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# **Executive Summary**



The size and diversity of our economy is the Chicago region's greatest asset. We're home to one of the nation's largest workforces, not to mention some of the world's largest and most powerful companies. Chicagoland continues to be one the nation's top places to live, in large part because of the jobs and pathways to economic prosperity offered here. The key to our strong economy is economic diversity — no one industry makes up more than 13% of the total economy.

Chicagoland's economic development leaders have long recognized that our outsized impact on the U.S. economy reflects the breadth of the region's interconnected economy. Building off of national best practices for regional economic development, the City of Chicago, Cook County and six other regional counties formed the **Greater Chicagoland Economic Partnership**, formally announced on January 4, 2023.

In this issue of the Chicago Business Bulletin, we share key facts on World Business Chicago's priority industries: Life Sciences, TD&L & Logistics Tech, Manufacturing, Food Manufacturing & Innovation, Finance & Fintech, and Business & Professional Services.\* These industries are among the region's most historic and fastest growing, and include some of our most significant employers. They are pillars for Chicagoland's economic vitality.

#### **Findings:**

- 1. Among the industries we look at, Life Sciences and TD&L are the fastest growing industries by business counts.
- 2. The WBC Research Center recognizes Finance & Fintech and Business & Professional Services as significant core industries in Chicagoland.
- 3. Manufacturing continues to be of tremendous importance to Chicagoland's economy.
- 4. Nationally, innovation varies across industries.

#### **Fact Sheet:**



At **\$803B** as of Q3 2022, Chicagoland's GDP is the third largest in the nation. The size of our economy rivals nations.



There are over **259K** businesses in the Chicago area, the fourth most in the nation. 86% of firms are service-providing, and 14% goods-producing.



There are over **4.68 million** people currently employed in the Chicago area. Top industries by employment include real estate, manufacturing, and professional services.



Chicagoland remains the fifth largest startup ecosystem in the U.S., with over **\$10.8B** of growth capital (venture capital and private equity) raised in the first three quarters of 2022.

<sup>\*</sup> Data presented is as of Q3 2022. The report was completed in December 2022, before the conclusion of Q4 2022.





# Chicago's Regional Economy



### Chicagoland's total economy is massive.

Chicagoland's economy literally rivals nations. Comparing Chicago to a global ranking of GDP values, we rank #22 — just above Sweden and Poland. Chicago is a leading global city; the 2022 Global Cities Index puts Chicago at #7, just behind Los Angeles and Beijing.

The sheer scale of Chicagoland's economy makes it a vibrant and attractive place to do business, and puts us in a class above smaller, high-growth cities throughout the United States. For businesses, we offer more — including talent, space, and connectivity — at a fraction of the cost in coastal cities.

In this issue of the Chicago Business Bulletin, we size the economy by three core metrics: productivity, employment, and business count. Learn more about how to understand economic data in the Appendix.

PRODUCTIVITY (NOMINAL GDP)				
<b>\$803B</b> 2022	<b>3rd</b> among metro areas	<b>+16.3%</b> growth over 2019		
EMPLOYMEN	NT			
<b>4.68M</b> as of October 2022	<b>3rd</b> among metro areas	<b>-2.6%</b> change from October 2019		
BUSINESS CO	BUSINESS COUNT			
<b>259K</b> as of Q2 2022	4th among metro areas	+3.7% growth over the 2019 average		

### Our economy is incredibly diverse.

Chicagoland is the most diverse economy among major metropolitan areas. No single industry makes up more than 13% of Chicagoland's total economy. A diverse economy is one of Chicago's greatest strengths: it allows us to better weather adverse market conditions and remain one of the world's top economies.

Although Chicagoland's economy is made up of many different sectors, World Business Chicago prioritizes business development in a narrower set of industries. These include:

- Life Sciences
- Transportation & Logistics
- Manufacturing
- Food Manufacturing & Innovation
- Fintech

These industries are some of Chicagoland's most promising by employment and GDP growth. Jobs in these industries are also generally considered higher quality — they pay well, offer greater job satisfaction, and create more indirect and supporting jobs.

#### Chicagoland's industries, sized by 2022 GDP



Sources: Moody's Analytics • 2022 Global Cities Report, Kearney • U.S. Bureau of Labor Statistics





# Chicago's Regional Economy



## Why do business in the Chicago region?

Both Chicago and the Chicago region offers a unique value proposition: the size and quality of life of a world class city with affordable costs. We have an incredible workforce, and are a magnet for the brightest minds in the country. Our diverse economy means that more of a firm's supply chain can be sourced in-region, and our strategic location makes it easy to move people and goods. **The proof is in the numbers: since 2021, there have been well over 300 companies that have made a "Pro-Chicago\* Decision."** 

#### **SPACE**

Chicagoland has ample industrial and office space at affordable costs, with more — including warehouses and lab space — in the construction pipeline.

#### **INVENTORY**

**1.2B** Industrial space, with **32.7M** sqft under construction.

142M

Office space in Chicago's Central Business District. At an average of \$43.57/sqft, costs are roughly 25% lower than in coastal sities

#### WORKFORCE

Chicagoland offers an excellent value for employers: an extensive workforce with competitive labor costs and low cost of living.

Chicagoland's Cost of Living
102.5 Index value, just 2.5% above national average.

**\$85.7K** Average yearly worker earnings in 2022.

**4.89M** Chicagoland's total labor force, as of October 2022.

#### **TALENT PIPELINE**

Chicagoland is a destination for Midwestern graduates, and offers a significant local talent pool.

2021	CHICAGO METRO	WITHIN A 4 HOUR DRIVE
Associate's & non-degree certificates	60K	166K
Bachelor's degrees	51K	195K
Graduate degrees	43K	103K

#### **INNOVATIVE ECOSYSTEM**

Chicagoland is a hub for corporate innovation and startup activity.

Known corporate innovation centers in the city of Chicago

\$10.8B Growth capital raised as of Q3 2022 in Chicagoland, the fifth most in the nation

1,700+ Chicago area companies that have raised growth capital since 2017.

#2 Most Fortune 500 companies in the U.S

#### CONNECTIVITY

Chicagoland is the nation's centerpoint, with a rich history as a trade hub and as one of the most globally connected cities.

\*\*Trade value through O'Hare \*\*305B Intl. Airport in 2021 — the nation's #1 port by value.

#1 O'Hare is the world's most connected airport.

Interstate highways through
Chicagoland, reaching 25% of
the U.S.'s population within
500 miles.

**#4** Best market globally for data

#### **QUALITY OF LIFE**

In Chicagoland, you have access to superlative public transit, an abundance of fresh water, and affordable housing. We value the rights and wellbeing of everybody here.

100 Chicago's perfect Municipa Equality Index score.

#3 Ranking among cities with the most jobs accessible via public transit.

Easily accessible parks — 98% of city residents live

Sources: World Business Chicago • U.S. Bureau of Labor Statistics • U.S. Census Bureau • Pitchbook Data, LLC • Esri Business Analyst • Lightcast™ • CBRE Industrial & Office Figures Q3 2022 • Cushman & Wakefield 2022 Global Data Center Market Comparison • ParkScore • OAG • Human Rights Campaign Municipal Equality Index, 2022





<sup>\*</sup> City of Chicago only

# Chicago's Regional Economy



### Key industries are significant economic engines for the Chicago metro area.

World Business Chicago's focus industries employ well over 1.4 million people in the Chicago metro area, and nearly half of its GDP. High growth sub-industries indicate where employment is growing the fastest.

#### **Life Sciences**

**GDP: \$26B** 

**Employment: 87K** 

High growth sub-industries:

- Pharmaceutical manufacturing
- R&D services

#### TD&L & Logistics Tech

GDP: \$22.7B

**Employment: 268K** 

High growth sub-industries:

- Freight intermediaries
- Last-mile deliveries

#### **Manufacturing**

**GDP: \$99.4B** 

**Employment: 414K** 

High growth sub-industries:

- Plastics manufacturing
- Railroad rolling stock manufacturing

#### **Food Manufacturing**

**GDP: \$9.6B** 

**Employment: 67K** 

High growth sub-industries:

- Alternative proteins
- Meat processing

#### Finance & Fintech

**GDP: \$132.3B** 

**Employment: 325K** 

High growth sub-industries:

- Securities and commodities exchanges
- Other financial investment service

# Business & Professional Services

**GDP: \$129B** 

**Employment: 397K** 

High growth sub-industries:

- Computer systems design
- Consulting services

# Several high-growth tech verticals overlap with WBC's core industries.

Top verticals by greatest increase in growth capital investment, 2019-21

Tech verticals with the greatest percentage increase in growth capital indicate where Chicagoland's start-up ecosystem may be poised for future growth.

# Larger deal volume

(50+ deals since 2019)

- FoodTech
- CleanTech
- Marketing Tech
- Climate Tech
- TMT (Technology, Media, and Telecom)
- FinTech
- SaaS (Software as a Service)
- Supply Chain Tech

### Smaller deal volume

(<50 deals since 2019)

- Gaming
- Nanotechnology
- Legal Tech
- Robotics and Drones
- CloudTech & DevOps

Sources: Moody's Analytics • Pitchbook Data, LLC





## **Life Sciences**

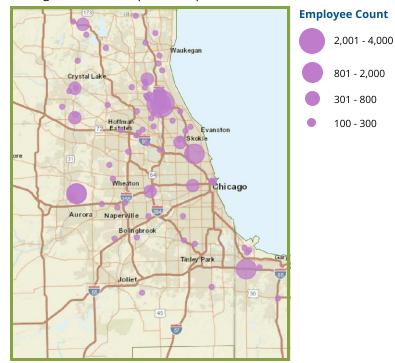


**Chicagoland's Life Sciences sector is the industry's next hot spot.** Concentrated in-and-around Chicago's central business district and in Lake County, more lab space than ever is coming online. Our R1 research universities are part of a rich life sciences talent pipeline, along with a concentration of federal and corporate research and development centers.

PRODUCTIVITY (NOMINAL GDP)			
<b>\$26B</b> 2022 (est.)  EMPLOYMENT	<b>6th</b> among metro areas	<b>+11.3%</b> growth over 2019	
87K as of Q3 2022 BUSINESS COU	5th among metro areas	<b>+2.2%</b> growth over Q4 2019	
<b>2,211</b> as of Q1 2022	<b>6th</b> among metro areas	<b>+11.4%</b> growth over Q4 2019	
<ul> <li>Pharmaceutical manufacturing is the 2nd largest in the nation, and grew over 1,600 employees since 2019.</li> </ul>			
• <b>R&amp;D services</b> is the 9th largest in the nation, and grew over 1,200 employees since 2019.			

#### **GEOGRAPHIC DISTRIBUTION**

Life sciences companies may also benefit from Chicago's well developed transportation network.



#### **LOCAL ASSETS**

#### Chicago offers affordable lab space, with more slated to come online.

• At \$50.25/sqft, lab space is roughly half the cost in New York and two-thirds the cost in Boston.

#### Chicago also has a supporting ecosystem for industry innovation and business growth.

• Chicago is home to over 75 incubators and accelerators, including 1871 and healthcare-focused MATTER.

#### Chicago is an existing hub for medicine.

- Chicago is home to one of the largest urban medical districts in the country, the Illinois Medical District, which spans over 500 acres with 40 healthcare facilities.
- There are 7 medical schools in the Chicago metro area, including two top-20 ranked programs and one the nation's largest programs.

Sources: Moody's Analytics • U.S. Bureau of Labor Statistics QCEW • Esri Business Analyst • Cushman & Wakefield Life Sciences Update, October 2022





# Life Sciences



#### **LABOR POOL & TALENT PIPELINE**



**Chicago's Life Sciences workforce is growing,** and there are thousands of employees in related careers across industries. As of 2022, Chicago is home to:

719K

Life science related occupations, including healthcare, ranking Chicago **3rd** in the nation.

23K

Life and physical scientists and related technicians.

+10K

Life science-related jobs added across all industries in 2022.

278K

Healthcare practitioners.

#### **TOP EMPLOYERS**

By global employee count

Abbott
AbbVie
Baxalta
Dade Behring
Fresenius Kabi
Advanced Clinical
Xeris Pharmaceuticals



Chicago has a strong biological sciences and bioengineering talent pipeline.

In 2021, higher education institutions in the Chicago metro area granted:

2,705

Biology, Bioengineering, Biomedical Sciences, and related **undergraduate degrees**, the **6th** most in the nation.

991

Biology, Bioengineering, Biomedical Sciences, and related **Master's & PhD degrees**, the **7th** most in the nation.

26,434

STEM degrees, the **4th** most in the nation and **12%** more than in 2020.

#### **SECTOR INNOVATION**

Nationwide, 25.5% of life science companies engaged in innovation activities from 2017 to 2019 to develop new products or business processes. Of these companies, 5% report using tax incentives or credits to support those activities. Over the same time period, **national sales from this industry's most important innovations totaled \$70.27 billion**.

5,206

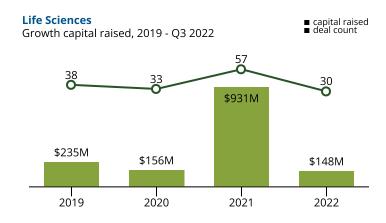
Active patents held by life sciences companies in Chicago. 1,328

Pending patents filed by life sciences companies in Chicago.

#### **ACCESS TO CAPITAL**

**Life Sciences is one of Chicago's fastest growing verticals by growth capital raised.** Investment increased 297% between 2019 and 2021, compared to 106% nationwide. Since 2019, there have been:

- 30+ local growth capital investors in Chicago's life sciences firms
- 8 Chicago-based companies acquired
- 6 companies that have gone public



**Sources:** Pitchbook Data, Inc. • Lightcast™ • National Center for Science and Engineering Statistics





# Transportation & Logistics Tech

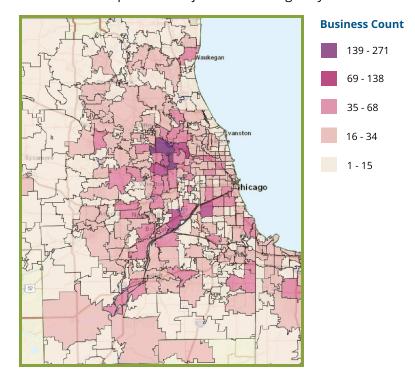


Chicago is the nation's leader in all things Transportation, Distribution & Logistics (TD&L). As the nation's transportation and logistics hub, our central location serves as a crossroads for moving both freight and people. Our TD&L industry is one of the largest in the country, and a significant pillar for our local economy.

PRODUCTIVITY	' (NOMINAL GDP	))	
\$22.7B 2022 (est.) EMPLOYMENT	3rd among metro areas	-7.8% change over 2019	
268K as of Q3 2022 BUSINESS COU	2nd among metro areas	<b>+8.5%</b> growth over Q4 2019	
17,059 as of Q2 2022 HIGH-GROWTH	1st among metro areas	+17.0% growth over Q4 2019	
<ul> <li>Freight intermediaries has grown by more than 4,300 employees in Chicago since 2019.</li> <li>Last mile delivery &amp; courier services have grown by over 7,000 employees in Chicago since 2019.</li> </ul>			

#### **GEOGRAPHIC DISTRIBUTION**

TD&L firms are concentrated around O'Hare International Airport and major interstate highways.



#### **LOCAL ASSETS**

Chicago is the nation's crossroads and freight hub. We have the transportation infrastructure to support a growing TD&L industry, including:

- 6 of 7 Class I railroads approximately 3,900 miles of rail lines.
- 10 interstate highways (representing about 30,000 miles of highway), connecting the region to a quarter of the nation's population within 500 miles.
- Over 100 miles of navigable waterways.

#### Chicago offers more industrial space at a lower cost than other leading markets.

- With 1.2 billion square feet of industrial space, we have one-third more than the next leading market.
- With a direct asking rent of \$6.01 average per square foot, industrial space in Chicago is ~80% lower than New York and ~60% lower than Miami.

Sources: Moody's Analytics • U.S. Bureau of Labor Statistics QCEW • Esri Business Analyst • CBRE Industrial Figures Q3 2022 • CMAP





# Transportation & Logistics Tech



#### **LABOR POOL & TALENT PIPELINE**



Chicago has an incredibly large TD&L workforce working in companies across all industries. As of 2022, Chicago is home to:

975K

Workers in TD&L-related occupations, the **3rd most** in the nation.

324K

Operations occupations, which include logistics and business operations.

500K

Transportation workers across all industries.

+10K

TD&L occupations added in 2022.



#### Chicago has a strong Logistics Tech and TD&L talent pipeline.

5,463

Computer and Information Science degrees granted in 2021, the **7th** most in the nation and **13%** more than in 2020.

45

Certified commercial driver (CDL) training schools in the Chicago metro area.

#### TOP EMPLOYERS

By global employee count

United Airlines
American Airlines
Chicago Transit Authority
UPS
Southwest Airlines
Hub Group Inc.
Coyote Logistics
Echo Global Logistics

#### SECTOR INNOVATION

Nationwide, 26.6% of TDL companies engaged in innovation activities from 2017 to 2019 to develop new products or business processes. Of these companies, 2.5% report using tax incentives or credits to support those activities. During the same time period, **national sales from this industry's most important innovations totaled \$15.77 billion**.

1,074

Active patents held by TD&L companies in Chicago. 236

Pending patents filed by TD&L companies in Chicago.

#### ACCESS TO CAPITAL

#### Chicago is Logistics Tech's top growth market.

Between 2019 and 2021, Chicago's Logistics Tech firms saw an 802% increase in growth capital invested. Today, Chicago is home to industry titans like ShipBob, Loadsmart, FourKites, and others.

- 340+ growth capital investors in Logistics Tech firms
- 6 unicorns (\$1B+ valuations)
- \$190M median post-deal valuation in 2021, up from \$50.2M in 2019



 $\textbf{Sources:} \ \textbf{Pitchbook Data, Inc.} \cdot \textbf{Lightcast}^{\text{IM}} \cdot \textbf{National Center for Science and Engineering Statistics} \cdot \textbf{Illinois Secretary of State}$ 





# **Manufacturing**

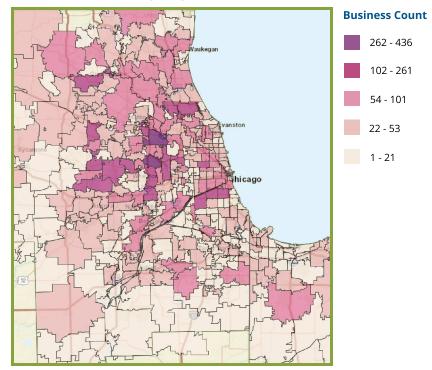


**Built on a historic legacy, Chicago's manufacturing is still going strong.** Chicago has been famously called "The City that Works" — we have that moniker because Chicago has one of the largest manufacturing industries in the nation. Our workforce and TD&L ecosystem makes Chicago a great place to make products and efficiently get them to market.

PRODUCTIVITY (NOMINAL GDP)			
<b>\$99.4B</b> 2022 (est.) <b>EMPLOYMEN</b>	<b>2nd</b> among metro areas	<b>+21.0%</b> growth over 2019	
414K as of Q3 2022 BUSINESS CO	areas	<b>-1.0%</b> change over Q4 2019	
<b>12,062</b> as of Q2 2022	<b>3rd</b> among metro areas	<b>+1.9%</b> growth over Q4 2019	
as of Q2 2022	among metro	growth over Q4 2019	
as of Q2 2022  HIGH-GROWT  • Plastics pro	among metro areas  H SUB-INDUSTE  oduct manufact ore than 1,210 e	growth over Q4 2019 RIES uring has	

#### **GEOGRAPHIC DISTRIBUTION**

Manufacturing firms are concentrated in certain zip codes across the Chicago region.



#### **LOCAL ASSETS**

#### Chicago is the nation's crossroads, making it easy for manufacturers to get their products to market.

- Chicagoland is home to North America's largest inland port: CenterPoint Intermodal occupies ~6,400 acres and handles ~3M TEU annually.
- O'Hare International Airport is the #1 U.S. port by value, moving \$305B in imports and exports in 2021.
- Chicagoland's free trade zone has 37 current sites, with over 930 total acres activated.

#### Chicago has an ecosystem for industry innovation as well as for training and upskilling talent.

- Chicago is home to over 75 incubators and accelerators, including 1871 and manufacturing-focused mHUB.
- Discovery Partners Institute offers companies, researchers, and students access to advanced equipment to turn their ideas into new products.

#### Chicago offers more industrial space than other leading markets

• With 1.2 billion square feet of industrial space, and a direct average asking rent of \$6.01 per square foot, industrial space in Chicago is ~80% lower than in New York and ~60% lower than in Miami.

Sources: Moody's Analytics • U.S. Bureau of Labor Statistics QCEW • Esri Business Analyst • International Trade Administration • CenterPoint Intermodal





# **Manufacturing**



#### **LABOR POOL & TALENT PIPELINE**



**Manufacturing is one of Chicago's largest industries by employment** and there are thousands of employees in related careers. As of 2022, Chicago is home to:

484K

Manufacturing-related occupations, the **3rd** most in the nation.

38K

Engineering occupations, the **8th** most in the nation.

-170

Manufacturing-related jobs lost in 2022 from 2021.

283K

Production occupations, the **2nd** most in the nation.



**Chicago has a strong manufacturing talent pipeline.** In 2021, higher education institutions in the Chicago metro area granted:

3,280

Engineering degrees, the **8th** most in the nation.

1.567

Engineering technician programs completions, the **5th** most in the nation.

26,434

STEM degrees, the **4th** most in the nation and **12%** more than in 2020.

TOP EMPLOYERS

WM Wrigley Jr.

By global employee count

Mondelez International

Baxter International Illinois Tool Works

#### **SUPPLY CHAIN**

Chicago offers a more local supply chain, with **50% of manufacturers' inputs purchased in-region**, compared to 33% in New York, 51% in Los Angeles, and 47% in Dallas.

#### **SECTOR INNOVATION**

Nationwide, 34% of manufacturing companies engaged in innovation activities from 2017 to 2019 to develop new products or business processes. Of these companies, 12% report using tax incentives or credits to support those activities. During the same time period, national sales from this industry's most important innovations totaled \$230.03 billion.

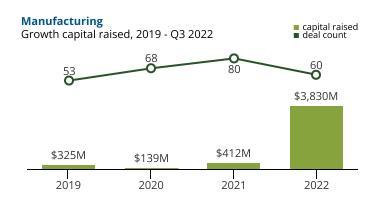
33,503

Active patents held by manufacturing companies in Chicago. **5,403**Pending patents filed by manufacturing companies in Chicago.

#### **ACCESS TO CAPITAL**

Manufacturing is a growing industry segment in Chicago's startup ecosystem, with investment increasing 26.7% between 2019 and 2021. Since 2019, there have been:

- 68 Chicago-based investors in local growth capital deals
- 161 Chicago-based companies acquired
- 13 companies going public



 $\textbf{Sources:} \ \textbf{Pitchbook Data, Inc.} \bullet \textbf{Lightcast}^{\text{TM}} \bullet \textbf{National Center for Science and Engineering Statistics}$ 





# Food Innovation & Manufacturing

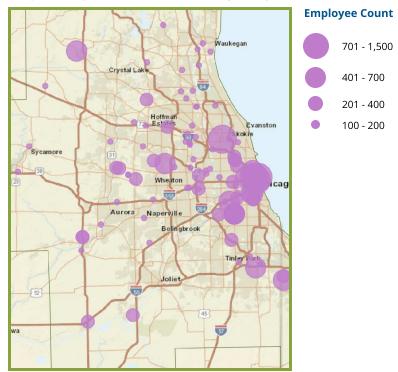


**Chicago is the nation's food innovation and manufacturing capital.** The city's proximity to the nation's most productive farmland and an extensive transportation network helped grow the historic industry. Today, the metro area is home to the nation's largest food manufacturing workforce and the industry's largest and most innovative corporations.

PRODUCTIVITY (NOMINAL GDP)			
<b>\$9.6B</b> 2022 (est.)	<b>1st</b> among metro areas	<b>+8.0%</b> growth over Q4 2019	
EMPLOYMEN1			
<b>67K</b> as of Q3 2022	<b>1st</b> among metro areas	<b>+9.6%</b> growth over Q4 2019	
BUSINESS COL	TNL		
<b>1,592</b> as of Q2 2022	<b>3rd</b> among metro areas	<b>+9.8%</b> growth over Q4 2019	
HIGH-GROWT	H SUB-INDUSTR	RIES	
• Other food manufacturing has grown 24%, or by more than 2,460 employees in Chicago since 2019.			
Meat processing has grown 13%, or by more than 1,350 employees in Chicago since 2019.			

#### **GEOGRAPHIC DISTRIBUTION**

Food manufacturing firms have HQs in the Loop, with operations distributed regionally.



#### **LOCAL ASSETS**

Chicago is the nation's crossroads, making it easy for food manufacturers to get their products to market.

- Chicagoland has 6 of 7 Class I railroads.
- Chicagoland is home to North America's largest inland port: CenterPoint Intermodal occupies ~6,400 acres and handles ~3M TEU annually.
- O'Hare International Airport is the #1 U.S. port by value, moving \$305B in imports and exports in 2021.

#### Chicago also has a supporting ecosystem for industry innovation and business growth.

- 24 known corporate innovation centers, many of which are food-related, like Mars Wrigley, McDonald's, and Ferrero.
- Over 75 incubators and accelerators, such as the Hatchery, the Food Foundry, and FoodLab Chicago, among others.

 $\textbf{Sources:} \ \mathsf{Moody's} \ \mathsf{Analytics} \bullet \mathsf{U.S.} \ \mathsf{Bureau} \ \mathsf{of} \ \mathsf{Labor} \ \mathsf{Statistics} \ \mathsf{QCEW} \bullet \mathsf{Esri} \ \mathsf{Business} \ \mathsf{Analyst}$ 





# Food Innovation & Manufacturing



#### **LABOR POOL & TALENT PIPELINE**



**Chicago has the nation's largest food manufacturing workforce.** As of 2022, Chicago is home to:

**Production** occupations, the **2nd** most in the nation.

Food processing occupations, the 3rd most in the nation.

**-2.2K** Production jobs lost in 2022 from 2021

Food scientist and technologist occupations, the 2nd most in the nation.



**Chicago has a strong talent pipeline for food manufacturing.** In 2021, higher education institutions in the Chicago metro area granted:

1.1K

1.567

Food science degrees — including from the University of Illinois at Urbana-Champaign — the **most** in the nation.

STEM degrees, the **4th** most in the nation and **12%** more than in 2020.

**3,280** Engineering degrees, the **8th** most in the nation.

Engineering technician programs completions, the **5th** most in the nation.

#### **TOP EMPLOYERS**

By global employee count

Mondelez International ADM Conagra Brands Kraft Heinz Co. Mars Wrigley US Foods Molson Coors Ingredion Quaker Oats

#### **SECTOR INNOVATION**

Nationwide, 36.8% of food manufacturing companies engaged in innovation activities to develop new products or business processes. Of these companies, 8.8% report using tax incentives or credits to support those activities. During the same time period, **national sales from this industry's most important innovations totaled \$8.26 billion**.

### ACCESS TO CAPITAL

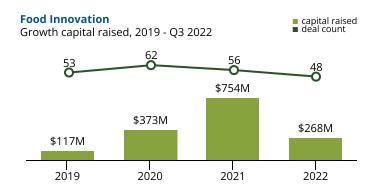
**Food innovation is one of Chicago's top verticals by growth capital raised.** Investment increased 544% between 2019 and 2021, compared to 73% nationwide. Since 2019, there have been:

- Nearly 60 local growth capital investors in Chicago's food innovation firms
- Over 50 companies acquired

933
Active patents held by food manufacturing companies in

Chicago.

Pending patents filed by food manufacturing companies in Chicago.



 $\textbf{Sources:} \ \textbf{Pitchbook Data, Inc.} \bullet \textbf{Lightcast}^{\text{TM}} \bullet \textbf{National Center for Science and Engineering Statistics}$ 





### **Finance & Fintech**

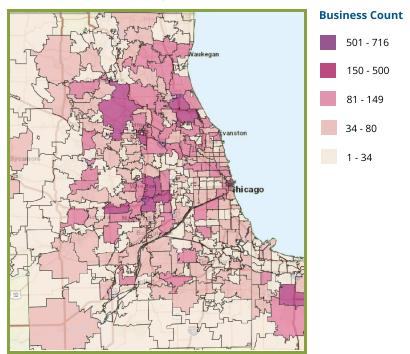


**Chicago is a hub for finance.** Today, Chicago has the most diverse economy among U.S. metros and the third highest employment in the finance and insurance sector. The region's economic diversity and need for financial products fostered the industry, leading to the establishment of the first private banks and exchanges. Today, fintech has evolved into one of Chicago's fastest growing tech verticals.

PRODUCTIVITY (NOMINAL GDP)			
<b>\$132.3B</b> 2022 (est.)	<b>3rd</b> among metro areas	<b>0.57%</b> growth over 2019	
EMPLOYMEN1	Γ		
325K	4th	-1.1%	
as of Q3 2022	among metro areas	change over Q4 2019	
BUSINESS COL	UNT		
13,776	4th	+0.4%	
as of Q2 2022	among metro areas	growth over Q4 2019	
HIGH-GROWT	H SUB-INDUSTF	RIES	
• Securities and commodity exchanges have added over 1,000 employees since 2019.			
• Other financial investment services have added nearly 2,000 employees since 2019.			

#### **GEOGRAPHIC DISTRIBUTION**

Finance and insurance firms in Chicagoland are concentrated in certain zip codes.



#### **LOCAL ASSETS**

#### Chicago is a global financial center.

- Nearly 200 years ago, Chicago established the first banks and exchanges and today it is home to the largest options exchange by volume.
- Over 45% of Chicago's finance firms are concentrated on LaSalle Street, which is surrounded by a population that has grown 44% since 2010 to reach 42,298 people, 43% of whom have a graduate or professional degree.

#### Chicago also has a supporting ecosystem for industry innovation and business growth.

- Chicago is home to over 75 incubators and accelerators, including 1871.
- 11 universities offering finance graduate programs in the Chicago area, including 2 of the top MBA schools.

#### Chicagoland is a leading region for data centers.

- Chicago is ranked as the #4 global data center market by Cushman & Wakefield.
- 400 MW currently operational, with an additional +200 MW under development.

Sources: Moody's Analytics • U.S. Bureau of Labor Statistics QCEW • Esri Business Analyst • Cushman & Wakefield 2022 Global Data Center Market Comparison





# Finance & Fintech



#### **LABOR POOL & TALENT PIPELINE**



**Chicago has a deep bench of finance talent across all industries** — including finance specialists that work in non-finance companies. As of 2022, Chicago is home to:

466K

+4.3K

**Finance-related** occupations, the **4th** most in the nation.

Finance-related jobs added in 2022 from 2021.

142K

Computer and mathematics occupations.

324K

**Business and financial operations** occupations.



**Chicago has a strong finance and fintech talent pipeline.** In 2021, higher education institutions in the Chicago metro area granted:

1,577

Mathematics and statistics degrees, the 4th most in the nation and 10% more than in 2020.

5,413

Computer and information sciences degrees, the 7th most in the nation and 13% more than in 2020.

TOP EMPLOYERS

By global employee count

Alletate

Arthur J. Gallagher

Cboe

CME Group

Kemper

Morningstar

State Farm

Jule Faiiii

\_ \_ .

18,789 Business, management, and marketing degrees, the 6th most in the

#### **SECTOR INNOVATION**

Nationwide, 26.1% of finance companies engaged in innovation activities from 2017 to 2019 to develop new products or business processes. Of these companies, 1.4% report using tax incentives or credits to support those activities. Over the same time period, **national sales from this industry's most important innovations totaled \$58.38 billion**.

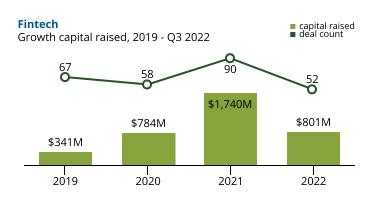
377

Active patents held by finance & insurance companies in Chicago. **44**Pending patents
filed by finance
& insurance
companies in
Chicago.

#### **ACCESS TO CAPITAL**

**Fintech is one of Chicago's fastest growing verticals by growth capital raised.** Investment increased 410% between 2019 and 2021, compared to 247% nationwide. Since 2019, there have been:

- Nearly 100 local growth capital investors in Chicago's fintech firms
- 32 Chicago-based companies acquired
- 4 local companies that have gone public



 $\textbf{Sources:} \ \mathsf{Pitchbook} \ \mathsf{Data}, \mathsf{Inc.} \bullet \mathsf{Lightcast}^{\mathsf{TM}} \bullet \mathsf{National} \ \mathsf{Center} \ \mathsf{for} \ \mathsf{Science} \ \mathsf{and} \ \mathsf{Engineering} \ \mathsf{Statistics}$ 





# Business & Professional Services

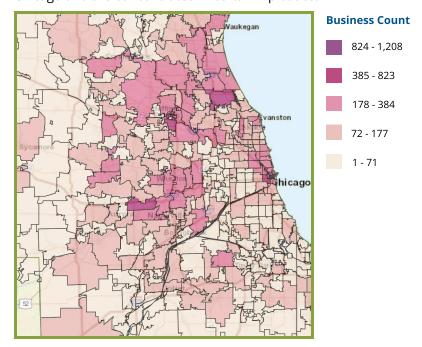


**Chicago is known as a headquarters town: we have all the services that make a corporation thrive.** Chicago has built up a deep bench of companies and talent to support business growth and innovation — today, we're home to some of the nation's top firms in consulting, law, advertising, and other industries.

PRODUCTIVIT	Y (NOMINAL GI	)PI		
PRODUCTIVITY (NOMINAL GDP)				
\$129B	4th	+19.5%		
2022 (est.)	among metro areas	growth over 2019		
EMPLOYMEN <sup>-</sup>	Γ			
397K	4th	+4.3%		
as of Q3 2022	among metro areas	growth over Q4 2019		
BUSINESS CO	UNT			
39,035	5th	+4.9%		
as of Q2 2022	among metro areas	growth over Q4 2019		
HIGH-GROWTH SUB-INDUSTRIES				
• <b>Legal Tech</b> , with \$77M in growth capital in 2021, up from \$3M in 2019.				
<ul> <li>Marketing Tech, with \$311M in growth capital in 2021, up from \$50M in 2019.</li> </ul>				

#### **GEOGRAPHIC DISTRIBUTION**

Scientific, professional, and R&D firms in Chicagoland are concentrated in certain zip codes.



#### **LOCAL ASSETS**

#### Airports, highways, and trains that connect Chicago to the rest of the U.S. and the world.

- O'Hare International Airport is the nation's most connected airport, and one of only five airports worldwide that offers direct service to all six inhabited continents.
- 10 interstate highways, connecting the region to a quarter of the nation's population within 500 miles.
- CTA is the second largest U.S. public transit system, covering the city of Chicago and 40 surrounding suburbs.

#### Several of the nation's best universities and talent producers.

- Northwestern University and the University of Chicago are among the top 10 U.S. News & World Report ranked universities; both also offer T14 law schools and M7 business schools.
- There are over 100 degree-granting institutions in the Chicago metro area, including 21 community colleges and 44 institutions graduating doctorate students.

#### Affordable, abundant office space.

• Office space costs on average \$43.57 per square foot in Chicago's Central Business District as of Q3 2022 — and \$24.74 in the suburbs — and is more affordable than in other leading markets.

Sources: Moody's Analytics • U.S. Bureau of Labor Statistics QCEW • Esri Business Analyst • CBRE Chicago Office Figures Q3 2022 • U.S. News & World Report • OAG • Lightcast™





# **Business & Professional** Services



#### **LABOR POOL & TALENT PIPELINE**



Chicago has one of the nation's largest talent pools for **business & professional services.** As of 2022, Chicago is home to:

391K

Management occupations, the 3rd most nationwide.

**Business operations** 217K occupations, the 4th most nationwide.

52K

Legal occupations, the **4th** most nationwide.

560K

Office & administrative support occupations, the 3rd most nationwide.



Chicago has a strong talent pipeline. In 2021, higher education institutions in the Chicago metro area granted:

5.413

Computer and information sciences degrees, the **7th** most in the nation and 13% more than in 2020.

Legal and legal support 2,136 degrees, the **5th** most in the nation.

#### **TOP EMPLOYERS** By global employee count

LAW FIRMS\*

Kirkland & Ellis

Jenner & Block

Latham & Watkins Seyfarth & Shaw **DLA Piper Greenberg Traurig** 

\*by local attorney count

**ACCOUNTING & CONSULTING FIRMS** Deloitte

PricewaterhouseCoopers

KPMG RSM US **BDO USA** Plante & Moran

**18.789** 

Business, management, and marketing degrees. the 6th most in the nation.

#### **SECTOR INNOVATION**

Nationwide, 29.0% of business and professional service companies engaged in innovation activities from 2017 to 2019 to develop new products or business processes. Of these companies, 4.2% reported using tax incentives or credits to support these activities. Over the same time period, national sales from this industry's most important innovations totaled \$75.28 billion.

1,738

Active patents held by business & professional services companies in Chicago.

284

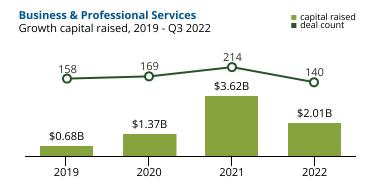
Pending patents filed by business & professional services companies in Chicago.

#### **ACCESS TO CAPITAL**

Startups in the business and professional services space are among the fastest growing in Chicago.

Investment increased 433% between 2019 and 2021, compared to 124% nationwide. Since 2019, there have been:

- 147 Chicago-based investors involved in local growth capital deals
- 389 companies acquired
- 7 companies that have gone public



Sources: Pitchbook Data, Inc. • Lightcast™ • Crain's The Book 2023 • National Center for Science and Engineering Statistics





# **Findings**



#### Chicagoland's economic prosperity is regional, and matters in a national context.

The Chicago metro area is one of the U.S.'s largest, stablest, and most diverse economies. The growth and economic success of World Business Chicago's core industries go beyond local importance: innovation and business activity that happens here impacts the world.

Chicagoland's economic development leaders have long recognized that our outsized impact on the U.S. economy reflects the breadth of the region's interconnected economy. Building off of national best practices for regional economic development, the City of Chicago, Cook County and six other regional counties formed the Greater Chicagoland Economic Partnership, formally announced on January 4, 2023.

# 1. Life Sciences and TD&L are the fastest growing industries by business counts.

More businesses are being established: the number of life sciences firms grew by 11.4% since 2019, and TD&L firms by 17%. Growth in business count may be a precursor to additional growth in employment or output as new businesses scale.

# 2. The WBC Research Center recognizes Finance and Business & Professional Services as significant core industries.

Earlier in 2022, World Business Chicago added the finance industry as a core area of focus, and the Research Center published a Chicago Business Bulletin issue on Chicagoland's most storied industry. With a GDP of \$132B and employment at 325K, it is clear why WBC would focus on the finance industry.

In this issue, we have included Chicagoland's business & professional services industry, though it is not a core area of focus for WBC. This industry is roughly the same size as the finance industry — \$129B in GDP and 397K in employment — and reflects Chicago's status as a leading metro area for corporate headquarters. Moreover, the business & professional services industry has maintained growth since the end of 2019, with 19.5% growth in GDP, 4.3% growth in employment, and 4.9% growth in business establishments.

# 3. Manufacturing continues to be of tremendous importance to Chicagoland's economy.

With 414K people employed, the manufacturing industry continues to be a crucial pillar of Chicagoland's economy. However, the industry is evolving: output is rapidly increasing while employment declines. Chicago's strategic location and local supply chain continue to underpin growth, while sub-industries — like food, pharmaceutical, and plastics manufacturing — define how the industry is growing.

#### 4. Nationally, innovation varies across industries.

Innovation varies widely across industries, though some industries are more successful at monetizing innovations than others. Across the U.S., 34% of manufacturing companies report they were able to generate over \$230B in sales of their most important innovations. Of these companies, only 12% reported using tax incentives or credits to fund activities that lead to those innovations. Conversely, the food manufacturing industry reports one of the highest rates of innovation — 36.8% of companies engage in innovation — while that industry is only able to generate \$8.26B in sales nationwide. Also consider that the finance industry reports some of the lowest rates of innovation and use of tax incentives, but nationally reports sales of \$58.38B from their most important innovations, one of the highest sales amounts among U.S. industries.







# **Sources & Methodology**

We use key data from several economic databases, including:

- Moody's Analytics (total industry employment, GDP)
- **Lightcast**™ (occupation employment, degrees and completions)
- Pitchbook Data, LLC (patents, growth capital)

The charts below and on the following page detail the criteria used to query industry data. NAICS codes, SOC codes, and CIP codes are all federally-defined categorizations. The methodology below represents data for the Chicago metro area.

<b>Classification</b> Data Source	<u>NAICS Codes:</u> Industries Moody's Analytics	S <u>OC Codes:</u> Occupations Lightcast™	C <u>IP Codes:</u> Educational Programs Lightcast™
Life Sciences	3251: Basic Chemical Manufacturing 3253: Pesticide, Fertilizer, and other Agricultural Chemical Manufacturing 3254: Pharmaceutical and Medicine Manufacturing 3345: Navigational, Measuring, Electromedical, and Control Instruments Manufacturing 3391: Medical equipment and supplies manufacturing 4242: Drugs and druggists' sundries merchant wholesalers 5417: Scientific research and development services 6215: Medical and diagnostic laboratories	<ul> <li>15-0000: Computer &amp; Mathematical</li> <li>17-0000: Engineering</li> <li>19-0000: Life &amp; Physical Science</li> <li>29-0000: Healthcare Practitioners</li> <li>31-0000: Healthcare Support</li> </ul>	<ul> <li>26: Biological &amp; Biomedical Sciences</li> <li>14.05: Biomedical/Medical Engineering</li> <li>14.43: Biochemical Engineering</li> <li>14.45: Biological/Biosystems Engineering</li> <li>41.01: Biology/Biotechnology Technologies/Technicians</li> <li>30.01 Biological &amp; Physical Sciences</li> </ul>
Transportation & Logistics Tech	48-49: Transportation & Warehousing	<ul> <li>13-0000: Business &amp; Financial Operations</li> <li>15-0000: Computer &amp; Mathematical</li> <li>53-0000: Transportation &amp; Materials Moving</li> </ul>	<ul> <li>49: Transportation and Materials Moving</li> <li>14: Engineering</li> <li>15: Engineering Technicians</li> <li>11: Computer and Information Sciences and Support Services</li> <li>52: Business, Management, Marketing, and Related Support Services</li> </ul>
Manufacturing	31-33: Manufacturing	15-0000: Computer & Mathematical     17-2000: Engineering     17-3000: Drafters, Engineering     Technicians, and Mapping Technicians     51-0000: Production	<ul><li>14: Engineering</li><li>15: Engineering Technicians</li><li>STEM*</li></ul>
Food Manufacturing & Innovation	<ul> <li>311: Food Manufacturing</li> <li>312: Beverage &amp; Tobacco Manufacturing</li> </ul>	<ul> <li>19-1012: Food Scientists and Technologists</li> <li>19-4013: Food Science Technicians</li> <li>51-0000: Production</li> </ul>	<ul> <li>01.10: Food Science and Technology</li> <li>14: Engineering</li> <li>15: Engineering Technicians</li> <li>STEM*</li> </ul>
Finance & Fintech	52: Finance and Insurance	<ul> <li>13-0000: Business &amp; Financial Operations</li> <li>15-0000: Computer &amp; Mathematical</li> </ul>	<ul> <li>11: Computer and Information Sciences and Support Services</li> <li>27: Mathematics &amp; Statistics</li> <li>52: Business, Management, Marketing, and Related Support Services</li> </ul>
Business & Professional Services	54: Professional, Scientific, and Technical Services	<ul> <li>11-0000: Management Occupations</li> <li>13-0000: Business &amp; Financial Operations</li> <li>23-0000: Legal</li> <li>43-0000: Office &amp; Admin Support</li> </ul>	<ul> <li>11: Computer and Information Sciences and Support Services</li> <li>22: Legal Professions and Studies</li> <li>52: Business, Management, Marketing, and Related Support Services</li> </ul>

<sup>\*</sup>We use the federally-defined <u>STEM Designated Degree Program List,</u> which is comprised of 107 STEM degree programs.







# Sources & Methodology (continued)

<b>Classification</b> Data Source	Patents Pitchbook Data, LLC	Innovation National Center for Science & Engineering Statistics	<b>Growth Capital (as of 11/21/22)</b> Pitchbook Data, LLC
Life Sciences	Industry Groups:  • Pharmaceuticals  • Biotechnology  • Healthcare Devices and Supplies  • Healthcare Services  • Healthcare Technology Systems	Manufacturing Subsectors:  • 325: Chemical Manufacturing  • 3345: Navigational, Measuring, and Electromedical Instrument Manufacturing  • 3391: Medical Equipment Manufacturing  • 5417: Scientific R&D Services  • 621-623: Healthcare Services	<ul><li>Vertical: Life Sciences</li><li>Industry: Biotechnology</li></ul>
Transportation & Logistics Tech	Industry Groups:  Commercial Transportation Containers and Packaging Transportation	• 48-49: Transportation & Warehousing	<ul> <li>Verticals: Supply Chain Tech</li> <li>Industry: Logistics</li> <li>Keywords: Digital Freight Brokerage, Freight Software, Trucking</li> </ul>
Manufacturing	Industry Groups:  Commercial Products Consumer Durables & Non-Durables Computer Hardware Energy Equipment Construction Metals, Minerals, and Mining Other Materials Textiles	• 31-33: Manufacturing	Verticals: Manufacturing, Advanced Manufacturing Keywords: Manufacturing, Manufacturer   Manufacturer
Food Manufacturing & Innovation	Industry Groups:  • Agriculture Products • Restaurant Tech	311: Food Manufacturing     312: Beverage & Tobacco Manufacturing	Verticals: FoodTech, Restaurant Tech Industries: Beverages, Food Products Keywords: Nutritional Data, Kitchen Tools, Online Grocery
Finance & Fintech	Industry Groups:	52: Finance and Insurance	Verticals: FinTech, InsurTech, Cryptocurrency/Blockchain
Business & Professional Services	Industry Groups:	54: Professional, Scientific, and Technical services	<ul> <li>Industries: Commercial Services, IT Services</li> <li>Verticals: AdTech, CloudTech &amp; DevOps, Cybersecurity, HR Tech, Legal Tech, Marketing Tech</li> </ul>





# **Understanding economic data**

This issue of the Chicago Business Bulletin quantifies the enormity of Chicago's economy and high-growth sectors. We plainly present figures often associated with economic prosperity, including productivity (GDP), employment, wages, and business counts.

What do these numbers mean in the context of economic development across Chicagoland? Knowing how industries are growing or contracting helps policymakers, business leaders, and other ecosystem partners know where to focus efforts to create more high-quality jobs or help entrepreneurs succeed. Putting this into a broader context: connecting potential workers to jobs and economic prosperity means a more vibrant, healthy region.

### **Glossary**

#### **Business Count**

Also referred to as "business establishments," this is the total number of businesses or firms in a region that are subject to unemployment insurance laws. This number is tabulated through the U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages, and covers 95% of U.S. jobs.  $\rightarrow$  See more from the U.S. Bureau of Labor Statistics.

#### **Employment: Industry versus Occupation**

As of October 2022, Chicago's employment was 4.68M. There are two ways to approach understanding employment: industry employment and occupational employment. Industry employment reflects the total employment for each industry and includes all occupations within each industry. Occupation employment reflects the total employment for each occupation and includes all industries that may employ that occupation. For example: the employment count for the accounting industry will reflect the total number people employed in that industry, which includes accountants, plus any other occupations. The accounting occupation will reflect the total number of people employed as accountants, which can include accountants working in the accounting industry or any other industry. → See more from the <u>U.S. Census Bureau</u>.

#### **Employment, Unemployment, and Labor Force**

The labor force is the sum of people employed and unemployed in a region, where people unemployed are actively looking for work. Those outside of the labor force are not actively looking for work; this includes children and retirees, discouraged unemployed workers, those who have left the workforce for caretaking responsibilities, among other reasons. → See more from the U.S. Bureau of Labor Statistics.

#### **GDP**

Short for Gross Domestic Product. Per the U.S. Bureau of Economic Analysis, GDP is "a comprehensive measure of U.S. economic activity. GDP measures the value of the final goods and services produced in the United States. Changes in GDP are the most popular indicator of the nation's overall economic health." In short: GDP measures what our region's firms produce. Nominal GDP is not adjusted for inflation, whereas Real GDP is (chained to 2012 dollars).  $\rightarrow$  See more from the U.S. Bureau of Economic Analysis.







### **Glossary (continued)**

#### **Growth Capital**

An expanded view of investments into tech startups, World Business Chicago includes venture capital investment, private equity for growth, and corporate venture as part of "growth capital." Growth capital helps companies start or expand their operations, which may translate to additional tangible economic activity, like hiring and office leasing.  $\rightarrow$  See more from Pitchbook.

#### Innovation

As defined by the National Center for Science and Engineering Statistics, innovation is "a business innovation is a new or improved product or business process (or combination thereof) that differs significantly from the firm's previous products or business processes and that has been introduced on the market or brought into use by the firm.  $\rightarrow$  See more from the NCSES.

#### Patent

As defined by the U.S. Patent and Trademark Office, "a patent for an invention is the grant of a property right to the inventor, issued by the United States Patent and Trademark Office. Generally, the term of a new patent is 20 years from the date on which the application for the patent was filed in the United States. There are three types of patents:

- *Utility patents* may be granted to anyone who invents or discovers any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof;
- *Design patents* may be granted to anyone who invents a new, original, and ornamental design for an article of manufacture: and
- *Plant patents* may be granted to anyone who invents or discovers and asexually reproduces any distinct and new variety of plant."

Patents are indicators of innovation, and are utilized across industry and academia.  $\rightarrow$  See more from the <u>USPTO</u>.

#### Metropolitan Statistical Area (MSA)

A U.S. Census-defined geographic area, where "the general concept of a metropolitan or micropolitan statistical area is that of a core area containing a substantial population nucleus, together with adjacent communities having a high degree of economic and social integration with that core." In Chicago, this is interchangeable with the concept of Chicagoland or the Chicago region: the broader suburban and exurban geography within commuting distance of the city of Chicago.  $\rightarrow$  See more from the <u>U.S. Census Bureau</u>.







### **About**

World Business Chicago is Chicago's public-private economic development agency. Our mission is to drive inclusive economic growth and job creation, support businesses, and promote Chicago as a leading global city. Our vision is to ensure that all Chicagoans prosper.

# The Research Center



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