Information
Metro Chicago – 2019Q2

EMPLOYMENT

82,347
Regional employment / 3,095,823 in the nation

WAGES

$90,016
Avg Wages per Worker / $110,113 in the nation

-1.4% ↓ 1.8% 3.0% ↑
Avg Ann % Change Last 10 0.4% in the U.S. 2.0% in the U.S. Years / +5.2% in the U.S.

TOP OCCUPATION GROUPS

Computer and Mathematical 20.0%
Office and Administrative 15.3%
Support 11.9%
Sales and Related 11.0%
Management 11.0%
Arts, Design, Entertainment, Sports, and Media 14.0%
All Others 27.8%

TOP INDUSTRIES

Avg Ann % Change in Employment, Last 10 Years

-3.8% 4.4% -3.9%
Region Nation Region Nation Region Nation

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Industry Snapshot

EMPLOYMENT

WAGES

<table>
<thead>
<tr>
<th>3-Digit Industry</th>
<th>Empl</th>
<th>Avg Ann Wages</th>
<th>LQ</th>
<th>5yr History</th>
<th>Annual Demand</th>
<th>Forecast Ann Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecommunications</td>
<td>21,279</td>
<td>$93,639</td>
<td>0.99</td>
<td></td>
<td>1,575</td>
<td>-2.2%</td>
</tr>
<tr>
<td>Other Information Services</td>
<td>20,083</td>
<td>$87,565</td>
<td>1.44</td>
<td></td>
<td>2,521</td>
<td>3.4%</td>
</tr>
<tr>
<td>Publishing Industries (except Internet)</td>
<td>17,950</td>
<td>$91,460</td>
<td>0.82</td>
<td></td>
<td>1,237</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Data Processing, Hosting, and Related Services</td>
<td>9,040</td>
<td>$131,042</td>
<td>0.86</td>
<td></td>
<td>828</td>
<td>0.6%</td>
</tr>
<tr>
<td>Motion Picture and Sound Recording Industries</td>
<td>8,652</td>
<td>$35,507</td>
<td>0.65</td>
<td></td>
<td>1,068</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Broadcasting (except Internet)</td>
<td>5,342</td>
<td>$101,595</td>
<td>0.67</td>
<td></td>
<td>427</td>
<td>-1.6%</td>
</tr>
<tr>
<td>Information</td>
<td>82,347</td>
<td>$90,016</td>
<td>0.92</td>
<td></td>
<td>8,027</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Employment is one of the broadest and most timely measures of a region's economy. Fluctuations in the number of jobs shed light on the health of an industry. A growing employment base creates more opportunities for regional residents and helps a region grow its population.

Since wages and salaries generally compose the majority of a household’s income, the annual average wages of a region affect its average household income, housing market, quality of life, and other socioeconomic indicators.
The mix of occupations points to the ability of a region to support an industry and its flexibility to adapt to future demand. Industry wages are a component of the cost of labor for regional employers.

<table>
<thead>
<tr>
<th>6-digit Occupation</th>
<th>Empl</th>
<th>Avg Ann Wages</th>
<th>Annual Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Developers, Applications</td>
<td>4,753</td>
<td>$106,400</td>
<td>454</td>
</tr>
<tr>
<td>Telecommunications Equipment Installers and Repairers, Except Line Installers</td>
<td>4,593</td>
<td>$61,100</td>
<td>331</td>
</tr>
<tr>
<td>Sales Representatives, Services, All Other</td>
<td>4,475</td>
<td>$72,700</td>
<td>552</td>
</tr>
<tr>
<td>Customer Service Representatives</td>
<td>4,319</td>
<td>$42,000</td>
<td>488</td>
</tr>
<tr>
<td>Editors</td>
<td>2,791</td>
<td>$63,600</td>
<td>217</td>
</tr>
<tr>
<td>Advertising Sales Agents</td>
<td>2,348</td>
<td>$55,600</td>
<td>250</td>
</tr>
<tr>
<td>General and Operations Managers</td>
<td>2,283</td>
<td>$147,700</td>
<td>184</td>
</tr>
<tr>
<td>Market Research Analysts and Marketing Specialists</td>
<td>1,990</td>
<td>$69,300</td>
<td>234</td>
</tr>
<tr>
<td>Computer User Support Specialists</td>
<td>1,868</td>
<td>$57,400</td>
<td>148</td>
</tr>
<tr>
<td>Office Clerks, General</td>
<td>1,751</td>
<td>$38,600</td>
<td>165</td>
</tr>
<tr>
<td>Remaining Component Occupations</td>
<td>51,153</td>
<td>$62,000</td>
<td>4,697</td>
</tr>
<tr>
<td>Total</td>
<td>82,347</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Geographic Distribution

<table>
<thead>
<tr>
<th>Region</th>
<th>Empl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook County, Illinois</td>
<td>58,299</td>
</tr>
<tr>
<td>DuPage County, Illinois</td>
<td>10,674</td>
</tr>
<tr>
<td>Lake County, Illinois</td>
<td>4,499</td>
</tr>
<tr>
<td>Kane County, Illinois</td>
<td>3,348</td>
</tr>
<tr>
<td>Will County, Illinois</td>
<td>2,905</td>
</tr>
<tr>
<td>McHenry County, Illinois</td>
<td>1,175</td>
</tr>
<tr>
<td>DeKalb County, Illinois</td>
<td>571</td>
</tr>
<tr>
<td>Kankakee County, Illinois</td>
<td>415</td>
</tr>
<tr>
<td>Kendall County, Illinois</td>
<td>316</td>
</tr>
<tr>
<td>Grundy County, Illinois</td>
<td>145</td>
</tr>
</tbody>
</table>

A geographic concentration of firms in related fields of business may reduce production costs, attract more suppliers and customers, and increase supply and demand for specialized labor, but may also increase competitive pressure and drive down prices.

Drivers of Employment Growth

Over the ten years ending 2018, employment in Information for the Metro Chicago shed 14,844 jobs. After adjusting for national growth during this period and industry mix share, the part of this employment change due to local competitiveness was a loss of 5,350 jobs—meaning this industry was less competitive than its national counterpart during this period.
Shift-share analysis sheds light on the factors that drive regional employment growth in an industry. A positive change in local competitiveness indicates advantages that may be due to factors such as superior technology, management, and labor pool, etc.

National growth is due to the overall growth or contraction in the national economy. Industry mix share is the growth attributable to the specific industries examined (based on national industry growth patterns and the industry mix of the region).

**Employment Distribution by Type**

The table below shows the employment mix by ownership type for Information for the Metro Chicago. Four of these ownership types — federal, state, and local government and the private sector — together constitute “Covered Employment” (employment covered by the Unemployment Insurance programs of the United States and reported via the Quarterly Census of Employment and Wages).

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“Self-Employment” refers to unincorporated self-employment and represents workers whose primary job is self-employment (that is, these data do not include workers whose primary job is a wage-and-salary position that is supplemented with self-employment).

Strong entrepreneurial activity is indicative of growing industries. Using self-employment as a proxy for entrepreneurs, a higher share of self-employed individuals within a regional industry points to future growth.

Establishments
In 2018, there were 3,690 Information establishments in the Metro Chicago (per covered employment establishment counts), a decrease from 4,077 establishments ten years earlier in 2008.
New business formations are an important source of job creation in a regional economy, spurring innovation and competition, and driving productivity growth. Establishment data can provide an indicator of growth in businesses by counting each single location (such as a factory or a store) where business activity takes place, and with at least one employee.

**GDP & Productivity**

In 2018, Information produced $28 billion in GDP for the Metro Chicago.

GDP: Indexed 2008 = 100

![GDP & Productivity Chart](chart.png)
Gross domestic product (GDP) is the most comprehensive measure of regional economic activity, and an industry’s contribution to GDP is an important indicator of regional industry strength. It is a measure of total value added to a regional economy in the form of labor income, proprietor’s income, and business profits, among others.

Growth in productivity (output per worker) leads to increases in wealth and higher average standards of living in a region.

Supply Chain: Top Suppliers

As of 2019Q2, Information in the Metro Chicago area is estimated to make $3.3 billion in annual purchases from suppliers in the United States with about 35% or $1.2 billion of these purchases being made from businesses located in the Metro Chicago.

<table>
<thead>
<tr>
<th>3-digit Supplier Industries</th>
<th>Purchases from In-Region ($M)</th>
<th>Purchases from Out-of-Region ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telecommunications</td>
<td>$217.2</td>
<td>$312.5</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>$193.2</td>
<td>$330.7</td>
</tr>
<tr>
<td>Real Estate</td>
<td>$107.7</td>
<td>$287.1</td>
</tr>
<tr>
<td>Computer and Electronic Product Manufacturing</td>
<td>$40.8</td>
<td>$234.1</td>
</tr>
<tr>
<td>Publishing Industries (except Internet)</td>
<td>$71.5</td>
<td>$70.0</td>
</tr>
<tr>
<td>Remaining Supplier Industries</td>
<td>$521.0</td>
<td>$921.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,151.5</strong></td>
<td><strong>$2,155.7</strong></td>
</tr>
</tbody>
</table>

Supplier-buyer networks can indicate local linkages between industries, regional capacity to support growth in an industry, and potential leakage of sales out of the region.
Sector Strategy Pathways

Computer Systems Analysts

Computer Occupations, All Other

Network and Computer Systems Administrators

Computer Programmers

Web Developers

Receptionists and Information Clerks

Tellers

Bill and Account Collectors

Hotel, Motel, and Resort Desk Clerks

Interviewers, Except Eligibility and Loan

Computer, Automated Teller, and Office Machine Repairers

Telecommunications Line Installers and Repairers

Security and Fire Alarm Systems Installers

Electrical and Electronics Repairers, Commercial and Industrial Equipment

Medical Equipment Repairers

Software Developers, Applications

Customer Service Representatives

Telecommunications Equipment Installers and Repairers, Except Line Installers

Postsecondary Programs Linked to Information

<table>
<thead>
<tr>
<th>Program</th>
<th>Awards</th>
</tr>
</thead>
</table>

The graphics on this page illustrate relationships and potential movement (from left to right) between occupations that share similar skill sets. Developing career pathways as a strategy promotes industry employment growth and workforce engagement.


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Columbia College Chicago
Cinematography and Film/Video Production 308
Recording Arts Technology/Technician 74

DePaul University
Cinematography and Film/Video Production 167

Devry University-Illinois
Electrical, Electronic and Communications Engineering Technology/Technician 132
Web Page, Digital/Multimedia and Information Resources Design 169

Illinois Institute of Technology
Computer Science 400

Illinois Media School-Chicago Campus
Radio and Television 141

Northwestern University
Communication, Journalism, and Related Programs, Other 205
Drama and Dramatics/Theatre Arts, General 117
Journalism 303


The number of graduates from postsecondary programs in the region identifies the pipeline of future workers as well as the training capacity to support industry demand.

Among postsecondary programs at schools located in the Metro Chicago, the sampling above identifies those most linked to occupations relevant to Information.

Region Definition
Metro Chicago is defined as the following counties:

Cook County, Illinois
DeKalb County, Illinois
DuPage County, Illinois
Grundy County, Illinois
Kane County, Illinois
Kankakee County, Illinois
Kendall County, Illinois
Lake County, Illinois
McHenry County, Illinois
Will County, Illinois
Data Notes

- Industry employment and wages (including total regional employment and wages) are as of 2019Q2 and are based upon BLS QCEW data, imputed by Chmura where necessary, and supplemented by additional sources including Census ZBP data. Employment forecasts are modeled by Chmura and are consistent with BLS national-level 10-year forecasts.
- Occupation employment is as of 2019Q2 and is based on industry employment and local staffing patterns calculated by Chmura and utilizing BLS OES data. Occupation wages are per the BLS OES data and are as of 2018.
- GDP is derived from BEA data and imputations by Chmura. Productivity (output per worker) is calculated by Chmura using industry employment and wages as well as GDP and BLS output data. Supply chain modeling including purchases by industry are developed by Chmura.
- Postsecondary awards are per the NCES and are for the 2017-2018 academic year.
- Establishment counts are per the BLS QCEW data.
- Figures may not sum due to rounding.

FAQ

What is (LQ) location quotient?

Location quotient is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

What is annual demand?

Annual demand is a of the sum of the annual projected growth demand and separation demand. Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. Growth demand is the increase or decrease of jobs expected due to expansion or contraction of the overall number of jobs.

What is the difference between industry wages and occupation wages?

Industry wages and occupation wages are estimated via separate data sets, often the time periods being reported do not align, and wages are defined slightly differently in the two systems (for example, certain bonuses are included in the industry wages but not the occupation wages). It is therefore common that estimates of the average industry wages and average occupation wages in a region do not match exactly.