

Using Data and Information to Align Economic and Workforce Development in the Tourism, Gaming, and Entertainment Sector



Nevada Governor's Office of
ECONOMIC DEVELOPMENT

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Nevada's Economic Development Sectors

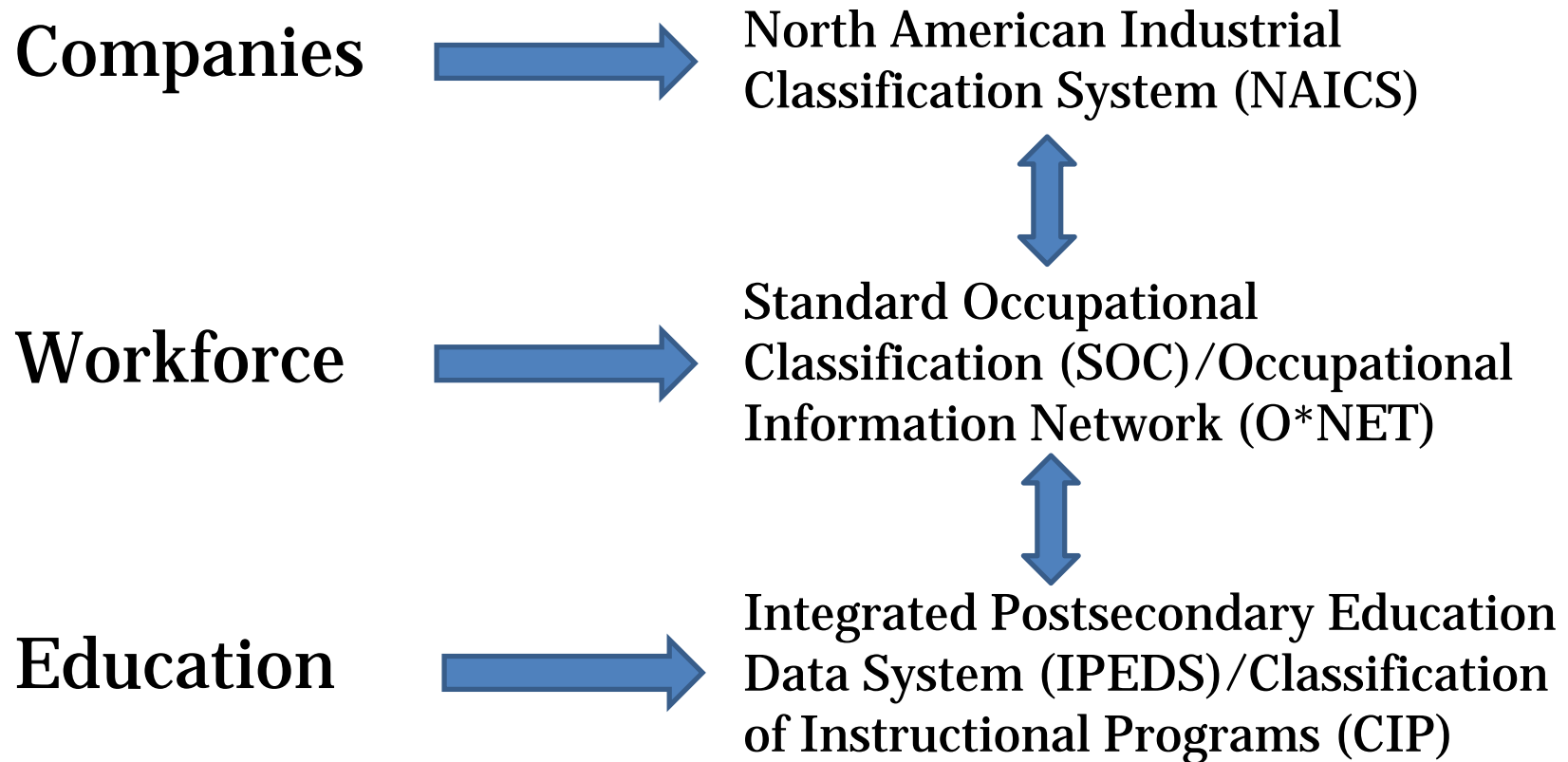
| Sector | Number of Jobs | Percent of All Nevada Jobs | Average Annual Wage* | Jobs Multiplier | Location Quotient | Percent above or below National Concentration |
|--|----------------|----------------------------|----------------------|-----------------|-------------------|---|
| Aerospace and Defense | 13,110 | 1.0% | \$96,207 | 2.04 | 0.67 | -33% |
| Business Information Technology Ecosystems | 59,367 | 4.5% | \$55,949 | 2.11 | 0.67 | -33% |
| Health and Medical Services | 106,222 | 8.1% | \$65,123 | 1.81 | 0.66 | -34% |
| Manufacturing and Logistics | 116,631 | 8.9% | \$69,497 | 2.68 | 0.59 | -41% |
| Natural Resources | 49,052 | 3.8% | \$76,333 | 2.69 | 0.63 | -37% |
| Mining | 14,028 | 1.1% | \$107,221 | 2.29 | 2.35 | 135% |
| Tourism, Gaming, and Entertainment | 408,856 | 31.3% | \$37,047 | 1.82 | 2.45 | 145% |

*The average earnings per worker in the region. Includes wages, salaries, supplements (additional employee benefits), and proprietor income.

Strategic Location Drivers

- Availability of a Qualified Workforce
- Competitive Cost Environment
 - Labor, Utilities, Real Estate, Transportation, Taxes
- Favorable Logistics/Accessibility
 - Air, Highway, Rail, Port
- Favorable Business Environment
 - Taxes, Incentives, Permitting
- Quality of place
 - Ability to recruit/relocate key workforce

The Economic and Workforce Information and Data Pipeline



Tying Economic and Workforce Development Together

Identifying high demand occupations

- Employment Projections
- Burning Glass Technologies
- Target Sector approach
- Job Openings
- Brookings STEM Score

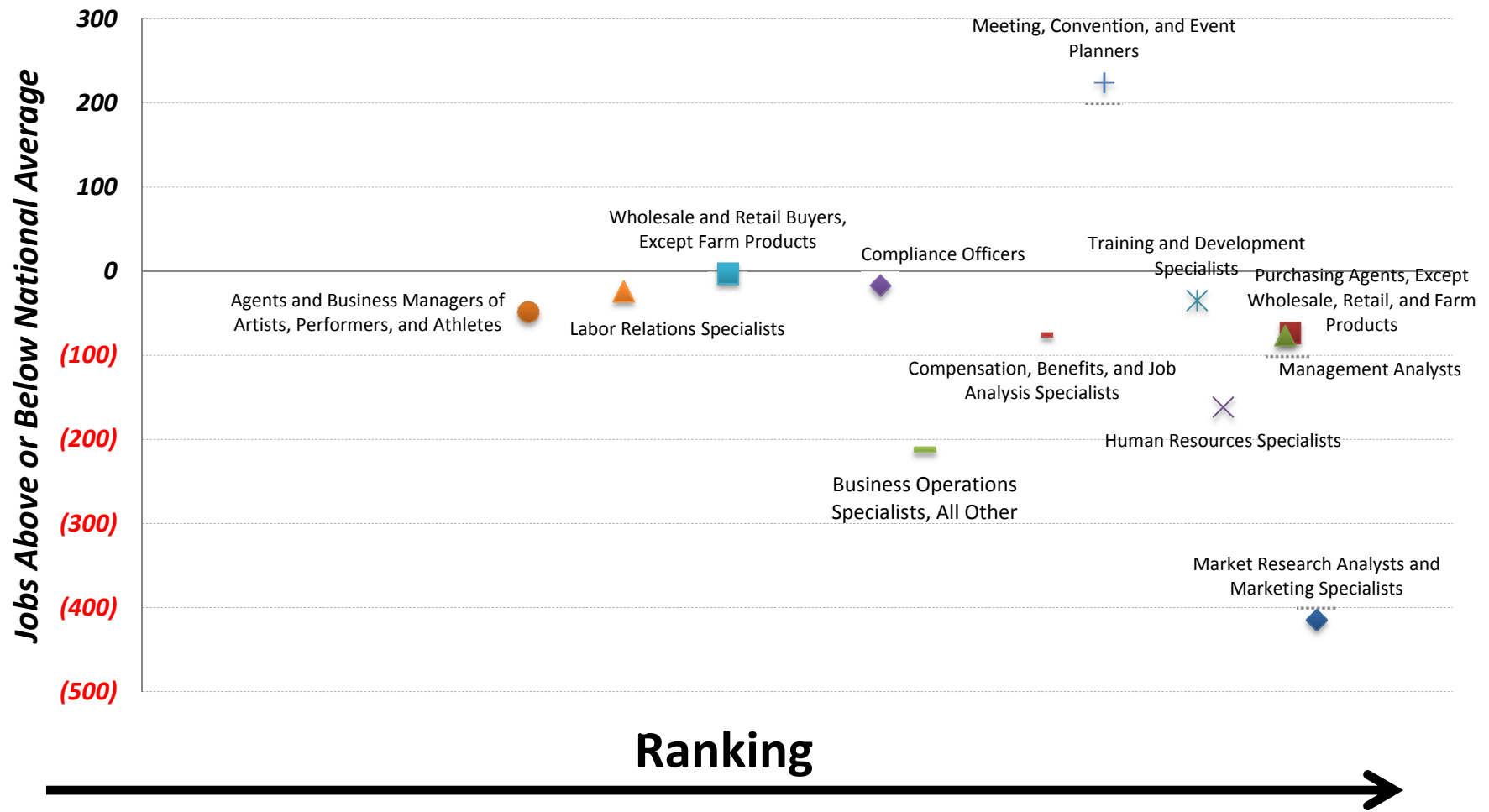
Top 20 High Demand Tourism, Gaming, and Entertainment Occupation Groups

Typical Entry Level Education/On-The-Job Training

| |
|---|
| Bachelor's degree |
| Associate's degree/Postsecondary non-degree award |
| High school diploma/Postsecondary non-degree award with OJT |
| High school diploma/Less than high school with OJT |

| Occupation Group Description | Consensus Rank | 2016 Jobs | Jobs Above or Below National Average | Median Hourly Earnings | |
|---|----------------|-----------|--------------------------------------|------------------------|---|
| Business Operations Specialists | 1 | 3,107 | (1,326) | \$27.40 | ← |
| Computer Occupations | 2 | 1,321 | (1,347) | \$34.54 | ← |
| Information and Record Clerks | 3 | 12,478 | 713 | \$14.65 | ← |
| Operations Specialties Managers | 4 | 1,630 | (493) | \$41.66 | ← |
| Motor Vehicle Operators | 5 | 14,989 | 2,091 | \$16.35 | |
| Entertainment Attendants and Related Workers | 6 | 38,607 | 33,418 | \$10.00 | |
| Financial Clerks | 7 | 5,978 | (367) | \$16.49 | |
| Food and Beverage Serving Workers | 8 | 85,525 | 25,296 | \$10.44 | |
| Entertainers and Performers, Sports and Related Workers | 9 | 3,602 | 34 | \$23.87 | |
| Art and Design Workers | 10 | 1,236 | (72) | \$20.00 | |
| Material Recording, Scheduling, Dispatching, and Distributing Workers | 11 | 6,755 | 506 | \$15.10 | |
| Construction Trades Workers | 12 | 1,522 | 306 | \$22.26 | |
| Cooks and Food Preparation Workers | 13 | 37,874 | 11,947 | \$12.52 | |
| Other Installation, Maintenance, and Repair Occupations | 14 | 6,790 | 525 | \$22.82 | |
| Media and Communication Workers | 15 | 1,413 | (551) | \$24.65 | |
| Other Office and Administrative Support Workers | 16 | 4,301 | 328 | \$14.50 | |
| Other Production Occupations | 17 | 896 | (851) | \$15.74 | |
| Media and Communication Equipment Workers | 18 | 2,332 | 1,008 | \$24.49 | |
| Other Management Occupations | 19 | 4,637 | 400 | \$37.29 | |
| Other Protective Service Workers | 20 | 11,384 | 5,665 | \$13.27 | |

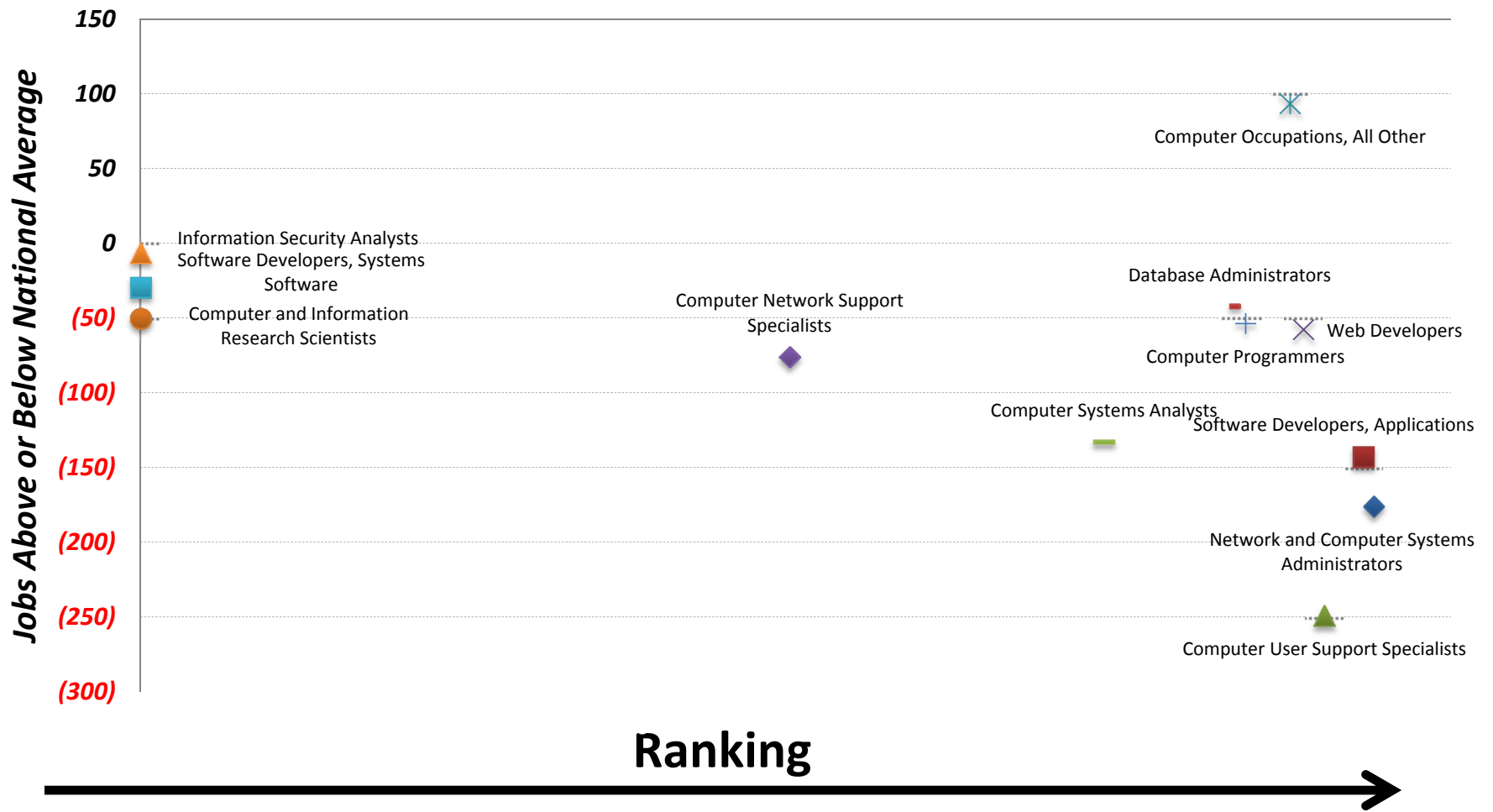
Drilling Down into the Detail: Business Operations Specialists



Drilling Down into the Detail: Business Operations Specialists

| Occupation Description | Consensus Rank | Jobs | Median Hourly Earnings | Jobs Above or Below National Average | Typical Entry Level Education | Typical On-The-Job Training |
|---|----------------|------|------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| Market Research Analysts and Marketing Specialists | 8 | 372 | \$25.71 | (415) | Bachelor's degree | None |
| Purchasing Agents, Except Wholesale, Retail, and Farm Products | 16 | 337 | \$25.28 | (73) | Bachelor's degree | Long-term on-the-job training |
| Management Analysts | 18 | 106 | \$35.32 | (77) | Bachelor's degree | None |
| Human Resources Specialists | 43 | 366 | \$24.21 | (162) | Bachelor's degree | None |
| Training and Development Specialists | 51 | 216 | \$25.20 | (34) | Bachelor's degree | None |
| Meeting, Convention, and Event Planners | 83 | 705 | \$21.89 | 225 | Bachelor's degree | None |
| Compensation, Benefits, and Job Analysis Specialists | 93 | 92 | \$27.62 | (76) | Bachelor's degree | None |
| Business Operations Specialists, All Other | 105 | 567 | \$27.66 | (212) | Bachelor's degree | None |
| Compliance Officers | 110 | 104 | \$28.83 | (17) | Bachelor's degree | Moderate-term on-the-job training |
| Wholesale and Retail Buyers, Except Farm Products | 144 | 72 | \$21.76 | (3) | Bachelor's degree | Long-term on-the-job training |
| Labor Relations Specialists | 176 | 55 | \$25.32 | (24) | Bachelor's degree | None |
| Agents and Business Managers of Artists, Performers, and Athletes | 199 | 60 | \$34.66 | (48) | Bachelor's degree | None |

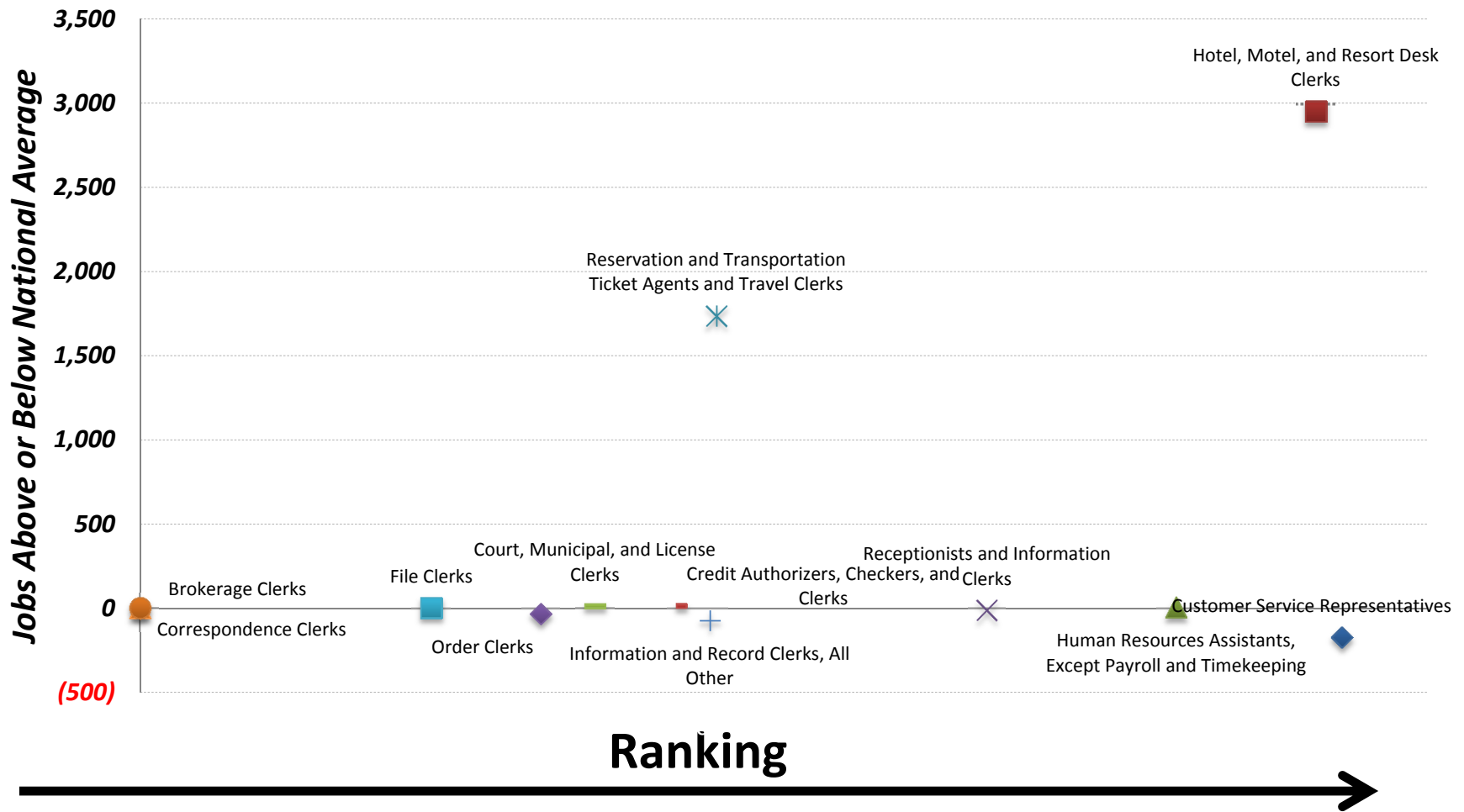
Drilling Down into the Detail: Computer Occupations



Drilling Down into the Detail: Computer Occupations

| Occupation Description | Consensus Rank | Jobs | Median Hourly Earnings | Jobs Above or Below National Average | Typical Entry Level Education | Typical On-The-Job Training |
|--|----------------|------|------------------------|--------------------------------------|---------------------------------|-----------------------------|
| Network and Computer Systems Administrators | 4 | 197 | \$37.45 | (176) | Bachelor's degree | None |
| Software Developers, Applications | 6 | 112 | \$42.81 | (143) | Bachelor's degree | None |
| Computer User Support Specialists | 7 | 193 | \$21.37 | (249) | Some college, no degree | None |
| Web Developers | 10 | 90 | \$27.14 | (58) | Associate's degree | None |
| Computer Occupations, All Other | 15 | 372 | \$31.07 | 93 | Bachelor's degree | None |
| Computer Programmers | 30 | 61 | \$38.50 | (54) | Bachelor's degree | None |
| Database Administrators | 40 | 65 | \$38.25 | (42) | Bachelor's degree | None |
| Computer Systems Analysts | 82 | 96 | \$37.95 | (133) | Bachelor's degree | None |
| Computer Network Support Specialists | 130 | 86 | \$25.67 | (76) | Associate's degree | None |
| Computer and Information Research Scientists | 218 | 5 | \$53.13 | (30) | Doctoral or professional degree | None |
| Information Security Analysts | 218 | 5 | \$33.13 | (7) | Bachelor's degree | None |
| Software Developers, Systems Software | 218 | 18 | \$41.02 | (50) | Bachelor's degree | None |

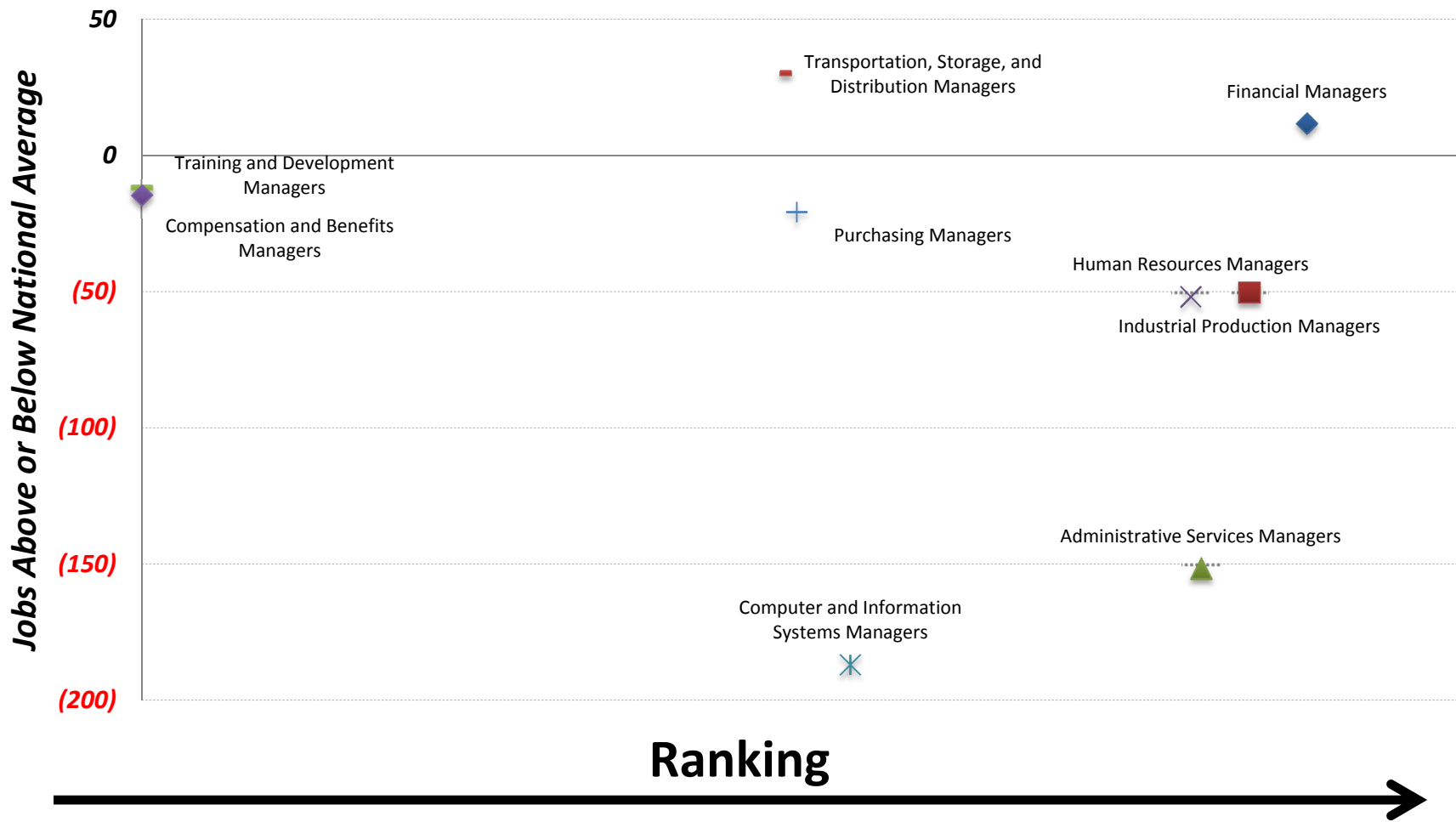
Drilling Down into the Detail: Information and Record Clerks



Drilling Down into the Detail: Information and Record Clerks

| Occupation Description | Consensus Rank | Jobs | Median Hourly Earnings | Jobs Above or Below National Average | Typical Entry Level Education | Typical On-The-Job Training |
|--|----------------|-------|------------------------|--------------------------------------|-----------------------------------|-----------------------------------|
| Customer Service Representatives | 48 | 2,981 | \$14.44 | (174) | High school diploma or equivalent | Short-term on-the-job training |
| Hotel, Motel, and Resort Desk Clerks | 54 | 5,123 | \$15.07 | 2,951 | High school diploma or equivalent | Short-term on-the-job training |
| Human Resources Assistants, Except Payroll and Timekeeping | 92 | 337 | \$17.11 | 5 | Associate's degree | None |
| Receptionists and Information Clerks | 108 | 1,136 | \$12.58 | (12) | High school diploma or equivalent | Short-term on-the-job training |
| Reservation and Transportation Ticket Agents and Travel Clerks | 167 | 2,428 | \$15.53 | 1,736 | High school diploma or equivalent | Short-term on-the-job training |
| Information and Record Clerks, All Other | 173 | 58 | \$18.19 | (72) | High school diploma or equivalent | Short-term on-the-job training |
| Credit Authorizers, Checkers, and Clerks | 181 | 121 | \$16.27 | 15 | High school diploma or equivalent | Moderate-term on-the-job training |
| Court, Municipal, and License Clerks | 198 | 53 | \$20.35 | 12 | High school diploma or equivalent | Moderate-term on-the-job training |
| Order Clerks | 200 | 136 | \$15.80 | (33) | High school diploma or equivalent | Short-term on-the-job training |
| File Clerks | 209 | 53 | \$12.60 | 3 | High school diploma or equivalent | Short-term on-the-job training |
| Brokerage Clerks | 218 | 0 | \$19.09 | 0 | High school diploma or equivalent | Moderate-term on-the-job training |
| Correspondence Clerks | 218 | 5 | \$18.02 | (0) | High school diploma or equivalent | Short-term on-the-job training |

Drilling Down into the Detail: Operations Specialties Managers



Drilling Down into the Detail: Operations Specialties Managers

| Occupation Description | Consensus Rank | Jobs | Median Hourly Earnings | Jobs Above or Below National Average | Typical Entry Level Education | Typical On-The-Job Training |
|--|----------------|------|------------------------|--------------------------------------|-----------------------------------|-----------------------------|
| Financial Managers | 14 | 750 | \$41.59 | 12 | Bachelor's degree | None |
| Industrial Production Managers | 35 | 53 | \$38.09 | (50) | Bachelor's degree | None |
| Administrative Services Managers | 55 | 199 | \$35.84 | (152) | Bachelor's degree | None |
| Human Resources Managers | 59 | 191 | \$46.61 | (52) | Bachelor's degree | None |
| Computer and Information Systems Managers | 119 | 186 | \$53.46 | (187) | Bachelor's degree | None |
| Purchasing Managers | 131 | 75 | \$42.44 | (21) | Bachelor's degree | None |
| Transportation, Storage, and Distribution Managers | 135 | 123 | \$33.23 | 30 | High school diploma or equivalent | None |
| Compensation and Benefits Managers | 218 | 24 | \$41.82 | (12) | Bachelor's degree | None |
| Training and Development Managers | 218 | 28 | \$40.50 | (15) | Bachelor's degree | None |

Top 25 High Demand Occupations in Tourism, Gaming, and Entertainment by Consensus Rank

| Description | Consensus Rank | 2016 Jobs | Median Hourly Earnings | Jobs Above or Below National Average | Typical Entry Level Education | Typical On-The-Job Training |
|--|----------------|-----------|------------------------|--------------------------------------|-----------------------------------|-----------------------------------|
| Managers, All Other | 1 | 1,119 | \$44.32 | 397 | Bachelor's degree | None |
| General and Operations Managers | 2 | 2,848 | \$40.00 | (91) | Bachelor's degree | None |
| Maintenance and Repair Workers, General | 3 | 4,319 | \$21.82 | 409 | High school diploma or equivalent | Long-term on-the-job training |
| Network and Computer Systems Administrators | 4 | 197 | \$37.45 | (176) | Bachelor's degree | None |
| First-Line Supervisors of Mechanics, Installers, and Rep | 5 | 548 | \$33.65 | (135) | High school diploma or equivalent | None |
| Software Developers, Applications | 6 | 112 | \$42.81 | (143) | Bachelor's degree | None |
| Computer User Support Specialists | 7 | 193 | \$21.37 | (249) | Some college, no degree | None |
| Market Research Analysts and Marketing Specialists | 8 | 372 | \$25.71 | (415) | Bachelor's degree | None |
| First-Line Supervisors of Office and Administrative Supp | 9 | 2,679 | \$21.94 | (499) | High school diploma or equivalent | None |
| Web Developers | 10 | 90 | \$27.14 | (58) | Associate's degree | None |
| Accountants and Auditors | 11 | 1,154 | \$27.27 | (372) | Bachelor's degree | None |
| First-Line Supervisors of Food Preparation and Serving | 12 | 9,401 | \$15.74 | 2,124 | High school diploma or equivalent | None |
| Electricians | 13 | 185 | \$27.04 | 19 | High school diploma or equivalent | Apprenticeship |
| Financial Managers | 14 | 750 | \$41.59 | 12 | Bachelor's degree | None |
| Computer Occupations, All Other | 15 | 372 | \$31.07 | 93 | Bachelor's degree | None |
| Purchasing Agents, Except Wholesale, Retail, and Far | 16 | 337 | \$25.28 | (73) | Bachelor's degree | Long-term on-the-job training |
| First-Line Supervisors of Retail Sales Workers | 17 | 3,508 | \$18.54 | 35 | High school diploma or equivalent | None |
| Management Analysts | 18 | 106 | \$35.32 | (77) | Bachelor's degree | None |
| Retail Salespersons | 19 | 20,745 | \$11.12 | 4,398 | No formal educational credential | Short-term on-the-job training |
| Sales Representatives, Wholesale and Manufacturing, | 20 | 305 | \$26.97 | (131) | High school diploma or equivalent | Moderate-term on-the-job training |
| Construction Laborers | 21 | 54 | \$17.82 | (0) | No formal educational credential | Short-term on-the-job training |
| Secretaries and Administrative Assistants, Except Leg | 22 | 1,434 | \$17.21 | (697) | High school diploma or equivalent | Short-term on-the-job training |
| Emergency Medical Technicians and Paramedics | 23 | 104 | \$19.65 | (54) | Postsecondary nondegree award | None |
| Chefs and Head Cooks | 24 | 3,065 | \$22.33 | 2,005 | High school diploma or equivalent | None |
| First-Line Supervisors of Production and Operating Wor | 25 | 193 | \$27.55 | (196) | High school diploma or equivalent | None |

Top 25 High Demand Tourism, Gaming, and Entertainment Occupations Sorted by Jobs Below National Average

| Description | Consensus Rank | 2016 Jobs | Median Hourly Earnings | Jobs Above or Below National Average | Typical Entry Level Education | Typical On-The-Job Training |
|--|----------------|-----------|------------------------|--------------------------------------|-----------------------------------|-----------------------------------|
| Team Assemblers | 205 | 689 | \$11.84 | (785) | High school diploma or equivalent | Moderate-term on-the-job training |
| Cooks, Institution and Cafeteria | 146 | 722 | \$13.67 | (747) | No formal educational credential | Short-term on-the-job training |
| Secretaries and Administrative Assistants, Except Legi | 22 | 1,434 | \$17.21 | (697) | High school diploma or equivalent | Short-term on-the-job training |
| First-Line Supervisors of Office and Administrative Supp | 9 | 2,679 | \$21.94 | (499) | High school diploma or equivalent | None |
| Bookkeeping, Accounting, and Auditing Clerks | 104 | 2,289 | \$17.52 | (452) | Some college, no degree | Moderate-term on-the-job training |
| Market Research Analysts and Marketing Specialists | 8 | 372 | \$25.71 | (415) | Bachelor's degree | None |
| Recreation Workers | 65 | 553 | \$15.22 | (398) | High school diploma or equivalent | Short-term on-the-job training |
| Childcare Workers | 64 | 308 | \$10.53 | (388) | High school diploma or equivalent | Short-term on-the-job training |
| Executive Secretaries and Executive Administrative As: | 117 | 361 | \$25.35 | (387) | High school diploma or equivalent | None |
| Food Servers, Nonrestaurant | 157 | 956 | \$10.72 | (386) | No formal educational credential | Short-term on-the-job training |
| Accountants and Auditors | 11 | 1,154 | \$27.27 | (372) | Bachelor's degree | None |
| Packaging and Filling Machine Operators and Tenders | 151 | 159 | \$13.24 | (263) | High school diploma or equivalent | Moderate-term on-the-job training |
| Computer User Support Specialists | 7 | 193 | \$21.37 | (249) | Some college, no degree | None |
| Bus Drivers, School or Special Client | 160 | 262 | \$16.72 | (241) | High school diploma or equivalent | Short-term on-the-job training |
| First-Line Supervisors of Non-Retail Sales Workers | 50 | 266 | \$24.58 | (225) | High school diploma or equivalent | None |
| Business Operations Specialists, All Other | 105 | 567 | \$27.66 | (212) | Bachelor's degree | None |
| Actors | 184 | 264 | \$23.88 | (208) | Some college, no degree | Long-term on-the-job training |
| First-Line Supervisors of Production and Operating Wor | 25 | 193 | \$27.55 | (196) | High school diploma or equivalent | None |
| Computer and Information Systems Managers | 119 | 186 | \$53.46 | (187) | Bachelor's degree | None |
| Network and Computer Systems Administrators | 4 | 197 | \$37.45 | (176) | Bachelor's degree | None |
| Customer Service Representatives | 48 | 2,981 | \$14.44 | (174) | High school diploma or equivalent | Short-term on-the-job training |
| Sewing Machine Operators | 195 | 93 | \$12.54 | (169) | No formal educational credential | Short-term on-the-job training |
| Self-Enrichment Education Teachers | 141 | 150 | \$19.30 | (165) | High school diploma or equivalent | None |
| Human Resources Specialists | 43 | 366 | \$24.21 | (162) | Bachelor's degree | None |
| Production, Planning, and Expediting Clerks | 46 | 224 | \$19.38 | (159) | High school diploma or equivalent | Moderate-term on-the-job training |

Questions for Sector Council Members

In your experience:

1. Which of the discussed occupations do you find most difficult to fill?
2. Which of these occupations do you believe will increase in demand because of new and emerging industry trends?
 - Please share your rationale.
3. Do you believe the typical entry education and experience levels identified by the Bureau of Labor Statistics are correct?
 - If not, please share the specific education (i.e., certification program, degree, etc.) and experience you typically look for when sourcing talent within your sector.

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