Gauging Employment Prospects in New York City, 2009
About the NYCLMIS
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 the Center for Urban Research at The Graduate Center of the City University of New York. The NYCLMIS’ objectives are to:

- 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.

The NYCLMIS primarily serves the program and policy needs of the public workforce system. The NYCLMIS creates research and associated products that are of service to the broader practitioner and policy communities in their day-to-day and strategic decision-making. These products help distill, frame, and synthesize the volumes of data available for the practical use of the public workforce system’s partners and stakeholders, with the overall goal of raising public awareness of the importance of workforce development in New York City.

About the WIB
The New York City Workforce Investment Board (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 WIB is made up of over 40 volunteer members, appointed by the Mayor, representing local businesses, educational institutions, labor unions, community-based organizations, and other government agencies.

About the Center for Urban Research
Working with the City University of New York Graduate Center’s 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, non-profit 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.
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February 2009
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Gauging Employment Prospects in New York City, 2009
Executive Summary
An important question facing workforce providers in their day-to-day operations is: How can providers and policy makers identify promising sectors for workforce development? While this question is important in a strong economy, it is critical in a recession, when job openings are scarce. At this moment, the national economy has been undergoing its longest recession in over 20 years, reflecting interrelated crises in mortgage markets, home values, credit availability, and consumer demand. City, state, and national governments are poised to take new steps to help employers and the workforce to weather this recession. Policy makers and providers are looking for help in determining what to do and where to target their efforts wisely.

Given the complexity of New York City’s labor market, a systematic review of recent and past trends can help workforce development professionals identify more or less promising sectors.

This report addresses several major questions that workforce development professionals have about the labor market. The results are intended to inform and guide their policymaking, business development, education and training, and job placement choices. The questions that framed our analyses of labor market information are organized into the following categories: employment and wage levels and growth, New York City’s specializations, performance during past recessions, and occupational opportunities. The report
ends with conclusions and implications for workforce providers and policymakers. Key findings are presented here in brief:

1. EMPLOYMENT AND WAGES

- New York City’s labor market is highly concentrated in relatively few industry groups. The 25 largest groups include more than half of the jobs in the city covered by the unemployment insurance system.
- There was a negative relationship between job and wage growth in New York City’s largest industry groups between 2000 and 2007. Many industry groups that gained jobs also experienced declining average annual wages during this period.
- Based on the number of jobs, job growth, and wage growth measures alone, hospitals and legal services are the most promising industry groups for workforce development: they both gained jobs and wages between 2000 and 2007, albeit modestly.
- Based on job growth alone, full-service restaurants, colleges and universities, and individual and family services appear promising, though workforce providers may need to help employers develop stronger career pathways and wage growth strategies for people who stay in these jobs.

2. NEW YORK CITY’S SPECIALIZATIONS

- Local advantage is an important criterion for workforce development. Industries that add jobs at a faster pace in New York City than they do across the nation are more likely to thrive in the local economy going forward. However, their jobs outlooks also depend on the persistence of these local advantages: if the advantages disappear, so may the jobs.
- When compared to the nation’s labor market, New York City’s labor market is more highly specialized in finance and insurance, professional, scientific and technical services, management of companies and other enterprises, and health care and social services.
- Other industry groups that make up a much larger share of jobs in New York City than in the nation as a whole benefit from: the creative labor force, access to communication with other global cities, or the city’s high population density.
- During the past decade, industry groups related to tourism and recreation added large numbers of jobs because of the unique advantage of the city as a travel destination and the weakness of U.S. dollar relative to other currencies.
- According to measures of specialization and local advantage alone, the most promising industry groups are publishing (periodicals, books, and directories), home health care services, and museums and historical sites. Additional industries include motion picture and video industries, urban transit, and grocery stores.

3. PERFORMANCE DURING PREVIOUS RECESSIONS

- Based on their employment performance during previous recessions, the traditional recession resistant industries in the health care and social assistance, and education sectors are likely to be the safest
harbors during this recession. Even so, providers need to monitor public sector budgets since any cuts in these budgets will have a negative effect on job availability in these industry groups.

Industry groups in the information sector that performed relatively well during previous recessions were audio and video recording and production and motion picture-related services.

4. OCCUPATIONAL OPPORTUNITIES

A few large industry groups provide thousands of jobs to people in the occupations that are accessible to the public workforce system’s jobseekers and pay more than $12.00/hour at the median. For example, home health care, limited- and full-service food services, grocery stores, banks, and law firms are dominant employers of workers in these occupations.

A variety of occupations offer good wages with few formal educational requirements, but many of these require another form of training, either on-the-job, or through apprenticeship or certification programs, like skilled trades, nurses, commercial drivers, and supervisors and managers.

5. IMPLICATIONS FOR WORKFORCE PROVIDERS AND POLICYMAKERS

As of this writing the nation is in the midst of a severe recession, that began in the finance and insurance and real estate sectors and has quickly spread to most other labor market sectors. New York City entered the recession later than the rest of the nation, but has quickly caught up both in terms of payroll declines and unemployment increases. This report is offered to provide an array of metrics that can be used by workforce providers to assess the various industry groups for their potential labor market weaknesses as this downturn progresses, and a number of other factors such as size, wages, occupational opportunities, and specialization in the region.

National, state, and city policymakers have recently begun to respond to the current recession with economic recovery and stimulus packages that are intended to shorten the recession or minimize its effects. As of this writing, the outlines and impacts of these policies are not yet known. Workforce policymakers and providers should stay abreast as the exact nature of the stimulus and recovery policies become clearer and funding is allocated, so that they can assess the effects on New York City’s labor market.

As this assessment reveals, there are tradeoffs in working with any industry
group among the number of jobs, job growth, wage levels, recession resistance, local advantage, and occupation opportunities. Providers should be aware of these and tailor their workforce strategies to their particular mix of strengths and weaknesses in the industry group with which they are working.

- Health, education, and social services have been recession-resistant and are expected to fare relatively well during the current one, barring large public sector budget cuts. However, recessions are not all alike, so account managers should use market intelligence (i.e. newspapers, employer feedback, etc.) about the industry groups with which they work as well as new labor market data (from sources such as the NYS Department of Labor, U.S. Census Bureau, and U.S. Bureau of Labor Statistics) as it emerges.

- Employment specialization and local advantage (location quotient and shift share, respectively) are key concepts in economic development that are useful to account managers. Having this information at their fingertips enables account managers to speak more knowledgeably with employers about the local business conditions that benefit and challenge them and inform their career advisor colleagues.

- Account managers should keep their colleagues apprised about the changing workforce needs in the finance and other highly exposed sectors as investment banks, and other financial institutions undergo restructuring as a result of the current financial crisis. Restructuring is expected to change the industry-occupation mix in the finance and insurance sector. As of this writing, it is too early in the course of this restructuring recession to tell what the new occupational mix will be.

- Workforce providers should position themselves to help individuals coming out of the more recession-prone industry groups: administrative and support services, professional, scientific, and technical services, construction, and finance and insurance. It would be worthwhile to build skills profiles for the key occupations and identify other industry groups that employ people with similar skills.

- Workforce providers should examine occupational data, not just labor market information about businesses. With a better understanding of the industry-occupation mix and skill transferability, they can more effectively help jobseekers find jobs or move from a lost job to another job in a different industry if need be.

- It would be helpful for providers to have information about job turnover during the recession. Unfortunately the available data cannot provide that information. The workforce community needs a reliable way to distinguish new jobs from replacement jobs in a timely manner, either by access to the Census Bureau’s Quarterly Workforce Indicators – soon to be available in New York State – or by gaining access to establishment level information.

- There are many occupations spread across many industry groups that pay well above minimum wage and do not require a four-year college degree. Several of these do require supervision and manage-
ment skills, an area well suited for workforce development training programs.

Thousands of well-paying jobs are in the skilled trades, requiring apprenticeship and often licensing. Policy makers should ensure that there are adequate “on ramps” to training opportunities that will enable public workforce development system’s customers to access these jobs.

Providers who serve jobseekers with multiple barriers to employment, such as ex-offenders, or people with mental health disabilities or histories of substance abuse should review the list of occupations to identify which might be available to them and from which they might be barred.

Many opportunities for well-paying occupations are in public sector agencies, New York City’s largest employment sector. Policy makers should consider making connections between the workforce system and the public agencies that employ thousands of people without college degrees, such as maintenance and repair workers and bus drivers in bus transportation and urban transit and paraprofessional occupations in elementary and secondary schools.

Given the poor jobs outlook in 2009, even occupations that pay low wages can be useful for jobseekers, particularly those with little to no experience. Career advisors and education and training professionals can help workers they place in lower wage jobs by identifying and strengthening their opportunities to increase their transferable skills and begin career pathways to higher paying work.

Restructuring will change the industry-occupation mix in the finance sector....it is too early in the course of this restructuring recession to know what the new mix will be.
New York City’s public workforce development system serves two basic objectives: to help businesses meet their labor needs and to help jobseekers find stable jobs with advancement potential. Many of the system’s stakeholders pursue – explicitly or implicitly – a “sector strategy” to accomplish these dual objectives. A key feature of a sector strategy in workforce development is a focus on similar or related enterprises within a given sector. This helps everyone working within the system - account managers, career advisors, and education and training professionals - to build relationships with one another, improve mutual understanding and coordination, and, ultimately develop strategies that meet employers’ needs and create opportunities for jobseekers and workers who are already on the job and seek advancement.

A. Overview
An important question facing workforce providers in their day-to-day operations is: How can providers and policy makers identify promising sectors for workforce development? While this question is important in a strong economy, it is critical in a recession, when job openings are scarce. At this moment, the national economy has been undergoing its longest recession in over 20 years, reflecting interrelated crises in mortgage markets, home values, credit availability, and consumer demand. City, state, and national governments are poised to take new steps to help employers and the workforce to weather this recession. Policy makers and providers are looking for help in determining what to do and where to target their efforts wisely.

Given the complexity of New York City’s labor market, a systematic review of recent and past trends can help workforce development professionals identify more or less promising sectors.

This report addresses several major questions that workforce development professionals have about the labor market. The results presented here are intended to inform and guide their policymaking, business development, education and training, and job placement choices. Although this report presents data that is specific
to New York City in 2009, other cities and states may easily replicate the method. In this report, we ask and address the following questions about New York City’s labor

<table>
<thead>
<tr>
<th>RESEARCH QUESTIONS</th>
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**Employment and Wages**
- What are New York City’s largest industry groups?
- Which industry groups gained jobs since 2000?
- Which industry groups have experienced growth in average real wages?

**New York City’s Specializations**
- How is New York City’s workforce uniquely specialized compared to the nation’s?
- In which industry groups has employment grown relative to the nation’s?

**Performance During Previous Recessions**
- Which industry groups weathered the last two recessions better than others?
- Which industry groups have the least exposure to the finance and insurance sector, the epicenter of the current recession?
- Which industry groups had the least growth in unemployment in 2008?

**Occupational Opportunities**
- What is the overall occupational composition of the New York City workforce?
- Which occupations are most common?
- How do these occupations pay?
- In which industry groups can the most common occupations be found?

**Conclusions**
- Considering all of the various factors of interest – trends in jobs, income, specialization, performance in recessionary conditions, and occupational composition – which industry groups hold the most promise for workforce development in 2009?
- What trade-offs are inherent in selecting one industry group over others for a sector strategy?
- How might New York City’s workforce development professionals act on these findings?
B. Organization of the Report
The report is divided into six sections. After this introduction (Section 1), Sections 2-5 present results that address the questions outlined on the previous page. Section 2 contains findings about employment and wages, Section 3 presents the results of analyses of New York City’s local specializations, Section 4 presents indicators of employment performance during previous recessions, and Section 5 analyzes occupations. Section 6, Conclusions and Recommendations, brings together the findings and draws conclusions about the state of the labor market. The report concludes with an outline of implications for workforce development professionals.

C. Data Notes
Employment data are drawn from the Quarterly Census of Employment and Wages (QCEW), the American Community Survey 2005-2007 combined samples, and County Business Patterns, all of which provide information on the number of jobs in New York City.

It is important to strike a balance between specificity and relevance in analyzing labor market data. All of the numbers presented in this report about jobs and wages refer to employer establishments by their classification under the North American Industry Classification System (NAICS). NAICS groups related businesses into 23 broad sectors. But looking only at these sectors might fail to highlight important variations within them. On the other hand, it would be overwhelming to analyze all 1,000 industries distinguished within NAICS. In this report, We use industry groups identified by a four-digit NAICS code (the first two digits identify the sector) wherever possible. As an example, NAICS Sector 62 encompasses all health care and social assistance; while NAICS industry group 6216 includes only home health care (i.e., not in-patient services, other outpatient services, nor any social assistance services).

Section 2 identifies the largest industry groups within the city. Subsequent sections that examine the labor market under different lenses are limited to industry groups that employ 10,000 or more workers in New York City.

WORKFORCE PROVIDERS DEFINED
This report is primarily intended for the providers and policymakers who work within the public workforce development system. The three types of providers referenced in this report are:
1. Account managers, who identify employers that can benefit from the workforce system’s search, screening, and placement services.
2. Career advisors, who screen and counsel jobseekers to help them match their skills to available jobs or access appropriate training.
3. Education and training professionals, who develop and operate adult education and occupational training programs.
D. An Overview of the New York City Labor Market

Figure 1.1 provides preliminary insight at-a-glance about the mixture of jobs in New York City by sector, the broadest classification under the NAICS system. The sectors are listed in descending order from the most to the least jobs in 2008. The largest sectors in New York City are government (NAICS 92) and health and social services (NAICS 62), each with 15 percent of all jobs. The next largest are finance and insurance (NAICS 52) and professional, scientific, and technical services (NAICS 54) each with nine percent. Health and social services includes hospitals, doctor’s offices, clinics, and treatment centers. Professional, scientific, and technical services includes...
TABLE 1.1 NEW YORK CITY EMPLOYMENT BY SECTOR, 2000-2008

<table>
<thead>
<tr>
<th>Sectors</th>
<th>2000</th>
<th>2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVERNMENT</td>
<td>549,389</td>
<td>551,974</td>
<td>0%</td>
</tr>
<tr>
<td>HEALTH CARE AND SOCIAL ASSISTANCE</td>
<td>474,132</td>
<td>550,339</td>
<td>16%</td>
</tr>
<tr>
<td>FINANCE AND INSURANCE</td>
<td>358,414</td>
<td>340,618</td>
<td>-5%</td>
</tr>
<tr>
<td>PROFESSIONAL AND TECHNICAL SERVICES</td>
<td>303,624</td>
<td>330,233</td>
<td>9%</td>
</tr>
<tr>
<td>RETAIL TRADE</td>
<td>268,150</td>
<td>291,924</td>
<td>9%</td>
</tr>
<tr>
<td>ACCOMODATION AND FOOD SERVICES</td>
<td>188,641</td>
<td>229,196</td>
<td>21%</td>
</tr>
<tr>
<td>ADMINISTRATIVE AND WASTE SERVICES</td>
<td>202,627</td>
<td>186,014</td>
<td>-8%</td>
</tr>
<tr>
<td>INFORMATION</td>
<td>184,252</td>
<td>154,871</td>
<td>-16%</td>
</tr>
<tr>
<td>OTHER SERVICES</td>
<td>134,204</td>
<td>142,194</td>
<td>6%</td>
</tr>
<tr>
<td>WHOLESALE TRADE</td>
<td>151,024</td>
<td>138,952</td>
<td>-8%</td>
</tr>
<tr>
<td>EDUCATIONAL SERVICES</td>
<td>109,434</td>
<td>137,963</td>
<td>26%</td>
</tr>
<tr>
<td>CONSTRUCTION</td>
<td>111,662</td>
<td>124,623</td>
<td>12%</td>
</tr>
<tr>
<td>REAL ESTATE AND RENTAL AND LEASING</td>
<td>114,427</td>
<td>118,892</td>
<td>4%</td>
</tr>
<tr>
<td>TRANSPORTATION AND WAREHOUSING</td>
<td>113,459</td>
<td>106,182</td>
<td>-6%</td>
</tr>
<tr>
<td>MANUFACTURING</td>
<td>175,255</td>
<td>96,259</td>
<td>-45%</td>
</tr>
<tr>
<td>ARTS, ENTERTAINMENT, AND RECREATION</td>
<td>53,191</td>
<td>64,149</td>
<td>21%</td>
</tr>
<tr>
<td>MANAGEMENT OF COMPANIES AND ENTERPRISES</td>
<td>51,354</td>
<td>58,597</td>
<td>14%</td>
</tr>
<tr>
<td>UTILITIES</td>
<td>14,391</td>
<td>15,479</td>
<td>8%</td>
</tr>
<tr>
<td>AGRICULTURE, FORESTRY, FISHING &amp; HUNTING</td>
<td>195</td>
<td>206</td>
<td>6%</td>
</tr>
<tr>
<td>MINING</td>
<td>114</td>
<td>59</td>
<td>-48%</td>
</tr>
<tr>
<td>TOTAL, ALL SECTORS</td>
<td>3,562,205</td>
<td>3,654,207</td>
<td>3%</td>
</tr>
</tbody>
</table>

SOURCE | New York State Department of Labor, Quarterly Census of Employment and Wages, 1Q 2000 to 1Q 2008.

services is a broad sector that includes architects, engineers, market research, and management consulting.  

Table 1.1 shows the number of jobs in each sector in 2000 and 2008 and the percent change in between. There were 3.65 million jobs in New York City in the first quarter of 2008: 92,000 more than in 2000 at the peak before the most recent recession. There were job gains nearly across the board except in the finance and insurance, information, and manufacturing sectors.

Endnotes

1 For more information about the NAICS, see Appendix A. Key Terms Used in This Report.

2 The Quarterly Census of Employment and Wages (QCEW) includes jobs in enterprises covered by the unemployment insurance program. Self-employed workers and some government employees are not included.
Employment and Wages
We now identify the largest industry groups. Industry groups are more similar groups that are nested within sectors. Examining industry group growth trends can help workforce providers determine – as a preliminary strategy – which areas have sufficient jobs to merit a sector focus for business development efforts and which ones are gaining or losing jobs.

A. What are New York City’s largest industry groups?
Table 2.1 shows the 25 largest industry groups in New York City ranked by the number of jobs in 2008. The table also shows the 2007 average annual wage for each industry group and the wage growth rate since 2000 adjusted for inflation.

The five largest industry groups each employ more than 100,000 people and together account for nearly 20 percent of the total number of jobs in New York City. The 25 largest industry groups account for more than half the jobs. Although many large industry groups are classified within the large sectors shown in Figure 1.1 (i.e., government, health and social services, and finance), several come from smaller sectors, such as food and accommodations, transportation, information, and retail. Figure 2.1 details the relative size of the 25 largest industry groups in 2008.

B. Which industry groups added jobs since 2000?
Table 2.1 shows that 19 of the 25 industry groups experienced job growth since 2000. The six industry groups that did not grow were: securities and commodities contracts, employment services, lessors of real estate, advertising and related services, newspapers and periodicals, and depository credit intermediation (including commercial banks, savings banks, and credit unions). Instead, the highest growing large industries came mainly from the social and consumer services: home health care services, full service as well as fast food (limited service) restaurants, colleges and universities, and other investment activities (including portfolio managers and financial advisors).

C. Which industry groups have increased wages since 2000?
Average wages vary widely among the 25 largest industry groups, with the highest earning industry group (securities and commodities contracts) earning nearly 26 times the annual wage of the lowest (grocery stores) (Table 2.1). While these figures do not account for hours worked and some of the difference may be attributed—frequency of part-time work, fast food restaurants and grocery stores typically pay front-line staff at or near minimum wage. Not surprisingly, securities and commodities contracts, other financial investment activities, and management of companies provide the highest annual average wage.
Ideally, workforce development efforts should place jobseekers with employers who provide stable jobs with room for growth and advancement.

Job growth is, of course, one indicator that an industry group is hiring, but wage growth could also indicate that people may be advancing within the industry group (or that the industry group is hiring more highly paid workers). Workforce

<table>
<thead>
<tr>
<th>Industry Group</th>
<th>2008 Employment</th>
<th>% Change Since 2000</th>
<th>2007 Average Annual Wage</th>
<th>% Change* Since 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>6111 ELEMENTARY &amp; SECONDARY SCHOOLS</td>
<td>188,643</td>
<td>6%</td>
<td>$43,958</td>
<td>-10%</td>
</tr>
<tr>
<td>6216 HOME HEALTH CARE SERVICES</td>
<td>59,114</td>
<td>89%</td>
<td>$27,193</td>
<td>-6%</td>
</tr>
<tr>
<td>2382 BUILDING EQUIPMENT CONTRACTORS</td>
<td>49,578</td>
<td>2%</td>
<td>$68,596</td>
<td>-6%</td>
</tr>
<tr>
<td>9221 JUSTICE PUBLIC ORDER &amp; SAFETY</td>
<td>98,565</td>
<td>1%</td>
<td>$63,032</td>
<td>-3%</td>
</tr>
<tr>
<td>5418 ADVERTISING &amp; RELATED SERVICES</td>
<td>54,490</td>
<td>-6%</td>
<td>$112,913</td>
<td>-3%</td>
</tr>
<tr>
<td>5412 ACCOUNTING-TAX PREP-BOOKKEEPING</td>
<td>50,066</td>
<td>27%</td>
<td>$84,477</td>
<td>-3%</td>
</tr>
<tr>
<td>6113 COLLEGES &amp; UNIVERSITIES</td>
<td>94,323</td>
<td>23%</td>
<td>$57,804</td>
<td>-2%</td>
</tr>
<tr>
<td>6241 INDIVIDUAL &amp; FAMILY SERVICES</td>
<td>117,712</td>
<td>18%</td>
<td>$25,555</td>
<td>-1%</td>
</tr>
<tr>
<td>6211 OFFICES OF PHYSICIANS</td>
<td>46,421</td>
<td>14%</td>
<td>$75,077</td>
<td>0%</td>
</tr>
<tr>
<td>7221 FULL-SERVICE RESTAURANTS</td>
<td>107,615</td>
<td>24%</td>
<td>$28,212</td>
<td>0%</td>
</tr>
<tr>
<td>7222 LIMITED-SERVICE EATING PLACES</td>
<td>55,934</td>
<td>25%</td>
<td>$16,811</td>
<td>2%</td>
</tr>
<tr>
<td>5111 NEWSPAPER/PERIODICAL/BOOK/DIRECTORY</td>
<td>52,041</td>
<td>-9%</td>
<td>$107,233</td>
<td>2%</td>
</tr>
<tr>
<td>5511 MANAGEMENT OF COMPANIES &amp; ENTERPRISES</td>
<td>58,602</td>
<td>12%</td>
<td>$192,131</td>
<td>2%</td>
</tr>
<tr>
<td>6231 NURSING CARE FACILITIES</td>
<td>51,646</td>
<td>-3%</td>
<td>$43,743</td>
<td>3%</td>
</tr>
<tr>
<td>4851 URBAN TRANSIT SYSTEMS</td>
<td>52,278</td>
<td>5%</td>
<td>$70,816</td>
<td>3%</td>
</tr>
<tr>
<td>4451 GROCERY STORES</td>
<td>46,621</td>
<td>10%</td>
<td>$23,354</td>
<td>4%</td>
</tr>
<tr>
<td>4481 CLOTHING STORES</td>
<td>52,692</td>
<td>14%</td>
<td>$35,344</td>
<td>6%</td>
</tr>
<tr>
<td>6221 GENERAL MEDICAL &amp; SURGICAL HOSPITALS</td>
<td>186,196</td>
<td>3%</td>
<td>$62,407</td>
<td>7%</td>
</tr>
<tr>
<td>5311 LESSORS OF REAL ESTATE</td>
<td>80,926</td>
<td>-7%</td>
<td>$50,892</td>
<td>12%</td>
</tr>
<tr>
<td>5411 LEGAL SERVICES</td>
<td>83,568</td>
<td>3%</td>
<td>$123,181</td>
<td>16%</td>
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<tr>
<td>5221 DEPOSITORY CREDIT INTERMEDIATION</td>
<td>50,493</td>
<td>-11%</td>
<td>$156,556</td>
<td>18%</td>
</tr>
<tr>
<td>5613 EMPLOYMENT SERVICES</td>
<td>60,277</td>
<td>-26%</td>
<td>$48,543</td>
<td>19%</td>
</tr>
<tr>
<td>5231 SECURITIES &amp; COMMODITY CONTRACTS</td>
<td>126,576</td>
<td>-13%</td>
<td>$435,639</td>
<td>30%</td>
</tr>
<tr>
<td>5239 OTHER FINANCIAL INVESTMENT ACTIVITIES</td>
<td>55,923</td>
<td>32%</td>
<td>$369,403</td>
<td>53%</td>
</tr>
<tr>
<td>5616 INVESTIGATION &amp; SECURITY SERVICES</td>
<td>45,625</td>
<td>15%</td>
<td>$26,766</td>
<td>3%</td>
</tr>
<tr>
<td>---- All Industry Groups</td>
<td>3,654,207</td>
<td>3%</td>
<td>$80,071</td>
<td>9%</td>
</tr>
</tbody>
</table>

* Wages adjusted for inflation using the CPI-U for the New York Metropolitan Area.

SOURCE | New York State Department of Labor, Quarterly Census of Employment and Wages. Employment numbers are from 1Q 2000 and 1Q 2008; average annual wages from 2000 and 2007 (2008 was not yet available at the time of this writing).

Wage trends varied, with 11 of the top industry groups experiencing zero or lower wage growth. The lowest wage growth industry groups were elementary and secondary schools, home health care services, and building equipment contractors. The highest wage growth industries were in finance (securities and commodities, and other financial investment activities) and employment services.
development professionals may therefore wish to target industry groups where employment and wages are both growing whenever possible.

Figure 2.1 charts job and wage growth for the 10 largest industry groups. The size of each bubble corresponds with the number of people employed in 2007. Industry groups in upper-right-hand quadrant (legal services and hospitals) had positive job and wage growth. Moving clockwise, the industry groups in the lower-right-hand quadrant had positive job growth but a declining average wage.

**FIGURE 2.1 TOP EMPLOYING INDUSTRY GROUPS IN NEW YORK CITY, 2008**

SOURCE | New York State Department of Labor, Quarterly Census of Employment and Wages, 2008.
These included elementary and secondary schools, individual and family services, justice and public safety, and colleges and universities. The average annual wage did not change in full-service restaurants, although the industry group gained jobs. Finally, securities and commodities, lessors of real estate, and employment services gained in average wages, but lost jobs during the seven-year period. None of the major industry groups declined in both employment and average wages.

D. Summary

New York City’s labor market is highly concentrated in relatively few industry groups. In this profile of New York City’s labor market, the 25 largest industry groups include more than half of the jobs in the city covered by the unemployment insurance system. These large industry groups display varied trends in wage and job growth since 2000. Historically, the two have been associated, but no such association was found in New York City’s largest industry groups between 2000 and 2007.

According to the employment and wage criteria presented in this section, hospitals and legal services are the most promising industry groups for workforce development since they both gained jobs and wages, albeit modestly. In terms of job growth alone, full-service restaurants, colleges and universities, and individual and family services appear promising, though workforce providers may need to help them develop stronger career pathways and wage growth strategies for incumbent workers.

Historically, job and wage growth have been associated; however, no such relationship was found in New York City’s largest industry groups between 2000 and 2007.
FIGURE 2.2 JOB AND WAGE GROWTH IN NEW YORK CITY’S LARGEST INDUSTRY GROUPS, 2000-2007

**SOURCE** | New York State Department of Labor, Quarterly Census of Employment and Wages, 2000-2007.
New York City’s Employment Specialization
We now identify industry groups whose national employment is concentrated in New York City and industry groups whose job growth exceeded that of their counterparts in the rest of the nation. Industry groups with a strong concentration in New York City and stronger than expected job gains could be particularly attractive for workforce development professionals.

A. What are New York City’s major employment specializations?

In the first part of this section, we examine industry groups with the largest “location quotients.” A location quotient is an indicator of employment concentration and is measured by taking the ratio of an industry group’s local job base (as a percentage of total employment) relative to the nation’s as a whole.

Table 3.1 shows the 25 most highly concentrated industry groups from most to least specialized in New York City, along with their 2008 employment.

Several highly concentrated industry groups belong to the larger finance and insurance, and professional services sectors, as might be expected from New York City’s prominence as global node in financial and corporate services. Information industries (e.g., newspaper, periodical, and book publishing, and motion picture and video industries) also appear on the list, reflecting New York’s position as a global communications hub. Industries associated with the city’s high population density also appear on the list, including urban transit systems, real estate lessors, and scheduled air transportation. New York City also maintains a distinctive concentration of service industries outside of the finance and insurance sector, such as advertising, information services, and specialized design services. Wholesale trade is also well represented among these industries, including apparel piece goods, and miscellaneous durable goods (most likely as an input to the construction sector).

B. What have been the relative employment trends of these highly concentrated industry groups?

The previous section examined employment trends in the largest industry groups over the past eight years. Many of these trends can be explained by national economic growth in general or by national patterns of industry growth. Job growth that cannot be explained is typically attributed to local advantages that the industry group experiences here in New York City. This portion is called the “local share” of growth as identified in a shift share analysis.
This section identifies the large industry groups that are adding jobs because they are, in all likelihood, enjoying a local advantage from operating in New York City. Table 3.2 highlights the industry groups that have gained the most jobs because of this “local share.”

The results in Table 3.2 differ from in one obvious respect from those in Table 3.1: finance and insurance sector industry groups have dropped out of the picture, mainly because their growth in New York City mirrored the national growth in that sector, or even lagged it. The home health care, business services and specialized retail industry groups (health and personal care stores and electronic and appliance stores) do appear to have a distinct advantage, however. This analysis also highlights the local advantage experienced by industry groups associated with recreation and tourism, such as other amusement and recreation industries, drinking places, department stores, museums and historical sites, performing arts companies, and restaurants (both full-service and limited service eating places).

**TABLE 3.1 NEW YORK CITY’S MOST SPECIALIZED INDUSTRY GROUPS***

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry Group</th>
<th>Employment 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5231 SECURITIES &amp; COMMODITY CONTRACTS</td>
<td>126,576</td>
</tr>
<tr>
<td>2</td>
<td>4851 URBAN TRANSIT SYSTEMS</td>
<td>52,278</td>
</tr>
<tr>
<td>3</td>
<td>4243 APPAREL PIECE GOODS &amp; NOTIONS WHSLE</td>
<td>31,553</td>
</tr>
<tr>
<td>4</td>
<td>5239 OTHER FINANCIAL INVESTMENT ACTIVITIES</td>
<td>55,923</td>
</tr>
<tr>
<td>5</td>
<td>3152 CUT &amp; SEW APPAREL MFG</td>
<td>19,887</td>
</tr>
<tr>
<td>6</td>
<td>5311 LESSORS OF REAL ESTATE</td>
<td>80,926</td>
</tr>
<tr>
<td>7</td>
<td>7111 PERFORMING ARTS COMPANIES</td>
<td>14,632</td>
</tr>
<tr>
<td>8</td>
<td>5418 ADVERTISING &amp; RELATED SERVICES</td>
<td>54,490</td>
</tr>
<tr>
<td>9</td>
<td>8131 RELIGIOUS ORGANIZATIONS</td>
<td>18,872</td>
</tr>
<tr>
<td>10</td>
<td>6241 INDIVIDUAL &amp; FAMILY SERVICES</td>
<td>117,712</td>
</tr>
<tr>
<td>11</td>
<td>7121 MUSEUMS HISTORICAL SITES &amp; SIMILAR</td>
<td>18,757</td>
</tr>
<tr>
<td>12</td>
<td>5414 SPECIALIZED DESIGN SERVICES</td>
<td>12,908</td>
</tr>
<tr>
<td>13</td>
<td>5111 NEWSPAPER/PERIODICAL/BOOK/DIRECTORY</td>
<td>52,041</td>
</tr>
<tr>
<td>14</td>
<td>8132 GRANTMAKING &amp; GIVING SERVICES</td>
<td>11,114</td>
</tr>
<tr>
<td>15</td>
<td>5151 RADIO &amp; TELEVISION BROADCASTING</td>
<td>17,437</td>
</tr>
<tr>
<td>16</td>
<td>5622 WASTE TREATMENT &amp; DISPOSAL</td>
<td>10,369</td>
</tr>
<tr>
<td>17</td>
<td>5121 MOTION PICTURE &amp; VIDEO INDUSTRIES</td>
<td>26,415</td>
</tr>
<tr>
<td>18</td>
<td>5411 LEGAL SERVICES</td>
<td>83,568</td>
</tr>
<tr>
<td>19</td>
<td>6216 HOME HEALTH CARE SERVICES</td>
<td>59,114</td>
</tr>
<tr>
<td>20</td>
<td>4239 MISCELLANEOUS DURABLE GOODS WHSLE</td>
<td>18,097</td>
</tr>
<tr>
<td>21</td>
<td>5191 OTHER INFORMATION SERVICES</td>
<td>15,652</td>
</tr>
<tr>
<td>22</td>
<td>5616 INVESTIGATION &amp; SECURITY SERVICES</td>
<td>45,625</td>
</tr>
<tr>
<td>23</td>
<td>8129 OTHER PERSONAL SERVICES</td>
<td>13,067</td>
</tr>
<tr>
<td>24</td>
<td>4811 SCHEDULED AIR TRANSPORTATION</td>
<td>25,089</td>
</tr>
<tr>
<td>25</td>
<td>9221 JUSTICE PUBLIC ORDER &amp; SAFETY</td>
<td>98,565</td>
</tr>
</tbody>
</table>

* Among industry groups employing 10,000 or more as measured by location quotient, a measure of employment specialization.

C. Summary
New York City’s labor market is more highly specialized in finance and insurance, professional, scientific, and technical services, management of companies and other enterprises, and health care and social services compared to the nation’s. Additional industry groups make up a much larger share of jobs in New York City than in the nation as a whole: some which benefit from the creative labor force and access to/communication with other global cities, and others that benefit from the high population density. During the past decade, industry groups related to tourism and recreation have added large numbers of jobs because of the unique advantage of the city as a travel destination and the weakness of U.S. dollar relative to other currencies.

Local advantage is an important criterion for workforce development: industries that enjoy these advantages are more likely to thrive in the local economy. However, their jobs outlooks also depend on the advantages. That is, if the advantages disappear, so may the jobs. For example, industries that benefit from a weaker dollar are more likely to undergo job loss as the dollar strengthens and international trade and tourism decline. Under the current conditions, the industries that rely on a strong finance sector will have a more uncertain future until the sector has fully restructured and recovered.

Considering these cautions, the most promising industry groups for workforce development, according to measures of local advantage, are publishing (periodicals, books, directories), home health care services, and museums and other historical sites. Additional industry groups include motion picture and video industries, urban transit, and grocery stores.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry Groups</th>
<th>Employment 2008</th>
<th>#</th>
<th>% of 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6216 HOME HEALTH CARE SERVICES</td>
<td>59,114</td>
<td>13,910</td>
<td>24%</td>
</tr>
<tr>
<td>2</td>
<td>5412 ACCOUNTING, TAX PREPARATION, BOOKKEEPING, AND PAYROLL SERVICES</td>
<td>50,066</td>
<td>7,026</td>
<td>14%</td>
</tr>
<tr>
<td>3</td>
<td>4461 HEALTH AND PERSONAL CARE SERVICES</td>
<td>35,864</td>
<td>4,742</td>
<td>13%</td>
</tr>
<tr>
<td>4</td>
<td>4451 GROCERY STORES</td>
<td>46,621</td>
<td>4,682</td>
<td>10%</td>
</tr>
<tr>
<td>5</td>
<td>7139 OTHER AMUSEMENT AND RECREATION INDUSTRIES</td>
<td>18,914</td>
<td>4,425</td>
<td>23%</td>
</tr>
<tr>
<td>6</td>
<td>5111 NEWSPAPER, PERIODICAL, BOOK, AND DIRECTORY PUBLISHERS</td>
<td>52,041</td>
<td>4,073</td>
<td>8%</td>
</tr>
<tr>
<td>7</td>
<td>5413 ARCHITECTURAL, ENGINEERING, AND RELATED SERVICES</td>
<td>29,431</td>
<td>3,821</td>
<td>13%</td>
</tr>
<tr>
<td>8</td>
<td>5511 MANAGEMENT OF COMPANIES AND ENTERPRISES</td>
<td>58,602</td>
<td>3,672</td>
<td>6%</td>
</tr>
<tr>
<td>9</td>
<td>7121 MUSEUMS, HISTORICAL SITES, AND SIMILAR INSTITUTIONS</td>
<td>18,757</td>
<td>3,637</td>
<td>19%</td>
</tr>
<tr>
<td>10</td>
<td>7222 LIMITED-SERVICE EATING PLACES</td>
<td>55,934</td>
<td>3,469</td>
<td>6%</td>
</tr>
<tr>
<td>11</td>
<td>4521 DEPARTMENT STORES</td>
<td>21,310</td>
<td>3,360</td>
<td>16%</td>
</tr>
<tr>
<td>12</td>
<td>2361 RESIDENTIAL BUILDING CONSTRUCTION</td>
<td>17,952</td>
<td>3,264</td>
<td>18%</td>
</tr>
<tr>
<td>13</td>
<td>4431 ELECTRONICS AND APPLIANCE STORES</td>
<td>14,531</td>
<td>1,963</td>
<td>14%</td>
</tr>
<tr>
<td>14</td>
<td>2211 ELECTRIC POWER GENERATION, TRANSMISSION AND DISTRIBUTION TRANSMISSION AND DISTRIBUTION</td>
<td>13,101</td>
<td>1,807</td>
<td>14%</td>
</tr>
<tr>
<td>15</td>
<td>7221 FULL-SERVICE RESTAURANTS</td>
<td>107,615</td>
<td>1,671</td>
<td>2%</td>
</tr>
<tr>
<td>16</td>
<td>8139 BUSINESS, PROFESSIONAL, LABOR, POLITICAL, AND SIMILAR ORGANIZATIONS</td>
<td>16,621</td>
<td>1,539</td>
<td>9%</td>
</tr>
<tr>
<td>17</td>
<td>7111 PERFORMING ARTS COMPANIES</td>
<td>14,632</td>
<td>1,510</td>
<td>10%</td>
</tr>
<tr>
<td>18</td>
<td>6244 CHILD DAY CARE SERVICES</td>
<td>25,147</td>
<td>1,477</td>
<td>6%</td>
</tr>
<tr>
<td>19</td>
<td>8121 PERSONAL CARE SERVICES</td>
<td>18,732</td>
<td>1,200</td>
<td>6%</td>
</tr>
<tr>
<td>20</td>
<td>9241 ADMINISTRATION OF ENVIRONMENTAL QUALITY PROGRAMS</td>
<td>7,809</td>
<td>1,188</td>
<td>15%</td>
</tr>
<tr>
<td>21</td>
<td>7211 TRAVELER ACCOMMODATION</td>
<td>40,154</td>
<td>1,060</td>
<td>3%</td>
</tr>
<tr>
<td>22</td>
<td>7223 SPECIAL FOOD SERVICES</td>
<td>17,797</td>
<td>1,027</td>
<td>6%</td>
</tr>
<tr>
<td>23</td>
<td>8123 DRYCLEANING AND LAUNDRY SERVICES</td>
<td>8,638</td>
<td>1,002</td>
<td>12%</td>
</tr>
<tr>
<td>24</td>
<td>7224 DRINKING PLACES</td>
<td>7,022</td>
<td>966</td>
<td>14%</td>
</tr>
<tr>
<td>25</td>
<td>5152 CABLE AND OTHER SUBSCRIPTION PROGRAMMING</td>
<td>9,190</td>
<td>958</td>
<td>10%</td>
</tr>
</tbody>
</table>

* Local share is the portion of job growth cannot be attributed to national growth nor to the mix of high- and low-growth industries in New York City.
Performance During Past Recessions
Up to this point, this report has considered employment and wage performance from 2000 to the beginning of 2008. Economists and the media have already noted that the current profile of jobs in New York City already differs from that of a year ago and will continue to undergo cyclical and structural changes. It appears that the finance and insurance sector will experience additional restructuring in ways that cannot completely be anticipated. Despite this uncertainty, strategic planning for workforce programs can still be usefully informed by examining employment stability of the largest industry groups during the two previous recessions, estimates of each industry group’s dependence on the financial services sector, and recent patterns in unemployment claims by sector.

A. What industry groups weathered the last two recessions better than others?

Although caution is warranted when making comparisons, the current recession bears some similarities to the 1989-1992 recession: both featured housing price declines, a sharp decrease in the stock market, and the failure of banking institutions. Although today’s economy differs substantially from that of 1989 and additional factors underlie the current recession (failure of larger financial institutions due to overreliance on securitized debt instruments and a much tighter credit market), the similarities remain.

Table 4.1 lists industry groups that retained more jobs than the local economy on average during the recession of 1989-92. The industry groups are listed in order by strength of their job performance during the 1989-92 recession with the strongest industry group at the top.

Some industry groups highlighted in the earlier analyses of employment and wage growth and local specialization also appear in Table 4.1. For example, some sectors that were among the most stable employers in the 1989-1992 recession – hospitals, home health care services, motion picture production, individual and family services, and elementary and secondary schools, along with some associ-
ated industry groups further down the list (e.g., offices of clinics and medical doctors, social services) – also showed gains in employment and wages in the current period.

Other industry groups that were relatively stable in the last recession have changed markedly since 1992, however, including traveler accommodations, radio and television production, and wholesale trade in nondurable goods (which includes the wholesale garment industry). Observers might be less confident about whether they could repeat their performance in the current recession, but we lack sufficient data to make a reliable projection.

Figure 4.1 shows the actual year-on-year variation relative to overall employment for the top 10 industry groups in Table 4.1 during the last recession. The best performing industry groups are also more volatile (as indicated by the peaks and valleys in the graph), while health services, motion picture production, individual and family services, insurance carriers, and elementary and secondary schools stayed about even with or slightly surpassed the economy as a whole.³

### TABLE 4.1 INDUSTRY GROUPS WITH BEST EMPLOYMENT PERFORMANCE* DURING 1989-92 RECESSION

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry Group</th>
<th>1992 Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2339 WOMEN'S AND MISSES' OUTERWEAR, N.E.C.</td>
<td>13,802</td>
</tr>
<tr>
<td>2</td>
<td>8060 HOSPITALS</td>
<td>169,396</td>
</tr>
<tr>
<td>3</td>
<td>8080 HOME HEALTH CARE SERVICES</td>
<td>38,099</td>
</tr>
<tr>
<td>4</td>
<td>7819 SERVICES ALLIED TO MOTION PICTURES</td>
<td>17,267</td>
</tr>
<tr>
<td>5</td>
<td>6310 LIFE INSURANCE</td>
<td>34,323</td>
</tr>
<tr>
<td>6</td>
<td>7810 MOTION PICTURE PRODUCTION AND SERVICES</td>
<td>25,329</td>
</tr>
<tr>
<td>7</td>
<td>8320 INDIVIDUAL AND FAMILY SERVICES</td>
<td>28,025</td>
</tr>
<tr>
<td>8</td>
<td>7920 PRODUCERS, ORCHESTRAS, ENTERTAINERS</td>
<td>20,296</td>
</tr>
<tr>
<td>9</td>
<td>4720 PASSENGER TRANSPORTATION ARRANGEMENT</td>
<td>11,840</td>
</tr>
<tr>
<td>10</td>
<td>7900 AMUSEMENT AND RECREATION SERVICES</td>
<td>34,690</td>
</tr>
<tr>
<td>11</td>
<td>8730 RESEARCH AND TESTING SERVICES</td>
<td>15,081</td>
</tr>
<tr>
<td>12</td>
<td>8010 OFFICES AND CLINICS OF MEDICAL DOCTORS</td>
<td>24,918</td>
</tr>
<tr>
<td>13</td>
<td>7520 AUTOMOBILE PARKING</td>
<td>8,949</td>
</tr>
<tr>
<td>14</td>
<td>7990 MISC. AMUSEMENT, RECREATION SERVICES</td>
<td>10,326</td>
</tr>
<tr>
<td>15</td>
<td>7922 THEATRICAL PRODUCERS AND SERVICES</td>
<td>12,944</td>
</tr>
<tr>
<td>16</td>
<td>4830 RADIO AND TELEVISION BROADCASTING</td>
<td>20,117</td>
</tr>
<tr>
<td>17</td>
<td>6330 FIRE, MARINE, AND CASUALTY INSURANCE</td>
<td>16,223</td>
</tr>
<tr>
<td>18</td>
<td>2731 BOOK PUBLISHING</td>
<td>13,577</td>
</tr>
<tr>
<td>19</td>
<td>8220 COLLEGES AND UNIVERSITIES</td>
<td>64,154</td>
</tr>
<tr>
<td>20</td>
<td>5190 MISC. NONDURABLE GOODS</td>
<td>15,690</td>
</tr>
<tr>
<td>21</td>
<td>8210 ELEMENTARY AND SECONDARY SCHOOLS</td>
<td>20,758</td>
</tr>
<tr>
<td>22</td>
<td>2730 BOOKS</td>
<td>12,358</td>
</tr>
<tr>
<td>23</td>
<td>5700 FURNITURE AND HOME FURNISHINGS STORES</td>
<td>16,139</td>
</tr>
<tr>
<td>24</td>
<td>8090 HEALTH AND ALLIED SERVICES, N.E.C.</td>
<td>12,086</td>
</tr>
<tr>
<td>25</td>
<td>8390 SOCIAL SERVICES, N.E.C.</td>
<td>12,083</td>
</tr>
</tbody>
</table>


* Measured as percent above/below the average year-to-year employment change in all industry groups during the reference period.
Table 4.2 and Figure 4.2 provide the same kind of information for the recession of 2001-2003. Although New York City’s labor market in 2003 was more similar to the current one, that recession was precipitated by the dot.com investment bust and the aftermath of September 11th. Many of the stable industry groups during the 2001-2003 recession are in traditionally recession-resistant areas in the sense that they are less sensitive to declines in consumer demand. Examples in Table 4.2 include education (school bus transport, junior colleges, other schools and instruction), health (home health care, specialty hospitals), and social services (child day care services, residential mental health and substance abuse treatment). Additional stable industry groups in Table 4.2 are related to the aftermath of September 11th, including investigative and security services and building materials and supplies. Health and personal care stores also emerge among the most stable employers during the 2001-2003 recession.

Figure 4.2 shows the actual quarter-on-quarter percentage variation between 2001-2003 from average employment for the top 10 industry groups in Table 4.2. The peaks and valleys in Figure 4.2 reflect
the seasonality of employment at junior colleges and museums and other historical sites. The remaining industry groups vary within 10 percent above or below the citywide average change in employment.

B. Which industry groups currently have the most and least exposure to the financial services sector?

Financial institutions are at the epicenter of the current recession; many of New York City’s largest firms have posted huge losses and several have entered bankruptcy or closed altogether. Thus, it is important to assess the consequences of the turmoil in the finance and insurance sector on the broader New York City labor market. This section assesses industry groups’ dependence on or exposure to the finance sector.³ Tables 4.3A and 4.3B list the most and least exposed industry groups in rank order. Industry groups that are highlighted in bold case at the bottom of Table 4.3A belong to the finance sector. Legal services, management, scientific, and consulting services, electric power generation, and management of companies and other enterprises are the

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**TABLE 4.2 INDUSTRY GROUPS WITH BEST EMPLOYMENT PERFORMANCE* DURING THE 2001-03 RECESSION**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry Group</th>
<th>Employment 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4854 SCHOOL &amp; EMPLOYEE BUS TRANSPORT</td>
<td>10,473</td>
</tr>
<tr>
<td>2</td>
<td>6216 HOME HEALTH CARE SERVICES</td>
<td>39,762</td>
</tr>
<tr>
<td>3</td>
<td>6223 SPECIALTY HOSPITALS(EX PSYCH &amp; ABUSE)</td>
<td>11,506</td>
</tr>
<tr>
<td>4</td>
<td>7121 MUSEUMS HISTORICAL SITES &amp; SIMILAR</td>
<td>17,045</td>
</tr>
<tr>
<td>5</td>
<td>7139 OTHER AMUSEMENT &amp; RECREATION</td>
<td>15,843</td>
</tr>
<tr>
<td>6</td>
<td>6112 JUNIOR COLLEGES</td>
<td>16,447</td>
</tr>
<tr>
<td>7</td>
<td>6116 OTHER SCHOOLS &amp; INSTRUCTION</td>
<td>10,087</td>
</tr>
<tr>
<td>8</td>
<td>6113 COLLEGES &amp; UNIVERSITIES</td>
<td>85,584</td>
</tr>
<tr>
<td>9</td>
<td>5616 INVESTIGATION &amp; SECURITY SERVICES</td>
<td>45,007</td>
</tr>
<tr>
<td>10</td>
<td>6214 INPATIENT CARE CENTERS</td>
<td>16,840</td>
</tr>
<tr>
<td>11</td>
<td>6244 CHILD DAY CARE SERVICES</td>
<td>21,710</td>
</tr>
<tr>
<td>12</td>
<td>9261 ADMINISTRATION OF ECONOMIC PROGRAMS</td>
<td>16,619</td>
</tr>
<tr>
<td>13</td>
<td>5511 MANAGEMENT OF COMPANIES &amp; ENTERPRISES</td>
<td>37,925</td>
</tr>
<tr>
<td>14</td>
<td>7223 SPECIAL FOOD SERVICES</td>
<td>18,709</td>
</tr>
<tr>
<td>15</td>
<td>6232 RESIDENTIAL MENTAL HEALTH &amp; SUBSTANCE</td>
<td>21,250</td>
</tr>
<tr>
<td>16</td>
<td>7222 LIMITED-SERVICE EATING PLACES</td>
<td>50,019</td>
</tr>
<tr>
<td>17</td>
<td>6241 INDIVIDUAL &amp; FAMILY SERVICES</td>
<td>109,897</td>
</tr>
<tr>
<td>18</td>
<td>4441 BUILDING MATERIAL &amp; SUPPLIES DEALERS</td>
<td>11,407</td>
</tr>
<tr>
<td>19</td>
<td>6213 OFFICES OF OTHER HEALTH PRACTITIONERS</td>
<td>9,175</td>
</tr>
<tr>
<td>20</td>
<td>5417 SCIENTIFIC RESEARCH &amp; DEVELOPMENT SERVICES</td>
<td>16,228</td>
</tr>
<tr>
<td>21</td>
<td>8131 RELIGIOUS ORGANIZATIONS</td>
<td>16,886</td>
</tr>
<tr>
<td>22</td>
<td>4461 HEALTH &amp; PERSONAL CARE STORES</td>
<td>14,163</td>
</tr>
<tr>
<td>23</td>
<td>8121 PERSONAL CARE SERVICES</td>
<td>14,838</td>
</tr>
<tr>
<td>24</td>
<td>7113 PROMOTERS - PERFORMING ARTS &amp; SPORTS</td>
<td>8,513</td>
</tr>
<tr>
<td>25</td>
<td>5223 ACTIVITIES RELATED TO CREDIT INTERMEDIATION</td>
<td>8,513</td>
</tr>
</tbody>
</table>

**SOURCE** | New York State Department of Labor, Quarterly Census of Employment and Wages, 2001-2003.  
* Measured as percent above/below the average quarter-on-quarter employment change in all industry groups during the reference period.
five industry groups expected to fare worst because of their close relationship with the financial services sector. With the exception of electrical power generation, the remaining industry groups are well known to rely on financial institutions as large purchasers of their products and services. A majority of the remaining industry groups on this list are from the professional, scientific, and technical services sector. Food services, waste management, hotels and motels, and civic organizations can also be expected to lose a substantial amount of business and therefore, potentially cut jobs. A decrease in the number of letters and packages sent through the U.S. Postal Service is widely considered a leading indicator of recession; this list shows that postal and courier services may be negatively influenced by the current recession.

Table 4.3B shows the industries that are least dependent on the financial services sector to purchase their goods and services. The full list of lower-risk industry groups is twice the size – these were a sample of the 90 industry groups with zero exposure to financial services, according to this measure.

Health and social services, education, and manufacturing industry groups are among the biggest employers in the less-exposed industries in Table 4.3B. The list also includes industry groups...
associated with tourism (museums and historical sites) and information-related technologies (sound recording, and software and video producing).

C. What sectors had the lowest growth in unemployment in 2008?

Unemployment claims are another indicator that workforce reductions are under way. Table 4.4 summarizes the monthly tally of unemployment insurance recipients by sector in 2008. The sectors are listed in descending order of the number of November 2008 unemployment beneficiaries. The rightmost column shows how much the number of claimants changed between
### TABLE 4.4 NEW YORK CITY UNEMPLOYMENT INSURANCE RECIPIENTS BY SECTOR, 2008

<table>
<thead>
<tr>
<th>Sectors</th>
<th>November</th>
<th>Jan-Nov Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>56</td>
<td>ADMINISTRATIVE AND SUPPORT AND WASTE MGMT AND REMEDIATION SVCS</td>
<td>9,263</td>
</tr>
<tr>
<td>23</td>
<td>CONSTRUCTION</td>
<td>7,135</td>
</tr>
<tr>
<td>54</td>
<td>PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES</td>
<td>7,100</td>
</tr>
<tr>
<td>62</td>
<td>HEALTH CARE AND SOCIAL ASSISTANCE</td>
<td>6,729</td>
</tr>
<tr>
<td>52</td>
<td>FINANCE AND INSURANCE</td>
<td>6,290</td>
</tr>
<tr>
<td>44-45</td>
<td>RETAIL TRADE</td>
<td>5,855</td>
</tr>
<tr>
<td>72</td>
<td>ACCOMMODATION AND FOOD SERVICES</td>
<td>4,657</td>
</tr>
<tr>
<td>31-33</td>
<td>MANUFACTURING</td>
<td>4,285</td>
</tr>
<tr>
<td>42</td>
<td>WHOLESALE TRADE</td>
<td>3,492</td>
</tr>
<tr>
<td>51</td>
<td>INFORMATION</td>
<td>2,966</td>
</tr>
<tr>
<td>48-49</td>
<td>TRANSPORTATION AND WAREHOUSING</td>
<td>2,587</td>
</tr>
<tr>
<td>81</td>
<td>OTHER SERVICES, EXCEPT PUBLIC ADMINISTRATION</td>
<td>2,538</td>
</tr>
<tr>
<td>71</td>
<td>ARTS, ENTERTAINMENT, AND RECREATION</td>
<td>2,493</td>
</tr>
<tr>
<td>53</td>
<td>REAL ESTATE, RENTALS AND LEASING</td>
<td>2,317</td>
</tr>
<tr>
<td>61</td>
<td>EDUCATIONAL SERVICES</td>
<td>1,462</td>
</tr>
<tr>
<td>55</td>
<td>MANAGEMENT OF COMPANIES AND ENTERPRISES</td>
<td>423</td>
</tr>
<tr>
<td>22</td>
<td>UTILITIES</td>
<td>34</td>
</tr>
<tr>
<td>--</td>
<td>TOTAL ALL INDUSTRIES AND GOVERNMENT</td>
<td>75,534</td>
</tr>
</tbody>
</table>

**Source**: New York State Department of Labor, 2008.

### FIGURE 4.3 NOVEMBER 2007 TO NOVEMBER 2008 CHANGE IN UNEMPLOYMENT RECIPIENTS BY SECTOR

- Finance and Insurance
- Transportation and Warehousing
- Administrative, Support, Waste Mgmt, and Remediation Svcs
- Construction
- Professional, Scientific, and Technical Services
- Information
- Wholesale Trade
- Retail Trade
- Accommodation and Food Services
- Arts, Entertainment, and Recreation
- Educational Services
- Manufacturing
- Other Services, Except Public Administration
- Real Estate and Rental and Leasing
- Health Care and Social Assistance

**Source**: New York State Department of Labor
January and November 2008. A large and growing number of unemployment insurance recipients is clearly a negative indicator for a sector. Workforce professionals should continue to track these numbers to monitor whether sectors have endured the majority of the effects of the recession or if job losses are accelerating.

The administrative, support, and waste management services sector leads in terms of former employees receiving unemployment insurance benefits with 9,263 in November 2008. The next hardest hit sectors include construction, professional, scientific, and technical services, and health care and social assistance – each with more than 6,500 unemployment beneficiaries.

Finance and insurance leads the sectors in the rate of increase in unemployment insurance recipients between January and November 2008 (73%), followed by professional, scientific, and technical services (56%), and transportation and warehousing (46%).

During 2008, the sectors associated with tourism and recreation did not experience rising unemployment claims: there were one percent decreases in the number of recipients in accommodation and food services, and arts, entertainment, and recreation.

Figure 4.3 shows the change from November 2007 to November 2008 in the number of unemployment insurance recipients by sector. There was an increase in all sectors, with finance and insurance (81%), transportation and warehousing (74%), and construction (70%) hardest hit. The health care and social assistance sector had the smallest increase in unemployment insurance claimants since November 2007 at 25 percent.
D. Summary
In this section, we have identified industry groups that fared better than the overall labor market during the two previous recessions as well as the industry groups that are the most and least dependent on the finance and insurance sector, and sectoral trends in unemployment insurance claims. These findings suggest that the traditional recession resistant industries – such as health and social services, and education – might be the safest harbors during this recession. Even in this case, however, workforce development providers should monitor the public sector budgets for health, education, and social services, since any cuts in these budgets will have a negative effect on job availability in these industry groups. Finally, some industry groups in the information sector may be relatively resilient, particularly those that entail audio and video recording and production and motion picture-related services.

While employers in high-risk industry groups might experience turnover and require replacement workers, these jobs, in all likelihood, will be unstable. Providers should position themselves to help individuals coming out of these recession-prone industry groups find new jobs. Rather than focusing on placing jobseekers in administrative and support services, professional, scientific, and technical services, construction, and finance and insurance, workforce providers should re-assess and retool their education and training programs so that jobseekers can be prepared for more stable jobs when the job market recovers.

Endnotes
3 We thank the New York State Department of Labor for providing NYCLMIS with their estimates of aggregate transactions between all industries in New York City and the industries in the finance sector. Our measure was calculated by summing the direct and regional coefficients that represent what each industry group sells to (as opposed to buys from) industries in the finance sector. The coefficients also take into effect “multiplier” or “induced” effects, as consumer demand rises or falls as a result of these transactions.
4 Unemployment insurance claims do not provide a complete picture, however, since many more people either are not applying or are not eligible for coverage.
5 The Administrative and Support and Waste Management and Remediation Services sector includes establishments that perform routine support for the day-to-day operations of other organizations. Establishments in this sector specialize in one or more of these support activities and provide these services to clients in a variety of industries and to households.
Occupational Opportunities
To be truly informed about labor market opportunities, workforce providers need occupational data too. This information helps account managers to approach employers with a greater understanding of their labor needs. Education and training professionals can identify and target growing occupations. Career advisors will be able to find the industries that employ the most common occupations in New York City.

This section begins with an overview of larger employment trends by occupation group. It then presents wage levels and job requirements of the most common occupations in New York City. This section also contains information about the primary industry groups associated with the most common occupations.

A. What are the larger occupational employment and wage trends in New York City?

Table 5.1 shows employment trends for the 23 major occupation groups in New York City between 2000 and 2007 with the largest occupations listed first. More than one-third of New York City’s jobs are in office and administrative support, sales, or management occupations. The other 65 percent are divided among 16 of the remaining occupation groups. Between 2000 and 2007, personal care and service, construction, building and grounds cleaning and maintenance, and food preparation and serving occupations experienced 30 percent or greater growth (as did farming, fishing, and forestry; however, there were a great deal fewer jobs in this occupation group). Production, installation, maintenance and repair, and computer and mathematical occupations experienced the greatest declines (as did military, but again, in much smaller absolute numbers).

Table 5.2 shows the levels and trends in average annual wages by major occupation group in New York City between 2000 and 2007, in descending order by 2007 average wage. Legal, management, and business and financial occupations earned the most, averaging about $100,000 or more in 2007; personal care and service, food preparation and serving related, healthcare support, and building and grounds cleaning and maintenance occupations earned the least, averaging less than $30,000 in the same year.

Table 5.2 also shows that legal, life, physical, and social science, and business and financial operations occupations experienced the greatest wage gains between 2000 and 2007. Nine occupation groups actually experienced wage losses over the seven-year period, with the greatest losses in personal care and service, construction, and transportation and material moving occupations.
Figure 5.1 brings together the information in Tables 5.1 and 5.2 to show job and wage growth between 2000 and 2007 for the 10 largest occupation groups. As in the previous figures, the bubble sizes reflect the number employed in each occupation group. Occupation groups that appear in the upper right-hand quadrant experienced job and wage gains. Moving clockwise, those in the lower right quadrant experience job gains and wage losses; and finally, those in the upper left-hand quadrant experienced job losses and wage gains. The diagonal pattern that appears in Figure 5.1 indicates that job growth was associated with wage loss at the occupational level in the 2000-2007 time period. The most obvious exception to this pattern was within business and financial operations occupations.

**B. What occupations are the most common? How do they pay? In what industries are these occupations most common?**
Table 5.3 identifies occupations that employ 10,000 people or more in New York City, have a median hourly wage of $12.00 or greater, and traditionally require less than a four-year postsecondary degree. (The educational requirements for each occupation derive from a national survey of employers and may not reflect New York City employers’ requirements.) Some employers may substitute years of experience in lieu of education; and employers may have other screening requirements, such as drug tests or criminal record checks.

The first column indicates how much education is typically required (less than high school, a high school diploma or GED, some college, or an Associates’ degree). The next column contains Standard Occupational Classification codes (SOC) and occupational titles. Next are indicators of the number of people employed in each occupation (10,000 to 25,000; 25,001-
<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>47-2152 Plumbers, pipefitters, and steamfitters</td>
<td>30K-50K</td>
</tr>
<tr>
<td>47-2011 Carpenters</td>
<td>30K-50K</td>
</tr>
<tr>
<td>43-5053 Postal service mail carriers, processors, and machine operators</td>
<td>30K-50K</td>
</tr>
<tr>
<td>37-3011 Landscaping and groundskeeping workers</td>
<td>30K-50K</td>
</tr>
<tr>
<td>25-9041 Teacher assistants</td>
<td>20K-30K</td>
</tr>
<tr>
<td>25-3099 Teachers and instructors, all other</td>
<td>20K-30K</td>
</tr>
<tr>
<td>41-5051 Clerical and transcribers, and medical secretaries</td>
<td>20K-30K</td>
</tr>
<tr>
<td>47-1011 First-line supervisors/managers of construction trades and extraction workers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>49-1011 First-line supervisors/managers of office and administrative support workers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>41-9022 Real estate sales agents</td>
<td>20K-30K</td>
</tr>
<tr>
<td>41-3099 Sales representatives, services, all other</td>
<td>20K-30K</td>
</tr>
<tr>
<td>41-3011 Advertising sales agents</td>
<td>20K-30K</td>
</tr>
<tr>
<td>51-1011 First-line supervisors/managers of production and operating workers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-1011 First-line supervisors/managers of office and administrative support workers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>47-2081 Construction laborers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-5011 Executive secretaries and administrative assistants</td>
<td>20K-30K</td>
</tr>
<tr>
<td>53-3021 Bus drivers, transit and intercity</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-5052 Postal service mail carriers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-5061 Production, planning, and expediting clerks</td>
<td>20K-30K</td>
</tr>
<tr>
<td>53-3022 Truck drivers, heavy and tractor-trailer</td>
<td>20K-30K</td>
</tr>
<tr>
<td>39-9031 Fitness trainers and aerobics instructors</td>
<td>20K-30K</td>
</tr>
<tr>
<td>41-1011 First-line supervisors/managers of retail sales workers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>25-3021 Self-enrichment education teachers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-3051 Payroll and timekeeping clerks</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-3022 Automotive service technicians and mechanics</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-3021 Bill and posting clerks and machine operators</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-4051 Customer service representatives</td>
<td>20K-30K</td>
</tr>
<tr>
<td>53-3022 Bus drivers, school</td>
<td>20K-30K</td>
</tr>
<tr>
<td>53-3033 Truck drivers, light or delivery services</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-6014 Secretaries, except legal, medical, and executive</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-9022 Word processors and typists</td>
<td>20K-30K</td>
</tr>
<tr>
<td>25-2011 Preschool teachers, except special education</td>
<td>20K-30K</td>
</tr>
<tr>
<td>33-1012 First-line supervisors/managers of food preparation and serving workers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>31-9022 Medical assistants</td>
<td>20K-30K</td>
</tr>
<tr>
<td>37-3012 Maids and housekeeping cleaners</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-4171 Receptionists and information clerks</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-5071 Shipping, receiving, and traffic clerks</td>
<td>20K-30K</td>
</tr>
<tr>
<td>21-1015 Rehabilitation counselors</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-9021 Data entry keyers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-9061 Office clerks, general</td>
<td>20K-30K</td>
</tr>
<tr>
<td>45-4071 File clerks</td>
<td>20K-30K</td>
</tr>
<tr>
<td>35-3011 Bartenders</td>
<td>20K-30K</td>
</tr>
<tr>
<td>35-2014 Cooks, restaurant</td>
<td>20K-30K</td>
</tr>
<tr>
<td>37-3011 Janitors and cleaners, except maids and housekeeping cleaners</td>
<td>20K-30K</td>
</tr>
<tr>
<td>11-3011 Administrative services managers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>47-2111 Electricians</td>
<td>20K-30K</td>
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<tr>
<td>49-9042 Maintenance and repair workers, general</td>
<td>20K-30K</td>
</tr>
<tr>
<td>31-1012 Nursing aides, orderlies, and attendants</td>
<td>20K-30K</td>
</tr>
<tr>
<td>39-5012 Hairdressers, hairstylists, and cosmetologists</td>
<td>20K-30K</td>
</tr>
<tr>
<td>27-2022 Producers and directors</td>
<td>20K-30K</td>
</tr>
<tr>
<td>13-1011 Claims adjusters, examiners, and investigators</td>
<td>20K-30K</td>
</tr>
<tr>
<td>41-4012 Sales representatives, wholesale and manufacturing</td>
<td>20K-30K</td>
</tr>
<tr>
<td>29-2061 Licensed practical and licensed vocational nurses</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-3031 Bookkeeping, accounting, and auditing clerks</td>
<td>20K-30K</td>
</tr>
<tr>
<td>11-1021 General and operations managers</td>
<td>20K-30K</td>
</tr>
<tr>
<td>15-1032 Computer software engineers, systems software</td>
<td>20K-30K</td>
</tr>
<tr>
<td>29-1111 Registered nurses</td>
<td>20K-30K</td>
</tr>
<tr>
<td>29-2061 Paralegals and legal assistants</td>
<td>20K-30K</td>
</tr>
<tr>
<td>43-4022 Legal secretaries</td>
<td>20K-30K</td>
</tr>
</tbody>
</table>

**TABLE 5.3 CHARACTERISTICS OF THE MOST COMMON OCCUPATIONS* IN NEW YORK CITY, 2007**

<table>
<thead>
<tr>
<th>Entry</th>
<th>Median</th>
<th>Upper</th>
<th>1-25%</th>
<th>25 to 50%</th>
<th>50 to 75%</th>
<th>75 to 100%</th>
<th>Primary Industry Group</th>
<th>SOC</th>
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</thead>
<tbody>
<tr>
<td>$15.03</td>
<td>$27.19</td>
<td>$45.79</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Construction</td>
<td>47-2152</td>
</tr>
<tr>
<td>$14.16</td>
<td>$25.28</td>
<td>$45.76</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Construction</td>
<td>47-2031</td>
</tr>
<tr>
<td>$15.17</td>
<td>$21.33</td>
<td>$23.88</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Postal service</td>
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</tr>
<tr>
<td>$8.05</td>
<td>$12.87</td>
<td>$21.81</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Landscaping services</td>
<td>37-3011</td>
</tr>
<tr>
<td>$7.98</td>
<td>$12.60</td>
<td>$21.33</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Elementary and secondary schools</td>
<td>25-9041</td>
</tr>
<tr>
<td>$20.31</td>
<td>$49.94</td>
<td>$70.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Securities, commodities, funds, trusts, and other financial investments</td>
<td>41-3031</td>
</tr>
<tr>
<td>$22.57</td>
<td>$37.69</td>
<td>$58.05</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Construction</td>
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<tr>
<td>$21.85</td>
<td>$33.27</td>
<td>$47.49</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Bus service and urban transit</td>
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<tr>
<td>$16.31</td>
<td>$30.66</td>
<td>$70.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Real estate</td>
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<td>$15.36</td>
<td>$28.31</td>
<td>$51.73</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Wired telecommunications carriers</td>
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</tr>
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<td>$14.50</td>
<td>$26.47</td>
<td>$49.26</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Advertising and related services</td>
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<td>$14.71</td>
<td>$26.27</td>
<td>$43.33</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Drycleaning and laundry services</td>
<td>51-1011</td>
</tr>
<tr>
<td>$17.17</td>
<td>$26.22</td>
<td>$40.44</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Banking and related activities</td>
<td>43-1011</td>
</tr>
<tr>
<td>$10.84</td>
<td>$24.65</td>
<td>$36.94</td>
<td>-</td>
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<td>Construction</td>
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</tr>
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<td>$16.00</td>
<td>$22.96</td>
<td>$34.82</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>$18.83</td>
<td>$21.11</td>
<td>$27.58</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Bus service and urban transit</td>
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</tr>
<tr>
<td>$18.33</td>
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<td>$23.94</td>
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<td>43-5052</td>
</tr>
<tr>
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<td>$20.77</td>
<td>$30.54</td>
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<td>-</td>
<td>-</td>
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<td>Truck transportation</td>
<td>53-3032</td>
</tr>
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<td>$10.40</td>
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<td>-</td>
<td>-</td>
<td>Motion pictures and video industries</td>
<td>43-5061</td>
</tr>
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<td>$15.81</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>Automotive repair and maintenance</td>
<td>49-2032</td>
</tr>
<tr>
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<td>$24.07</td>
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<td>-</td>
<td>Hospitals</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>Private households</td>
<td>37-1092</td>
</tr>
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<td>-</td>
<td>-</td>
<td>Offices of physicians</td>
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<td>$22.27</td>
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<td>-</td>
<td>Services incidental to transportation</td>
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<td>-</td>
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<td>-</td>
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<td>-</td>
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<td>Securities, commodities, funds, trusts, and other financial investments</td>
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<td>$12.79</td>
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<td>-</td>
<td>-</td>
<td>Services to buildings and dwellings</td>
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<tr>
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<td>$45.45</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Real estate</td>
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<td>$48.80</td>
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<td>-</td>
<td>Home health care services</td>
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<td>$24.45</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>Beauty salons</td>
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<td>$46.21</td>
<td>$70.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Radio and television broadcasting and cable</td>
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<tr>
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<td>$30.70</td>
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<td>-</td>
<td>-</td>
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</tr>
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<td>$28.56</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Wholesale trade in apparel, fabrics, and notions</td>
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</tr>
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<td>$16.84</td>
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<td>$28.85</td>
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<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>$11.60</td>
<td>$18.01</td>
<td>$26.22</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Banking and related activities</td>
<td>43-3051</td>
</tr>
<tr>
<td>$29.54</td>
<td>$65.96</td>
<td>$70.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Securities, commodities, funds, trusts, and other financial investments</td>
<td>11-3021</td>
</tr>
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<td>$32.37</td>
<td>$48.33</td>
<td>$69.38</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Computer systems design and related services</td>
<td>15-1032</td>
</tr>
<tr>
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<td>$36.84</td>
<td>$49.94</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Hospitals</td>
<td>29-1111</td>
</tr>
<tr>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>Legal services</td>
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</tr>
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<td>$21.41</td>
<td>$30.96</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Legal services</td>
<td>43-6012</td>
</tr>
</tbody>
</table>

* The occupations that appear in this table employ 10,000 or more people in New York City, have a median hourly wage of over $12.00, and typically require no more than an Associate’s Degree.
50,000; 50,001-100,000; or greater than 100,000).
The first set of columns on the facing page contains entry-, median, and upper-level wages earned by each occupation. The next columns to the right indicate the rate of job growth from 2000 to 2007 (less than -50%; -25 to -50%; 0 to -24%; 1 to 24%; 25 to 50%; more than 50%). The next column shows the primary industry associated with the occupation. (The SOC is repeated at the far right to help table navigation.)

A striking finding in Table 5.3 is the large number of occupations that require only a high school diploma or less education (shown in green in the top half of the table). The most common are secretaries (SOC 43-6014) and janitors and cleaners (SOC 37-2011).

Many occupations belong to the same industry group, as indicated on the second to last column. Industries employing five or more of these promising occupations include banking and related activities, construction, grocery stores, hospitals, legal services, and restaurant and other food services. Public sector industry groups also provide occupational

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**FIGURE 5.2 INDUSTRY MIX OF SELECTED COMMON OCCUPATIONS**

- Registered nurses
- Janitors and cleaners
- Secretaries and admin. assts.
- Maintenance and repair

**SOURCE** | American Community Survey, 2005-07 combined Public Use Microdata Samples (place of work: New York City).
opportunities: bus service and urban transit, elementary and secondary schools, and the postal service.

Figure 5.2 takes a closer view at the industry group mix of a few common occupations. For example, a majority of nurses work in hospitals and a small number of additional industry groups in the health services sector. At the other extreme are secretaries who work in banking, schools, hospitals, law firms, and a variety of other industry groups across several economic sectors. Career advisors should know the industry mixes of the most common occupations they place and inform jobseekers about which industries they might be able to find jobs.

C. Summary

Workforce professionals need to examine occupational as well as industry information as they develop sector strategies. Providers need to be aware of the relative size of occupations, whether they are growing or shrinking, and what wage ranges and educational requirements are. Career advisors should be aware of the variety of occupations available to individuals with less than a four-year college degree, who make up the majority of jobseekers they serve. Account executives need to know which industries specialize in what occupations and communicate that information to career advisors.

Career advisors should know the industry mixes of the most common occupations they place and inform jobseekers about which industries they might be able to find jobs.

A variety of occupations offer good wages with few formal educational requirements, but many require another form of training, either on-the-job, or through apprenticeship or certification programs. Common occupations with these characteristics include the skilled trades, nurses, commercial drivers, and managers and supervisors. Policy makers and education and training professionals should assess the extent to which their training programs are meeting the needs of employers and the workforce based on the number of jobs in these occupations.

A few large industry groups provide thousands of jobs to people in the occupations that are accessible to the public workforce system jobseekers. For example, healthcare, food service, grocery stores, banks, and law firms are the dominant employers in Table 5.3. Although businesses in some of these industry groups may be smaller and harder to reach for account managers, many belong to regional or national chains. Business development with these companies stand to make a large number of jobs accessible to workforce customers with comparatively little effort.

Finally, the workforce system traditionally does not serve public sector agencies. However, these public sector industry groups provide a wide variety of opportunities for individuals who do not have a four-year degree. Bus drivers, teachers, rehabilitation counselors, and postal carriers work primarily in the public sector. Policy makers should consider ways that the public workforce development system can facilitate job placement in these industries.
Endnotes

6 Between 2000 and 2007, farming, fishing, and forestry occupations gained ground but there were a great deal fewer jobs in this occupation group in New York City. Similarly, military-specific occupations declined substantially, but also in much smaller absolute numbers than the other occupation groups highlighted above.

7 $12.00 is the 25th percentile hourly wage for New York residents employed 35 hours per week or more.
Conclusions and Recommendations
All things considered, workforce development professionals would like to target large industry groups that are growing, important to the local economy, recession-resistant, and not currently losing jobs. In reality, each industry group has strengths and weaknesses along these different dimensions. Knowing what these differences are will help workforce policymakers providers perform their jobs more effectively.

A. Cross-Measure Findings
Table 6.1 presents a summary listing of how industry groups that ranked highly on one or more of the multiple measures included in this report stack up against each other. At the far left of the table are the NAICS industry group codes, followed by the industry group title and number of jobs in 2008. Reading across the next columns from left to right are the key measures that appear in this report. Dots in these columns indicate that the industry group ranks among the top 25 industry groups on the relevant measure. These measures are: number of jobs, specialization, local advantage, performance during the 1989-92 recession, performance during the 2001-03 recession, high exposure to the finance and insurance sector, and low exposure to the finance and insurance sector. At the far right, the shaded columns are the overall rankings. The first shaded column contains rankings according to the measures that appear in the table (1 denotes the strongest industry group according to the measure, 2 the second strongest, and so on). The second shaded column is the ranking after taking 2008 unemployment claims into consideration.

Most of these industry groups are large employers and most have some specialization in New York City. On the other hand, relatively few were especially stable during the previous two recessions and a few are highly dependent on the finance and insurance sector (as indicated by a green dot). Some sectors are experiencing more severe unemployment than others: for example, colleges and universities are doing much better than banks right now. Just as every industry group has important strengths, each faces particular challenges that workforce development professionals need to understand. A large industry group might be highly dependent on the finance and insurance sector; a less dependent industry group may not enjoy a local advantage and therefore be more subject to national trends.

Home health care was the most highly ranked industry group according to assessment measures used in this report.
It is among the largest employment industries with over 59,000 jobs in 2008, almost one-quarter of which were created as a result of New York City's local advantages. Its employment performance during the previous two recessions in 1989-92 and 2001-03 was among the best, losing proportionately fewer jobs than the New York City economy as a whole during those periods. However, average wages were among the lowest across industry groups, and have decreased since 2000.

Figure 6.2 depicts the occupation mix within some of the highest ranking...
industry groups. The different colored stripes on the bars represent different occupation groups, and the size of the stripes indicates the number of people employed from within that occupation group. For example, the darker green bar that appears in newspaper, periodical, and book publishing, other financial investment, and limited service eating places indicates that sales occupations are employed in all three industry groups. Of the three, the most salespeople are employed in other financial investment activities. Career advisors should be aware of this information so that they can advise jobseekers to look at occupations in other industries that have comparable skills and experience.

Table 6.2 shows the ten most common occupations in high ranking industry groups that require less than a college degree. The table is sorted in descending order by median hourly wage. A majority of these occupations are in the limited service eating places and home health care industry groups and are fairly specific to

Conclusions and Recommendations
those industries, such as cooks, waiters, and nursing and personal home health aides. Others can be found in numerous industry groups, such as office clerks and secretaries/administrative assistants, potential entry points for careers in any number of enterprises and, in the case of secretaries, potential careers in and of themselves.

Some of the highest paying occupations require some previous experience in the field or certification beyond formal schooling (e.g., chefs and managers). Education and training professionals should be aware that many jobs are in these occupations and career advisors should be aware of the variety of these occupations and the wage levels they typically pay. Other occupations in these industry groups earn low wages: at or just above the minimum wage. Jobseekers who need first exposure or an entry point to the workplace may look to these jobs (e.g., home health aides, office clerks, and cashiers). Account managers and education and training professionals should work with employers to build advancement pathways within the industry group or identify opportunities in other industries.

B. What implications do these findings have for workforce providers in New York City?
This report is intended to help workforce development account managers develop business and place job seekers, career advisors to counsel job seekers, and education and training professionals identify strategic industry groups on which to focus their training efforts. Below, we outline the implications of this report for workforce development professionals generally and for account
managers, and training professionals and career advisors specifically.

**General**

As of this writing the nation is in the midst of a severe recession, that began in the finance and insurance and real estate sectors and has quickly spread to most other labor market sectors. New York City entered the recession later than the rest of the nation, but has quickly caught up both in terms of payroll declines and unemployment increases. This report is offered to provide an array of metrics that can be used by workforce providers to assess the various industry groups for their potential labor market weaknesses as this downturn progresses, and a number of other factors such as size, wages, occupational opportunities, and specialization in the region. Workforce development professionals need to understand the contours of New York City’s labor market to make sense of the conditions that face them and to work knowledgeably with employers and jobseekers.

The data may not fully capture the impact of shrinking credit availability. Some industry groups – though not dependent on the finance sector – are dependent on continuously ready credit such as construction and real estate development. Account managers should be aware that businesses functioning in high-credit-demand industry groups will have a difficult time surviving the recession unless credit becomes more available.

National, state, and city policymakers have recently begun to respond to the current recession with economic recovery and stimulus packages that are intended to shorten the recession or minimize its effects. As of this writing, the outlines and impacts of these policies are not yet known. Workforce policymakers and providers should stay abreast as the exact nature of the stimulus and recovery policies become clearer and funding is allocated, so that they can assess the effects on New York City’s labor market.

Health and social assistance and education services have been recession-resistant sectors in past recessions and are expected to fare relatively well during the current one, barring large public sector budget cuts. However, recessions are not all alike, so account managers should use other market intelligence (i.e. newspapers, employer feedback, etc.) about the industry groups with which they work as well as new labor market data as it emerges.

Workforce development professionals should be aware that there are tradeoffs in working with any industry group. They can surmount aspects of this challenge by developing long term relationships with employers to ensure that training and education are available for both jobseekers and incumbent workers.

**For Account Managers**

Establishments in New York City contain over three and a half million jobs covered by unemployment insurance in New York City, about half of which are concentrated in 25 large industry groups. Account managers should group employers by industry group rather than NAICS sector. Industry groups tend to have similar in their business processes and often, similar types of labor market demands.
Employment specialization and local advantage (location quotient and shift share, respectively) are key concepts in economic development that are useful to account managers. High specialization indicates that an industry group is strongly rooted in New York City. Local advantage indicates that the city’s local economy plays a larger role in its success than does national growth in that industry. Having this information at their fingertips enables account managers to target employers whose labor market demands are more feasibly met with the available workforce. It also enables them to speak more knowledgeably with employers about the business conditions that benefit and challenge them and inform their career advisor colleagues apprised of the ebbs and flows of businesses in the industry group.

Account managers should keep their colleagues apprised about the changing workforce needs in the finance sector as banks, investment banks, and other financial institutions as undergo restructuring as a result of the mortgage market meltdown. Restructuring is likely to change the industry-occupation mix in the finance and insurance sector. As of this writing, it is too early in the course of this restructuring recession to tell what the new occupational mix will be.

For career advisors and training professionals to be truly informed about the labor market, it is not enough to rely on labor market information about sectors and industry groups: they should also examine occupational data. With a better understanding of the industry-occupation mix and skill transferability, they can more effectively help jobseekers find jobs or move from a lost job to another job in a different industry if need be.

There are many occupations spread across many industry groups that pay well above minimum wage and do not require a four-year college degree. Several of these do require supervision and management skills, an area ripe for training.

Thousands of well-paying jobs are in the skilled trades, requiring apprenticeship and often licensing. Policy makers should ensure that there are adequate “on ramps” to training opportunities that will enable public workforce development system’s customers to access these jobs.

Providers who serve job seekers with multiple barriers to employment, such as ex-offenders, or people with mental health disabilities or histories of substance abuse should review the list of occupations to identify which might be available to them and from which they might be barred.

Many opportunities for well-paying occupations are in public agencies, New York City’s largest employment sector. Like the skilled trades, many public sector agencies have structured training and professional development opportunities for incumbent workers to facilitate career advancement.

For Career Advisors and Education and Training Professionals

Career advisors and education and training professionals should think about longer term ways to prepare jobseekers to take positions in more recession-prone industries once the recession ends.
Even occupations that pay low wages can be useful for jobseekers with little to no experience in the short-term. Career advisors and education and training professionals can help incumbent workers by identifying and strengthening opportunities to increase their transferable skills and begin career pathways to higher paying work appropriate to their levels of experience.

Endnotes

8 The rankings that appear in the rightmost column of Table 6.1 factor in the number and growth of unemployment insurance recipients in 2008. It is computed separately because it is the only indicator of current job conditions and is measured at the sector (instead of industry group) level.
Appendix
A. Key Terms Used in This Report

**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:

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

**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:

<table>
<thead>
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<th>SUBSECTOR</th>
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<td>481</td>
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<td>Pipeline</td>
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<td>482</td>
<td>Water</td>
<td>488</td>
<td>Support activities</td>
</tr>
<tr>
<td>483</td>
<td>Rail</td>
<td>491</td>
<td>Postal service</td>
</tr>
<tr>
<td>484</td>
<td>Truck</td>
<td>492</td>
<td>Couriers and messengers</td>
</tr>
<tr>
<td>485</td>
<td>Transit and ground passenger</td>
<td>493</td>
<td>Warehousing and storage</td>
</tr>
</tbody>
</table>

**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:

<table>
<thead>
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<th>NAICS</th>
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<tr>
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<td>Information sector</td>
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</tr>
<tr>
<td>512</td>
<td>Motion picture and sound recording subsector</td>
<td></td>
</tr>
<tr>
<td>5121</td>
<td>Motion picture and video industry group</td>
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<tr>
<td>51213</td>
<td>Motion picture and video exhibition NAICS industry</td>
<td></td>
</tr>
<tr>
<td>512132</td>
<td>Drive-in motion picture theaters national industry</td>
<td></td>
</tr>
</tbody>
</table>
**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:

<table>
<thead>
<tr>
<th>SOC</th>
<th>MAJOR OCCUPATION GROUP</th>
<th>SOC</th>
<th>MAJOR OCCUPATION GROUP</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Management</td>
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<td>Food preparation, serving related</td>
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<td>13</td>
<td>Business, financial operations</td>
<td>37</td>
<td>Building, grounds cleaning, maintenance</td>
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<td>Computer, mathematical</td>
<td>39</td>
<td>Personal care, service</td>
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<td>Architecture, engineering</td>
<td>41</td>
<td>Sales, related</td>
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<td>19</td>
<td>Life, physical, social science</td>
<td>43</td>
<td>Office, administrative support</td>
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<td>21</td>
<td>Community, social services</td>
<td>45</td>
<td>Farming, fishing, forestry</td>
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<td>Legal</td>
<td>47</td>
<td>Construction, extraction</td>
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<tr>
<td>27</td>
<td>Education, training, library</td>
<td>49</td>
<td>Installation, maintenance, repair</td>
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<tr>
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<td>Arts, design, entertainment, sports, media</td>
<td>51</td>
<td>Production</td>
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<td>31</td>
<td>Healthcare practitioners, technical healthcare support</td>
<td>53</td>
<td>Transportation, material moving</td>
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<td>33</td>
<td>Protective service</td>
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B. Acknowledgements

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