



**Using Labor Market Information
to Inform Workforce Development Practice and Planning**

CUNY Adult and Continuing Education – January 20, 2010

8:30 a.m. to 12:00 pm

CUNY Graduate Center, Room

Training Objectives

- Provide an introduction to labor market research
- Demonstrate tools for self-guided labor market research
- Explore the uses and limitations of labor market research
- Present research on 10 fastest growing occupations in NYC

Agenda

- 8:30 Coffee and networking
- 9:00 Welcome and introductions
- 9:15 Setting the Stage: Key Questions and Terminology
- 9:30 Industrial Perspectives
- Exercise 1.*
- BREAK*
- 10:15 Occupational Perspectives
- Exercise 2.*
- 11:00 Bringing it all together
- Exercise 3.*
- 11:20 Growth occupations
- 11:40 Q&A and Discussion



NEW YORK CITY LABOR MARKET INFORMATION SERVICE

The New York City Labor Market Information Service (NYCLMIS) provides labor market analysis for the public workforce system. The service is a joint endeavor of the New York City Workforce Investment Board (WIB) and Center for Urban Research at the City University of New York Graduate Center.

NYCLMIS OBJECTIVES

- ❖ Develop action-oriented research and information tools that will be used by workforce development service providers and policy makers to improve their practice
- ❖ Be the portal for cutting-edge and timely labor market data about New York City

USERS

The NYCLMIS creates research and associated products that are of service to the workforce development practitioner and policy communities in their day-to-day and strategic decision making. These products help synthesize, distill, and frame the volumes of data available for the use of the public workforce system's partners and stakeholders.

PRODUCTS AND SERVICES

- ❖ In-Demand Occupations analysis for the NYC Department of Small Business Services
- ❖ *Green Collar jobs Outlook* in New York City
- ❖ Profiles of employment nine key New York City industry groups (grocery stores, urban transit, publishing, legal services, security and investigation services, colleges and universities, home health care, individual and family care, and restaurants)
- ❖ *Gauging Employment Prospects in New York City, 2009*
- ❖ *Employment in New York City's Transportation Sector, September 2008*
- ❖ Transportation Subsector Profiles (air, truck, transit and ground passenger, support activities)
- ❖ Information tools on the website
- ❖ Workshops, presentations, and roundtables on labor market information

ABOUT THE NEW YORK CITY WORKFORCE INVESTMENT BOARD (WIB)

The NYC WIB administers the federal Workforce Investment Act funds in New York City and oversees the public workforce system run by the Department of Small Business Services and the Department of Youth and Community Development. The NYC WIB is made up of over 40 volunteer members, who are appointed by the Mayor, and includes representatives of local businesses, educational institutions, labor unions, community-based organizations, and other government agencies. The NYC WIB oversees the largest local workforce investment area in the country.

ABOUT THE CENTER FOR URBAN RESEARCH AT THE CITY UNIVERSITY OF NEW YORK

Working with Graduate Center faculty and students, the Center for Urban Research organizes basic research on the critical issues that face New York and other large cities in the U.S. and abroad, collaborates on applied research with public agencies, nonprofit organizations, and other partners, and holds forums for the media, foundations, community organizations and others about urban research at the Graduate Center of the City University of New York.

CONTACT US

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Information Sources for Sector Research
CUNY Adult and Continuing Education Meeting – January 20, 2010

	Useful Sources of Information		
	Numbers	Words	People
Business Environment			
Current business performance in New York City	CES	Daily business section Business weeklies	
Priority to the City, State or Federal Government for (i.e., green jobs, health care)		Grant solicitations Daily business section Business weeklies Trade weeklies	City and State Officials (EDC, SBS, DYCD, etc) Industry leaders
Current or easily developed relationships with key labor unions, associations, industry groups		Daily business section Trade weeklies	Key stakeholders
Employers			
Have similar staffing needs across industries/companies	NAICS description NYS DOL Staffing Patterns		Industry HR professionals
Sufficient job openings	QWI OES		
Good prospects for employment growth or stability	CES QCEW	Daily business section Business weeklies	Industry leaders
You already have or can easily develop relationships with employers in the sector	Business directory		
Are located within your catchment, if appropriate	Business directory		
Occupations			
No obvious barriers to jobseekers with whom you work	O*NET Online	LAC Survey NY State Law	Industry leaders Employer interviews
Require skills, training, experience, certification that your agency can help jobseekers to obtain	O*NET Online		
Pay good wages, have benefits	QWI OES		Employer interviews
Have reasonable retention levels	QWI OES		
Provide opportunities for advancement	O*NET Online		

	Useful Sources of Information		
	Numbers	Words	People
Working conditions acceptable to jobseekers with whom you work	O*NET Online		
Training and Recruitment Needs			
Employers are willing to/interested in interviewing the applicants your agency would send them			Employer interviews
Sector has a known shortage of workers with the relevant skills	NYSDOL Jobs in Demand	Business weeklies	Employer interviews
Number of current training providers	Approved provider list		Employer interviews
Needs to provide/outsouce training for incumbent workers			Employer interviews

KEY		
Approved provider list	New York City's list of New York State-approved training providers	http://www.nyc.gov/trainingguide
Business Directory	InfoUSA list of establishments by occupation and industry with contact information	http://www.labor.state.ny.us/stats/bdirector.shtm
CES	Monthly Current Employment Statistics and 1-month and 1-year comparisons	http://www.labor.state.ny.us/workforceindustrydata/cesemp.asp
NAICS	Sectors are classified according to the 2007 North American Industry Classification System	http://www.census.gov/epcd/www/naics.html
O*NET	A comprehensive on-line database, showing in detail or summary format for every US occupation: skills, requirements, working conditions, typical wages, and similar occupations	http://online.onetcenter.org/
OES	Occupation Employment Statistics adapted by NYSDOL long-term projections – be sure to use the New York City specific analysis	http://www.labor.state.ny.us/workforceindustrydata/lsproj.shtm
QCEW	Quarterly Census of Employment and Wages (required for all UI-eligible employers)	http://www.labor.state.ny.us/workforceindustrydata/lsqcew.shtm
QWI	Quarterly Workforce Indicators, a Census online application that uses state-of-the-art data to provide key indicators of employment and wages by sector	http://lehd.did.census.gov/led/datatools/gwiapp.html
SOC	Occupations are classified according to the Standard Occupational Classification System (soon to be updated)	http://www.bls.gov/oes/2001/oes_stru.htm



LABOR MARKET INFORMATION TOOLS

KEY TERMS & DEFINITIONS

LABOR MARKET INFORMATION TOOLS

This is the first in a series of tools being developed by the New York City Labor Market Information Service (NYCLMIS). The purpose of the tools is to help workforce development professionals to collect, understand, and use data that will improve their day-to-day operations and strategic decision-making. This tool defines some key classification terms used in labor market analysis.

KEY TERMS ABOUT ENTERPRISES

Establishment

An establishment is the physical location of economic activity—for example, a factory, store, office, or school. An establishment usually produces a single good or provides a single service. Enterprises (a firm, government agency, or nonprofit organization) may consist of one or many establishments. If there are many establishments within an enterprise, they can be classified into a single industry (e.g., a chain), or into different industries (e.g., a conglomerate).

North American Industry Classification System (NAICS)

A standard numerical classification system used to group establishments. Establishments that do similar things in similar ways are classified together. NAICS codes vary in their level of specificity from 20 broad 2-digit categories known as “sectors” to more than 1,000 6-digit “industries.” Workforce professionals should use NAICS to ensure that they are being precise and consistent about their definitions.

Sector

The broadest way to group establishments under NAICS. The 20 2-digit NAICS sectors are:

NAICS	SECTOR	NAICS	SECTOR
11	Agriculture, forestry, fishing, hunting	54	Professional, scientific, technical services
21	Mining	55	Management of companies, enterprises
23	Construction	56	Administrative, support; waste management, remediation services
31-33	Manufacturing		
42	Wholesale trade	61	Educational services
44-45	Retail trade	62	Health care, social assistance
48-49	Transportation, warehousing	71	Arts, entertainment, recreation
51	Information	72	Accommodation, food services
52	Finance, insurance	81	Other services
53	Real estate, rental, leasing	92	Public administration

Subsector

A grouping of establishments under NAICS category, as identified by a 3-digit NAICS Code. Subsectors are more specific than sectors. For example, the subsectors classified under the Transportation and warehousing sector (NAICS 48-49) are:

NAICS	SUBSECTOR	NAICS	SUBSECTOR
481	Air	486	Pipeline
482	Water	488	Support activities
483	Rail	491	Postal service
484	Truck	492	Couriers and messengers
485	Transit and ground passenger	493	Warehousing and storage

Industry Group, NAICS Industry, National Industry

Establishments can be grouped into increasingly specific categories. 4-digit codes describe what are known as industry groups; 5-digit codes describe NAICS industries; and 6-digit codes describe national industries. For example:

NAICS	Classification
51	Information <u>sector</u>
512	Motion picture and sound recording <u>subsector</u>
5121	Motion picture and video <u>industry group</u>
51213	Motion picture and video exhibition <u>NAICS industry</u>
512132	Drive-in motion picture theaters <u>national industry</u>

KEY TERMS ABOUT JOBS

Occupation

A set of activities or tasks that employees are paid to perform. Employees that perform essentially the same tasks are in the same occupation, whether or not they work in the same industry. Some occupations are concentrated in a few industries (e.g., pipe welders); other occupations are found in many industries (e.g., administrative assistants).

Standard Occupational Classification System (SOC)

A standard numerical classification system used to group workers into occupational categories according to job duties, skills, education, or experience. SOCs vary in specificity: there are 23 major groups, 96 minor groups, 449 broad occupations, and over 800 detailed occupations. The major occupational groups are:

SOC	MAJOR OCCUPATION GROUP	SOC	MAJOR OCCUPATION GROUP
11	Management	35	Food preparation, serving related
13	Business, financial operations	37	Building, grounds cleaning, maintenance
15	Computer, mathematical	39	Personal care, service
17	Architecture, engineering	41	Sales, related
19	Life, physical, social science	43	Office, administrative support
21	Community, social services	45	Farming, fishing, forestry
23	Legal	47	Construction, extraction
27	Education, training, library	49	Installation, maintenance, repair
29	Arts, design, entertainment, sports, media	51	Production
31	Healthcare practitioners, technical healthcare support	53	Transportation, material moving
33	Protective service	55	Military specific

WHO WE ARE

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2007 Two- and Three-Digit North American Industry Classification System (NAICS) Codes
CUNY Adult and Continuing Education – January 20, 2010

Code	Description
11	Agriculture, Forestry, Fishing and Hunting
111	Crop Production
112	Animal Production
113	Forestry and Logging
114	Fishing, Hunting and Trapping
115	Support Activities for Agriculture and Forestry
21	Mining, Quarrying, and Oil and Gas Extraction
211	Oil and Gas Extraction
212	Mining (except Oil and Gas)
213	Support Activities for Mining
22	Utilities
221	Utilities
23	Construction
236	Construction of Buildings
237	Heavy and Civil Engineering Construction
238	Specialty Trade Contractors
31-33	Manufacturing
311	Food Manufacturing
312	Beverage and Tobacco Product Manufacturing
313	Textile Mills
314	Textile Product Mills
315	Apparel Manufacturing
316	Leather and Allied Product Manufacturing
321	Wood Product Manufacturing
322	Paper Manufacturing
323	Printing and Related Support Activities
324	Petroleum and Coal Products Manufacturing
325	Chemical Manufacturing
326	Plastics and Rubber Products Manufacturing
327	Nonmetallic Mineral Product Manufacturing
331	Primary Metal Manufacturing
332	Fabricated Metal Product Manufacturing
333	Machinery Manufacturing

Code	Description
334	Computer and Electronic Product Manufacturing
335	Electrical Equipment, Appliance, and Component Manufacturing
336	Transportation Equipment Manufacturing
337	Furniture and Related Product Manufacturing
339	Miscellaneous Manufacturing
42	Wholesale Trade
423	Merchant Wholesalers, Durable Goods
424	Merchant Wholesalers, Nondurable Goods
425	Wholesale Electronic Markets and Agents and Brokers
44-45	Retail Trade
441	Motor Vehicle and Parts Dealers
442	Furniture and Home Furnishings Stores
443	Electronics and Appliance Stores
444	Building Material and Garden Equipment and Supplies Dealers
445	Food and Beverage Stores
446	Health and Personal Care Stores
447	Gasoline Stations
448	Clothing and Clothing Accessories Stores
451	Sporting Goods, Hobby, Book, and Music Stores
452	General Merchandise Stores
453	Miscellaneous Store Retailers
454	Nonstore Retailers
48-49	Transportation and Warehousing
481	Air Transportation
482	Rail Transportation
483	Water Transportation
484	Truck Transportation
485	Transit and Ground Passenger Transportation
486	Pipeline Transportation
487	Scenic and Sightseeing Transportation
488	Support Activities for Transportation
491	Postal Service
492	Couriers and Messengers
493	Warehousing and Storage
51	Information
511	Publishing Industries (except Internet)
512	Motion Picture and Sound Recording Industries
515	Broadcasting (except Internet)
517	Telecommunications
518	Data Processing, Hosting and Related Services

Code	Description
519	Other Information Services
52	Finance and Insurance
521	Monetary Authorities-Central Bank
522	Credit Intermediation and Related Activities
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities
524	Insurance Carriers and Related Activities
525	Funds, Trusts, and Other Financial Vehicles
53	Real Estate and Rental and Leasing
531	Real Estate
532	Rental and Leasing Services
533	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)
54	Professional, Scientific, and Technical Services
541	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
551	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
561	Administrative and Support Services
562	Waste Management and Remediation Services
61	Educational Services
611	Educational Services
62	Health Care and Social Assistance
621	Ambulatory Health Care Services
622	Hospitals
623	Nursing and Residential Care Facilities
624	Social Assistance
71	Arts, Entertainment, and Recreation
711	Performing Arts, Spectator Sports, and Related Industries
712	Museums, Historical Sites, and Similar Institutions
713	Amusement, Gambling, and Recreation Industries
72	Accommodation and Food Services
721	Accommodation
722	Food Services and Drinking Places
81	Other Services (except Public Administration)
811	Repair and Maintenance

Code	Description
812	Personal and Laundry Services
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations
814	Private Households
92	Public Administration
921	Executive, Legislative, and Other General Government Support
922	Justice, Public Order, and Safety Activities
923	Administration of Human Resource Programs
924	Administration of Environmental Quality Programs
925	Administration of Housing Programs, Urban Planning, and Community Development
926	Administration of Economic Programs
927	Space Research and Technology
928	National Security and International Affairs

Search:  for: 

Occupational Employment Statistics (http://www.bls.gov/oes/2001/oes_stru.htm)

List of SOC Occupations

Major groups

- [00-0000 All Occupations](#)
- [11-0000 Management Occupations](#)
- [13-0000 Business and Financial Operations Occupations](#)
- [15-0000 Computer and Mathematical Occupations](#)
- [17-0000 Architecture and Engineering Occupations](#)
- [19-0000 Life, Physical, and Social Science Occupations](#)
- [21-0000 Community and Social Services Occupations](#)
- [23-0000 Legal Occupations](#)
- [25-0000 Education, Training, and Library Occupations](#)
- [27-0000 Arts, Design, Entertainment, Sports, and Media Occupations](#)
- [29-0000 Healthcare Practitioners and Technical Occupations](#)
- [31-0000 Healthcare Support Occupations](#)
- [33-0000 Protective Service Occupations](#)
- [35-0000 Food Preparation and Serving Related Occupations](#)
- [37-0000 Building and Grounds Cleaning and Maintenance Occupations](#)
- [39-0000 Personal Care and Service Occupations](#)
- [41-0000 Sales and Related Occupations](#)
- [43-0000 Office and Administrative Support Occupations](#)
- [45-0000 Farming, Fishing, and Forestry Occupations](#)
- [47-0000 Construction and Extraction Occupations](#)
- [49-0000 Installation, Maintenance, and Repair Occupations](#)
- [51-0000 Production Occupations](#)
- [53-0000 Transportation and Material Moving Occupations](#)

11-0000 Management Occupations

- [11-0000](#) Management Occupations
- [11-1011](#) Chief Executives
- [11-1021](#) General and Operations Managers
- [11-1031](#) Legislators
- [11-2011](#) Advertising and Promotions Managers
- [11-2021](#) Marketing Managers
- [11-2022](#) Sales Managers
- [11-2031](#) Public Relations Managers
- [11-3011](#) Administrative Services Managers
- [11-3021](#) Computer and Information Systems Managers
- [11-3031](#) Financial Managers
- [11-3040](#) Human Resources Managers
- [11-3051](#) Industrial Production Managers
- [11-3061](#) Purchasing Managers

- [11-3071](#) Transportation, Storage, and Distribution Managers
- [11-9011](#) Farm, Ranch, and Other Agricultural Managers
- [11-9021](#) Construction Managers
- [11-9031](#) Education Administrators, Preschool and Child Care Center/Program
- [11-9032](#) Education Administrators, Elementary and Secondary School
- [11-9033](#) Education Administrators, Postsecondary
- [11-9041](#) Engineering Managers
- [11-9051](#) Food Service Managers
- [11-9061](#) Funeral Directors
- [11-9071](#) Gaming Managers
- [11-9081](#) Lodging Managers
- [11-9111](#) Medical and Health Services Managers
- [11-9121](#) Natural Sciences Managers
- [11-9131](#) Postmasters and Mail Superintendents
- [11-9141](#) Property, Real Estate, and Community Association Managers
- [11-9151](#) Social and Community Service Managers

13-0000 Business and Financial Operations Occupations

- [13-0000](#) Business and Financial Operations Occupations
- [13-1011](#) Agents and Business Managers of Artists, Performers, and Athletes
- [13-1021](#) Purchasing Agents and Buyers, Farm Products
- [13-1022](#) Wholesale and Retail Buyers, Except Farm Products
- [13-1023](#) Purchasing Agents, Except Wholesale, Retail, and Farm Products
- [13-1031](#) Claims Adjusters, Examiners, and Investigators
- [13-1032](#) Insurance Appraisers, Auto Damage
- [13-1041](#) Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation
- [13-1051](#) Cost Estimators
- [13-1061](#) Emergency Management Specialists
- [13-1071](#) Employment, Recruitment, and Placement Specialists
- [13-1072](#) Compensation, Benefits, and Job Analysis Specialists
- [13-1073](#) Training and Development Specialists
- [13-1111](#) Management Analysts
- [13-1121](#) Meeting and Convention Planners
- [13-2011](#) Accountants and Auditors
- [13-2021](#) Appraisers and Assessors of Real Estate
- [13-2031](#) Budget Analysts
- [13-2041](#) Credit Analysts
- [13-2051](#) Financial Analysts
- [13-2052](#) Personal Financial Advisors
- [13-2053](#) Insurance Underwriters
- [13-2061](#) Financial Examiners
- [13-2071](#) Loan Counselors
- [13-2072](#) Loan Officers
- [13-2081](#) Tax Examiners, Collectors, and Revenue Agents
- [13-2082](#) Tax Preparers

15-0000 Computer and Mathematical Occupations

- [15-0000](#) Computer and Mathematical Occupations
- [15-1011](#) Computer and Information Scientists, Research
- [15-1021](#) Computer Programmers
- [15-1031](#) Computer Software Engineers, Applications
- [15-1032](#) Computer Software Engineers, Systems Software
- [15-1041](#) Computer Support Specialists
- [15-1051](#) Computer Systems Analysts
- [15-1061](#) Database Administrators
- [15-1071](#) Network and Computer Systems Administrators
- [15-1081](#) Network Systems and Data Communications Analysts
- [15-2011](#) Actuaries
- [15-2021](#) Mathematicians
- [15-2031](#) Operations Research Analysts
- [15-2041](#) Statisticians
- [15-2091](#) Mathematical Technicians

17-0000 Architecture and Engineering Occupations

- [17-0000](#) Architecture and Engineering Occupations
- [17-1011](#) Architects, Except Landscape and Naval
- [17-1012](#) Landscape Architects
- [17-1021](#) Cartographers and Photogrammetrists
- [17-1022](#) Surveyors
- [17-2011](#) Aerospace Engineers
- [17-2021](#) Agricultural Engineers
- [17-2031](#) Biomedical Engineers
- [17-2041](#) Chemical Engineers
- [17-2051](#) Civil Engineers
- [17-2061](#) Computer Hardware Engineers
- [17-2071](#) Electrical Engineers
- [17-2072](#) Electronics Engineers, Except Computer
- [17-2081](#) Environmental Engineers
- [17-2111](#) Health and Safety Engineers, Except Mining Safety Engineers and Inspectors
- [17-2112](#) Industrial Engineers
- [17-2121](#) Marine Engineers and Naval Architects
- [17-2131](#) Materials Engineers
- [17-2141](#) Mechanical Engineers
- [17-2151](#) Mining and Geological Engineers, Including Mining Safety Engineers
- [17-2161](#) Nuclear Engineers
- [17-2171](#) Petroleum Engineers
- [17-3011](#) Architectural and Civil Drafters
- [17-3012](#) Electrical and Electronics Drafters
- [17-3013](#) Mechanical Drafters
- [17-3021](#) Aerospace Engineering and Operations Technicians
- [17-3022](#) Civil Engineering Technicians
- [17-3023](#) Electrical and Electronic Engineering Technicians
- [17-3024](#) Electro-Mechanical Technicians
- [17-3025](#) Environmental Engineering Technicians

- [17-3026](#) Industrial Engineering Technicians
- [17-3027](#) Mechanical Engineering Technicians
- [17-3031](#) Surveying and Mapping Technicians

19-0000 Life, Physical, and Social Science Occupations

- [19-0000](#) Life, Physical, and Social Science Occupations
- [19-1010](#) Agricultural and Food Scientists
- [19-1021](#) Biochemists and Biophysicists
- [19-1022](#) Microbiologists
- [19-1023](#) Zoologists and Wildlife Biologists
- [19-1031](#) Conservation Scientists
- [19-1032](#) Foresters
- [19-1041](#) Epidemiologists
- [19-1042](#) Medical Scientists, Except Epidemiologists
- [19-2011](#) Astronomers
- [19-2012](#) Physicists
- [19-2021](#) Atmospheric and Space Scientists
- [19-2031](#) Chemists
- [19-2032](#) Materials Scientists
- [19-2041](#) Environmental Scientists and Specialists, Including Health
- [19-2042](#) Geoscientists, Except Hydrologists and Geographers
- [19-2043](#) Hydrologists
- [19-3011](#) Economists
- [19-3021](#) Market Research Analysts
- [19-3022](#) Survey Researchers
- [19-3031](#) Clinical, Counseling, and School Psychologists
- [19-3032](#) Industrial-Organizational Psychologists
- [19-3041](#) Sociologists
- [19-3051](#) Urban and Regional Planners
- [19-3091](#) Anthropologists and Archeologists
- [19-3092](#) Geographers
- [19-3093](#) Historians
- [19-3094](#) Political Scientists
- [19-4011](#) Agricultural and Food Science Technicians
- [19-4021](#) Biological Technicians
- [19-4031](#) Chemical Technicians
- [19-4041](#) Geological and Petroleum Technicians
- [19-4051](#) Nuclear Technicians
- [19-4091](#) Environmental Science and Protection Technicians, Including Health
- [19-4092](#) Forensic Science Technicians
- [19-4093](#) Forest and Conservation Technicians

21-0000 Community and Social Services Occupations

- [21-0000](#) Community and Social Services Occupations
- [21-1011](#) Substance Abuse and Behavioral Disorder Counselors
- [21-1012](#) Educational, Vocational, and School Counselors
- [21-1013](#) Marriage and Family Therapists
- [21-1014](#) Mental Health Counselors

- [21-1015](#) Rehabilitation Counselors
- [21-1021](#) Child, Family, and School Social Workers
- [21-1022](#) Medical and Public Health Social Workers
- [21-1023](#) Mental Health and Substance Abuse Social Workers
- [21-1091](#) Health Educators
- [21-1092](#) Probation Officers and Correctional Treatment Specialists
- [21-1093](#) Social and Human Service Assistants
- [21-2011](#) Clergy
- [21-2021](#) Directors, Religious Activities and Education

23-0000 Legal Occupations

- [23-0000](#) Legal Occupations
- [23-1011](#) Lawyers
- [23-1021](#) Administrative Law Judges, Adjudicators, and Hearing Officers
- [23-1022](#) Arbitrators, Mediators, and Conciliators
- [23-1023](#) Judges, Magistrate Judges, and Magistrates
- [23-2011](#) Paralegals and Legal Assistants
- [23-2091](#) Court Reporters
- [23-2092](#) Law Clerks
- [23-2093](#) Title Examiners, Abstractors, and Searchers

25-0000 Education, Training, and Library Occupations

- [25-0000](#) Education, Training, and Library Occupations
- [25-1011](#) Business Teachers, Postsecondary
- [25-1021](#) Computer Science Teachers, Postsecondary
- [25-1022](#) Mathematical Science Teachers, Postsecondary
- [25-1031](#) Architecture Teachers, Postsecondary
- [25-1032](#) Engineering Teachers, Postsecondary
- [25-1041](#) Agricultural Sciences Teachers, Postsecondary
- [25-1042](#) Biological Science Teachers, Postsecondary
- [25-1043](#) Forestry and Conservation Science Teachers, Postsecondary
- [25-1051](#) Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary
- [25-1052](#) Chemistry Teachers, Postsecondary
- [25-1053](#) Environmental Science Teachers, Postsecondary
- [25-1054](#) Physics Teachers, Postsecondary
- [25-1061](#) Anthropology and Archeology Teachers, Postsecondary
- [25-1062](#) Area, Ethnic, and Cultural Studies Teachers, Postsecondary
- [25-1063](#) Economics Teachers, Postsecondary
- [25-1064](#) Geography Teachers, Postsecondary
- [25-1065](#) Political Science Teachers, Postsecondary
- [25-1066](#) Psychology Teachers, Postsecondary
- [25-1067](#) Sociology Teachers, Postsecondary
- [25-1071](#) Health Specialties Teachers, Postsecondary
- [25-1072](#) Nursing Instructors and Teachers, Postsecondary
- [25-1081](#) Education Teachers, Postsecondary
- [25-1082](#) Library Science Teachers, Postsecondary
- [25-1111](#) Criminal Justice and Law Enforcement Teachers, Postsecondary
- [25-1112](#) Law Teachers, Postsecondary

- [25-1113](#) Social Work Teachers, Postsecondary
- [25-1121](#) Art, Drama, and Music Teachers, Postsecondary
- [25-1122](#) Communications Teachers, Postsecondary
- [25-1123](#) English Language and Literature Teachers, Postsecondary
- [25-1124](#) Foreign Language and Literature Teachers, Postsecondary
- [25-1125](#) History Teachers, Postsecondary
- [25-1126](#) Philosophy and Religion Teachers, Postsecondary
- [25-1191](#) Graduate Teaching Assistants
- [25-1192](#) Home Economics Teachers, Postsecondary
- [25-1193](#) Recreation and Fitness Studies Teachers, Postsecondary
- [25-1194](#) Vocational Education Teachers, Postsecondary
- [25-2011](#) Preschool Teachers, Except Special Education
- [25-2012](#) Kindergarten Teachers, Except Special Education
- [25-2021](#) Elementary School Teachers, Except Special Education
- [25-2022](#) Middle School Teachers, Except Special and Vocational Education
- [25-2023](#) Vocational Education Teachers, Middle School
- [25-2031](#) Secondary School Teachers, Except Special and Vocational Education
- [25-2032](#) Vocational Education Teachers, Secondary School
- [25-2041](#) Special Education Teachers, Preschool, Kindergarten, and Elementary School
- [25-2042](#) Special Education Teachers, Middle School
- [25-2043](#) Special Education Teachers, Secondary School
- [25-3011](#) Adult Literacy, Remedial Education, and Ged Teachers and Instructors
- [25-3021](#) Self-Enrichment Education Teachers
- [25-4010](#) Archivists, Curators, and Museum Technicians
- [25-4021](#) Librarians
- [25-4031](#) Library Technicians
- [25-9011](#) Audio-Visual Collections Specialists
- [25-9021](#) Farm and Home Management Advisors
- [25-9031](#) Instructional Coordinators
- [25-9041](#) Teacher Assistants

27-0000 Arts, Design, Entertainment, Sports, and Media Occupations

- [27-0000](#) Arts, Design, Entertainment, Sports, and Media Occupations
- [27-1011](#) Art Directors
- [27-1013](#) Fine Artists, Including Painters, Sculptors, and Illustrators
- [27-1014](#) Multi-Media Artists and Animators
- [27-1021](#) Commercial and Industrial Designers
- [27-1022](#) Fashion Designers
- [27-1023](#) Floral Designers
- [27-1024](#) Graphic Designers
- [27-1025](#) Interior Designers
- [27-1026](#) Merchandise Displayers and Window Trimmers
- [27-1027](#) Set and Exhibit Designers
- [27-2011](#) Actors
- [27-2012](#) Producers and Directors
- [27-2021](#) Athletes and Sports Competitors
- [27-2022](#) Coaches and Scouts
- [27-2023](#) Umpires, Referees, and Other Sports Officials
- [27-2031](#) Dancers

- [27-2032](#) Choreographers
- [27-2041](#) Music Directors and Composers
- [27-2042](#) Musicians and Singers
- [27-3010](#) Announcers
- [27-3020](#) News Analysts, Reporters and Correspondents
- [27-3031](#) Public Relations Specialists
- [27-3041](#) Editors
- [27-3042](#) Technical Writers
- [27-3043](#) Writers and Authors
- [27-3091](#) Interpreters and Translators
- [27-4011](#) Audio and Video Equipment Technicians
- [27-4012](#) Broadcast Technicians
- [27-4013](#) Radio Operators
- [27-4014](#) Sound Engineering Technicians
- [27-4021](#) Photographers
- [27-4031](#) Camera Operators, Television, Video, and Motion Picture
- [27-4032](#) Film and Video Editors

29-0000 Healthcare Practitioners and Technical Occupations

- [29-0000](#) Healthcare Practitioners and Technical Occupations
- [29-1011](#) Chiropractors
- [29-1020](#) Dentists
- [29-1031](#) Dietitians and Nutritionists
- [29-1041](#) Optometrists
- [29-1051](#) Pharmacists
- [29-1061](#) Anesthesiologists
- [29-1062](#) Family and General Practitioners
- [29-1063](#) Internists, General
- [29-1064](#) Obstetricians and Gynecologists
- [29-1065](#) Pediatricians, General
- [29-1066](#) Psychiatrists
- [29-1067](#) Surgeons
- [29-1071](#) Physician Assistants
- [29-1081](#) Podiatrists
- [29-1111](#) Registered Nurses
- [29-1121](#) Audiologists
- [29-1122](#) Occupational Therapists
- [29-1123](#) Physical Therapists
- [29-1124](#) Radiation Therapists
- [29-1125](#) Recreational Therapists
- [29-1126](#) Respiratory Therapists
- [29-1127](#) Speech-Language Pathologists
- [29-1131](#) Veterinarians
- [29-2011](#) Medical and Clinical Laboratory Technologists
- [29-2012](#) Medical and Clinical Laboratory Technicians
- [29-2021](#) Dental Hygienists
- [29-2031](#) Cardiovascular Technologists and Technicians
- [29-2032](#) Diagnostic Medical Sonographers
- [29-2033](#) Nuclear Medicine Technologists

- [29-2034](#) Radiologic Technologists and Technicians
- [29-2041](#) Emergency Medical Technicians and Paramedics
- [29-2051](#) Dietetic Technicians
- [29-2052](#) Pharmacy Technicians
- [29-2053](#) Psychiatric Technicians
- [29-2054](#) Respiratory Therapy Technicians
- [29-2055](#) Surgical Technologists
- [29-2056](#) Veterinary Technologists and Technicians
- [29-2061](#) Licensed Practical and Licensed Vocational Nurses
- [29-2071](#) Medical Records and Health Information Technicians
- [29-2081](#) Opticians, Dispensing
- [29-2091](#) Orthotists and Prosthetists
- [29-9010](#) Occupational Health and Safety Specialists and Technicians
- [29-9091](#) Athletic Trainers

31-0000 Healthcare Support Occupations

- [31-0000](#) Healthcare Support Occupations
- [31-1011](#) Home Health Aides
- [31-1012](#) Nursing Aides, Orderlies, and Attendants
- [31-1013](#) Psychiatric Aides
- [31-2011](#) Occupational Therapist Assistants
- [31-2012](#) Occupational Therapist Aides
- [31-2021](#) Physical Therapist Assistants
- [31-2022](#) Physical Therapist Aides
- [31-9011](#) Massage Therapists
- [31-9091](#) Dental Assistants
- [31-9092](#) Medical Assistants
- [31-9093](#) Medical Equipment Preparers
- [31-9094](#) Medical Transcriptionists
- [31-9095](#) Pharmacy Aides
- [31-9096](#) Veterinary Assistants and Laboratory Animal Caretakers

33-0000 Protective Service Occupations

- [33-0000](#) Protective Service Occupations
- [33-1011](#) First-Line Supervisors/Managers of Correctional Officers
- [33-1012](#) First-Line Supervisors/Managers of Police and Detectives
- [33-1021](#) First-Line Supervisors/Managers of Fire Fighting and Prevention Workers
- [33-2011](#) Fire Fighters
- [33-2021](#) Fire Inspectors and Investigators
- [33-2022](#) Forest Fire Inspectors and Prevention Specialists
- [33-3011](#) Bailiffs
- [33-3012](#) Correctional Officers and Jailers
- [33-3021](#) Detectives and Criminal Investigators
- [33-3031](#) Fish and Game Wardens
- [33-3041](#) Parking Enforcement Workers
- [33-3051](#) Police and Sheriff's Patrol Officers

- [33-3052](#) Transit and Railroad Police
- [33-9011](#) Animal Control Workers
- [33-9021](#) Private Detectives and Investigators
- [33-9031](#) Gaming Surveillance Officers and Gaming Investigators
- [33-9032](#) Security Guards
- [33-9091](#) Crossing Guards

35-0000 Food Preparation and Serving Related Occupations

- [35-0000](#) Food Preparation and Serving Related Occupations
- [35-1011](#) Chefs and Head Cooks
- [35-1012](#) First-Line Supervisors/Managers of Food Preparation and Serving Workers
- [35-2011](#) Cooks, Fast Food
- [35-2012](#) Cooks, Institution and Cafeteria
- [35-2014](#) Cooks, Restaurant
- [35-2015](#) Cooks, Short Order
- [35-2021](#) Food Preparation Workers
- [35-3011](#) Bartenders
- [35-3021](#) Combined Food Preparation and Serving Workers, Including Fast Food
- [35-3022](#) Counter Attendants, Cafeteria, Food Concession, and Coffee Shop
- [35-3031](#) Waiters and Waitresses
- [35-3041](#) Food Servers, Nonrestaurant
- [35-9011](#) Dining Room and Cafeteria Attendants and Bartender Helpers
- [35-9021](#) Dishwashers
- [35-9031](#) Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop

37-0000 Building and Grounds Cleaning and Maintenance Occupations

- [37-0000](#) Building and Grounds Cleaning and Maintenance Occupations
- [37-1011](#) First-Line Supervisors/Managers of Housekeeping and Janitorial Workers
- [37-1012](#) First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers
- [37-2011](#) Janitors and Cleaners, Except Maids and Housekeeping Cleaners
- [37-2012](#) Maids and Housekeeping Cleaners
- [37-2021](#) Pest Control Workers
- [37-3011](#) Landscaping and Groundskeeping Workers
- [37-3012](#) Pesticide Handlers, Sprayers, and Applicators, Vegetation
- [37-3013](#) Tree Trimmers and Pruners

39-0000 Personal Care and Service Occupations

- [39-0000](#) Personal Care and Service Occupations
- [39-1011](#) Gaming Supervisors
- [39-1012](#) Slot Key Persons
- [39-1021](#) First-Line Supervisors/Managers of Personal Service Workers
- [39-2011](#) Animal Trainers
- [39-2021](#) Nonfarm Animal Caretakers
- [39-3011](#) Gaming Dealers
- [39-3012](#) Gaming and Sports Book Writers and Runners
- [39-3021](#) Motion Picture Projectionists

- [39-3031](#) Ushers, Lobby Attendants, and Ticket Takers
- [39-3091](#) Amusement and Recreation Attendants
- [39-3092](#) Costume Attendants
- [39-3093](#) Locker Room, Coatroom, and Dressing Room Attendants
- [39-4011](#) Embalmers
- [39-4021](#) Funeral Attendants
- [39-5011](#) Barbers
- [39-5012](#) Hairdressers, Hairstylists, and Cosmetologists
- [39-5091](#) Makeup Artists, Theatrical and Performance
- [39-5092](#) Manicurists and Pedicurists
- [39-5093](#) Shampooers
- [39-5094](#) Skin Care Specialists
- [39-6011](#) Baggage Porters and Bellhops
- [39-6012](#) Concierges
- [39-6021](#) Tour Guides and Escorts
- [39-6022](#) Travel Guides
- [39-6031](#) Flight Attendants
- [39-6032](#) Transportation Attendants, Except Flight Attendants and Baggage Porters
- [39-9011](#) Child Care Workers
- [39-9021](#) Personal and Home Care Aides
- [39-9031](#) Fitness Trainers and Aerobics Instructors
- [39-9032](#) Recreation Workers
- [39-9041](#) Residential Advisors

41-0000 Sales and Related Occupations

- [41-0000](#) Sales and Related Occupations
- [41-1011](#) First-Line Supervisors/Managers of Retail Sales Workers
- [41-1012](#) First-Line Supervisors/Managers of Non-Retail Sales Workers
- [41-2011](#) Cashiers
- [41-2012](#) Gaming Change Persons and Booth Cashiers
- [41-2021](#) Counter and Rental Clerks
- [41-2022](#) Parts Salespersons
- [41-2031](#) Retail Salespersons
- [41-3011](#) Advertising Sales Agents
- [41-3021](#) Insurance Sales Agents
- [41-3031](#) Securities, Commodities, and Financial Services Sales Agents
- [41-3041](#) Travel Agents
- [41-4011](#) Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products
- [41-4012](#) Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products
- [41-9011](#) Demonstrators and Product Promoters
- [41-9012](#) Models
- [41-9021](#) Real Estate Brokers
- [41-9022](#) Real Estate Sales Agents
- [41-9031](#) Sales Engineers
- [41-9041](#) Telemarketers
- [41-9091](#) Door-To-Door Sales Workers, News and Street Vendors, and Related Workers

43-0000 Office and Administrative Support Occupations

- [43-0000](#) Office and Administrative Support Occupations
- [43-1011](#) First-Line Supervisors/Managers of Office and Administrative Support Workers
- [43-2011](#) Switchboard Operators, Including Answering Service
- [43-2021](#) Telephone Operators
- [43-3011](#) Bill and Account Collectors
- [43-3021](#) Billing and Posting Clerks and Machine Operators
- [43-3031](#) Bookkeeping, Accounting, and Auditing Clerks
- [43-3041](#) Gaming Cage Workers
- [43-3051](#) Payroll and Timekeeping Clerks
- [43-3061](#) Procurement Clerks
- [43-3071](#) Tellers
- [43-4011](#) Brokerage Clerks
- [43-4021](#) Correspondence Clerks
- [43-4031](#) Court, Municipal, and License Clerks
- [43-4041](#) Credit Authorizers, Checkers, and Clerks
- [43-4051](#) Customer Service Representatives
- [43-4061](#) Eligibility Interviewers, Government Programs
- [43-4071](#) File Clerks
- [43-4081](#) Hotel, Motel, and Resort Desk Clerks
- [43-4111](#) Interviewers, Except Eligibility and Loan
- [43-4121](#) Library Assistants, Clerical
- [43-4131](#) Loan Interviewers and Clerks
- [43-4141](#) New Accounts Clerks
- [43-4151](#) Order Clerks
- [43-4161](#) Human Resources Assistants, Except Payroll and Timekeeping
- [43-4171](#) Receptionists and Information Clerks
- [43-4181](#) Reservation and Transportation Ticket Agents and Travel Clerks
- [43-5011](#) Cargo and Freight Agents
- [43-5021](#) Couriers and Messengers
- [43-5031](#) Police, Fire, and Ambulance Dispatchers
- [43-5032](#) Dispatchers, Except Police, Fire, and Ambulance
- [43-5041](#) Meter Readers, Utilities
- [43-5051](#) Postal Service Clerks
- [43-5052](#) Postal Service Mail Carriers
- [43-5053](#) Postal Service Mail Sorters, Processors, and Processing Machine Operators
- [43-5061](#) Production, Planning, and Expediting Clerks
- [43-5071](#) Shipping, Receiving, and Traffic Clerks
- [43-5081](#) Stock Clerks and Order Fillers
- [43-5111](#) Weighers, Measurers, Checkers, and Samplers, Recordkeeping
- [43-6011](#) Executive Secretaries and Administrative Assistants
- [43-6012](#) Legal Secretaries
- [43-6013](#) Medical Secretaries
- [43-6014](#) Secretaries, Except Legal, Medical, and Executive
- [43-9011](#) Computer Operators
- [43-9021](#) Data Entry Keyers
- [43-9022](#) Word Processors and Typists
- [43-9031](#) Desktop Publishers
- [43-9041](#) Insurance Claims and Policy Processing Clerks

- [43-9051](#) Mail Clerks and Mail Machine Operators, Except Postal Service
- [43-9061](#) Office Clerks, General
- [43-9071](#) Office Machine Operators, Except Computer
- [43-9081](#) Proofreaders and Copy Markers
- [43-9111](#) Statistical Assistants

45-0000 Farming, Fishing, and Forestry Occupations

- [45-0000](#) Farming, Fishing, and Forestry Occupations
- [45-1011](#) First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers
- [45-1012](#) Farm Labor Contractors
- [45-2011](#) Agricultural Inspectors
- [45-2021](#) Animal Breeders
- [45-2041](#) Graders and Sorters, Agricultural Products
- [45-2091](#) Agricultural Equipment Operators
- [45-2092](#) Farmworkers and Laborers, Crop, Nursery, and Greenhouse
- [45-2093](#) Farmworkers, Farm and Ranch Animals
- [45-4011](#) Forest and Conservation Workers
- [45-4021](#) Fallers
- [45-4022](#) Logging Equipment Operators
- [45-4023](#) Log Graders and Scalers

47-0000 Construction and Extraction Occupations

- [47-0000](#) Construction and Extraction Occupations
- [47-1011](#) First-Line Supervisors/Managers of Construction Trades and Extraction Workers
- [47-2011](#) Boilermakers
- [47-2021](#) Brickmasons and Blockmasons
- [47-2022](#) Stonemasons
- [47-2031](#) Carpenters
- [47-2041](#) Carpet Installers
- [47-2042](#) Floor Layers, Except Carpet, Wood, and Hard Tiles
- [47-2043](#) Floor Sanders and Finishers
- [47-2044](#) Tile and Marble Setters
- [47-2051](#) Cement Masons and Concrete Finishers
- [47-2053](#) Terrazzo Workers and Finishers
- [47-2061](#) Construction Laborers
- [47-2071](#) Paving, Surfacing, and Tamping Equipment Operators
- [47-2072](#) Pile-Driver Operators
- [47-2073](#) Operating Engineers and Other Construction Equipment Operators
- [47-2081](#) Drywall and Ceiling Tile Installers
- [47-2082](#) Tapers
- [47-2111](#) Electricians
- [47-2121](#) Glaziers
- [47-2130](#) Insulation Workers
- [47-2141](#) Painters, Construction and Maintenance
- [47-2142](#) Paperhangers
- [47-2151](#) Pipelayers
- [47-2152](#) Plumbers, Pipefitters, and Steamfitters
- [47-2161](#) Plasterers and Stucco Masons

- [47-2171](#) Reinforcing Iron and Rebar Workers
- [47-2181](#) Roofers
- [47-2211](#) Sheet Metal Workers
- [47-2221](#) Structural Iron and Steel Workers
- [47-3011](#) Helpers—Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters
- [47-3012](#) Helpers—Carpenters
- [47-3013](#) Helpers—Electricians
- [47-3014](#) Helpers—Painters, Paperhangers, Plasterers, and Stucco Masons
- [47-3015](#) Helpers—Pipelayers, Plumbers, Pipefitters, and Steamfitters
- [47-3016](#) Helpers—Roofers
- [47-4011](#) Construction and Building Inspectors
- [47-4021](#) Elevator Installers and Repairers
- [47-4031](#) Fence Erectors
- [47-4041](#) Hazardous Materials Removal Workers
- [47-4051](#) Highway Maintenance Workers
- [47-4061](#) Rail-Track Laying and Maintenance Equipment Operators
- [47-4071](#) Septic Tank Servicers and Sewer Pipe Cleaners
- [47-4091](#) Segmental Pavers
- [47-5011](#) Derrick Operators, Oil and Gas
- [47-5012](#) Rotary Drill Operators, Oil and Gas
- [47-5013](#) Service Unit Operators, Oil, Gas, and Mining
- [47-5021](#) Earth Drillers, Except Oil and Gas
- [47-5031](#) Explosives Workers, Ordnance Handling Experts, and Blasters
- [47-5041](#) Continuous Mining Machine Operators
- [47-5042](#) Mine Cutting and Channeling Machine Operators
- [47-5051](#) Rock Splitters, Quarry
- [47-5061](#) Roof Bolters, Mining
- [47-5071](#) Roustabouts, Oil and Gas
- [47-5081](#) Helpers—Extraction Workers

49-0000 Installation, Maintenance, and Repair Occupations

- [49-0000](#) Installation, Maintenance, and Repair Occupations
- [49-1011](#) First-Line Supervisors/Managers of Mechanics, Installers, and Repairers
- [49-2011](#) Computer, Automated Teller, and Office Machine Repairers
- [49-2021](#) Radio Mechanics
- [49-2022](#) Telecommunications Equipment Installers and Repairers, Except Line Installers
- [49-2091](#) Avionics Technicians
- [49-2092](#) Electric Motor, Power Tool, and Related Repairers
- [49-2093](#) Electrical and Electronics Installers and Repairers, Transportation Equipment
- [49-2094](#) Electrical and Electronics Repairers, Commercial and Industrial Equipment
- [49-2095](#) Electrical and Electronics Repairers, Powerhouse, Substation, and Relay
- [49-2096](#) Electronic Equipment Installers and Repairers, Motor Vehicles
- [49-2097](#) Electronic Home Entertainment Equipment Installers and Repairers
- [49-2098](#) Security and Fire Alarm Systems Installers
- [49-3011](#) Aircraft Mechanics and Service Technicians
- [49-3021](#) Automotive Body and Related Repairers
- [49-3022](#) Automotive Glass Installers and Repairers
- [49-3023](#) Automotive Service Technicians and Mechanics
- [49-3031](#) Bus and Truck Mechanics and Diesel Engine Specialists

- [49-3041](#) Farm Equipment Mechanics
- [49-3042](#) Mobile Heavy Equipment Mechanics, Except Engines
- [49-3043](#) Rail Car Repairers
- [49-3051](#) Motorboat Mechanics
- [49-3052](#) Motorcycle Mechanics
- [49-3053](#) Outdoor Power Equipment and Other Small Engine Mechanics
- [49-3091](#) Bicycle Repairers
- [49-3092](#) Recreational Vehicle Service Technicians
- [49-3093](#) Tire Repairers and Changers
- [49-9011](#) Mechanical Door Repairers
- [49-9012](#) Control and Valve Installers and Repairers, Except Mechanical Door
- [49-9021](#) Heating, Air Conditioning, and Refrigeration Mechanics and Installers
- [49-9031](#) Home Appliance Repairers
- [49-9041](#) Industrial Machinery Mechanics
- [49-9042](#) Maintenance and Repair Workers, General
- [49-9043](#) Maintenance Workers, Machinery
- [49-9044](#) Millwrights
- [49-9045](#) Refractory Materials Repairers, Except Brickmasons
- [49-9051](#) Electrical Power-Line Installers and Repairers
- [49-9052](#) Telecommunications Line Installers and Repairers
- [49-9061](#) Camera and Photographic Equipment Repairers
- [49-9062](#) Medical Equipment Repairers
- [49-9063](#) Musical Instrument Repairers and Tuners
- [49-9064](#) Watch Repairers
- [49-9091](#) Coin, Vending, and Amusement Machine Servicers and Repairers
- [49-9092](#) Commercial Divers
- [49-9093](#) Fabric Menders, Except Garment
- [49-9094](#) Locksmiths and Safe Repairers
- [49-9095](#) Manufactured Building and Mobile Home Installers
- [49-9096](#) Riggers
- [49-9097](#) Signal and Track Switch Repairers
- [49-9098](#) Helpers—Installation, Maintenance, and Repair Workers

51-0000 Production Occupations

- [51-0000](#) Production Occupations
- [51-1011](#) First-Line Supervisors/Managers of Production and Operating Workers
- [51-2011](#) Aircraft Structure, Surfaces, Rigging, and Systems Assemblers
- [51-2021](#) Coil Winders, Tapers, and Finishers
- [51-2022](#) Electrical and Electronic Equipment Assemblers
- [51-2023](#) Electromechanical Equipment Assemblers
- [51-2031](#) Engine and Other Machine Assemblers
- [51-2041](#) Structural Metal Fabricators and Fitters
- [51-2091](#) Fiberglass Laminators and Fabricators
- [51-2092](#) Team Assemblers
- [51-2093](#) Timing Device Assemblers, Adjusters, and Calibrators
- [51-3011](#) Bakers
- [51-3021](#) Butchers and Meat Cutters
- [51-3022](#) Meat, Poultry, and Fish Cutters and Trimmers
- [51-3023](#) Slaughterers and Meat Packers

- [51-3091](#) Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders
- [51-3092](#) Food Batchmakers
- [51-3093](#) Food Cooking Machine Operators and Tenders
- [51-4011](#) Computer-Controlled Machine Tool Operators, Metal and Plastic
- [51-4012](#) Numerical Tool and Process Control Programmers
- [51-4021](#) Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
- [51-4022](#) Forging Machine Setters, Operators, and Tenders, Metal and Plastic
- [51-4023](#) Rolling Machine Setters, Operators, and Tenders, Metal and Plastic
- [51-4031](#) Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
- [51-4032](#) Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- [51-4033](#) Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- [51-4034](#) Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- [51-4035](#) Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic
- [51-4041](#) Machinists
- [51-4051](#) Metal-Refining Furnace Operators and Tenders
- [51-4052](#) Pourers and Casters, Metal
- [51-4061](#) Model Makers, Metal and Plastic
- [51-4062](#) Patternmakers, Metal and Plastic
- [51-4071](#) Foundry Mold and Coremakers
- [51-4072](#) Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic
- [51-4081](#) Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic
- [51-4111](#) Tool and Die Makers
- [51-4121](#) Welders, Cutters, Solderers, and Brazers
- [51-4122](#) Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders
- [51-4191](#) Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic
- [51-4192](#) Lay-Out Workers, Metal and Plastic
- [51-4193](#) Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic
- [51-4194](#) Tool Grinders, Filers, and Sharpeners
- [51-5011](#) Bindery Workers
- [51-5012](#) Bookbinders
- [51-5021](#) Job Printers
- [51-5022](#) Prepress Technicians and Workers
- [51-5023](#) Printing Machine Operators
- [51-6011](#) Laundry and Dry-Cleaning Workers
- [51-6021](#) Pressers, Textile, Garment, and Related Materials
- [51-6031](#) Sewing Machine Operators
- [51-6041](#) Shoe and Leather Workers and Repairers
- [51-6042](#) Shoe Machine Operators and Tenders
- [51-6051](#) Sewers, Hand
- [51-6052](#) Tailors, Dressmakers, and Custom Sewers
- [51-6061](#) Textile Bleaching and Dyeing Machine Operators and Tenders
- [51-6062](#) Textile Cutting Machine Setters, Operators, and Tenders
- [51-6063](#) Textile Knitting and Weaving Machine Setters, Operators, and Tenders
- [51-6064](#) Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders
- [51-6091](#) Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers
- [51-6092](#) Fabric and Apparel Patternmakers
- [51-6093](#) Upholsterers
- [51-7011](#) Cabinetmakers and Bench Carpenters

- [51-7021](#) Furniture Finishers
- [51-7031](#) Model Makers, Wood
- [51-7032](#) Patternmakers, Wood
- [51-7041](#) Sawing Machine Setters, Operators, and Tenders, Wood
- [51-7042](#) Woodworking Machine Setters, Operators, and Tenders, Except Sawing
- [51-8011](#) Nuclear Power Reactor Operators
- [51-8012](#) Power Distributors and Dispatchers
- [51-8013](#) Power Plant Operators
- [51-8021](#) Stationary Engineers and Boiler Operators
- [51-8031](#) Water and Liquid Waste Treatment Plant and System Operators
- [51-8091](#) Chemical Plant and System Operators
- [51-8092](#) Gas Plant Operators
- [51-8093](#) Petroleum Pump System Operators, Refinery Operators, and Gaugers
- [51-9011](#) Chemical Equipment Operators and Tenders
- [51-9012](#) Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders
- [51-9021](#) Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders
- [51-9022](#) Grinding and Polishing Workers, Hand
- [51-9023](#) Mixing and Blending Machine Setters, Operators, and Tenders
- [51-9031](#) Cutters and Trimmers, Hand
- [51-9032](#) Cutting and Slicing Machine Setters, Operators, and Tenders
- [51-9041](#) Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders
- [51-9051](#) Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders
- [51-9061](#) Inspectors, Testers, Sorters, Samplers, and Weighers
- [51-9071](#) Jewelers and Precious Stone and Metal Workers
- [51-9081](#) Dental Laboratory Technicians
- [51-9082](#) Medical Appliance Technicians
- [51-9083](#) Ophthalmic Laboratory Technicians
- [51-9111](#) Packaging and Filling Machine Operators and Tenders
- [51-9121](#) Coating, Painting, and Spraying Machine Setters, Operators, and Tenders
- [51-9122](#) Painters, Transportation Equipment
- [51-9123](#) Painting, Coating, and Decorating Workers
- [51-9131](#) Photographic Process Workers
- [51-9132](#) Photographic Processing Machine Operators
- [51-9141](#) Semiconductor Processors
- [51-9191](#) Cementing and Gluing Machine Operators and Tenders
- [51-9192](#) Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders
- [51-9193](#) Cooling and Freezing Equipment Operators and Tenders
- [51-9194](#) Etchers and Engravers
- [51-9195](#) Molders, Shapers, and Casters, Except Metal and Plastic
- [51-9196](#) Paper Goods Machine Setters, Operators, and Tenders
- [51-9197](#) Tire Builders
- [51-9198](#) Helpers—Production Workers

53-0000 Transportation and Material Moving Occupations

- [53-0000](#) Transportation and Material Moving Occupations
- [53-1011](#) Aircraft Cargo Handling Supervisors
- [53-1021](#) First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand

- [53-1031](#) First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators
- [53-2011](#) Airline Pilots, Copilots, and Flight Engineers
- [53-2012](#) Commercial Pilots
- [53-2021](#) Air Traffic Controllers
- [53-2022](#) Airfield Operations Specialists
- [53-3011](#) Ambulance Drivers and Attendants, Except Emergency Medical Technicians
- [53-3021](#) Bus Drivers, Transit and Intercity
- [53-3022](#) Bus Drivers, School
- [53-3031](#) Driver/Sales Workers
- [53-3032](#) Truck Drivers, Heavy and Tractor-Trailer
- [53-3033](#) Truck Drivers, Light Or Delivery Services
- [53-3041](#) Taxi Drivers and Chauffeurs
- [53-4011](#) Locomotive Engineers
- [53-4012](#) Locomotive Firers
- [53-4013](#) Rail Yard Engineers, Dinkey Operators, and Hostlers
- [53-4021](#) Railroad Brake, Signal, and Switch Operators
- [53-4031](#) Railroad Conductors and Yardmasters
- [53-5011](#) Sailors and Marine Oilers
- [53-5021](#) Captains, Mates, and Pilots of Water Vessels
- [53-5022](#) Motorboat Operators
- [53-5031](#) Ship Engineers
- [53-6011](#) Bridge and Lock Tenders
- [53-6021](#) Parking Lot Attendants
- [53-6031](#) Service Station Attendants
- [53-6041](#) Traffic Technicians
- [53-6051](#) Transportation Inspectors
- [53-7011](#) Conveyor Operators and Tenders
- [53-7021](#) Crane and Tower Operators
- [53-7031](#) Dredge Operators
- [53-7032](#) Excavating and Loading Machine and Dragline Operators
- [53-7033](#) Loading Machine Operators, Underground Mining
- [53-7041](#) Hoist and Winch Operators
- [53-7051](#) Industrial Truck and Tractor Operators
- [53-7061](#) Cleaners of Vehicles and Equipment
- [53-7062](#) Laborers and Freight, Stock, and Material Movers, Hand
- [53-7063](#) Machine Feeders and Offbearers
- [53-7064](#) Packers and Packagers, Hand
- [53-7071](#) Gas Compressor and Gas Pumping Station Operators
- [53-7072](#) Pump Operators, Except Wellhead Pumpers
- [53-7073](#) Wellhead Pumpers
- [53-7081](#) Refuse and Recyclable Material Collectors
- [53-7111](#) Shuttle Car Operators
- [53-7121](#) Tank Car, Truck, and Ship Loaders

Employer Questionnaire Template

CUNY Adult and Continuing Education – January 20, 2010

Developed by D.B. Grant and Associates and Appleseed, Inc. with NYCLMIS and NYC Department of Small Business Services.

1. How many people are currently employed by your company?

Overall?

At this location?

2. How long have you been doing business?

In New York City?

At this location?

3. What do you think are the three most significant challenges facing your company in New York City – now, and in the next three to five years?

4. In the next three to five years, what do you think are your company's prospects for growth in New York City? (strong expansion, some expansion, same, smaller)

5. Are there things that city or state government could do – or that other agencies such as the NYCEDC or ESD could do – to help your company succeed here, and to improve your prospects for growth?

6. What are the principal staffing challenges your business is currently facing in New York City?

7. What are your entry-level, mid-level, and upper level positions?

8. What are the typical wage scales for these jobs?

9. What are the position requirements for these jobs – i.e., education, experience, skills, licensing or certification?

10. Do you promote from within? Are there any "career ladders" in your company?

11. How many people are you likely to be hiring in New York City (here) in the next 12 months?

12. In which positions are you most likely to be hiring people? (*Be sure you have identified the education, skills, experience, etc. required in these positions.*)

13. Are there any working conditions or on-the-job requirements that potential new hires should know before they apply for these jobs?
14. What are your major sources for identifying and recruiting prospective candidates for jobs? For example (*e.g., referrals from current employees, walk-in job applicants, on-line applications, colleges, schools or training programs, government agencies, community organizations, other?*)
15. When you screen job applicants for interviews, what do you look for? Do you use tests to screen candidates? If so, what types of tests?
16. Are there particular skills you would like to see more fully developed among your employees, incumbents or new hires?
17. Are there particular types of training you would like to see your employees have before you hire them?
18. Does your company provide training for its employees?
[If “yes:” Can you briefly describe what kind of training you provide?]
[If “yes:” Do you provide training in-house, or do you use outside training providers?]
19. What’s your experience with respect to retaining employees? Is turnover a problem?
[If “yes:” How many jobs turnover a year? Why do you think jobs turn over as fast as they do?]
20. What career paths do your employees pursue when they leave the company? Do you know anything about the jobs they pursue when they leave such as wages, hiring requirements, etc.?
21. Have you had any experience with government or government-sponsored programs as a source for recruiting or training applicants? If so, what has been your experience with them?
22. Would you consider having another conversation so I can learn how my agency could be of immediate service?

Exercise Worksheet

Exercise 1 - Industrial Perspectives on the Labor Market

Using the NAICS code list in your packet, choose a 2-digit NAICS sector that is of interest to you and answer the following:

1. What are the 3-digit subsectors within this sector?
2. How have employment and wages changed between 2000-08 in the major subsectors?
3. What if anything can you learn about recent trends in the Current Employment Statistics?

Exercise 2 – Occupational Perspectives on the Labor Market

Select 2 SOC codes from the list in your packet and answer the following for each:

1. How does the NYSDOL define the occupation?
2. How many people were employed in this occupation in 2006?
3. What is DOL's expectation for employment in this occupation in 2016?
4. How many of the average annual openings does NYSDOL think will be due to growth? Replacement?
5. What is the median wage?
6. What kind of education and training does the occupation require?

Exercise 3 – Combining Industry & Occupation

Using the SOC list in your packet, choose 1 occupation of interest to you.

1. In what industries is this occupation concentrated?
2. What does this tell you about job opportunities for this occupation?

Now, look at the #1 industry where your occupation is concentrated and answer: what percentage of the people employed in the industry hold your occupation?

**Introduction to LMI
 Workshop Evaluation Form**

1. What is your job title? _____

2. *To be filled out before the session:* What do you expect to learn today?

3. How would you rate the following on a scale from 1 to 5 (5 being the most positive)? *(circle one for each line)*

	Not at all Useful (1)	Not very useful (2)	Somewhat Useful (3)	Useful (4)	Very Useful (5)
a. Presenter preparation					
b. Presenter delivery					
c. Presentation content					
d. Materials					
e. Examples					

4. Would you recommend this training to your colleagues (circle one)? Yes No

5. How do you think you will use the information you learned today?

6. How well/poorly did this training meet your expectations (see #2 above)?

7. Do you have any other comments you'd like to make?

Thank you for your feedback!