | N/A | 4,010 | 4,140 | 3.2% | 13 | 219 | 297 | 529 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 39-4021 | Funeral Attendants | ST OJT | 2,730 | 2,810 | 2.9% | 8 | 156 | 209 | 373 |
| 39-4031 | Morticians, Undertakers & Funeral Directors | AD+ | 1,270 | 1,320 | 3.9% | 5 | 62 | 88 | 155 |
| 39-5000 | Personal Appearance Workers | N/A | 44,070 | 56,930 | 29.2% | 1,287 | 2,610 | 2,778 | 6,675 |
| 39-5011 | Barbers | PS | 2,480 | 3,020 | 21.8% | 55 | 106 | 156 | 317 |
| 39-5012 | Hairdressers, Hairstylists & Cosmetologists | PS | 31,840 | 40,330 | 26.7% | 849 | 1,911 | 2,005 | 4,765 |
| 39-5092 | Manicurists & Pedicurists | PS | 6,890 | 9,740 | 41.4% | 285 | 423 | 440 | 1,148 |
| 39-5093 | Shampooers | ST OJT | 790 | 1,070 | 35.4% | 29 | 47 | 49 | 125 |
| 39-5094 | Skincare Specialists | PS | 2,060 | 2,740 | 33.0% | 68 | 122 | 127 | 317 |
| 39-6000 | Transportation, Tourism & Lodging Attendants | N/A | 1,810 | 2,070 | 14.4% | 26 | 101 | 148 | 275 |
| 39-6011 | Baggage Porters & Bellhops | ST OJT | 920 | 1,050 | 14.1% | 12 | 51 | 75 | 138 |
| 39-6012 | Concierges | MT OJT | 880 | 1,020 | 15.9% | 14 | 50 | 73 | 137 |
| 39-7000 | Tour & Travel Guides | N/A | 1,590 | 1,740 | 9.4% | 16 | 107 | 155 | 278 |
| 39-7010 | Tour & Travel Guides | MT OJT | 1,590 | 1,740 | 9.4% | 16 | 107 | 155 | 278 |
| 39-9000 | Other Personal Care & Service Workers | N/A | 70,300 | 81,020 | 15.2% | 1,072 | 4,714 | 6,133 | 11,919 |
| 39-9011 | Childcare Workers | ST OJT | 37,900 | 40,820 | 7.7% | 292 | 2,649 | 2,750 | 5,691 |
| 39-9031 | Fitness Trainers & Aerobics Instructors | ST OJT | 11,970 | 16,800 | 40.4% | 483 | 842 | 1,365 | 2,690 |
| 39-9032 | Recreation Workers | ST OJT | 12,460 | 14,420 | 15.7% | 196 | 787 | 1,276 | 2,259 |
| 39-9041 | Residential Advisors | ST OJT | 6,760 | 7,410 | 9.6% | 65 | 357 | 636 | 1,058 |
| 39-9098 | Crematory Oprs & Other Personal Service Workers | ST OJT | 1,210 | 1,570 | 29.8% | 36 | 79 | 105 | 220 |
| 41-0000 | Sales & Related Occupations | N/A | 525,290 | 532,430 | 1.4% | 714 | 27,343 | 41,786 | 69,843 |
| 41-1000 | Supervisors - Sales Workers | N/A | 71,040 | 69,470 | -2.2% | -158 | 2,375 | 4,701 | 6,918 |
| 41-1011 | Supervisors - Retail Sales Workers | WK EXP | 53,970 | 52,830 | -2.1% | -114 | 1,887 | 3,700 | 5,473 |
| 41-1012 | Supervisors - Non-Retail Sales Workers | WK EXP | 17,080 | 16,640 | -2.6% | -44 | 488 | 1,002 | 1,446 |
| 41-2000 | Retail Sales Workers | N/A | 288,980 | 287,880 | -0.4% | -110 | 19,550 | 25,281 | 44,721 |
| 41-2011 | Cashiers | ST OJT | 128,680 | 122,750 | -4.6% | -593 | 10,695 | 12,036 | 22,138 |
| 41-2012 | Gaming Change Persons & Booth Cashiers | ST OJT | 370 | 510 | 37.8% | 15 | 37 | 42 | 94 |
| 41-2021 | Counter & Rental Clerks | ST OJT | 9,370 | 10,150 | 8.3% | 78 | 438 | 670 | 1,186 |
| 41-2022 | Parts Salespersons | MT OJT | 10,350 | 10,880 | 5.1% | 53 | 447 | 813 | 1,313 |
| 41-2031 | Retail Salespersons | ST OJT | 140,210 | 143,580 | 2.4% | 337 | 7,933 | 11,720 | 19,990 |
| 41-3000 | Sales Representatives, Services | N/A | 67,250 | 73,520 | 9.3% | 627 | 1,945 | 5,240 | 7,812 |
| 41-3011 | Advertising Sales Agents | MT OJT | 3,610 | 3,650 | 1.1% | 4 | 111 | 337 | 452 |
| 41-3021 | Insurance Sales Agents | MT OJT | 18,230 | 19,750 | 8.3% | 152 | 632 | 1,062 | 1,846 |
| 41-3031 | Securities, Commodities & Financial Services Sales Agents | BD+ | 12,610 | 13,320 | 5.6% | 71 | 287 | 817 | 1,175 |
| 41-3041 | Travel Agents | MT OJT | 1,700 | 1,770 | 4.1% | 8 | 85 | 115 | 208 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 41-3091 | Sales Representatives - Services | MT OJT | 31,110 | 35,030 | 12.6% | 392 | 830 | 2,908 | 4,130 |
| 41-4000 | Sales Representatives, Wholesale & Manufacturing | N/A | 67,770 | 71,090 | 4.9% | 332 | 2,052 | 4,691 | 7,075 |
| 41-4011 | Sales Representatives, Technical & Scientific Products | BD+ | 11,390 | 12,030 | 5.6% | 63 | 346 | 791 | 1,200 |
| 41-4012 | Sales Representatives | MT OJT | 56,370 | 59,060 | 4.8% | 269 | 1,706 | 3,900 | 5,875 |
| 41-9000 | Other Sales & Related Workers | N/A | 30,250 | 30,470 | 0.7% | 22 | 1,420 | 1,873 | 3,315 |
| 41-9011 | Demonstrators & Product Promoters | ST OJT | 2,330 | 2,450 | 5.2% | 12 | 264 | 158 | 434 |
| 41-9021 | Real Estate Brokers | WK EXP | 1,890 | 2,000 | 5.8% | 12 | 81 | 86 | 179 |
| 41-9022 | Real Estate Sales Agents | MT OJT | 14,610 | 15,410 | 5.5% | 81 | 624 | 660 | 1,365 |
| 41-9031 | Sales Engineers | BD+ | 3,120 | 3,360 | 7.7% | 24 | 65 | 266 | 355 |
| 41-9041 | Telemarketers | ST OJT | 5,060 | 4,170 | -17.6% | -89 | 213 | 471 | 595 |
| 41-9091 | Door-to-Door Sales Workers, News & Street Vendors & Related Workers | ST OJT | 1,120 | 840 | -25.0% | -28 | 71 | 53 | 96 |
| 43-0000 | Office & Administrative Support Occupations | N/A | 811,460 | 785,610 | -3.2% | -2,586 | 38,349 | 49,372 | 85,135 |
| 43-1000 | Supervisors - Office & Administrative Support Workers | N/A | 66,650 | 65,850 | -1.2% | -79 | 2,458 | 4,048 | 6,427 |
| 43-1011 | Supervisors - Office & Administrative Support Workers | WK EXP | 66,650 | 65,850 | -1.2% | -79 | 2,458 | 4,048 | 6,427 |
| 43-2000 | Communications Equipment Operators | N/A | 2,400 | 1,850 | -22.9% | -54 | 108 | 126 | 180 |
| 43-2011 | Switchboard Operators | ST OJT | 2,160 | 1,660 | -23.1% | -50 | 99 | 111 | 160 |
| 43-3000 | Financial Clerks | N/A | 116,760 | 111,230 | -4.7% | -553 | 5,644 | 6,474 | 11,565 |
| 43-3011 | Bill & Account Collectors | MT OJT | 7,660 | 7,200 | -6.0% | -46 | 272 | 527 | 753 |
| 43-3021 | Billing & Posting Clerks | MT OJT | 20,210 | 20,640 | 2.1% | 42 | 838 | 1,253 | 2,133 |
| 43-3031 | Bookkeeping, Accounting & Auditing Clerks | PS+ | 58,520 | 56,900 | -2.8% | -162 | 3,382 | 2,947 | 6,167 |
| 43-3051 | Payroll & Timekeeping Clerks | MT OJT | 6,010 | 5,270 | -12.3% | -75 | 267 | 308 | 500 |
| 43-3061 | Procurement Clerks | MT OJT | 2,810 | 2,720 | -3.2% | -10 | 76 | 175 | 241 |
| 43-3071 | Tellers | ST OJT | 20,970 | 17,860 | -14.8% | -310 | 788 | 1,220 | 1,698 |
| 43-4000 | Information & Record Clerks | N/A | 221,250 | 221,040 | -0.1% | -21 | 10,787 | 16,233 | 26,999 |
| 43-4011 | Brokerage Clerks | MT OJT | 2,530 | 2,300 | -9.1% | -23 | 98 | 159 | 234 |
| 43-4021 | Correspondence Clerks | ST OJT | 170 | 160 | -5.9% | -1 | 7 | 10 | 16 |
| 43-4031 | Court, Municipal & License Clerks | LT OJT | 1,550 | 1,630 | 5.2% | 8 | 77 | 80 | 165 |
| 43-4041 | Credit Authorizers, Checkers & Clerks | MT OJT | 1,180 | 1,140 | -3.4% | -4 | 42 | 71 | 109 |
| 43-4051 | Customer Service Representatives | ST OJT | 121,580 | 120,300 | -1.1% | -128 | 5,685 | 9,510 | 15,067 |
| 43-4061 | Eligibility Interviewers, Government Programs | MT OJT | 8,730 | 9,100 | 4.2% | 37 | 330 | 461 | 828 |
| 43-4071 | File Clerks | ST OJT | 4,580 | 4,000 | -12.7% | -58 | 232 | 265 | 439 |
| 43-4081 | Hotel, Motel & Resort Desk Clerks | ST OJT | 6,090 | 6,730 | 10.5% | 64 | 371 | 679 | 1,114 |
| 43-4111 | Interviewers | ST OJT | 7,260 | 6,700 | -7.7% | -56 | 403 | 451 | 798 |
| 43-4121 | Library Assistants, Clerical | ST OJT | 5,270 | 5,200 | -1.3% | -8 | 466 | 335 | 793 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

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|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 43-4131 | Loan Interviewers & Clerks | ST OJT | 6,800 | 6,740 | -0.9% | -5 | 195 | 398 | 588 |
| 43-4141 | New Accounts Clerks | MT OJT | 760 | 650 | -14.5% | -11 | 22 | 44 | 55 |
| 43-4151 | Order Clerks | PS | 5,160 | 4,200 | -18.6% | -96 | 199 | 294 | 397 |
| 43-4161 | Human Resources Assistants | AD | 4,710 | 4,620 | -1.9% | -9 | 179 | 283 | 453 |
| 43-4171 | Receptionists & Information Clerks | ST OJT | 39,030 | 41,490 | 6.3% | 246 | 2,247 | 2,782 | 5,275 |
| 43-4181 | Reservation & Transportation Ticket Agents & Travel Clerks | ST OJT | 3,060 | 3,230 | 5.6% | 18 | 119 | 224 | 361 |
| 43-4199 | Information & Record Clerks, Other | ST OJT | 2,790 | 2,840 | 1.8% | 5 | 115 | 186 | 306 |
| 43-5000 | Material Recording, Scheduling, Dispatching & Distributing Workers | N/A | 82,890 | 81,200 | -2.0% | -169 | 3,100 | 4,302 | 7,233 |
| 43-5011 | Cargo & Freight Agents | ST OJT | 2,080 | 2,290 | 10.1% | 21 | 83 | 130 | 234 |
| 43-5021 | Couriers & Messengers | ST OJT | 5,280 | 4,870 | -7.8% | -42 | 208 | 276 | 442 |
| 43-5031 | Police, Fire & Ambulance Dispatchers | MT OJT | 3,480 | 3,660 | 5.2% | 18 | 126 | 200 | 344 |
| 43-5032 | Dispatchers | MT OJT | 7,140 | 7,370 | 3.2% | 23 | 255 | 406 | 684 |
| 43-5041 | Meter Readers, Utilities | ST OJT | 1,020 | 930 | -8.8% | -9 | 29 | 43 | 63 |
| 43-5051 | Postal Service Clerks | ST OJT | 3,800 | 3,490 | -8.2% | -32 | 166 | 130 | 264 |
| 43-5052 | Postal Service Mail Carriers | ST OJT | 13,570 | 12,450 | -8.3% | -113 | 452 | 467 | 806 |
| 43-5053 | Postal Service Mail Sorters, Processors & Processing Machine Operators | ST OJT | 5,500 | 4,910 | -10.7% | -59 | 284 | 169 | 394 |
| 43-5061 | Production, Planning & Expediting Clerks | MT OJT | 11,080 | 11,950 | 7.9% | 87 | 411 | 748 | 1,246 |
| 43-5071 | Shipping, Receiving & Traffic Clerks | ST OJT | 27,380 | 26,350 | -3.8% | -103 | 981 | 1,579 | 2,457 |
| 43-5111 | Weighers, Measurers, Checkers & Samplers, Recordkeeping | ST OJT | 2,560 | 2,950 | 15.2% | 39 | 104 | 156 | 299 |
| 43-6000 | Secretaries & Administrative Assistants | N/A | 135,050 | 125,400 | -7.1% | -965 | 6,626 | 7,272 | 12,933 |
| 43-6011 | Executive Secretaries & Executive Administrative Assistants | WK EXP | 14,800 | 12,070 | -18.4% | -273 | 684 | 750 | 1,161 |
| 43-6012 | Legal Secretaries | MT OJT | 6,290 | 5,020 | -20.2% | -126 | 288 | 316 | 478 |
| 43-6013 | Medical Secretaries | MT OJT | 22,410 | 24,860 | 10.9% | 245 | 1,202 | 1,320 | 2,767 |
| 43-6014 | Secretaries | ST OJT | 91,550 | 83,450 | -8.8% | -810 | 4,452 | 4,886 | 8,528 |
| 43-9000 | Other Office & Administrative Support Workers | N/A | 186,470 | 179,040 | -4.0% | -744 | 9,625 | 10,917 | 19,798 |
| 43-9021 | Data Entry Keyers | ST OJT | 7,010 | 5,370 | -23.4% | -164 | 276 | 392 | 504 |
| 43-9022 | Word Processors & Typists | ST OJT | 6,500 | 4,120 | -36.6% | -238 | 319 | 288 | 369 |
| 43-9031 | Desktop Publishers | AD | 360 | 290 | -19.4% | -7 | 13 | 22 | 28 |
| 43-9041 | Insurance Claims & Policy Processing Clerks | MT OJT | 10,850 | 10,720 | -1.2% | -14 | 380 | 632 | 998 |
| 43-9051 | Mail Clerks & Mail Machine Operators | ST OJT | 3,690 | 3,500 | -5.1% | -20 | 182 | 225 | 387 |
| 43-9061 | Office Clerks, General | ST OJT | 150,220 | 147,140 | -2.1% | -308 | 8,113 | 8,817 | 16,622 |
| 43-9071 | Office Machine Operators | ST OJT | 1,830 | 1,580 | -13.7% | -25 | 89 | 102 | 166 |
| 43-9081 | Proofreaders & Copy Markers | BD | 470 | 500 | 6.4% | 3 | 30 | 32 | 65 |
| 43-9111 | Statistical Assistants | BD | 590 | 630 | 6.8% | 4 | 14 | 56 | 74 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|--|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 43-9199 | Office & Administrative Support Workers, Other | ST OJT | 4,960 | 5,200 | 4.8% | 24 | 210 | 352 | 586 |
| 45-0000 | Farming, Fishing & Forestry Occupations | N/A | 42,050 | 43,120 | 2.5% | 107 | 1,784 | 4,832 | 6,723 |
| 45-1000 | Supervisors - Farming, Fishing & Forestry Workers | N/A | 2,150 | 2,300 | 7.0% | 15 | 82 | 231 | 328 |
| 45-1011 | Farm & Forestry Worker Supervisors | WK EXP | 2,150 | 2,300 | 7.0% | 15 | 82 | 231 | 328 |
| 45-2000 | Agricultural Workers | N/A | 38,340 | 39,220 | 2.3% | 88 | 1,640 | 4,425 | 6,153 |
| 45-2011 | Agricultural Inspectors | BD+ | 400 | 410 | 2.5% | 1 | 18 | 47 | 66 |
| 45-2021 | Animal Breeders | ST OJT | 550 | 570 | 3.6% | 2 | 24 | 64 | 90 |
| 45-2041 | Graders & Sorters, Agricultural Products | ST OJT | 1,200 | 1,150 | -4.2% | -6 | 46 | 127 | 167 |
| 45-2091 | Agricultural Equipment Operators | MT OJT | 2,490 | 2,770 | 11.2% | 29 | 111 | 301 | 441 |
| 45-2092 | Farmworkers & Laborers, Crop, Nursery & Greenhouse | ST OJT | 22,080 | 22,670 | 2.7% | 59 | 948 | 2,557 | 3,564 |
| 45-2093 | Farmworkers, Farm, Ranch & Aquacultural Animals | ST OJT | 11,300 | 11,300 | 0.0% | 0 | 479 | 1,292 | 1,771 |
| 45-2099 | Agricultural Workers, Other | ST OJT | 330 | 350 | 6.1% | 2 | 14 | 39 | 55 |
| 45-4000 | Forest, Conservation & Logging Workers | N/A | 1,440 | 1,460 | 1.4% | 2 | 55 | 163 | 220 |
| 45-4011 | Forest & Conservation Workers | MT OJT | 330 | 310 | -6.1% | -2 | 14 | 34 | 46 |
| 45-4022 | Logging Equipment Operators | MT OJT | 510 | 540 | 5.9% | 3 | 19 | 60 | 82 |
| 45-4023 | Log Graders & Scalers | MT OJT | 140 | 140 | 0.0% | 1 | 5 | 16 | 22 |
| 47-0000 | Construction & Extraction Occupations | N/A | 244,620 | 258,590 | 5.7% | 1,397 | 7,632 | 17,132 | 26,161 |
| 47-1000 | Supervisors - Construction & Extraction Workers | N/A | 23,260 | 24,690 | 6.1% | 144 | 678 | 1,552 | 2,374 |
| 47-1011 | Supervisors - Construction Trades & Extraction Workers | WK EXP | 23,260 | 24,690 | 6.1% | 144 | 678 | 1,552 | 2,374 |
| 47-2000 | Construction Trades Workers | N/A | 180,720 | 191,760 | 6.1% | 1,104 | 5,462 | 12,496 | 19,062 |
| 47-2011 | Boilermakers | LT OJT | 340 | 330 | -2.9% | -2 | 6 | 24 | 28 |
| 47-2021 | Brickmasons & Blockmasons | LT OJT | 3,630 | 3,610 | -0.6% | -2 | 115 | 223 | 336 |
| 47-2022 | Stonemasons | LT OJT | 290 | 300 | 3.4% | 1 | 9 | 18 | 28 |
| 47-2031 | Carpenters | LT OJT | 37,620 | 38,520 | 2.4% | 90 | 1,111 | 2,375 | 3,576 |
| 47-2041 | Carpet Installers | ST OJT | 1,910 | 1,800 | -5.8% | -12 | 49 | 108 | 145 |
| 47-2042 | Floor Layers | MT OJT | 450 | 510 | 13.3% | 6 | 13 | 28 | 47 |
| 47-2043 | Floor Sanders & Finishers | MT OJT | 340 | 360 | 5.9% | 2 | 9 | 20 | 31 |
| 47-2044 | Tile & Marble Setters | LT OJT | 1,190 | 1,340 | 12.6% | 14 | 33 | 73 | 120 |
| 47-2051 | Cement Masons & Concrete Finishers | MT OJT | 3,780 | 3,850 | 1.9% | 8 | 92 | 251 | 351 |
| 47-2053 | Terrazzo Workers & Finishers | LT OJT | 150 | 140 | -6.7% | -1 | 4 | 9 | 12 |
| 47-2061 | Construction Laborers | ST OJT | 47,620 | 52,000 | 9.2% | 438 | 1,472 | 3,364 | 5,274 |
| 47-2071 | Paving, Surfacing & Tamping Equipment Operators | MT OJT | 1,170 | 1,230 | 5.1% | 6 | 39 | 86 | 131 |
| 47-2073 | Operating Engineers & Other Construction Equipment Operators | MT OJT | 21,070 | 22,120 | 5.0% | 105 | 706 | 1,548 | 2,359 |
| 47-2081 | Drywall & Ceiling Tile Installers | MT OJT | 2,390 | 2,520 | 5.4% | 13 | 61 | 139 | 213 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 47-2082 | Tapers | MT OJT | 340 | 350 | 2.9% | 0 | 9 | 20 | 29 |
| 47-2111 | Electricians | LT OJT | 21,360 | 23,390 | 9.5% | 203 | 650 | 1,643 | 2,496 |
| 47-2121 | Glaziers | LT OJT | 940 | 1,040 | 10.6% | 10 | 26 | 76 | 112 |
| 47-2131 | Insulation Workers, Floor, Ceiling & Wall | ST OJT | 490 | 520 | 6.1% | 3 | 12 | 34 | 49 |
| 47-2132 | Insulation Workers, Mechanical | LT OJT | 520 | 550 | 5.8% | 3 | 13 | 36 | 52 |
| 47-2141 | Painters, Construction & Maintenance | MT OJT | 8,700 | 9,210 | 5.9% | 51 | 271 | 496 | 818 |
| 47-2142 | Paperhangers | LT OJT | 230 | 250 | 8.7% | 2 | 7 | 13 | 22 |
| 47-2151 | Pipelayers | ST OJT | 450 | 460 | 2.2% | 1 | 13 | 33 | 47 |
| 47-2152 | Plumbers, Pipefitters & Steamfitters | LT OJT | 15,250 | 16,060 | 5.3% | 82 | 456 | 1,126 | 1,664 |
| 47-2161 | Plasterers & Stucco Masons | LT OJT | 490 | 520 | 6.1% | 3 | 14 | 26 | 43 |
| 47-2171 | Reinforcing Iron & Rebar Workers | LT OJT | 260 | 280 | 7.7% | 2 | 9 | 17 | 28 |
| 47-2181 | Roofers | MT OJT | 4,480 | 4,860 | 8.5% | 38 | 116 | 326 | 480 |
| 47-2211 | Sheet Metal Workers | LT OJT | 2,970 | 3,080 | 3.7% | 11 | 82 | 196 | 289 |
| 47-2221 | Structural Iron & Steel Workers | LT OJT | 2,120 | 2,310 | 9.0% | 19 | 57 | 170 | 246 |
| 47-3000 | Helpers, Construction Trades | N/A | 5,830 | 6,010 | 3.1% | 17 | 174 | 518 | 709 |
| 47-3011 | Helpers--Brick, Block, Stonemasons, Tile & Marble Setters | ST OJT | 580 | 600 | 3.4% | 2 | 17 | 52 | 71 |
| 47-3012 | Helpers--Carpenters | ST OJT | 1,200 | 1,200 | 0.0% | 1 | 35 | 105 | 141 |
| 47-3013 | Helpers--Electricians | ST OJT | 2,040 | 2,050 | 0.5% | 1 | 60 | 179 | 240 |
| 47-3015 | Helpers--Pipelayers, Plumbers, Pipefitters & Steamfitters | ST OJT | 870 | 920 | 5.7% | 5 | 26 | 79 | 110 |
| 47-3019 | Helpers, Construction Trades, Other | ST OJT | 650 | 690 | 6.2% | 4 | 20 | 59 | 83 |
| 47-4000 | Other Construction & Related Workers | N/A | 25,260 | 26,600 | 5.3% | 134 | 1,066 | 1,702 | 2,902 |
| 47-4011 | Construction & Building Inspectors | WK EXP | 7,010 | 7,150 | 2.0% | 13 | 385 | 428 | 826 |
| 47-4021 | Elevator Installers & Repairers | LT OJT | 730 | 780 | 6.8% | 4 | 17 | 52 | 73 |
| 47-4031 | Fence Erectors | MT OJT | 680 | 710 | 4.4% | 4 | 17 | 52 | 73 |
| 47-4041 | Hazardous Materials Removal Workers | MT OJT | 1,510 | 1,610 | 6.6% | 11 | 59 | 127 | 197 |
| 47-4051 | Highway Maintenance Workers | MT OJT | 12,530 | 13,230 | 5.6% | 70 | 505 | 808 | 1,383 |
| 47-4061 | Rail-Track Laying & Maintenance Equipment Operators | MT OJT | 750 | 780 | 4.0% | 3 | 13 | 53 | 69 |
| 47-4071 | Septic Tank Servicers & Sewer Pipe Cleaners | MT OJT | 1,570 | 1,830 | 16.6% | 25 | 54 | 141 | 220 |
| 47-4090 | Miscellaneous Construction & Related Workers | MT OJT | 480 | 520 | 8.3% | 4 | 16 | 41 | 61 |
| 47-5000 | Extraction Workers | N/A | 9,550 | 9,520 | -0.3% | -2 | 252 | 864 | 1,114 |
| 47-5011 | Derrick Operators, Oil & Gas | ST OJT | 110 | 100 | -9.1% | 0 | 2 | 10 | 12 |
| 47-5012 | Rotary Drill Operators, Oil & Gas | MT OJT | 590 | 570 | -3.4% | -2 | 12 | 56 | 66 |
| 47-5013 | Service Unit Operators, Oil, Gas & Mining | MT OJT | 1,720 | 1,650 | -4.1% | -6 | 34 | 163 | 191 |
| 47-5022 | Excavating/Loading/Dragline Machine Oprs, Surface Mining | WK EXP | 1,360 | 1,380 | 1.5% | 2 | 42 | 117 | 161 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

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|----------------|--|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 47-5041 | Continuous Mining Machine Operators | MT OJT | 570 | 570 | 0.0% | 0 | 18 | 49 | 67 |
| 47-5051 | Rock Splitters, Quarry | ST OJT | 790 | 800 | 1.3% | 0 | 25 | 68 | 93 |
| 47-5071 | Roustabouts, Oil & Gas | MT OJT | 1,770 | 1,790 | 1.1% | 2 | 36 | 172 | 210 |
| 47-5081 | Helpers--Extraction Workers | MT OJT | 920 | 960 | 4.3% | 4 | 29 | 80 | 113 |
| 47-5097 | Earth Drillers, Explosives Workers & Ordnance Handlers | WK EXP | 820 | 850 | 3.7% | 3 | 26 | 71 | 100 |
| 49-0000 | Installation, Maintenance & Repair Occupations | N/A | 232,680 | 250,670 | 7.7% | 1,799 | 7,557 | 15,274 | 24,630 |
| 49-1000 | Supervisors - Installation, Maintenance & Repair Workers | N/A | 19,750 | 21,150 | 7.1% | 140 | 593 | 1,216 | 1,949 |
| 49-1011 | Supervisors - Mechanics, Installers & Repairers | WK EXP | 19,750 | 21,150 | 7.1% | 140 | 593 | 1,216 | 1,949 |
| 49-2000 | Electrical & Electronic Equipment Mechanics, Installers & Repairers | N/A | 19,990 | 21,230 | 6.2% | 124 | 633 | 1,441 | 2,198 |
| 49-2011 | Computer, Automated Teller & Office Machine Repairers | PS | 4,740 | 4,890 | 3.2% | 15 | 145 | 366 | 526 |
| 49-2021 | Radio, Cellular & Tower Equipment Installers & Repairers | AD+ | 630 | 690 | 9.5% | 6 | 23 | 51 | 80 |
| 49-2022 | Telecommunications Equipment Installers & Repairers | PS+ | 5,850 | 6,400 | 9.4% | 54 | 213 | 470 | 737 |
| 49-2091 | Avionics Technicians | AD | 250 | 260 | 4.0% | 2 | 6 | 11 | 19 |
| 49-2092 | Electric Motor, Power Tool & Related Repairers | WK EXP | 770 | 810 | 5.2% | 4 | 30 | 46 | 80 |
| 49-2093 | Electrical & Electronics Installers & Repairers, Transportation Equipment | PS+ | 400 | 410 | 2.5% | 1 | 11 | 20 | 32 |
| 49-2094 | Electrical & Electronics Repairers, Commercial & Industrial Equipment | PS+ | 2,470 | 2,610 | 5.7% | 14 | 70 | 126 | 210 |
| 49-2095 | Electrical & Electronics Repairers, Powerhouse, Substation & Relay | PS+ | 990 | 1,020 | 3.0% | 3 | 28 | 50 | 81 |
| 49-2097 | Electronic Home Entertainment Equipment Installers & Repairers | PS | 1,280 | 1,320 | 3.1% | 5 | 42 | 94 | 141 |
| 49-2098 | Security & Fire Alarm Systems Installers | MT OJT | 2,530 | 2,770 | 9.5% | 24 | 63 | 204 | 291 |
| 49-3000 | Vehicle & Mobile Equipment Mechanics, Installers | N/A | 68,650 | 71,780 | 4.6% | 313 | 2,121 | 4,634 | 7,068 |
| 49-3011 | Aircraft Mechanics & Service Technicians | PS | 2,330 | 2,540 | 9.0% | 21 | 70 | 127 | 218 |
| 49-3021 | Automotive Body & Related Repairers | LT OJT | 7,640 | 8,070 | 5.6% | 43 | 249 | 467 | 759 |
| 49-3022 | Automotive Glass Installers & Repairers | MT OJT | 680 | 750 | 10.3% | 7 | 23 | 51 | 81 |
| 49-3023 | Automotive Service Technicians & Mechanics | PS | 32,230 | 32,480 | 0.8% | 24 | 962 | 2,195 | 3,181 |
| 49-3031 | Bus & Truck Mechanics & Diesel Engine Specialists | LT OJT | 12,250 | 13,260 | 8.2% | 101 | 361 | 795 | 1,257 |
| 49-3041 | Farm Equipment Mechanics & Service Technicians | LT OJT | 1,450 | 1,620 | 11.7% | 16 | 46 | 104 | 166 |
| 49-3042 | Mobile Heavy Equipment Mechanics | LT OJT | 6,040 | 6,700 | 10.9% | 66 | 190 | 430 | 686 |
| 49-3043 | Rail Car Repairers | LT OJT | 690 | 700 | 1.4% | 1 | 21 | 47 | 69 |
| 49-3051 | Motorboat Mechanics & Service Technicians | LT OJT | 390 | 440 | 12.8% | 5 | 18 | 27 | 50 |
| 49-3052 | Motorcycle Mechanics | PS | 570 | 610 | 7.0% | 4 | 26 | 39 | 69 |
| 49-3053 | Outdoor Power Equipment & Other Small Engine Mechanics | MT OJT | 1,340 | 1,420 | 6.0% | 8 | 60 | 91 | 159 |
| 49-3091 | Bicycle Repairers | MT OJT | 390 | 420 | 7.7% | 3 | 13 | 34 | 50 |
| 49-3092 | Recreational Vehicle Service Technicians | LT OJT | 380 | 450 | 18.4% | 7 | 13 | 34 | 54 |
| 49-3093 | Tire Repairers & Changers | ST OJT | 2,270 | 2,330 | 2.6% | 7 | 71 | 191 | 269 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 49-9000 | Other Installation, Maintenance & Repair Occupations | N/A | 124,290 | 136,500 | 9.8% | 1,222 | 4,209 | 7,983 | 13,414 |
| 49-9011 | Mechanical Door Repairers | MT OJT | 590 | 640 | 8.5% | 5 | 14 | 35 | 54 |
| 49-9012 | Control & Valve Installers & Repairers | MT OJT | 1,660 | 1,700 | 2.4% | 4 | 38 | 96 | 138 |
| 49-9021 | Heating, A/C & Refrigeration Mechanics & Installers | PS+ | 16,240 | 17,040 | 4.9% | 79 | 427 | 1,135 | 1,641 |
| 49-9031 | Home Appliance Repairers | MT OJT | 1,440 | 1,480 | 2.8% | 5 | 55 | 85 | 145 |
| 49-9041 | Industrial Machinery Mechanics | LT OJT | 19,640 | 24,010 | 22.3% | 437 | 671 | 1,179 | 2,287 |
| 49-9043 | Maintenance Workers, Machinery | LT OJT | 2,980 | 3,320 | 11.4% | 34 | 104 | 172 | 310 |
| 49-9044 | Millwrights | LT OJT | 1,900 | 2,090 | 10.0% | 18 | 58 | 113 | 189 |
| 49-9051 | Electrical Power-Line Installers & Repairers | LT OJT | 3,910 | 4,150 | 6.1% | 24 | 76 | 271 | 371 |
| 49-9052 | Telecommunications Line Installers & Repairers | LT OJT | 5,350 | 5,840 | 9.2% | 48 | 124 | 472 | 644 |
| 49-9061 | Camera & Photographic Equipment Repairers | LT OJT | 110 | 120 | 9.1% | 1 | 5 | 7 | 13 |
| 49-9062 | Medical Equipment Repairers | AD+ | 2,260 | 2,380 | 5.3% | 13 | 102 | 139 | 254 |
| 49-9063 | Musical Instrument Repairers & Tuners | LT OJT | 610 | 590 | -3.3% | -2 | 26 | 36 | 60 |
| 49-9069 | Precision Instrument & Equipment Repairers, Other | LT OJT | 300 | 320 | 6.7% | 1 | 14 | 18 | 33 |
| 49-9071 | Maintenance & Repair Workers, General | MT OJT | 57,830 | 62,780 | 8.6% | 495 | 2,125 | 3,518 | 6,138 |
| 49-9081 | Wind Turbine Service Technicians | PS+ | 310 | 450 | 45.2% | 14 | 13 | 25 | 52 |
| 49-9091 | Coin, Vending & Amusement Machine Servicers & Repairers | ST OJT | 920 | 1,070 | 16.3% | 14 | 44 | 72 | 130 |
| 49-9094 | Locksmiths & Safe Repairers | LT OJT | 540 | 490 | -9.3% | -5 | 20 | 32 | 47 |
| 49-9095 | Manufactured Building & Mobile Home Installers | ST OJT | 160 | 130 | -18.8% | -3 | 5 | 9 | 11 |
| 49-9096 | Riggers | MT OJT | 380 | 400 | 5.3% | 2 | 8 | 30 | 40 |
| 49-9098 | Helpers--Installation, Maintenance & Repair Workers | ST OJT | 2,730 | 2,920 | 7.0% | 19 | 121 | 237 | 377 |
| 49-9099 | Installation, Maintenance & Repair Workers, Other | MT OJT | 3,880 | 4,070 | 4.9% | 18 | 140 | 265 | 423 |
| 51-0000 | Production Occupations | N/A | 361,760 | 362,070 | 0.1% | 31 | 13,467 | 25,736 | 39,234 |
| 51-1000 | Supervisors - Production Workers | N/A | 26,960 | 28,170 | 4.5% | 121 | 829 | 1,854 | 2,804 |
| 51-1011 | Supervisors - Production & Operating Workers | WK EXP | 26,960 | 28,170 | 4.5% | 121 | 829 | 1,854 | 2,804 |
| 51-2000 | Assemblers & Fabricators | N/A | 64,930 | 60,480 | -6.9% | -446 | 2,377 | 4,403 | 6,334 |
| 51-2011 | Aircraft Structure, Surfaces, Rigging & Systems Assemblers | MT OJT | 1,170 | 1,060 | -9.4% | -11 | 42 | 80 | 111 |
| 51-2028 | Electrical, Electronic, & Electromechanical Assemblers | MT OJT | 12,430 | 12,890 | 3.7% | 46 | 509 | 811 | 1,366 |
| 51-2031 | Engine & Other Machine Assemblers | MT OJT | 1,100 | 960 | -12.7% | -15 | 36 | 76 | 97 |
| 51-2041 | Structural Metal Fabricators & Fitters | MT OJT | 2,600 | 2,310 | -11.2% | -30 | 55 | 196 | 221 |
| 51-2051 | Fiberglass Laminators & Fabricators | MT OJT | 530 | 580 | 9.4% | 5 | 21 | 39 | 65 |
| 51-2090 | Misc. Assemblers & Fabricators | MT OJT | 46,610 | 42,270 | -9.3% | -434 | 1,696 | 3,172 | 4,434 |
| 51-3000 | Food Processing Workers | N/A | 26,520 | 27,910 | 5.2% | 139 | 1,308 | 2,045 | 3,492 |
| 51-3011 | Bakers | LT OJT | 9,090 | 9,840 | 8.3% | 74 | 527 | 708 | 1,309 |

**Pennsylvania
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2020-2030 Long-Term Projections**

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|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 51-3021 | Butchers & Meat Cutters | LT OJT | 3,830 | 3,850 | 0.5% | 2 | 156 | 285 | 443 |
| 51-3022 | Meat, Poultry & Fish Cutters & Trimmers | ST OJT | 3,150 | 3,290 | 4.4% | 15 | 131 | 239 | 385 |
| 51-3023 | Slaughterers & Meat Packers | ST OJT | 2,330 | 2,440 | 4.7% | 11 | 97 | 177 | 285 |
| 51-3091 | Food & Tobacco Roasting, Baking & Drying Machine Operators | MT OJT | 710 | 740 | 4.2% | 3 | 28 | 54 | 85 |
| 51-3092 | Food Batchmakers | MT OJT | 6,180 | 6,460 | 4.5% | 28 | 294 | 471 | 793 |
| 51-3093 | Food Cooking Machine Operators | MT OJT | 830 | 860 | 3.6% | 3 | 60 | 84 | 147 |
| 51-3099 | Food Processing Workers, Other | MT OJT | 410 | 430 | 4.9% | 2 | 15 | 27 | 44 |
| 51-4000 | Metal Workers & Plastic Workers | N/A | 81,970 | 83,290 | 1.6% | 131 | 2,620 | 5,786 | 8,537 |
| 51-4021 | Extruding & Drawing Machine Operators | MT OJT | 4,070 | 3,880 | -4.7% | -19 | 138 | 245 | 364 |
| 51-4022 | Forging Machine Operators | MT OJT | 780 | 650 | -16.7% | -13 | 25 | 44 | 56 |
| 51-4023 | Rolling Machine Operators | MT OJT | 1,280 | 1,190 | -7.0% | -9 | 43 | 76 | 110 |
| 51-4031 | Cutting, Punching & Press Machine Operators | MT OJT | 6,910 | 6,660 | -3.6% | -25 | 215 | 467 | 657 |
| 51-4033 | Grinding, Lapping, Polishing & Buffing Machine Tool Operators | MT OJT | 3,620 | 3,460 | -4.4% | -16 | 159 | 243 | 386 |
| 51-4034 | Lathe & Turning Machine Tool Operators | MT OJT | 950 | 890 | -6.3% | -6 | 30 | 62 | 86 |
| 51-4035 | Milling & Planing Machine Operators | MT OJT | 610 | 510 | -16.4% | -10 | 18 | 38 | 46 |
| 51-4041 | Machinists | LT OJT | 15,330 | 16,410 | 7.0% | 109 | 531 | 1,079 | 1,719 |
| 51-4051 | Metal-Refining Furnace Operators | MT OJT | 1,430 | 1,460 | 2.1% | 3 | 32 | 99 | 134 |
| 51-4052 | Pourers & Casters, Metal | MT OJT | 910 | 860 | -5.5% | -4 | 20 | 61 | 77 |
| 51-4062 | Patternmakers | MT OJT | 170 | 170 | 0.0% | 0 | 6 | 12 | 18 |
| 51-4071 | Foundry Mold & Coremakers | MT OJT | 550 | 530 | -3.6% | -2 | 18 | 37 | 53 |
| 51-4072 | Molding, Coremaking & Casting Machine Operators | MT OJT | 6,960 | 6,670 | -4.2% | -29 | 222 | 461 | 654 |
| 51-4081 | Multiple Machine Tool Operators | MT OJT | 9,850 | 10,390 | 5.5% | 54 | 329 | 685 | 1,068 |
| 51-4111 | Tool & Die Makers | PS+ | 3,750 | 3,730 | -0.5% | -2 | 138 | 236 | 372 |
| 51-4121 | Welders, Cutters, Solderers & Brazers | MT OJT | 18,250 | 19,560 | 7.2% | 131 | 497 | 1,491 | 2,119 |
| 51-4122 | Welding, Soldering & Brazing Machine Operators | MT OJT | 1,510 | 1,430 | -5.3% | -8 | 39 | 116 | 147 |
| 51-4191 | Heat Treating Equipment Operators | MT OJT | 1,190 | 1,130 | -5.0% | -6 | 38 | 78 | 110 |
| 51-4192 | Layout Workers | MT OJT | 300 | 310 | 3.3% | 1 | 10 | 20 | 31 |
| 51-4193 | Plating & Coating Machine Operators | MT OJT | 1,570 | 1,520 | -3.2% | -5 | 50 | 104 | 149 |
| 51-4194 | Tool Grinders, Filers & Sharpeners | MT OJT | 180 | 170 | -5.6% | -1 | 6 | 12 | 17 |
| 51-4199 | Metal Workers & Plastic Workers, Other | MT OJT | 1,090 | 1,080 | -0.9% | -1 | 35 | 73 | 107 |
| 51-5100 | Printing Workers | N/A | 10,630 | 10,420 | -2.0% | -21 | 404 | 750 | 1,133 |
| 51-5111 | Prepress Technician & Workers | PS | 920 | 810 | -12.0% | -12 | 33 | 83 | 104 |
| 51-5112 | Printing Press Operators | MT OJT | 8,030 | 8,070 | 0.5% | 3 | 292 | 567 | 862 |
| 51-5113 | Print Binding & Finishing Workers | MT OJT | 1,670 | 1,550 | -7.2% | -13 | 79 | 101 | 167 |

**Pennsylvania
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2020-2030 Long-Term Projections**

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|----------------|--|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 51-6000 | Textile, Apparel & Furnishings Workers | N/A | 16,420 | 16,810 | 2.4% | 39 | 1,002 | 1,012 | 2,053 |
| 51-6011 | Laundry & Dry-Cleaning Workers | ST OJT | 5,940 | 6,630 | 11.6% | 69 | 407 | 422 | 898 |
| 51-6021 | Pressers: Textile, Garment & Related Materials | ST OJT | 1,240 | 1,150 | -7.3% | -10 | 52 | 72 | 114 |
| 51-6031 | Sewing Machine Operators | ST OJT | 4,310 | 4,190 | -2.8% | -12 | 257 | 224 | 469 |
| 51-6041 | Shoe & Leather Workers & Repairers | MT OJT | 70 | 70 | 0.0% | 0 | 4 | 4 | 8 |
| 51-6042 | Shoe Machine Operators | ST OJT | 260 | 250 | -3.8% | 0 | 14 | 16 | 30 |
| 51-6051 | Sewers, Hand | MT OJT | 190 | 190 | 0.0% | 0 | 15 | 10 | 25 |
| 51-6052 | Tailors, Dressmakers & Custom Sewers | MT OJT | 1,160 | 1,060 | -8.6% | -10 | 88 | 56 | 134 |
| 51-6061 | Textile Bleaching & Dyeing Machine Operators | ST OJT | 160 | 170 | 6.2% | 0 | 9 | 11 | 20 |
| 51-6062 | Textile Cutting Machine Operators | MT OJT | 370 | 380 | 2.7% | 0 | 20 | 24 | 44 |
| 51-6063 | Textile Knitting & Weaving Machine Operators | ST OJT | 740 | 730 | -1.4% | -1 | 40 | 48 | 87 |
| 51-6064 | Textile Winding, Twisting & Drawing Out Machine Operators | MT OJT | 730 | 720 | -1.4% | -1 | 39 | 47 | 85 |
| 51-6091 | Extruding & Forming Machine Operators, Synthetic & Glass Fibers | MT OJT | 390 | 390 | 0.0% | 0 | 21 | 25 | 46 |
| 51-6092 | Fabric & Apparel Patternmakers | MT OJT | 70 | 70 | 0.0% | 0 | 4 | 4 | 8 |
| 51-6093 | Upholsterers | MT OJT | 400 | 430 | 7.5% | 3 | 12 | 23 | 38 |
| 51-6099 | Textile, Apparel & Furnishings Workers, Other | ST OJT | 380 | 400 | 5.3% | 1 | 21 | 25 | 47 |
| 51-7000 | Woodworkers | N/A | 11,790 | 12,790 | 8.5% | 101 | 446 | 817 | 1,364 |
| 51-7011 | Cabinetmakers & Bench Carpenters | MT OJT | 4,610 | 5,030 | 9.1% | 42 | 181 | 267 | 490 |
| 51-7021 | Furniture Finishers | ST OJT | 960 | 1,030 | 7.3% | 7 | 59 | 75 | 141 |
| 51-7041 | Sawing Machine Operators, Wood | MT OJT | 2,210 | 2,320 | 5.0% | 11 | 80 | 172 | 263 |
| 51-7042 | Woodworking Machine Operators | MT OJT | 3,930 | 4,320 | 9.9% | 39 | 122 | 298 | 459 |
| 51-8000 | Plant & System Operators | N/A | 13,040 | 12,670 | -2.8% | -37 | 382 | 873 | 1,218 |
| 51-8011 | Nuclear Power Reactor Operators | LT OJT | 330 | 230 | -30.3% | -10 | 7 | 18 | 15 |
| 51-8012 | Power Distributors & Dispatchers | LT OJT | 480 | 470 | -2.1% | -1 | 12 | 32 | 43 |
| 51-8013 | Power Plant Operators | LT OJT | 1,450 | 1,330 | -8.3% | -12 | 36 | 93 | 117 |
| 51-8021 | Stationary Engineers & Boiler Operators | LT OJT | 1,910 | 2,000 | 4.7% | 9 | 94 | 139 | 242 |
| 51-8031 | Water & Wastewater Treatment Plant & System Operators | LT OJT | 5,800 | 5,570 | -4.0% | -23 | 160 | 352 | 489 |
| 51-8092 | Gas Plant Operators | LT OJT | 770 | 790 | 2.6% | 2 | 18 | 61 | 81 |
| 51-8093 | Petroleum Pump System Operators, Refinery Operators & Gaugers | MT OJT | 1,290 | 1,300 | 0.8% | 1 | 30 | 100 | 131 |
| 51-9000 | Other Production Occupations | N/A | 109,500 | 109,540 | 0.0% | 4 | 4,099 | 8,197 | 12,300 |
| 51-9011 | Chemical Equipment Operators | MT OJT | 5,100 | 4,840 | -5.1% | -27 | 109 | 385 | 467 |
| 51-9012 | Separating, Filtering, Clarifying, Precipitating & Still Machine Operators | MT OJT | 2,180 | 2,230 | 2.3% | 5 | 48 | 171 | 224 |
| 51-9021 | Crushing, Grinding & Polishing Machine Operators | MT OJT | 1,260 | 1,230 | -2.4% | -3 | 42 | 93 | 132 |
| 51-9022 | Grinding & Polishing Workers, Hand | MT OJT | 1,340 | 1,160 | -13.4% | -18 | 42 | 93 | 117 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 51-9023 | Mixing & Blending Machine Operators | MT OJT | 4,140 | 4,320 | 4.3% | 18 | 143 | 316 | 477 |
| 51-9031 | Cutters & Trimmers, Hand | ST OJT | 390 | 300 | -23.1% | -9 | 16 | 26 | 33 |
| 51-9032 | Cutting & Slicing Machine Operators | MT OJT | 2,240 | 2,210 | -1.3% | -2 | 100 | 169 | 267 |
| 51-9041 | Extruding, Forming, Pressing & Compacting Machine Operators | MT OJT | 2,870 | 2,990 | 4.2% | 12 | 80 | 216 | 308 |
| 51-9051 | Furnace, Kiln, Oven, Drier & Kettle Operators | MT OJT | 540 | 560 | 3.7% | 2 | 19 | 34 | 55 |
| 51-9061 | Inspectors, Testers, Sorters, Samplers & Weighers | MT OJT | 19,550 | 17,250 | -11.8% | -230 | 707 | 1,461 | 1,938 |
| 51-9071 | Jewelers & Precious Stone & Metal Workers | LT OJT | 720 | 710 | -1.4% | -2 | 38 | 48 | 84 |
| 51-9081 | Dental Laboratory Technicians | MT OJT | 1,460 | 1,660 | 13.7% | 20 | 70 | 127 | 217 |
| 51-9082 | Medical Appliance Technicians | MT OJT | 660 | 750 | 13.6% | 9 | 32 | 58 | 99 |
| 51-9083 | Ophthalmic Laboratory Technicians | MT OJT | 710 | 790 | 11.3% | 8 | 34 | 61 | 103 |
| 51-9111 | Packaging & Filling Machine Operators | MT OJT | 19,530 | 20,530 | 5.1% | 100 | 826 | 1,329 | 2,255 |
| 51-9124 | Coating, Painting & Spraying Machine Setters/Oprs/Tenders | MT OJT | 6,720 | 7,220 | 7.4% | 50 | 192 | 500 | 742 |
| 51-9141 | Semiconductor Processors | MT OJT | 690 | 680 | -1.4% | -1 | 24 | 51 | 74 |
| 51-9151 | Photographic Process Workers & Processing Machine Operators | ST OJT | 510 | 410 | -19.6% | -10 | 21 | 48 | 59 |
| 51-9161 | CNC Tool Operators | MT OJT | 11,060 | 11,160 | 0.9% | 9 | 380 | 821 | 1,210 |
| 51-9162 | CNC Tool Programmers | PS+ | 790 | 1,010 | 27.8% | 21 | 31 | 66 | 118 |
| 51-9191 | Adhesive Bonding Machine Operators | MT OJT | 500 | 510 | 2.0% | 0 | 28 | 34 | 62 |
| 51-9192 | Cleaning, Washing & Metal Pickling Equipment Operators | MT OJT | 660 | 690 | 4.5% | 4 | 23 | 50 | 77 |
| 51-9193 | Cooling & Freezing Equipment Operators | MT OJT | 370 | 380 | 2.7% | 1 | 13 | 27 | 41 |
| 51-9195 | Molders, Shapers & Casters | LT OJT | 2,980 | 3,560 | 19.5% | 58 | 117 | 214 | 389 |
| 51-9196 | Paper Goods Machine Operators | MT OJT | 6,920 | 6,800 | -1.7% | -12 | 309 | 455 | 752 |
| 51-9197 | Tire Builders | MT OJT | 350 | 370 | 5.7% | 2 | 7 | 28 | 37 |
| 51-9198 | Helpers--Production Workers | ST OJT | 9,780 | 9,240 | -5.5% | -54 | 446 | 896 | 1,288 |
| 51-9199 | Production Workers, Other | MT OJT | 5,070 | 5,570 | 9.9% | 49 | 182 | 393 | 624 |
| 53-0000 | Transportation & Material Moving Occupations | N/A | 557,300 | 616,710 | 10.7% | 5,942 | 27,379 | 46,249 | 79,570 |
| 53-1000 | Supervisors - Transportation & Material Moving Workers | N/A | 22,230 | 24,120 | 8.5% | 189 | 846 | 1,606 | 2,641 |
| 53-1041 | Aircraft Cargo Handling Supervisors | WK EXP | 410 | 460 | 12.2% | 4 | 16 | 30 | 50 |
| 53-1047 | Supervisors - Transportation & Material Moving Workers | WK EXP | 21,810 | 23,670 | 8.5% | 185 | 830 | 1,576 | 2,591 |
| 53-2000 | Air Transportation Workers | N/A | 5,830 | 6,560 | 12.5% | 73 | 281 | 416 | 770 |
| 53-2012 | Commercial Pilots | MT OJT | 570 | 620 | 8.8% | 5 | 22 | 42 | 69 |
| 53-2021 | Air Traffic Controllers | AD+ | 740 | 770 | 4.1% | 2 | 20 | 52 | 74 |
| 53-2022 | Airfield Operations Specialists | LT OJT | 240 | 250 | 4.2% | 2 | 6 | 17 | 25 |
| 53-3000 | Motor Vehicle Operators | N/A | 190,560 | 213,350 | 12.0% | 2,279 | 9,513 | 12,848 | 24,640 |
| 53-3011 | Ambulance Drivers & Attendants | MT OJT | 1,150 | 1,210 | 5.2% | 6 | 46 | 83 | 135 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 53-3031 | Driver/Sales Workers | ST OJT | 14,290 | 16,280 | 13.9% | 199 | 626 | 1,036 | 1,861 |
| 53-3032 | Heavy & Tractor-Trailer Truck Drivers | PS | 88,100 | 93,620 | 6.3% | 552 | 3,721 | 6,161 | 10,434 |
| 53-3033 | Light Truck or Delivery Services Drivers | ST OJT | 44,880 | 48,900 | 9.0% | 403 | 1,920 | 3,180 | 5,503 |
| 53-3052 | Bus Drivers, Transit & Intercity | MT OJT | 5,750 | 6,720 | 16.9% | 96 | 410 | 310 | 816 |
| 53-3058 | Passenger Vehicle Drivers | ST OJT | 34,830 | 44,930 | 29.0% | 1,011 | 2,626 | 1,983 | 5,620 |
| 53-3099 | Motor Vehicle Operators, Other | ST OJT | 1,560 | 1,680 | 7.7% | 12 | 164 | 95 | 271 |
| 53-4000 | Rail Transportation Workers | N/A | 4,800 | 4,840 | 0.8% | 4 | 108 | 313 | 425 |
| 53-4011 | Locomotive Engineers | WK EXP | 1,090 | 1,100 | 0.9% | 1 | 24 | 71 | 96 |
| 53-4013 | Rail Yard Engineers, Dinkey Operators & Hostlers | MT OJT | 410 | 420 | 2.4% | 1 | 9 | 27 | 37 |
| 53-4022 | Railroad Brake/Signal/Switch Oprs & Locomotive Firers | MT OJT | 950 | 940 | -1.1% | -2 | 21 | 61 | 80 |
| 53-4031 | Railroad Conductors & Yardmasters | MT OJT | 2,280 | 2,310 | 1.3% | 3 | 51 | 149 | 203 |
| 53-4041 | Subway & Streetcar Operators | MT OJT | 60 | 70 | 16.7% | 0 | 1 | 4 | 5 |
| 53-5000 | Water Transportation Workers | N/A | 1,200 | 1,290 | 7.5% | 9 | 36 | 99 | 144 |
| 53-5011 | Sailors & Marine Oilers | MT OJT | 350 | 390 | 11.4% | 4 | 11 | 32 | 47 |
| 53-5021 | Captains, Mates & Pilots of Water Vessels | PS+ | 540 | 580 | 7.4% | 4 | 16 | 40 | 60 |
| 53-6000 | Other Transportation Workers | N/A | 9,650 | 10,300 | 6.7% | 65 | 487 | 915 | 1,467 |
| 53-6011 | Bridge & Lock Tenders | ST OJT | 50 | 50 | 0.0% | 0 | 2 | 5 | 7 |
| 53-6021 | Parking Lot Attendants | ST OJT | 4,820 | 5,130 | 6.4% | 31 | 242 | 515 | 788 |
| 53-6031 | Automotive & Watercraft Service Attendants | ST OJT | 2,530 | 2,750 | 8.7% | 23 | 122 | 234 | 379 |
| 53-6041 | Traffic Technicians | MT OJT | 150 | 160 | 6.7% | 0 | 7 | 14 | 21 |
| 53-6051 | Transportation Inspectors | MT OJT | 1,150 | 1,160 | 0.9% | 1 | 38 | 84 | 123 |
| 53-6061 | Transportation Attendants | ST OJT | 670 | 750 | 11.9% | 8 | 63 | 38 | 109 |
| 53-6098 | Aircraft Service Attendants & Other Transport'n Workers | ST OJT | 270 | 290 | 7.4% | 2 | 13 | 25 | 40 |
| 53-7000 | Material Moving Workers | N/A | 323,040 | 356,270 | 10.3% | 3,322 | 16,109 | 30,052 | 49,483 |
| 53-7011 | Conveyor Operators | ST OJT | 1,890 | 2,020 | 6.9% | 14 | 61 | 168 | 243 |
| 53-7021 | Crane & Tower Operators | WK EXP | 2,280 | 2,400 | 5.3% | 12 | 63 | 178 | 253 |
| 53-7051 | Industrial Truck & Tractor Operators | ST OJT | 34,070 | 37,840 | 11.1% | 377 | 1,082 | 2,760 | 4,219 |
| 53-7061 | Cleaners of Vehicles & Equipment | ST OJT | 12,030 | 13,140 | 9.2% | 110 | 616 | 1,120 | 1,846 |
| 53-7062 | Laborers & Freight, Stock & Material Movers | ST OJT | 137,610 | 151,530 | 10.1% | 1,392 | 6,326 | 12,579 | 20,297 |
| 53-7063 | Machine Feeders & Offbearers | ST OJT | 6,020 | 6,950 | 15.4% | 93 | 369 | 475 | 937 |
| 53-7064 | Packers & Packagers, Hand | ST OJT | 23,910 | 25,490 | 6.6% | 158 | 1,407 | 2,000 | 3,565 |
| 53-7065 | Stockers & Order Fillers | ST OJT | 98,450 | 109,490 | 11.2% | 1,104 | 5,918 | 10,141 | 17,163 |
| 53-7071 | Gas Compressor & Gas Pumping Station Operators | MT OJT | 550 | 550 | 0.0% | 0 | 13 | 46 | 59 |
| 53-7072 | Pump Operators | MT OJT | 510 | 520 | 2.0% | 1 | 12 | 44 | 57 |

**Pennsylvania
Occupational Employment
2020-2030 Long-Term Projections**

| SOC Code | Occupational Title | Educ. Level | Employment Outlook | | | Annual Demand | | | |
|----------|---|-------------|--------------------|----------------|----------------|-----------------------------|----------------------------|--------------------------------|----------------------------|
| | | | Estimated 2020 | Projected 2030 | Percent Change | Due to Growth ^{1/} | Due to Exits ^{2/} | Due to Transfers ^{3/} | Total Demand ^{4/} |
| 53-7073 | Wellhead Pumpers | WK EXP | 450 | 450 | 0.0% | 0 | 11 | 38 | 49 |
| 53-7081 | Refuse & Recyclable Material Collectors | ST OJT | 4,750 | 5,340 | 12.4% | 59 | 214 | 455 | 728 |
| 53-7121 | Tank Car, Truck & Ship Loaders | ST OJT | 260 | 270 | 3.8% | 1 | 8 | 23 | 32 |

FOOTNOTES:

Data may not add to totals due to rounding. Confidential data and occupations with employment less than 50 are not shown but are included in all sub-total and total employment values.

1/ Demand due to employment growth measures the numerical change in projected number of job gains or losses.

2/ Demand due to exits measure the projected number of workers leaving an occupation and exiting the workforce entirely.

3/ Demand due to transfers are the projected number of workers leaving an occupation and transferring to a different occupation.

4/ Total demand is the projected number of openings (positions) for workers entering the occupation. Defined as the sum of the demand due to growth, exits, and transfers.