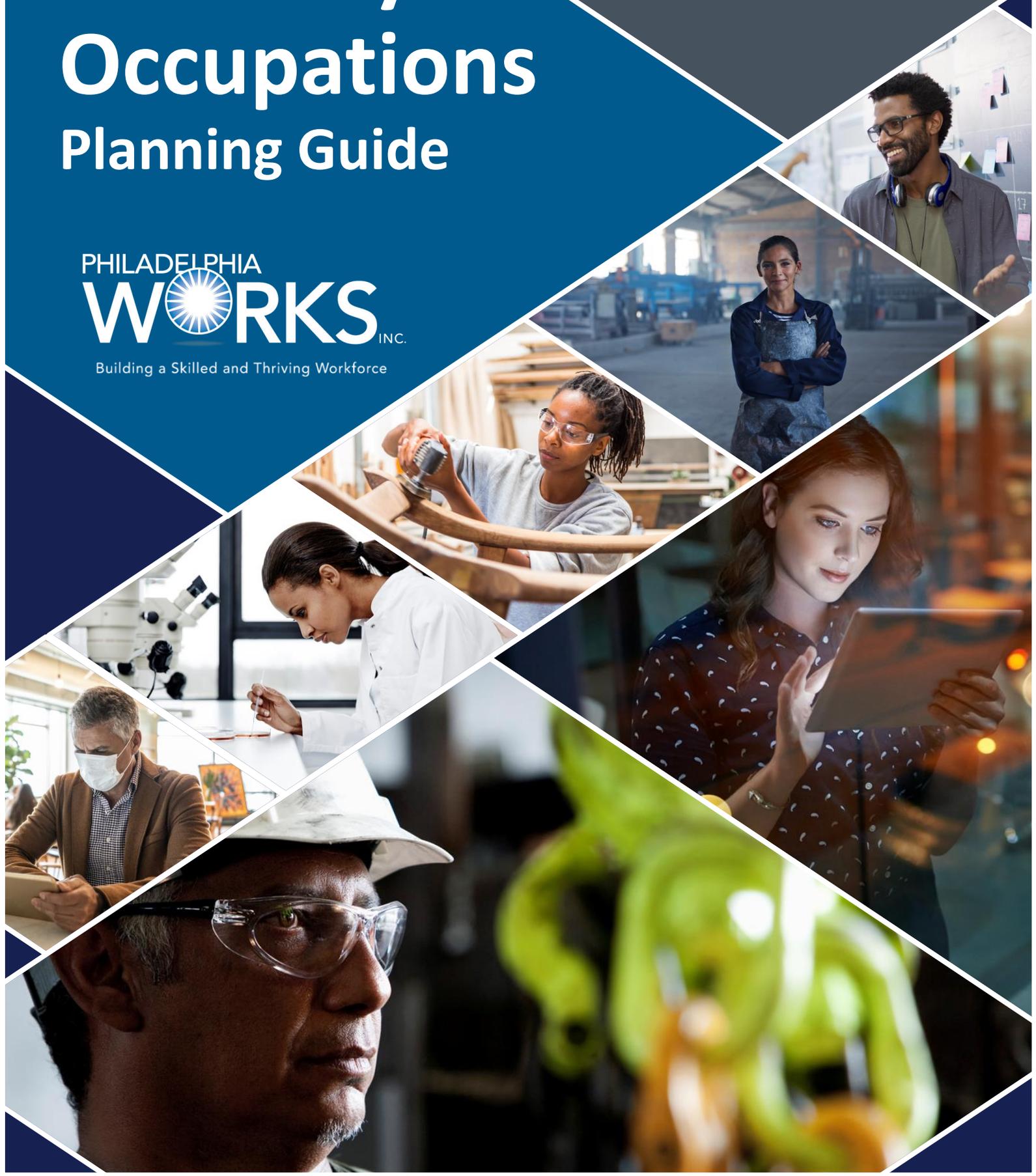


# Recovery Occupations Planning Guide

2023-24

PHILADELPHIA  
**WORKS** INC.

Building a Skilled and Thriving Workforce



## Background and Methodology

As **Philadelphia's Workforce Development Board, Philadelphia Works** manages strategic investment of federal, state, local and private funding into job training and employment programming throughout the city and Southeastern Pennsylvania region. While our community navigates economic recovery from the COVID-19 crisis, now, more than ever, we are prioritizing timely opportunities in occupations that are experiencing employer demand *now*; show promise for future growth; pay livable wages; and are accessible to workers with diverse educational and employment backgrounds.

To drive this COVID-considerate approach forward and support city leaders and partners as they, too, work toward recovery, Philadelphia Works has identified a set of **2023-2024 Recovery Occupations**. These occupations were drawn from our analysis of labor market and employment data; job posting data; and local employer feedback on the skills and credentials that workers need to become competitive candidates.

All Recovery Occupations have experienced minimal negative impact to employment during the pandemic or have projected growth through 2027 and pay \$15.00 or more an hour. Critically, most are middle-skill jobs or low-skill entry points into career paths with opportunity for advancement. Serving as a catalog, this document provides detailed information on each Recovery Occupation including wages, required skills and certifications, top Philadelphia employers, and more.

### How Philadelphia Works Identifies Recovery Occupations

- ☑ **\$15+/Hr** Median Wage
- ☑ Minimal negative impact to employment during the COVID-19 pandemic, and/or projected growth, resulting in dependable job openings
- ☑ Strategic focus on **middle-skill** and low-skill jobs with **opportunity for advancement**
- ☑ Strategic focus on **timely jobs** requiring an **Associate's Degree or less**, to connect career-seekers to employment or earn-and-learn opportunities **now**
- ☑ A WIOA High Priority Occupation (HPO), or worthy of petition

## How to use the *Recovery Occupations Planning Guide*

The **Workforce Service Flag** indicates the type of service most appropriate for this occupation.

**Transportation and Logistics Occupations**

### Light Truck Drivers

Drive a light vehicle, such as a truck or van, with a capacity of less than 26,001 pounds Gross Vehicle Weight (GVW), primarily to pick up merchandise or packages from a distribution center and deliver. May load and unload vehicle.

**Local Wages**

\$12  
Lower Wage

\$17  
Median Wage

\$24  
Upper Wage

Other Job Titles	Top Posting Employers	Baseline Skills
<ul style="list-style-type: none"> <li>Driver Helper</li> <li>Store Driver</li> <li>Package Delivery Driver</li> <li>Commercial Driver</li> </ul>	<ul style="list-style-type: none"> <li>Amazon</li> <li>UPS</li> <li>Advanced Auto Parts</li> </ul>	<ul style="list-style-type: none"> <li>Physical Abilities</li> <li>Communication Skills</li> <li>English language</li> <li>Organizational Skills</li> </ul>

Required Education and Experience	Certifications and Licenses
<ul style="list-style-type: none"> <li>High School Diploma or GED (Competitive: Post-Secondary Certificate)</li> <li>Less than Two Years of Experience</li> <li>On-the-Job Training: One Month or Less</li> </ul>	<ul style="list-style-type: none"> <li>Driver's License</li> <li>Competitive: CDL Class A (IR)</li> </ul>

Source: Philadelphia Works analysis of data from Lightcast Inc.

6

The **Specialized, Software, and Baseline Skills Tables** show the different types of skills that someone employed in the position would need.

The **Certifications and Licenses Table** shows the different types of licenses that employers in Philadelphia demand. In some cases, certifications are listed as Competitive, which means this certification may be desirable for some employers.

**Credentials that are Industry Recognized are labeled (IR).**

### Workforce Service Flag Definitions

<b>Direct Placement</b>	These occupations typically require no specialized training beyond a high school diploma and require a month or less of onboarding.
<b>On-the-Job Training</b>	These occupations require no formal training beyond a high school diploma but require extensive on-the-job training.
<b>Vocational Training</b>	These occupations require some form of specialized training and are well-suited for traditional vocational skills training (Including ITAs and VSTs).
<b>Higher Education</b>	These occupations typically require no specialized training beyond an associate's or bachelor's degree.

## Transportation and Logistics

- Light Truck Drivers...**6**
- Dispatchers...**7**
- Warehouse Associates...**8**
- Forklift Operator...**9**
- Heavy and Tractor-Trailer Truck Drivers...**10**
- Airline Pilots, Copilots, and Flight Engineers...**11**
- Flight Attendants...**12**
- Logisticians...**13**
- Transportation Security Screeners...**14**

## Healthcare and Life Sciences

- Medical Records Specialists...**16**
- Medical Assistants...**17**
- Emergency Medical Technicians and Paramedics...**18**
- Orderlies...**19**
- Nursing Assistants...**20**
- Licensed Practical and Licensed Vocational Nurses...**21**
- Registered Nurses...**22**
- Respiratory Therapists...**23**
- Phlebotomists...**24**
- Surgical Technologists...**25**
- Pharmacy Technicians...**26**
- Clinical Laboratory Technicians...**27**
- Magnetic Resonance Imaging Technologists...**28**
- Medical Equipment Preparers...**29**

## Information Technology

- Software Developers...**31**
- Computer Network Support Specialists...**32**
- Computer User Support Specialists...**33**
- Computer Systems Analysts...**34**
- Database Administrators and Architects...**35**
- Audio and Video Technicians...**36**
- Telecommunications Equipment Installers...**37**

## Business and Professional Services

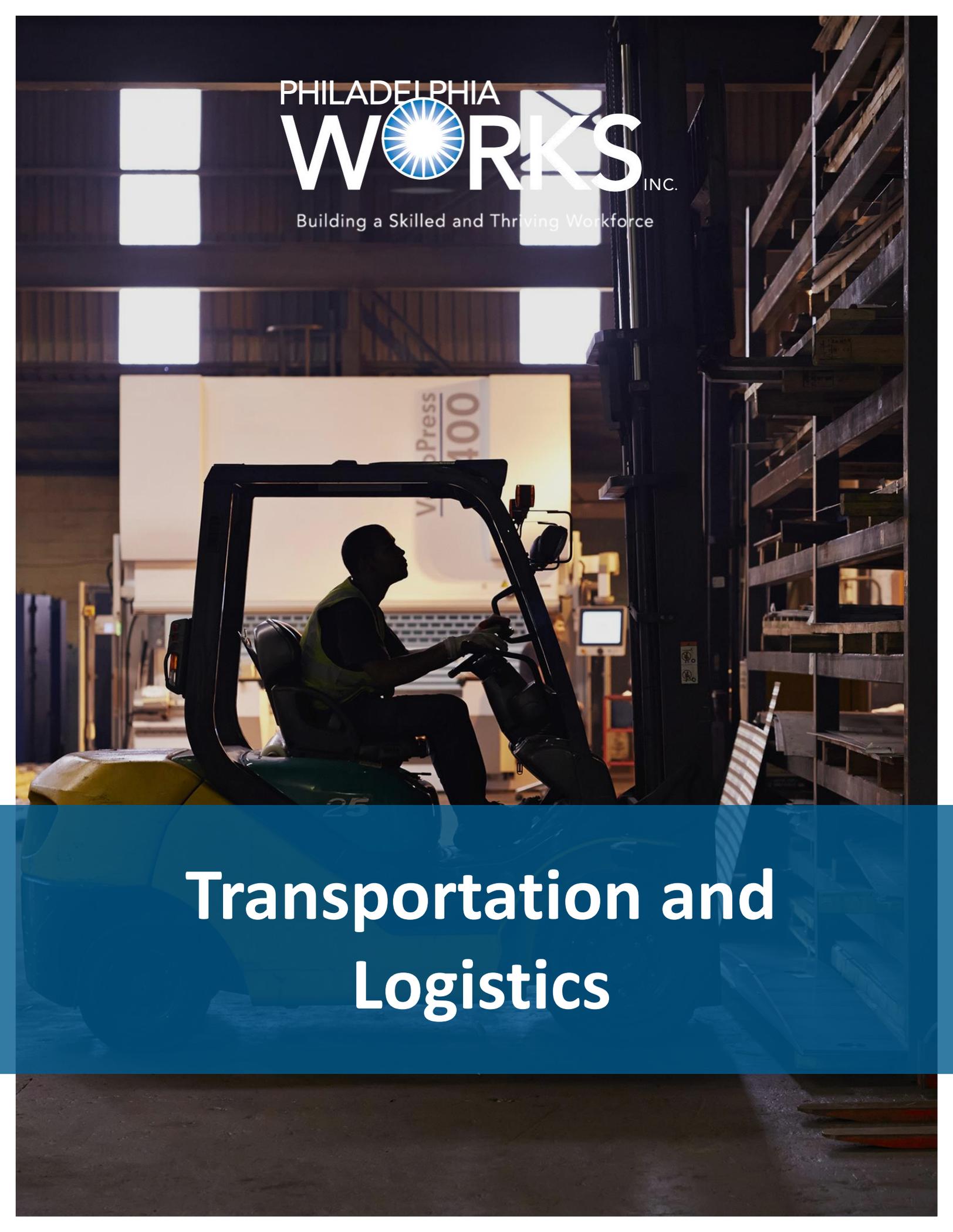
- Real Estate Sales Agents...**39**
- Human Resources Specialists...**40**
- Market Research Analysts...**41**
- Accountants and Auditors...**42**
- Meeting, Convention, and Event Planners...**43**
- Project Management Specialists...**44**
- Receptionists and Information Clerks...**45**
- Electrical Engineers...**46**

## Manufacturing and Construction

- Operating Engineers...**48**
- Industrial Machinery Mechanics...**49**
- Welders, Cutters, Solderers, and Brazers...**50**
- Engineering Technologists and Technicians...**51**
- Electromechanical Assemblers...**52**
- Highway Maintenance Workers...**53**
- Mobile Heavy Equipment Mechanics...**54**
- HVAC Mechanics and Installers...**55**

## Education and Social Assistance

- Childcare Workers...**57**
- Career/Technical Education Teachers...**58**
- Child, Family, and School Social Workers...**59**
- Community Health Workers...**60**
- Crossing Guards and Flaggers...**61**
- Elementary School Teachers...**62**
- Eligibility Interviewers, Government Programs...**63**
- Librarians and Media Collections Specialists...**64**
- Police and Sheriffs Patrol Officers...**65**
- Secondary School Teachers...**66**
- Special Education Teachers...**67**

The background of the entire page is a photograph of a warehouse interior. A worker in a high-visibility vest is operating a forklift, silhouetted against the bright light from large windows. To the right, there are tall metal shelving units filled with boxes. The overall atmosphere is industrial and professional.

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# Transportation and Logistics

## Light Truck Drivers

Drive a light vehicle, such as a truck or van, with a capacity of less than 26,001 pounds Gross Vehicle Weight (GVW), primarily to pick up merchandise or packages from a distribution center and deliver. May load and unload vehicle.

### Specialized Skills

- Customer Contact
- Customer Service
- Commercial Driving
- Repair
- Lifting Ability
- Post Trip Inspections
- Scheduling
- Vehicle Inspection

### Software Skills

- Basic Computer Skills



### Other Job Titles

- Driver Helper
- Store Driver
- Package Delivery Driver
- Commercial Driver

### Top Posting Employers

- Amazon
- UPS
- Advanced Auto Parts

### Baseline Skills

- Physical Abilities
- Communication Skills
- English language
- Organizational Skills

### Required Education and Experience

- High School Diploma or GED (Competitive: Post-Secondary Certificate)
- Less than Two Years of Experience
- On-the-Job Training: One Month or Less

### Certifications and Licenses

- Driver's License
- Competitive: CDL Class A (IR)

## Dispatchers

Schedule and dispatch workers, work crews, equipment, or service vehicles for conveyance of materials, freight, or passengers, or for normal installation, service, or emergency repairs rendered outside the place of business. Duties may include using radio, telephone, or computer to transmit assignments and compiling statistics and reports on work progress.



### Specialized Skills

- Customer Service
- Scheduling
- Customer Contact
- Data Entry
- Repair
- Appointment Setting
- Record Keeping

### Software Skills

- Microsoft Excel
- Microsoft Word
- Microsoft Outlook
- Microsoft Windows

### Other Job Titles

- Dispatcher

### Top Posting Employers

- Penn Medicine
- Healthfleet Ambulance

### Baseline Skills

- Communication Skills
- Computer Literacy
- Multi-Tasking
- Problem Solving
- Organizational Skills

### Required Education and Experience

- High School Diploma or GED
- Less than Two Years of Experience
- On-the-Job Training: One to Twelve Months

### Certifications and Licenses

- None

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Warehouse Associate

Manually move freight, stock, luggage, or other materials, or perform other general labor. Includes all manual laborers not elsewhere classified. The official SOC occupation title is Laborers and Freight, Stock, and Material Movers, Hand.



- ### Specialized Skills
- Forklift Operation
  - Sorting
  - Lifting Ability
  - Scheduling
  - Shipment Sorting
  - Customer Service
  - Packaging
  - Hand Trucks

- ### Software Skills
- None

- ### Other Job Titles
- Warehouse Associate
  - Warehouse Worker
  - Material Handler

- ### Top Posting Employers
- Amazon
  - UPS
  - FedEx

- ### Baseline Skills
- Physical Abilities
  - English language
  - Detail-Oriented
  - Communication Skills
  - Organizational Skills

- ### Required Education and Experience
- High School Diploma or GED (Competitive: Post-Secondary Certificate)
  - Less than Two Years of Experience
  - On-the-Job Training: One Month or Less

- ### Certifications and Licenses
- Driver's License
  - Competitive: Forklift Certification (IR)

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Forklift Operator

Operate industrial trucks or tractors (Forklifts) equipped to move materials around a warehouse, storage yard, factory, construction site, or similar location. The official SOC occupation title is Industrial Truck and Tractor Operators.



- ### Specialized Skills
- Forklift Operation
  - Lifting Ability
  - Data Entry
  - Inventory Management
  - Machinery
  - Packaging
  - Inventory Control
  - OSHA

- ### Software Skills
- None

- ### Other Job Titles
- Forklift Operator
  - Forklift Driver

- ### Top Posting Employers
- BJ's Wholesale
  - XPO Logistics
  - Thompson First Group
  - DHL Express

- ### Baseline Skills
- Physical Abilities
  - Detail-Oriented
  - English language
  - Organizational Skills
  - Communication Skills

- ### Required Education and Experience
- High School Diploma or GED plus Post-Secondary Certificate
  - Less than Two Years of Experience
  - On-the-Job Training: One Month or Less

- ### Certifications and Licenses
- Forklift Certification (IR)
  - Driver's License

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Heavy and Tractor-Trailer Truck Drivers

Drive a tractor-trailer combination or a truck with a capacity of at least 26,001 pounds Gross Vehicle Weight (GVW). May be required to unload truck. Requires commercial drivers' license. Includes tow truck drivers.



### Specialized Skills

- Truck Driving
- HAZMAT
- Commercial Driving
- Over the Road
- Customer Service
- Forklift Operation
- Post Trip Inspections
- Scheduling

### Software Skills

- Basic Computer Skills

### Other Job Titles

- Driver
- Truck Driver

### Top Posting Employers

- Clean Harbors
- Carvana
- Marten Transport
- Ryder Systems Inc.
- Transforce

### Baseline Skills

- Physical Abilities
- English language
- Communication Skills
- Organizational Skills
- Teamwork

### Required Education and Experience

- High School Diploma or GED plus Post-Secondary Certificate
- Two to Four Years of Experience
- On-the-Job Training: One Month or Less

### Certifications and Licenses

- CDL Class A (IR)
- Driver's License

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Airline Pilots, Copilots, and Flight Engineers

Pilot and navigate the flight of fixed-wing aircraft, usually on scheduled air carrier routes, for the transport of passengers and cargo. Requires Federal Air Transport certificate and rating for specific aircraft type used. Includes regional, national, and international airline pilots and flight instructors of airline pilots.

On-the-Job Training  
Vocational Training



### Specialized Skills

- Federal Aviation Regulations
- Scheduling
- Flight Planning
- Aviation Security
- Safety
- Repair
- Customer Service

### Software Skills

- General Microsoft Office

### Other Job Titles

- Chief Pilot
- Commercial Airline Pilot

### Top Posting Employers

- Republic Airways
- General Dynamics
- Federal Government

### Baseline Skills

- Communication Skills
- Teamwork and Collaboration
- Planning
- Leadership

### Required Education and Experience

- High School Diploma or GED
- Less than Two Years of Experience
- On-the-Job Training: One to Twelve Months

### Certifications and Licenses

- Airline Pilot License (IR)

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Flight Attendants

Monitor safety of the aircraft cabin. Provide services to airline passengers, explain safety information, serve food and beverages, and respond to emergency incidents.



### Specialized Skills

- Federal Aviation Regulations
- Merchandising
- Guest Services
- Customer Service
- Scheduling
- Medical Emergencies
- Meal Serving

### Software Skills

- General Microsoft Office

### Other Job Titles

- Airline Flight Attendant
- Flight Cabin Crew

### Top Posting Employers

- American Airlines
- Republic Airways
- Spirit Airlines

### Baseline Skills

- Communication Skills
- Teamwork and Collaboration
- Physical Abilities
- Problem Solving

### Required Education and Experience

- High School Diploma or GED
- Less than Two Years of Experience
- On-the-Job Training: One to Twelve Months

### Certifications and Licenses

- Driver's License

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Logisticians

Analyze and coordinate the ongoing logistical functions of a firm or organization. Responsible for the entire life cycle of a product, including acquisition, distribution, internal allocation, delivery, and final disposal of resources.



### Specialized Skills

- Supply Chain Knowledge
- Logistics
- Supply Chain Management
- SAP
- Scheduling
- Enterprise Resource Planning
- Procurement

### Software Skills

- Microsoft Excel
- SAP
- Enterprise Resource Planning
- Microsoft PowerPoint

### Other Job Titles

- Production Planner
- Supply Chain Analyst
- Logistics Specialist

### Top Posting Employers

- Johnson and Johnson
- Lockheed Martin
- Comcast
- Deloitte

### Baseline Skills

- Communication Skills
- Planning
- Teamwork and Collaboration
- Problem Solving

### Required Education and Experience

- Bachelor's Degree
- Three to Five Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Competitive: American Production and Inventory Control Society (APICS) Certification (IR)

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Transportation Security Screeners

Direct Placement

Conduct screening of passengers, baggage, or cargo to ensure compliance with Transportation Security Administration (TSA) regulations. May operate basic security equipment such as x-ray machines and hand wands at screening checkpoints.



### Specialized Skills

- Customer Service
- Transportation Security
- Customer Contact
- Public Transit Systems
- Scheduling

### Software Skills

- None

### Other Job Titles

- Screener
- Transportation Security Officer

### Top Posting Employers

- Transportation Security Administration

### Baseline Skills

- Teamwork and Collaboration
- Communication Skills
- Physical Abilities
- Detail-Oriented

### Required Education and Experience

- High School Diploma or GED
- Less than Two Years of Experience
- On-the-Job Training: One Month or Less

### Certifications and Licenses

- Driver's License

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

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A smiling female scientist with dark curly hair, wearing a white lab coat, is seated in front of several computer monitors. The monitors display various scientific diagrams, including anatomical structures and data visualizations. She has a name tag on her lab coat that reads "St. George Hospital" and "Dr. Fakar MD".

# Healthcare and Life Science

## Medical Records Specialists

Compile, process, and maintain medical records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the healthcare system. Classify medical and healthcare concepts, including diagnosis, procedures, medical services, and equipment, into the healthcare industry's numerical coding system. Includes medical coders.



### Specialized Skills

- Medical Coding
- Medical Billing
- Customer Billing
- Medical Records
- Customer Service
- Health Information Technology
- Patient Care

### Software Skills

- Microsoft Excel
- ICD-10
- Microsoft Word
- Epic Systems

### Other Job Titles

- Medical Biller
- Medical Billing Specialist
- Medical Records Clerk

### Top Posting Employers

- Penn Medicine
- Cooper University Hospital
- Virtua Health
- Children’s Hospital of Philadelphia

### Baseline Skills

- Communication Skills
- Detail-Oriented
- Teamwork
- Research
- Organizational Skills

### Required Education and Experience

- High School Diploma or GED (Competitive: Post-Secondary Certificate)
- Two to Three Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Registered Health Information Technician (IR)
- Competitive: Certified Professional Coder (IR)

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Medical Assistants

Perform administrative and certain clinical duties under the direction of a physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician.



### Specialized Skills

- Patient Care
- Scheduling
- CPR
- Vital Signs Measurement
- Medical Assistance
- Appointment Setting
- Patient Preparation
- Electrocardiogram (EKG)

### Software Skills

- Microsoft Excel
- ICD-9-CM Coding

### Other Job Titles

- Medical Assistant
- Certified Medical Assistant

### Top Posting Employers

- Penn Medicine
- Virtua Health
- Thomas Jefferson University

### Baseline Skills

- Communication Skills
- Organizational Skills
- Computer Literacy
- Telephone Skills
- Teamwork

### Required Education and Experience

- High School Diploma or GED plus Post-Secondary Certificate
- Less than Two Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Certified Medical Assistant (IR)
- Competitive: First Aid CPR AED

Source: Philadelphia Works analysis of data from Lightcast Inc.

## EMTs and Paramedics

Assess injuries and illnesses and administer basic emergency medical care. May transport injured or sick persons to medical facilities.

### Specialized Skills

- Patient Care
- CPR
- Life Support
- Patient Transportation
- Electrocardiogram (EKG)
- Medical Triage
- Scheduling
- Phlebotomy

### Software Skills

- None



### Other Job Titles

- Paramedic
- Emergency Medical Technician

### Top Posting Employers

- Global Medical Response
- Virtua Health
- Ambulnz
- Keystone Quality Transport

### Baseline Skills

- Communication Skills
- Physical Abilities
- Teamwork
- English language
- Detail-Oriented

### Required Education and Experience

- High School Diploma or GED plus Post-Secondary Certificate
- Less than Two Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Emergency Medical Technician (EMT) (IR)
- Driver's License
- First Aid CPR AED

## Orderlies

Transport patients to areas such as operating rooms or x-ray rooms using wheelchairs, stretchers, or moveable beds.

May maintain stocks of supplies or clean and transport equipment. Psychiatric orderlies are included in Psychiatric Aides.



### Specialized Skills

- Patient Transportation and Transfer
- CPR
- Patient Care
- Medical Assistance
- Vital Signs Measurement
- Customer Service
- Electrocardiogram (EKG)

### Software Skills

- None

### Other Job Titles

- Transporter
- Patient Transporter
- Patient Escort

### Top Posting Employers

- Penn Medicine
- Trinity Health
- Temple University Health System

### Baseline Skills

- Troubleshooting
- Physical Abilities
- Communication Skills
- Computer Literacy
- Detail-Oriented

### Required Education and Experience

- High School Diploma or GED (Competitive: Post-Secondary Certificate)
- Less than Two Years of Experience
- On-the-Job Training: One Month or Less

### Certifications and Licenses

All Competitive:

- First Aid CPR AED
- American Heart Association Certification
- Basic Life Saving (BLS) Certification

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Nursing Assistants

Provide or assist with basic care or support under the direction of onsite licensed nursing staff. Perform duties such as monitoring of health status, feeding, bathing, dressing, grooming, toileting, or ambulation of patients in a health or nursing facility. May include medication administration and other health-related tasks.



Specialized Skills
<ul style="list-style-type: none"> <li>• Patient Care</li> <li>• Activities of Daily Living (ADLS)</li> <li>• CPR</li> <li>• Vital Signs Measurement</li> <li>• Home Health</li> <li>• Scheduling</li> <li>• Phlebotomy</li> </ul>

Software Skills
<ul style="list-style-type: none"> <li>• None</li> </ul>

Other Job Titles
<ul style="list-style-type: none"> <li>• Certified Nursing Assistant</li> </ul>

Top Posting Employers
<ul style="list-style-type: none"> <li>• Penn Medicine</li> <li>• HCR ManorCare</li> <li>• Virtua Health</li> </ul>

Baseline Skills
<ul style="list-style-type: none"> <li>• Communication Skills</li> <li>• English language</li> <li>• Computer Literacy</li> <li>• Teamwork</li> <li>• Physical Abilities</li> </ul>

Required Education and Experience
<ul style="list-style-type: none"> <li>• High School Diploma or GED plus Post-Secondary Certificate</li> <li>• Less than Two Years of Experience</li> <li>• On-the-Job Training: None</li> </ul>

Certifications and Licenses
<ul style="list-style-type: none"> <li>• Certified Nursing Assistant (IR)</li> <li>• Competitive: First Aid CPR AED</li> </ul>

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Licensed Practical and Vocational Nurses

Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.



- ### Specialized Skills
- CPR
  - Patient Care
  - Home Health
  - Medication Administration
  - Treatment Planning
  - Scheduling
  - Care Planning
  - Long-Term Care

- ### Software Skills
- None

- ### Other Job Titles
- Licensed Practical Nurse

- ### Top Posting Employers
- Bayada Home Health Care
  - ConnetRN
  - HCR ManorCare
  - Penn Medicine

- ### Baseline Skills
- Communication Skills
  - Teamwork
  - Problem Solving
  - Organizational Skills
  - English language

- ### Required Education and Experience
- High School Diploma or GED plus Post-Secondary Certificate
  - Two Years of Experience
  - On-the-Job Training: None

- ### Certifications and Licenses
- Licensed Practical Nurse (LPN) (IR)
  - Competitive: First Aid CPR AED

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Registered Nurses

Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required.



### Specialized Skills

- Patient Care
- CPR
- Advanced Cardiac Life Support
- Treatment Planning
- Acute Care
- Case Management
- Home Health

### Software Skills

- None

### Other Job Titles

- Registered Nurse

### Top Posting Employers

- Bayada Home Health Care
- Penn Medicine
- Virtua Health
- Thomas Jefferson Hospital

### Baseline Skills

- Communication Skills
- Planning
- Teamwork
- Research
- Computer Literacy

### Required Education and Experience

- Associate’s Degree or Bachelor’s Degree (45%) in Nursing Science
- Less than Two Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Registered Nurse (IR)
- Competitive: Advanced Cardiac Life Support Certification
- Competitive: First Aid CPR AED
- Basic Life Saving Skills

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Respiratory Therapists

Assess, treat, and care for patients with breathing disorders. Assume primary responsibility for all respiratory care modalities, including the supervision of respiratory therapy technicians. Initiate and conduct therapeutic procedures; maintain patient records; and select, assemble, check, and operate equipment.



Specialized Skills
<ul style="list-style-type: none"> <li>Respiratory Therapy</li> <li>Advanced Cardiac Life Support</li> <li>Patient Care</li> <li>Critical Care</li> <li>Treatment Planning</li> <li>CPR</li> <li>Life Support</li> </ul>

Software Skills
<ul style="list-style-type: none"> <li>None</li> </ul>

Other Job Titles
<ul style="list-style-type: none"> <li>Respiratory Therapist</li> </ul>

Top Posting Employers
<ul style="list-style-type: none"> <li>Penn Medicine</li> <li>Virtua Health</li> <li>Select Medical</li> </ul>

Baseline Skills
<ul style="list-style-type: none"> <li>Communication Skills</li> <li>Research</li> <li>Teamwork</li> <li>Problem Solving</li> <li>Planning</li> </ul>

Required Education and Experience
<ul style="list-style-type: none"> <li>Associate's Degree in Respiratory Therapy</li> <li>Less than Two Years of Experience</li> <li>On-the-Job Training: None</li> </ul>

Certifications and Licenses
<ul style="list-style-type: none"> <li>Registered Respiratory Therapist (IR)</li> <li>Respiratory Care Practitioner (IR)</li> </ul>

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Phlebotomists

Draw blood for tests, transfusions, donations, or research. May explain the procedure to patients and assist in the recovery of patients with adverse reactions.

- ### Specialized Skills
- Phlebotomy
  - Venipuncture
  - Blood Collection
  - Laboratory Testing
  - Specimen Collection
  - Blood Draws
  - Customer Service
  - Patient Interaction

- ### Software Skills
- None



- ### Other Job Titles
- Phlebotomist

- ### Top Posting Employers
- Quest Diagnostics
  - Virtua Health
  - Penn Medicine
  - Pride Health

- ### Baseline Skills
- Communication Skills
  - Research
  - Telephone Skills
  - Detail-Oriented
  - Teamwork

- ### Required Education and Experience
- High School Diploma or GED plus Post-Secondary Certificate
  - Less than Two Years of Experience
  - On-the-Job Training: None

- ### Certifications and Licenses
- Phlebotomy Certification (IR)
  - Driver's License

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Surgical Technologists

Vocational Training

Assist in operations, under the supervision of surgeons, registered nurses, or other surgical personnel. May help set up operating room, prepare and transport patients for surgery, adjust lights and equipment, pass instruments and other supplies to surgeons and surgeons' assistants, hold retractors, cut sutures, and help count sponges, needles, supplies, and instruments.



- ### Specialized Skills
- Surgery
  - Patient Care
  - Surgical Technology
  - Aseptic Technique
  - Sterile Procedures
  - CPR
  - Cleaning
  - Surgical Procedure

- ### Software Skills
- None

- ### Other Job Titles
- Surgical Technician
  - Surgical Technologist

- ### Top Posting Employers
- Penn Medicine
  - Virtual Health
  - Aya Healthcare

- ### Baseline Skills
- Teamwork
  - Research
  - Communication Skills
  - English language
  - Organizational Skills

- ### Required Education and Experience
- High School Diploma or GED plus Post-Secondary Certificate
  - Less than Two Years of Experience
  - On-the-Job Training: None

- ### Certifications and Licenses
- Certified Surgical Technician (IR)
  - Competitive: Basic Life Saving (BLS) Certification

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Pharmacy Technicians

Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications according to prescription orders.

On-the-Job Training

Vocational Training



- ### Specialized Skills
- Customer Service
  - Retail Industry Knowledge
  - Customer Contact
  - Prescription Filling
  - Legal Compliance
  - Insurance Knowledge
  - Transcription
  - Customer Billing

- ### Software Skills
- Microsoft Excel

- ### Other Job Titles
- Pharmacy Technician

- ### Top Posting Employers
- CVS Health
  - Rite Aid Corporation
  - Penn Medicine
  - Walmart

- ### Baseline Skills
- Communication Skills
  - Typing
  - Problem Solving
  - Teamwork
  - Physical Abilities

- ### Required Education and Experience
- High School Diploma or GED plus Post-Secondary Certificate
  - Many employers offer certification through on-the-job training
  - Less than Two Years of Experience
  - On-the-Job Training: One to Twelve Months

- ### Certifications and Licenses
- Certified Pharmacy Technician (IR)

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Clinical Laboratory Technicians

Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease.

Higher Education

- ### Specialized Skills
- Chemistry
  - Quality Assurance and Control
  - Phlebotomy
  - Biology
  - Laboratory Equipment
  - Laboratory Testing
  - Patient Care

- ### Software Skills
- Microsoft Excel
  - Microsoft Word



- ### Other Job Titles
- Laboratory Technician
  - Laboratory Assistant

- ### Top Posting Employers
- Penn Medicine
  - Children’s Hospital of Philadelphia
  - Virtua Health

- ### Baseline Skills
- Communication Skills
  - Research
  - Organizational Skills
  - Physical Abilities
  - Computer Literacy

- ### Required Education and Experience
- Associate’s Degree Required, Bachelor’s Degree Preferred
  - Less than Two Years of Experience
  - On-the-Job Training: None

- ### Certifications and Licenses
- Competitive: American Society for Clinical Pathology (ASCP) Certification (IR)

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Magnetic Resonance Imaging Technologists

Vocational Training

Operate Magnetic Resonance Imaging (MRI) scanners. Monitor patient safety and comfort, and view images of area being scanned to ensure quality of pictures. May administer gadolinium contrast dosage intravenously. May interview patient, explain MRI procedures, and position patient on examining table. May enter into the computer data such as patient history, anatomical area to be scanned, orientation specified, and position of entry.



### Specialized Skills

- Radiologic Technology
- Radiology
- CPR
- Patient Care
- Anatomy
- Diagnostic Imaging
- CAT Scan
- Information Systems

### Software Skills

- General Microsoft Office

### Other Job Titles

- MRI Technologist
- CT Technologist
- MRI Technician
- CT Technician

### Top Posting Employers

- Penn Medicine
- Children’s Hospital of Philadelphia
- Thomas Jefferson University

### Baseline Skills

- Communication Skills
- Teamwork and Collaboration
- Organizational Skills
- Research

### Required Education and Experience

- Associate’s Degree
- Less than Two Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- American Registry of Radiologic Technologists (ARRT) Certification (IR)

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Medical Equipment Preparers

Prepare, sterilize, install, or clean laboratory or healthcare equipment. May perform routine laboratory tasks and operate or inspect equipment.

Vocational Training

### Specialized Skills

- Sterile Procedures and Techniques
- Cleaning
- Surgical Instruments
- Patient Care
- Packaging
- Aseptic Technique
- Infection Control

### Software Skills

- General Microsoft Office



### Other Job Titles

- Sterile Process Technician
- Sterilization Technician

### Top Posting Employers

- Penn Medicine
- Virtua Health

### Baseline Skills

- Communication Skills
- Teamwork and Collaboration
- Computer Literacy
- Organizational Skills

### Required Education and Experience

- High School Diploma or GED plus Post-Secondary Certificate
- Less than Two Years of Experience
- On-the-Job Training: One to Twelve Months

### Certifications and Licenses

- Certified Registered Central Service Technician (CRCST) (IR)

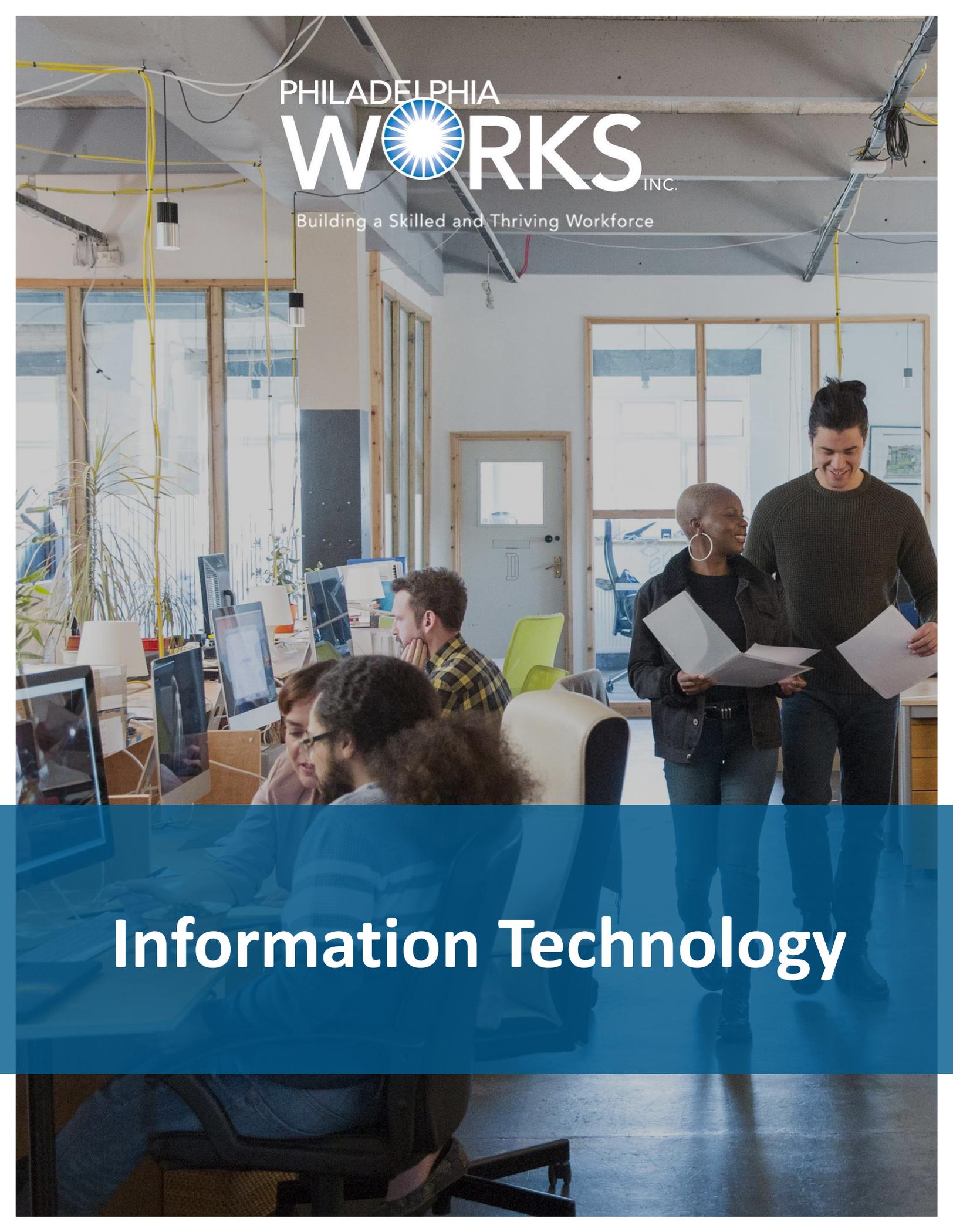
**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.



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**Information Technology**

## Software Developers and Testers

Higher Education

Develop and execute software tests to identify software problems and their causes. Test system modifications to prepare for implementation. Document software and application defects using a bug tracking system and report defects to software or web developers. Create and maintain databases of known defects. May participate in software design reviews to provide input on functional requirements, operational characteristics, product designs, and schedules.



### Specialized Skills

- Quality Assurance and Control
- Software Development
- Software Testing
- Automated Testing
- Software Quality Assurance
- Application Lifecycle Mgmt

### Software Skills

- SQL
- Selenium
- Java
- Atlassian JIRA
- Scrum

### Other Job Titles

- Quality Assurance Analyst
- Quality Assurance Engineer
- Quality Assurance Tester

### Top Posting Employers

- JP Morgan Chase
- Comcast
- Capital One
- Lockheed Martin

### Baseline Skills

- Communication
- Writing
- Planning
- Problem Solving
- Teamwork

### Required Education and Experience

- Bachelor’s Degree in Computer Science
- Three to Five Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- None

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Computer Network Support Specialists

Analyze, test, troubleshoot, and evaluate existing network systems, such as local area networks (LAN), wide area networks (WAN), cloud networks, servers, and other data communications networks. Perform network maintenance to ensure networks operate correctly with minimal interruption.



Specialized Skills
<ul style="list-style-type: none"> <li>• Technical Support</li> <li>• Customer Service</li> <li>• Network Support</li> <li>• Project Management</li> <li>• Network Administration</li> <li>• Routers</li> <li>• Hardware and Software Installation</li> </ul>

Software Skills
<ul style="list-style-type: none"> <li>• Microsoft Excel</li> <li>• Microsoft Windows</li> <li>• SQL</li> <li>• Linux</li> <li>• Cisco</li> </ul>

Other Job Titles
<ul style="list-style-type: none"> <li>• Network Technician</li> <li>• Network Support</li> </ul>

Top Posting Employers
<ul style="list-style-type: none"> <li>• SAP</li> <li>• TD Bank</li> <li>• Anthem Blue Cross</li> </ul>

Baseline Skills
<ul style="list-style-type: none"> <li>• Communication Skills</li> <li>• Typing</li> <li>• Problem Solving</li> <li>• Teamwork</li> <li>• Physical Abilities</li> </ul>

Required Education and Experience
<ul style="list-style-type: none"> <li>• Bachelor’s Degree in Computer Science or Related Field</li> <li>• Three to Five Years of Experience</li> <li>• On-the-Job Training: None</li> </ul>

Certifications and Licenses
<ul style="list-style-type: none"> <li>• None</li> </ul>

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Computer User Support Specialists

Provide technical assistance to computer users. Answer questions or resolve computer problems for clients in person, via telephone, or electronically. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems.

Vocational Training



### Specialized Skills

- Technical Support
- Customer Service
- Help Desk Support
- Repair
- Printers
- IT Support
- Hardware and Software Installation

### Software Skills

- Microsoft Windows
- Microsoft Excel
- SQL
- Linux
- SAP

### Other Job Titles

- Desktop Support Analyst
- Desktop Support Technician
- Help Desk Analyst

### Top Posting Employers

- Best Buy
- University of Pennsylvania
- DirectTV
- JP Morgan Chase

### Baseline Skills

- Troubleshooting
- Communication Skills
- Problem Solving
- Teamwork
- Detail-Oriented

### Required Education and Experience

- Bachelor’s Degree in Computer Science (50%) or Vocational Training (30%)
- Less than Two Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Certified A+ Technician is often required for individuals with no college degree (IR)

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Computer Systems Analysts

Higher Education

Analyze science, engineering, business, and other data processing problems to develop and implement solutions to complex applications problems, system administration issues, or network concerns. Perform systems management and integration functions, improve existing computer systems, and review computer system capabilities, workflow, and schedule limitations. May analyze or recommend commercially available software.



### Specialized Skills

- Project Management
- Business Process
- Systems Analysis
- Business Analysis
- Software Development
- Customer Service
- Quality Assurance and Control

### Software Skills

- SQL
- Systems Analysis
- Microsoft Excel
- Oracle
- Software Development

### Other Job Titles

- Business Systems Analyst
- Systems Analyst

### Top Posting Employers

- Deloitte
- Excelon
- JP Morgan Chase

### Baseline Skills

- Communication Skills
- Teamwork
- Problem Solving
- Planning
- Troubleshooting

### Required Education and Experience

- Bachelor’s Degree in Computer Science or Related Field
- Three to Five Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Certifications may be industry or role specific

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Database Administrators and Architects

Administer, test, and implement computer databases, applying knowledge of database management systems. Coordinate changes to computer databases. Identify, investigate, and resolve database performance issues, database capacity, and database scalability. May plan, coordinate, and implement security measures to safeguard computer databases.



Specialized Skills
<ul style="list-style-type: none"> <li>Database Administration</li> <li>Extraction, Transformation, and Loading (ETL)</li> <li>Data Warehousing</li> <li>Big Data</li> <li>Performance Tuning</li> <li>Database Design</li> <li>Data Modeling</li> </ul>

Software Skills
<ul style="list-style-type: none"> <li>SQL</li> <li>Oracle</li> <li>Python</li> <li>Java</li> <li>Apache Hadoop</li> </ul>

Other Job Titles
<ul style="list-style-type: none"> <li>Data Engineer</li> <li>Database Administrator</li> </ul>

Top Posting Employers
<ul style="list-style-type: none"> <li>Capital One</li> <li>Comcast</li> <li>University of Pennsylvania</li> <li>JP Morgan Chase</li> </ul>

Baseline Skills
<ul style="list-style-type: none"> <li>Communication Skills</li> <li>Troubleshooting</li> <li>Problem Solving</li> <li>Teamwork</li> <li>Writing</li> </ul>

Required Education and Experience
<ul style="list-style-type: none"> <li>Bachelor's Degree in Computer Science</li> <li>Three to Five Years of Experience</li> <li>On-the-Job Training: None</li> </ul>

Certifications and Licenses
<ul style="list-style-type: none"> <li>None</li> </ul>

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Audio and Video Technicians

Set up, maintain, and dismantle audio and video equipment, such as microphones, sound speakers, connecting wires and cables, sound and mixing boards, video cameras, video monitors and servers, and related electronic equipment for live or recorded events, such as concerts, meetings, conventions, presentations, podcasts, news conferences, and sporting events.



Specialized Skills
<ul style="list-style-type: none"> <li>• Repair</li> <li>• Video Conferencing</li> <li>• Scheduling</li> <li>• Cabling</li> <li>• Wiring</li> <li>• Video Production</li> <li>• Multimedia</li> <li>• Technical Support</li> </ul>

Software Skills
<ul style="list-style-type: none"> <li>• General Microsoft Office</li> </ul>

Other Job Titles
<ul style="list-style-type: none"> <li>• AV Technician</li> </ul>

Top Posting Employers
<ul style="list-style-type: none"> <li>• University of Pennsylvania</li> <li>• Live Nation Worldwide</li> <li>• AV Services Inc.</li> </ul>

Baseline Skills
<ul style="list-style-type: none"> <li>• Troubleshooting</li> <li>• Communication Skills</li> <li>• Physical Abilities</li> <li>• Organizational Skills</li> </ul>

Required Education and Experience
<ul style="list-style-type: none"> <li>• High School Diploma or GED</li> <li>• Less than Two Years of Experience</li> <li>• On-the-Job Training: One Month or Less</li> </ul>

Certifications and Licenses
<ul style="list-style-type: none"> <li>• Driver’s License</li> </ul>

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Telecommunications Equipment Installers and Repairers

Install, set up, rearrange, or remove switching, distribution, routing, and dialing equipment used in central offices or headends. Service or repair telephone, cable television, Internet, and other communications equipment on customers' property. May install communications equipment or communications wiring in buildings.

On-the-Job Training



### Specialized Skills

- Repair
- Telecommunications
- Customer Service
- Hand Tools
- Lifting
- Wiring
- Cabling
- Scheduling

### Software Skills

- Basic Computer Skills

### Other Job Titles

- Field Technician
- Telecommunications Technician

### Top Posting Employers

- Dish Network
- Medscope

### Baseline Skills

- Troubleshooting
- Physical Abilities
- Communication Skills
- Computer Literacy
- Detail-Oriented

### Required Education and Experience

- High School Diploma or GED
- Less than Two Years of Experience
- On-the-Job Training: One to Twelve Months

### Certifications and Licenses

- Driver's License

Source: Philadelphia Works analysis of data from Lightcast Inc.

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# Business and Professional Services

## Real Estate Sales Agents

Rent, buy, or sell property for clients. Perform duties such as study property listings, interview prospective clients, accompany clients to property site, discuss conditions of sale, and draw up real estate contracts. Includes agents who represent buyer.



### Specialized Skills

- Sales
- Customer Service
- Real Estate Sales
- Leasing
- Market Strategy
- Real Estate Experience
- Mediation
- Marketing Materials

### Software Skills

- Microsoft Excel

### Other Job Titles

- Real Estate Agent
- Leasing Consultant
- Leasing Agent

### Top Posting Employers

- Realtors
- Berkshire Hathaway
- Keller Williams

### Baseline Skills

- Communication Skills
- Creativity
- Detail Oriented
- Organizational Skills
- Writing

### Required Education and Experience

- High School Diploma or GED plus Post-Secondary Certificate
- Less than Two Years of Experience
- On-the-Job Training: One to Twelve Months

### Certifications and Licenses

- Real Estate Certification (IR)
- Driver's License

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Human Resources Specialist

Recruit, screen, interview, or place individuals within an organization. May perform other activities in multiple human resources areas.

Higher Education

### Specialized Skills

- Recruiting
- Onboarding
- Scheduling
- Applicant Tacking
- Talent Acquisition
- Social Media
- Customer Service
- Employee Relations

### Software Skills

- Microsoft Excel
- Human Resource Information System
- Microsoft PowerPoint
- Microsoft Word

### Local Wages



### Other Job Titles

- Recruiter
- Human Resources Generalist

### Top Posting Employers

- TD Bank
- Comcast
- JP Morgan Chase
- University of Pennsylvania

### Baseline Skills

- Communication Skills
- Organizational Skills
- Teamwork
- Building Effective Relationships

### Required Education and Experience

- Bachelor's Degree
- Less than Two Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- None

## Market Research Analysts and Marketing Specialists

Research conditions in local, regional, national, or online markets. Gather information to determine potential sales of a product or service, or plan a marketing or advertising campaign. May gather information on competitors, prices, sales, and methods of marketing and distribution. May employ search marketing tactics, analyze web metrics, and develop recommendations to increase search engine ranking and visibility to target markets.

Higher Education



**Specialized Skills**

- Marketing
- Social Media
- Project Management
- Sales
- Customer Service
- Digital Marketing
- Budgeting
- Business Development

**Software Skills**

- Microsoft Excel
- Microsoft PowerPoint
- Facebook
- Microsoft Word
- Adobe Creative Suite

**Other Job Titles**

- Marketing Coordinator
- Marketing Assistant
- Marketing Specialist

**Top Posting Employers**

- JP Morgan Chase
- Deloitte
- DirectTV
- Wells Fargo

**Baseline Skills**

- Communication Skills
- Creativity
- Organizational Skills
- Teamwork
- Detail-Oriented

**Required Education and Experience**

- Bachelor’s Degree in Marketing, Business, or Communications
- Less than Two Years of Experience
- On-the-Job Training: None

**Certifications and Licenses**

- None

Source: Philadelphia Works analysis of data from Lightcast Inc.

Higher Education

## Accountants and Auditors

Examine, analyze, and interpret accounting records to prepare financial statements, give advice, or audit and evaluate statements prepared by others. Install or advise on systems of recording costs or other financial and budgetary data.



- ### Specialized Skills
- Accounting
  - Account Reconciliation
  - Budgeting
  - General Ledger
  - Financial Statements
  - Generally Accepted Accounting Principles (GAAP)

- ### Software Skills
- Microsoft Excel
  - General Microsoft Office
  - Enterprise Resource Planning

- ### Other Job Titles
- Staff Accountant
  - Senior Accountant
  - Property Accountant
  - Internal Auditor

- ### Top Posting Employers
- KPMG
  - Intuit
  - PricewaterhouseCoopers
  - Comcast

- ### Baseline Skills
- Communication Skills
  - Detail-Oriented
  - Organizational Skills
  - Research
  - Problem Solving

- ### Required Education and Experience
- Bachelor's Degree plus Certification
  - Three to Five Years of Experience
  - On-the-Job Training: None

- ### Certifications and Licenses
- Certified Public Accountant (CPA) (IR)
  - Certified Information Systems Auditor (CISA) (IR)

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Meeting, Convention, and Event Planners

Coordinate activities of staff, convention personnel, or clients to make arrangements for group meetings, events, or conventions.



### Specialized Skills

- Event Planning
- Budgeting
- Customer Service
- Scheduling
- Event Management
- Project Management
- Sales
- Social Media

### Software Skills

- General Microsoft Office

### Other Job Titles

- Event Coordinator
- Event Manager

### Top Posting Employers

- University of Pennsylvania
- Marriott International

### Baseline Skills

- Planning
- Communication Skills
- Organizational Skills
- Detail Oriented
- Creativity

### Required Education and Experience

- Bachelor’s Degree
- Less than Two Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Driver’s License

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Project Management Specialists

Analyze and coordinate the schedule, timeline, procurement, staffing, and budget of a product or service on a per project basis. Lead and guide the work of technical staff. May serve as a point of contact for the client or customer.

Higher Education

Vocational Training



### Specialized Skills

- Project Management
- Customer Service
- Scheduling
- Sales
- Change Management
- Key Performance Indicators
- Data Analysis

### Software Skills

- Microsoft Excel
- General Microsoft Office

### Other Job Titles

- Business Analyst
- Project Manager

### Top Posting Employers

- Target
- Accenture
- Allied Universal

### Baseline Skills

- Communication Skills
- Microsoft Excel
- Teamwork and Collaboration
- Organizational Skills

### Required Education and Experience

- Bachelor’s Degree
- Three to Five Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Project Management Professional (PMP) (IR)

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Receptionists and Information Clerks

Answer inquiries and provide information to the general public, customers, visitors, and other interested parties regarding activities conducted at establishment and location of departments, offices, and employees within the organization.



Specialized Skills
<ul style="list-style-type: none"> <li>• Administrative Support</li> <li>• Customer Service</li> <li>• Scheduling</li> <li>• Appointment Setting</li> <li>• Data Entry</li> <li>• Mail Sorting</li> <li>• Mailing</li> <li>• Clerical Duties</li> </ul>

Software Skills
<ul style="list-style-type: none"> <li>• General Microsoft Office</li> </ul>

Other Job Titles
<ul style="list-style-type: none"> <li>• Receptionist</li> <li>• Front Desk Receptionist</li> </ul>

Top Posting Employers
<ul style="list-style-type: none"> <li>• Walgreens</li> <li>• Allied Universal</li> <li>• LA Fitness</li> <li>• Genesis Healthcare</li> </ul>

Baseline Skills
<ul style="list-style-type: none"> <li>• Communication Skills</li> <li>• Telephone Skills</li> <li>• Organizational Skills</li> <li>• Multi-Tasking</li> <li>• Computer Literacy</li> </ul>

Required Education and Experience
<ul style="list-style-type: none"> <li>• High School Diploma or GED</li> <li>• Less than Two Years of Experience</li> <li>• On-the-Job Training: One Month or Less</li> </ul>

Certifications and Licenses
<ul style="list-style-type: none"> <li>• None</li> </ul>

## Electrical Engineers

Research, design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use.



### Specialized Skills

- Electrical Engineering
- Budgeting
- Project Management
- AutoCAD
- Scheduling
- Electrical Design
- Electrical Systems
- Calculation

### Software Skills

- AutoCAD
- General Microsoft Office

### Other Job Titles

- Controls Engineer
- Electrical Design Engineer

### Top Posting Employers

- Excelon
- Lockheed Martin
- L3Harris

### Baseline Skills

- Communication Skills
- Troubleshooting
- Problem Solving
- Teamwork and Collaboration

### Required Education and Experience

- Bachelor’s Degree
- Three to Five Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- None

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**Manufacturing and  
Construction**

## Operating Engineers and Other Construction Equipment Operators

Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties.



### Specialized Skills

- Heavy Equipment
- Equipment Operation
- Repair
- Backhoes
- Occupational Health and Safety
- Plumbing
- Operating Engineering

### Software Skills

- None

### Other Job Titles

- Heavy Equipment Operator
- Operating Engineer

### Top Posting Employers

- Waste Management
- Jones Lang Lasalle Inc.
- Allan Myers Inc.

### Baseline Skills

- Preventive Maintenance
- Physical Abilities
- Communication Skills
- Teamwork
- Time Management

### Required Education and Experience

- High School Diploma or GED plus Post-Secondary Licensing
- Two Years of Experience
- On-the-Job Training: One to Twelve Months

### Certifications and Licenses

- Multiple licenses via Post-Secondary Training, required to operate a range of equipment and vehicles
- Driver's License

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Industrial Machinery Mechanics

Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems. May also install, dismantle, or move machinery and heavy equipment according to plans.

On-the-Job Training



Specialized Skills
<ul style="list-style-type: none"> <li>• Repair</li> <li>• Machinery</li> <li>• Welding</li> <li>• Hand Tools</li> <li>• Plumbing</li> <li>• Packaging</li> <li>• Industrial Operations</li> <li>• Industry Knowledge</li> </ul>

Software Skills
<ul style="list-style-type: none"> <li>• None</li> </ul>

Other Job Titles
<ul style="list-style-type: none"> <li>• Machinery Mechanic</li> <li>• Mechanic</li> <li>• Industrial Maintenance Mechanic</li> </ul>

Top Posting Employers
<ul style="list-style-type: none"> <li>• Uline Shipping Supplies</li> <li>• Oldcastle Precast Inc.</li> <li>• Mauser Packaging Solutions</li> </ul>

Baseline Skills
<ul style="list-style-type: none"> <li>• Troubleshooting</li> <li>• Preventive Maintenance</li> <li>• Physical Abilities</li> <li>• Communication Skills</li> <li>• Problem Solving</li> </ul>

Required Education and Experience
<ul style="list-style-type: none"> <li>• High School Diploma or GED</li> <li>• Three to Five Years of Experience</li> <li>• On-the-Job Training: More than Twelve Months</li> </ul>

Certifications and Licenses
<ul style="list-style-type: none"> <li>• Driver's License</li> </ul>

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Welders, Cutters, Solderers, and Brazers

Use hand-welding, flame-cutting, hand-soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.



Specialized Skills
<ul style="list-style-type: none"> <li>Welding</li> <li>Mig and Tig Welding</li> <li>Repair</li> <li>Flux Core Welding</li> <li>Hand Tools</li> <li>Welding Equipment</li> <li>Grinders</li> <li>Soldering</li> </ul>

Software Skills
<ul style="list-style-type: none"> <li>None</li> </ul>

Other Job Titles
<ul style="list-style-type: none"> <li>Welder</li> </ul>

Top Posting Employers
<ul style="list-style-type: none"> <li>Omega Engineering Inc.</li> <li>Wastequip Inc.</li> <li>Viking Yacht Company</li> <li>Pennoni</li> </ul>

Baseline Skills
<ul style="list-style-type: none"> <li>Physical Abilities</li> <li>Detail-Oriented</li> <li>Communication Skills</li> <li>Work Area Maintenance</li> <li>Organizational Skills</li> </ul>

Required Education and Experience
<ul style="list-style-type: none"> <li>High School Diploma or GED (Competitive: Post-Secondary Certificate)</li> <li>Three to Five Years of Experience</li> <li>On-the-Job Training: One to Twelve Months</li> </ul>

Certifications and Licenses
<ul style="list-style-type: none"> <li>Welding Certification (AWS) (IR)</li> </ul>

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Electrical Engineering Technologists and Technicians

Apply electrical and electronic theory and related knowledge, usually under the direction of engineering staff, to design, build, repair, adjust, and modify electrical components, circuitry, controls, and machinery for subsequent evaluation and use by engineering staff in making engineering design decisions.

Direct Placement



### Specialized Skills

- Repair
- Schematic Diagrams
- Test Equipment
- Wiring
- Machinery
- Preventative Maintenance
- Electrical Systems
- Oscilloscopes

### Software Skills

- General Microsoft Office

### Other Job Titles

- Electrical Technician
- Electromechanical Technician
- Electronics Technician

### Top Posting Employers

- Rioch Electronics
- Owens Corning
- Lockheed Martin

### Baseline Skills

- Troubleshooting
- Communication Skills
- Computer Literacy
- Problem Solving
- Physical Abilities

### Required Education and Experience

- High School Diploma or GED
- Three to Five Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- None

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Electromechanical Equipment Assemblers

Assemble or modify electromechanical equipment or devices, such as servomechanisms, gyros, dynamometers, magnetic drums, tape drives, brakes, control linkage, actuators, and appliances.

On-the-Job Training



Specialized Skills
<ul style="list-style-type: none"> <li>• Repair</li> <li>• Hand Tools</li> <li>• Hoisting Equipment</li> <li>• Schematic Diagrams</li> <li>• Scheduling</li> <li>• Welding</li> <li>• PLC Programming</li> <li>• Preventative Maintenance</li> </ul>

Software Skills
<ul style="list-style-type: none"> <li>• None</li> </ul>

Other Job Titles
<ul style="list-style-type: none"> <li>• Assembler</li> </ul>

Top Posting Employers
<ul style="list-style-type: none"> <li>• Container Research Corp.</li> <li>• SP Industries Inc.</li> <li>• Opex Corp.</li> </ul>

Baseline Skills
<ul style="list-style-type: none"> <li>• Physical Abilities</li> <li>• Detail-Oriented</li> <li>• Communication Skills</li> <li>• Work Area Maintenance</li> <li>• Organizational Skills</li> </ul>

Required Education and Experience
<ul style="list-style-type: none"> <li>• High School Diploma or GED</li> <li>• Three to Five Years of Experience</li> <li>• On-the-Job Training: One to Twelve Months</li> </ul>

Certifications and Licenses
<ul style="list-style-type: none"> <li>• None</li> </ul>

**NEW**

## Highway Maintenance Workers

Maintain highways, municipal and rural roads, airport runways, and rights-of-way. Duties include patching broken or eroded pavement and repairing guard rails, highway markers, and snow fences. May also mow or clear brush from along road, or plow snow from roadway.

On-the-Job Training



Specialized Skills
<ul style="list-style-type: none"> <li>Traffic Management</li> <li>Repair</li> <li>Lifting Ability</li> <li>Maintenance</li> <li>Two-Way Radio Operation</li> <li>Staff Management</li> <li>Scheduling</li> <li>Machinery</li> </ul>

Software Skills
<ul style="list-style-type: none"> <li>None</li> </ul>

Other Job Titles
<ul style="list-style-type: none"> <li>Traffic Control Flagger</li> <li>Maintenance Worker</li> </ul>

Top Posting Employers
<ul style="list-style-type: none"> <li>Area Wise Protective</li> <li>Flagger Force</li> <li>Traffic Plan</li> </ul>

Baseline Skills
<ul style="list-style-type: none"> <li>Physical Abilities</li> <li>Detail-Oriented</li> <li>Communication Skills</li> <li>Work Area Maintenance</li> <li>Organizational Skills</li> </ul>

Required Education and Experience
<ul style="list-style-type: none"> <li>High School Diploma or GED</li> <li>Less than Two Years of Experience</li> <li>On-the-Job Training: One to Twelve Months</li> </ul>

Certifications and Licenses
<ul style="list-style-type: none"> <li>Driver's License</li> </ul>

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Mobile Heavy Equipment Mechanics, Except Engines

Diagnose, adjust, repair, or overhaul mobile mechanical, hydraulic, and pneumatic equipment, such as cranes, bulldozers, graders, and conveyors, used in construction, logging, and mining.



### Specialized Skills

- Repair
- Heavy Equipment
- Preventative Maintenance
- Welding
- Hand Tools
- Machinery
- Forklift Operation
- Equipment Repair

### Software Skills

- None

### Other Job Titles

- Heavy Equipment Mechanic

### Top Posting Employers

- PAE Inc.
- Waste Management
- Jesco Inc.
- SEPTA

### Baseline Skills

- Troubleshooting
- Physical Abilities
- Communication Skills
- Computer Literacy
- Problem Solving

### Required Education and Experience

- High School Diploma or GED
- Less than Two Years of Experience
- On-the-Job Training: More than Twelve Months

### Certifications and Licenses

- Driver's License

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Heating, Air Conditioning, and Refrigeration Mechanics and Installers

Install or repair heating, central air conditioning, HVAC, or refrigeration systems, including oil burners, hot-air furnaces, and heating stoves.

On-the-Job Training

Vocational Training



Specialized Skills
<ul style="list-style-type: none"> <li>• HVAC</li> <li>• Repair</li> <li>• Plumbing</li> <li>• Customer Service</li> <li>• Predictive Maintenance</li> <li>• Hand Tools</li> <li>• Ventilation</li> <li>• Carpentry</li> </ul>

Software Skills
<ul style="list-style-type: none"> <li>• None</li> </ul>

Other Job Titles
<ul style="list-style-type: none"> <li>• HVAC Service Technician</li> <li>• HVAC Installer</li> </ul>

Top Posting Employers
<ul style="list-style-type: none"> <li>• Sears</li> <li>• HB McClure</li> <li>• Johnson Controls</li> </ul>

Baseline Skills
<ul style="list-style-type: none"> <li>• Troubleshooting</li> <li>• Communication Skills</li> <li>• Physical Abilities</li> <li>• Organizational Skills</li> <li>• Problem Solving</li> </ul>

Required Education and Experience
<ul style="list-style-type: none"> <li>• High School Diploma or GED</li> <li>• Three to Five Years of Experience</li> <li>• On-the-Job Training: More than Twelve Months</li> </ul>

Certifications and Licenses
<ul style="list-style-type: none"> <li>• Driver’s License</li> <li>• Competitive: EPA Certification (IR)</li> </ul>

Source: Philadelphia Works analysis of data from Lightcast Inc.



Building a Skilled and Thriving Workforce

A photograph of two women in an office setting. The woman on the left has short, grey hair and is wearing a dark blue button-down shirt. She is looking towards the woman on the right. The woman on the right has long, dark, wavy hair and is wearing glasses, a black leather jacket, and an orange turtleneck. She is smiling and holding a pen over a document. The background is a blurred office environment with large windows.

# Education and Social Assistance

## Childcare Workers

Attend to children at schools, businesses, private households, and childcare institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play.



- ### Specialized Skills
- Child Care
  - CPR
  - Babysitting
  - Teaching
  - Scheduling
  - Infant Care
  - Laundry
  - Caregiving

- ### Software Skills
- None

- ### Other Job Titles
- Child Care Provider

- ### Top Posting Employers
- YMCA
  - Care Solutions
  - Philadelphia Nanny Network Inc.

- ### Baseline Skills
- Communication Skills
  - Energetic
  - Organizational Skills
  - Planning
  - Creativity

- ### Required Education and Experience
- High School Diploma or GED (Competitive: Post-Secondary Certificate)
  - Less than Two Years of Experience
  - On-the-Job Training: One Month or Less

- ### Certifications and Licenses
- Child Development Associate (CDA) (IR)
  - Competitive: First Aid CPR

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Career/Technical Education Teachers

Teach occupational, vocational, career, or technical subjects to students at the secondary school level.

Higher Education

Vocational Training

- ### Specialized Skills
- Teaching
  - Special Education
  - Lesson Planning
  - Tutoring
  - Commercial Driving
  - Customer Service
  - CPR
  - Technical Knowledge

- ### Software Skills
- General Microsoft Office



- ### Other Job Titles
- Driving Instructor
  - Computer Science Teacher
  - High School Teacher

- ### Top Posting Employers
- Local School Districts

- ### Baseline Skills
- Teamwork and Collaboration
  - Planning
  - Organizational Skills
  - Problem Solving

- ### Required Education and Experience
- Bachelor's Degree
  - Less than Two Years of Experience
  - On-the-Job Training: None

- ### Certifications and Licenses
- Teaching Certification (IR)

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Child, Family, and School Social Workers

Provide social services and assistance to improve the social and psychological functioning of children and their families and to maximize the family well-being and the academic functioning of children. May assist parents, arrange adoptions, and find foster homes for abandoned or abused children. In schools, they address such problems as teenage pregnancy, misbehavior, and truancy. May also advise teachers.



Higher Education

### Specialized Skills

- Case Management
- Social Work
- Mental Health
- Social Services
- Psychology
- Crisis Intervention
- Treatment Planning
- Behavioral Health

### Software Skills

- General Microsoft Office

### Other Job Titles

- School Social Worker
- Family Advocate
- Case Manager

### Top Posting Employers

- Center for Family Services
- JEVS Human Services
- Local Governments
- Local School Districts

### Baseline Skills

- Teamwork and Collaboration
- Communication
- Spanish/Bilingual
- Planning

### Required Education and Experience

- Bachelor's Degree
- Less than Two Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Driver's License
- Competitive: Social Work License

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Community Health Workers

Higher Education

Promote health within a community by assisting individuals to adopt healthy behaviors. Serve as an advocate for the health needs of individuals by assisting community residents in effectively communicating with healthcare providers or social service agencies. Act as liaison or advocate and implement programs that promote, maintain, and improve individual and overall community health. May deliver health-related preventive services such as blood pressure, glaucoma, and hearing screenings. May collect data to help identify community health needs.



### Specialized Skills

- Customer Service
- Behavior Health
- Public Health and Safety
- Mental Health
- Home Care
- Data Entry
- Case Management
- Budgeting

### Software Skills

- General Microsoft Office

### Other Job Titles

- Community Liaison

### Top Posting Employers

- Trinity Health
- University of Pennsylvania
- Local Governments

### Baseline Skills

- Communication Skills
- Teamwork and Collaboration
- Organizational Skills
- Problem Solving

### Required Education and Experience

- Bachelor’s Degree
- Less than Two Years of Experience
- On-the-Job Training: One Month or Less

### Certifications and Licenses

- Driver’s License

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Crossing Guards and Flaggers

Guide or control vehicular or pedestrian traffic at such places as streets, schools, railroad crossings, or construction sites.

Direct Placement



EMSI

### Specialized Skills

- Traffic Laws
- CPR
- Traffic Maintenance
- Scheduling
- Lifting Ability
- Public Health and Safety
- Customer Service
- Traffic Management

### Software Skills

- None

### Other Job Titles

- School Crossing Guard

### Top Industries

- Local School Districts
- Local Governments

### Baseline Skills

- Physical Abilities
- Communication Skills
- Problem Solving
- Organizational Skills
- Planning

### Required Education and Experience

- High School Diploma or GED
- Less than Two Years of Experience
- On-the-Job Training: One Month or Less

### Certifications and Licenses

- None

## Elementary School Teachers

Teach academic and social skills to students at the elementary school level.

Higher Education

Vocational Training



### Specialized Skills

- Teaching
- Lesson Planning
- Special Education
- Assessment Data
- Learning Styles
- Child Development
- Task Analysis
- Child Care

### Software Skills

- General Microsoft Office

### Other Job Titles

- Elementary Teacher

### Top Posting Employers

- Local School Districts

### Baseline Skills

- Teamwork and Collaboration
- Planning
- Communication Skills
- Writing

### Required Education and Experience

- Bachelor’s Degree
- Less than Two Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Teaching Certification (IR)

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Eligibility Interviewers, Government Programs

Determine eligibility of persons applying to receive assistance from government programs and agency resources, such as welfare, unemployment benefits, social security, and public housing.



### Specialized Skills

- Customer Service
- Sales
- Scheduling
- Customer Billing
- Case Management
- Data Entry
- Medicare/Medicaid Knowledge

### Software Skills

- General Microsoft Office

### Other Job Titles

- Enrollment Specialist

### Top Posting Employers

- University of Pennsylvania
- Trinity Health
- Local Governments

### Baseline Skills

- Communication Skills
- Organizational Skills
- Multi-Tasking
- Teamwork and Collaboration

### Required Education and Experience

- High School Diploma or GED
- Less than Two Years of Experience
- On-the-Job Training: One to Twelve Months

### Certifications and Licenses

- None

Higher Education

On-the-Job Training

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Librarians and Media Collections Specialists

Administer and maintain libraries or collections of information, for public or private access through reference or borrowing. Work in a variety of settings, such as educational institutions, museums, and corporations, and with various types of informational materials, such as books, periodicals, recordings, films, and databases.



### Specialized Skills

- Teaching
- Budgeting
- Customer Service
- Information Literacy
- Library Resources
- Library Instruction
- Staff Management
- Social Media

### Software Skills

- General Microsoft Office
- LibGuides

### Other Job Titles

- Librarian
- Reference Librarian

### Top Posting Employers

- University of Pennsylvania
- Temple University
- Drexel University

### Baseline Skills

- Communication Skills
- Research
- Teamwork and Collaboration
- Writing

### Required Education and Experience

- Bachelor’s Degree or Higher
- Less than Two Year of Experience
- On-the-Job Training: None

### Certifications and Licenses

- None

## Police and Sheriffs Patrol Officers

On-the-Job Training

Maintain order and protect life and property by enforcing local, tribal, state, or federal laws and ordinances. Perform a combination of the following duties: patrol a specific area; direct traffic; issue traffic summonses; investigate accidents; apprehend and arrest suspects, or serve legal processes of courts. Includes police officers working at educational institutions.



### Specialized Skills

- Public Health and Safety
- CPR
- Law Enforcement and Criminal Justice
- Scheduling
- Prevention of Criminal Activity
- Surveillance

### Software Skills

- General Microsoft Office

### Other Job Titles

- Public Safety Officer
- Police Officer
- Military Police Officer

### Top Posting Employers

- Local Governments

### Baseline Skills

- Physical Abilities
- Communication Skills
- Computer Literacy
- Writing
- Organizational Skills

### Required Education and Experience

- High School Diploma or GED
- Less than Two Years of Experience
- On-the-Job Training: One to Twelve Months

### Certifications and Licenses

- Driver's License

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Secondary School Teachers

Teach one or more subjects to students at the secondary school level.

Higher Education

Vocational Training



### Specialized Skills

- Teaching
- Lesson Planning
- Assessment Data
- Special Education
- Learning Styles
- Chemistry
- Biology
- Data Analysis

### Software Skills

- General Microsoft Office

### Other Job Titles

- High School Teacher
- Math Teacher
- Spanish Teacher

### Top Posting Employers

- Local School Districts

### Baseline Skills

- Teamwork and Collaboration
- Planning
- Communication Skills
- Writing

### Required Education and Experience

- Bachelor’s Degree
- Less than Two Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Teacher Certification (IR)

**NEW**

Source: Philadelphia Works analysis of data from Lightcast Inc.

## Special Education Teachers

Teach academic, social, and life skills to school students with learning, emotional, or physical disabilities. Includes teachers who specialize and work with students who are blind or have visual impairments; students who are deaf or have hearing impairments; and students with intellectual disabilities.



### Specialized Skills

- Teaching
- Child Development
- Child Care
- Lesson Planning
- Special Education
- CPR
- Educational Programs
- Assessment Data

### Software Skills

- General Microsoft Office

### Other Job Titles

- Teacher

### Top Posting Employers

- Local School Districts

### Baseline Skills

- Teamwork and Collaboration
- Communication Skills
- Planning
- Physical Abilities

### Required Education and Experience

- Bachelor’s Degree
- Less than Two Years of Experience
- On-the-Job Training: None

### Certifications and Licenses

- Teacher Certification (IR)

Higher Education

Vocational Training

**NEW**

**For comments or questions about the contents of  
this document, please reach out to  
[data@philaworks.org](mailto:data@philaworks.org)**



**1617 John F. Kennedy Boulevard, 13<sup>th</sup> Floor  
Philadelphia, PA 19103  
Administrative Offices: (215) 963-2100  
Job Seeker and Business Services: (833) 750-5672**