

# Chicago Business Bulletin

Year in Review 2023





# TABLE OF CONTENTS

<b>Executive Summary</b>	2
<b>Pro-Chicagoland Decisions</b>	4
<b>Macro Trends</b>	6
Gross Regional Product	7
Unemployment	8
Employment	9
<b>Quality of Life</b>	14
<b>Startup Ecosystem</b>	17
<b>Trade &amp; Foreign Direct Investment</b>	22
<b>Company Spotlights</b>	26
Innovafeed	27
CADDi	28
MassPersona	29
Legacy, Synergy, Innovation: Chicago's Trading Industry	30
<b>Sources</b>	31
<b>About</b>	32



An aerial photograph of a city skyline, likely New York City, viewed from a high angle. The image is heavily filtered with a blue color, creating a monochromatic effect. The buildings are densely packed, and the city extends towards a body of water in the distance. The sky is a clear, light blue.

# EXECUTIVE SUMMARY



# EXECUTIVE SUMMARY

**On March 1, 2024, Chicagoland secured its 11th consecutive Top Metro in the U.S. for Corporate Relocation and Site Selection, showcasing economic resilience amidst uncertainties. In 2023, 163 pro-Chicagoland decisions resulted in 23,100 jobs and generated over \$1.87 billion in earnings. Chicagoland also maintained its status as the nation's third-largest metro economy, with a gross regional product (GRP) of \$847 billion. A 5.2 percent growth in professional and business services, coupled with significant contributions from the manufacturing sector, fueled this expansion.**

Increases in output did not necessarily correspond to increases in jobs across Chicagoland. Despite maintaining a 4.1 percent unemployment rate in December 2023, unemployment across the region was higher than 70 percent of other U.S. metropolitan areas. That said, there are significant discrepancies between U.S. Bureau of Labor Statistics data sources: Current Employment Statistics (CES) reported a gain of 142,800 jobs, while Local Area Unemployment Statistics (LAUS) indicated a drop of approximately 26,000 jobs, possibly due to individuals holding multiple jobs simultaneously.

Despite a decline from the year prior, growth capital investments totaling \$4.73 billion in the startup ecosystem showed consistent growth when compared to the pre-COVID period of 2013 to 2019. Chicago also emerged as a top location for women founders of startups, according to a Chicago:Blend Startup Diversity Report co-authored by the WBC Research Center. In 2023, O'Hare International Airport continued its reign as one of the top ports by value in the nation with \$271 billion in trade, trailing only Port Laredo and Port of Los Angeles. Such performance across various metrics reinforces Chicagoland's multifaceted economic strength and prominence nationally and globally.

The Chicago metro's performance in 2023 showcases a robust business environment, and despite complexities in the employment landscape characterized by a nuanced job market, the city's resilience remains a driving force. Growth in key industries, sustained capital investments, and O'Hare International Airport's continued prominence in trade contribute to a positive outlook for 2024.

## KEY FACTS FOR 2023

- **\$4.73 billion** total growth capital raised
- **516** companies raised growth capital
- **587** growth capital deals
- **\$24 million** median growth capital deal value
- **788** investors in Chicago startups
- **\$1 billion** largest deal, raised by Invenergy



# PRO-CHICAGO LAND DECISIONS





# PRO-CHICAGOLAND DECISIONS

## World Business Chicago's primary key performance indicator reflects relocations, expansions, or new market entrances in Chicagoland.

2023 started off with uncertainty as fears of an economic recession loomed. Mass layoffs, increased interest rates, and high inflation rattled business ecosystems nationally, creating reduced capital availability for growth. However, Chicagoland's advantages, such as its diverse economy and centralized location, continue to make it an ideal location for companies to invest in. On March 1, 2024, the Chicagoland region was named the "Top Metro in the U.S. for Corporate Relocation and Site Selection" for the 11th consecutive year by Site Selection Magazine.

Despite a less than favorable economic climate, Chicagoland closed out 2023 with 163 pro-Chicagoland

decisions, including 117 business expansions and 46 relocations and new market entrants to the region. Of these 163 pro-Chicagoland decisions, the WBC Research Center tracked 65 suburban investments and 19 investments in community areas on the South and West sides of Chicago. These pro-Chicagoland decisions created over 23,100 jobs and over \$1.87 billion earnings for workers in 2023.

Although 2023 pro-Chicagoland decision numbers were a slight decline from 183 pro-Chicago decisions in 2022, Chicago continues to assert its economic appeal. Note that in 2023, our methodology changed so that multiple office or facility expansions were each considered an individual decision.

### Noteworthy Pro-Chicagoland Decisions



#### **Chan Zuckerberg Biohub Chicago**

Started by Meta founder and CEO, Mark Zuckerberg, and his wife Priscilla Chan, The Chan Zuckerberg Biohub Chicago kicked off a new 28,000 square foot, \$275 million, biomedical research hub in Fulton Market, bringing together researchers from the University of Chicago, the University of Illinois Urbana-Champaign, and Northwestern University for the purpose of developing engineering technologies to further biological innovation.



#### **Xchange Grand Crossing**

A nonprofit formed by the Comer Education Campus will be opening a \$20 million tech workforce and training center in Grand Crossing on Chicago's South Side. The project will provide jobs, apprenticeships, and training programs in tech subindustries such as cybersecurity and software engineering. The hub will start with 100 employees in its first year, expecting to grow to 300 employees by year five.



#### **DHL**

An American founded German logistics company providing courier, package delivery and express mail service. Over the summer of 2023, they announced the opening of their first LEED certified building in the U.S., located in the western suburb of Melrose Park, IL. The 352,000 square foot facility is also one of DHL's largest distribution centers.





# MACRO TRENDS



# GROSS REGIONAL PRODUCT

## The Chicagoland region continues to see economic growth, though some industries have yet to recover from COVID-19.

Chicagoland's gross regional product (GRP) grew to an estimated \$847 billion in 2023, maintaining the position as the nation's third largest metro economy. Chicago's professional and business services industry drove much of this growth: output for the industry grew by 5.2 percent to reach over \$120 billion in 2023. Perhaps counterintuitively, Chicagoland's manufacturing sector output reached over \$100 billion in 2023, driven by 5.6 percent growth in non-durable goods and 4.3 percent growth in durable goods manufacturing.

### Reflecting back to the pre-COVID economy, Chicago's economic landscape changed between 2019 and 2023 across different industries. Industries that grew the most include:

- The tech industry grew a remarkable 32.4 percent to a GRP of \$34 billion.
- The professional and business services sector grew 13.2 percent to a GRP of \$120 billion.
- The healthcare and social assistance industry grew 9.02 percent to a GRP of \$51 billion.

### Conversely, GRP in two industries significantly declined:

- The finance and insurance industry, which declined 19.1 percent to a GRP of \$51 billion.
- The construction sector, which declined 15.4 percent to a 2023 GRP of \$14 billion.



# UNEMPLOYMENT

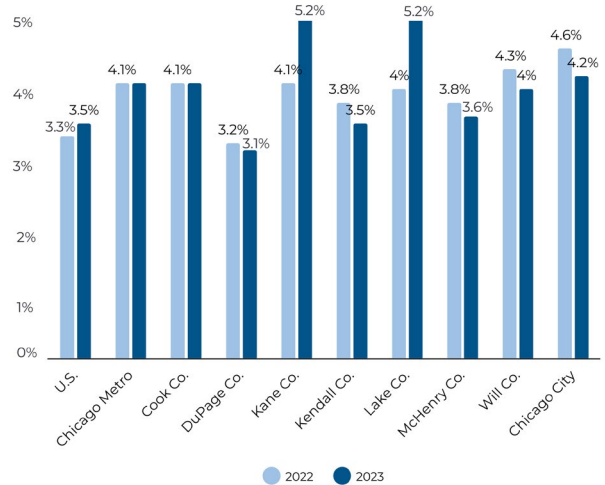
## While the Chicagoland region's unemployment rate remains low, it is higher than most other metro areas across the U.S.

In December 2023, Chicagoland's unemployment rate held steady at 4.1 percent, mirroring the rate observed in the same month of the previous year, December 2022. This consistency contrasts with the broader U.S. trend, where the national unemployment rate dipped slightly to 3.5 percent in December 2023.

Delving into Chicagoland's specific counties, variations emerged. Cook County reported a 4.0 percent unemployment rate, while DuPage County experienced a lower rate at 3.1 percent. Kane County faced a higher rate of 5.2 percent, as did Lake County, whereas Kendall County stood at 3.5 percent, McHenry County at 3.6 percent, and Will County at 4.0 percent. During the same period, the city of Chicago recorded a 4.2 percent unemployment rate.

Although Chicagoland's overall rate of 4.1 percent is low, it was higher than 70 percent of other U.S. metropolitan areas in December 2023, indicating a localized economic context within the broader national landscape.

Unemployment rates for the US and across the region





# EMPLOYMENT

## Differences in total employment reported by LAUS and CES suggest that Chicagoans are holding multiple jobs.

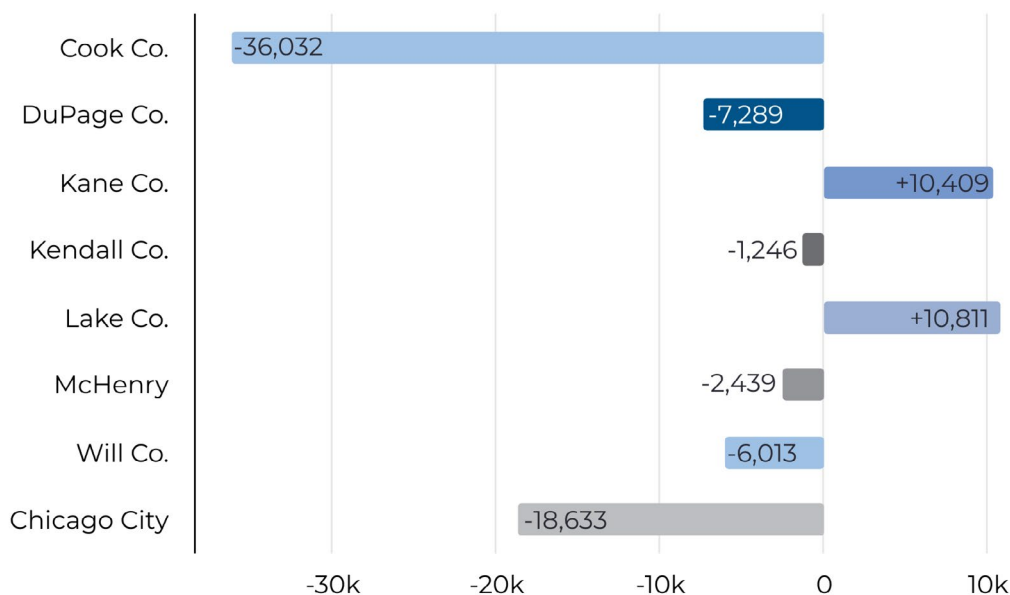
The U.S Bureau of Labor Statistics (BLS) utilizes two main approaches to gathering employment data: the Local Area Unemployment Statistics (LAUS) and the Current Employment Statistics (CES). LAUS offers estimates of unemployment and the labor force through household surveys, emphasizing individuals' places of residence. In contrast, CES centers on business establishments and payroll data, prioritizing the location of work. These distinct methodologies highlight the unique aspects each dataset captures based on their respective survey methods and focus on residence or workplace. In this report and in the WBC Research Center's bi-monthly Economic Dashboard, we utilize LAUS data to share county-level insights with our Greater Chicagoland Economic Partnership (GCEP) partners. With more specific data, economic development practitioners throughout the region can better understand their residents' employment situations.

Chicagoland's employment landscape experienced fluctuations throughout 2023. In December 2023, employment in Chicagoland reached 4,684,294 people, marking a decrease from the 4,710,766 reported at the beginning of the same year. The region's counties and the city of Chicago closed 2023 with the following employment:

- **Cook County:** 2,515,049
- **DuPage County:** 497,537
- **Kane County:** 256,153
- **Kendall County:** 69,057
- **Lake County:** 348,251
- **McHenry County:** 161,905
- **Will County:** 348,597
- **City of Chicago:** 1,300,578

Notably, Kane and Lake counties saw increased employment in 2023, whereas Cook County and the City of Chicago experienced a significant decline.

### Employment change, Dec. 2022 — Dec. 2023 (LAUS)





## Chicagoland's economy was bolstered by healthcare industry hiring in 2023.

From an industry employment perspective, Chicagoland's top industries by employment in 2023 were:

- **Professional & business services**  
(over 860,000 employed)
- **Healthcare & social services**  
(over 620,000 employed)
- **Government** (over 526,000 employed)

In 2023, job postings showed that hospitals and healthcare providers were consistently among the top companies posting new positions. Unsurprisingly, healthcare and social services employment grew in 2023 by nearly 27,000, or 4.5 percent from the year prior. The WBC Research Center intends on reporting on healthcare and life sciences to delve deeper into industry trends in future editions of the CBB.

Compared to the pre-COVID economy, employment levels in some industries in Chicagoland have fully recovered while others continue to struggle. Noteworthy is the transportation and warehousing industry, which grew a remarkable 12.45 percent, resulting in a workforce of 273,323 by the end of 2023. In a close parallel, the healthcare and social assistance sector grew 3.78 percent to 620,642 in 2023. Despite uncertainty in the commercial real estate segment, the real estate and rental and leasing industry recorded a 2.62 percent uptick in employment, reaching a total of 73,908 by the end of 2023. Finally, the professional and business services domain expanded by 2.46 percent, culminating in an employment count of 860,625.

Conversely, the arts and entertainment sector has yet to recover from COVID-19, having declined 7.75 percent to an employment figure of 75,910. Other sectors, including utilities, accommodation and food services, and manufacturing, also witnessed decreases in employment during this period. However, manufacturing remains one of Chicagoland's largest industries by employment and experienced strong growth in output in the same period.

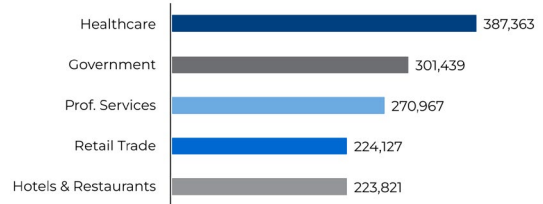


## Top industries by employment throughout GCEP counties remain diverse.

Employment clusters are dispersed throughout the region; understanding top industries by county illustrates where key industries are concentrated.

### Cook County's largest industry by employment is healthcare.

There were 387,363 healthcare and social assistance jobs in Cook County in 2023, followed by 301,439 jobs in government and 270,967 jobs in professional, scientific, and technical services – the city of Chicago's top employer, with management, computer systems design, and legal services being top sub-sectors by employment. Within suburban Cook County, food services and manufacturing are also significant employers, with fabricated metals, food, and machinery manufacturing being top sub-sectors.



### DuPage County's largest industry by employment is healthcare.

There were 79,963 jobs in healthcare and social assistance jobs in DuPage County in 2023, followed by professional and business services (61,846 jobs) and administrative services (58,626 jobs) – top sub-sectors in these industries include computer systems design, building services, management and consulting services, and architecture and engineering services.



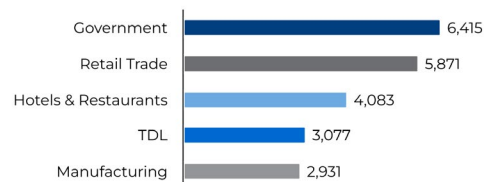
### Kane County's largest industry by employment is manufacturing.

There were 32,077 jobs in manufacturing in Kane County in 2023, followed by 30,086 jobs in government and 24,404 jobs in administrative services. Top manufacturing sub-sectors include plastics and rubber, fabricated metals, and food manufacturing.



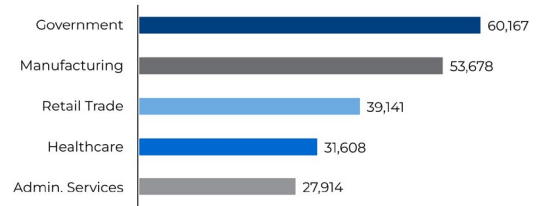
### Kendall County's largest private industry by employment is retail.

Although Kendall County's largest industry by employment in 2023 was government, with 6,415 jobs, retail was the largest private industry with 5,871 jobs. Transportation & warehousing (3,077 jobs) and manufacturing are also significant employers (2,931 jobs), with plastics and rubber, food, and machinery manufacturing being top sub-industries.



**Lake County's largest private industry by employment is manufacturing.**

Although Lake County's largest industry by employment in 2023 was government, with 60,167 jobs, manufacturing was the largest private industry with 53,678 jobs. Top manufacturing sub-sectors include pharmaceuticals, plastics, and medical equipment manufacturing. Retail (39,141 jobs) and healthcare and social assistance (31,608 jobs) follow as top employment industries.



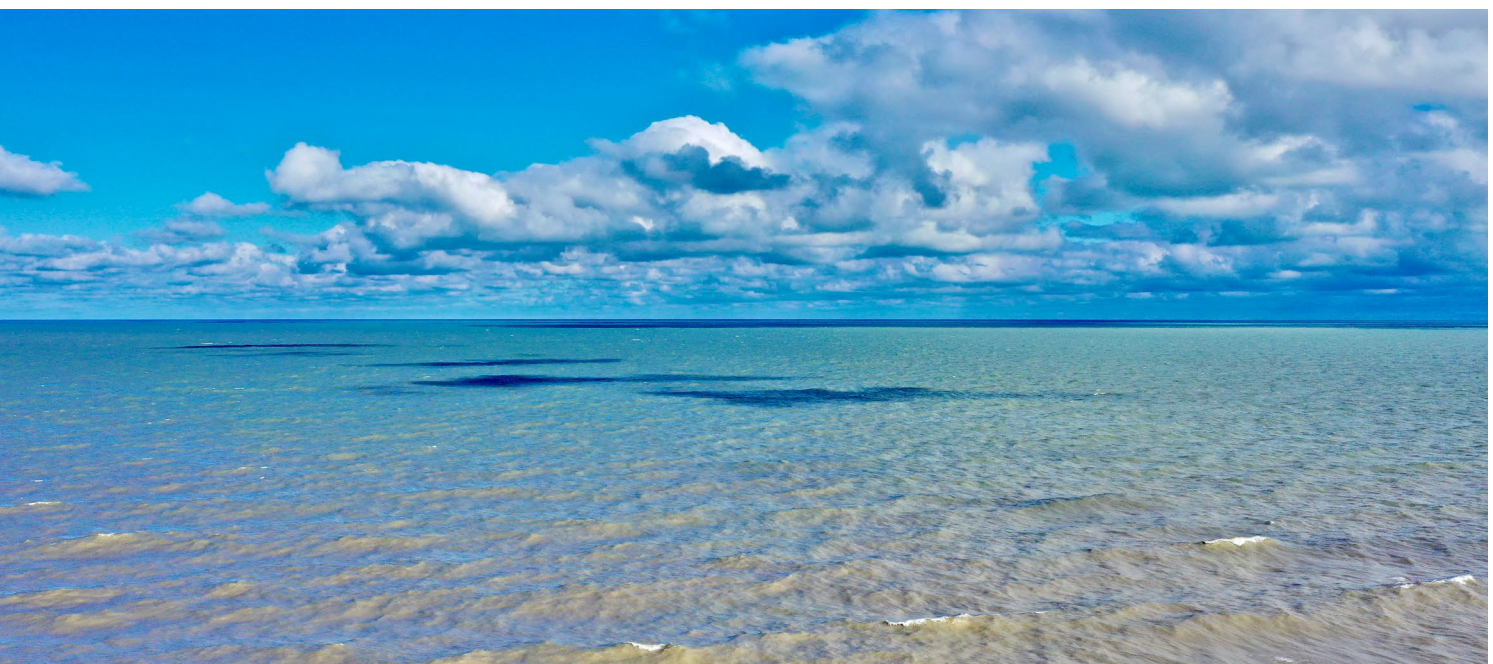
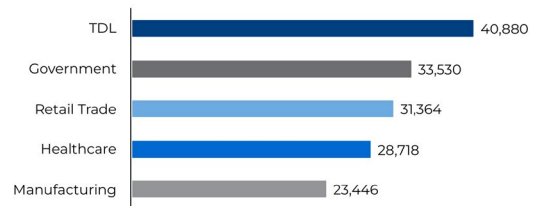
**McHenry County's largest private industries by employment are retail and manufacturing.**

Although McHenry County's largest industry by employment in 2023 was government, with 14,499 jobs, its largest private industries were retail (13,295 jobs) and manufacturing (13,199 jobs). Top manufacturing sub-sectors include plastics, machinery, and fabricated metals manufacturing.



**Will County's largest industry by employment is transportation and warehousing.**

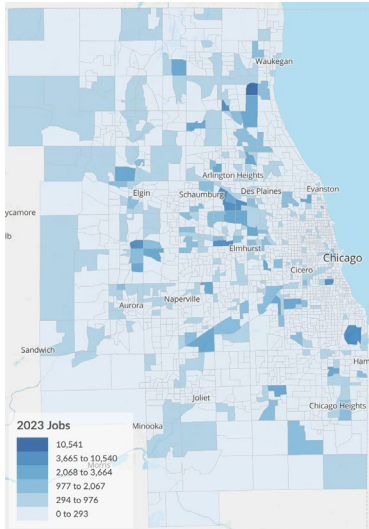
There were 40,880 jobs in transportation and warehousing in Will County in 2023, followed by 33,530 jobs in government and 31,365 jobs in retail. Manufacturing is also a sizable employer, with food, plastics and rubber, and machine manufacturing being top sub-industries.



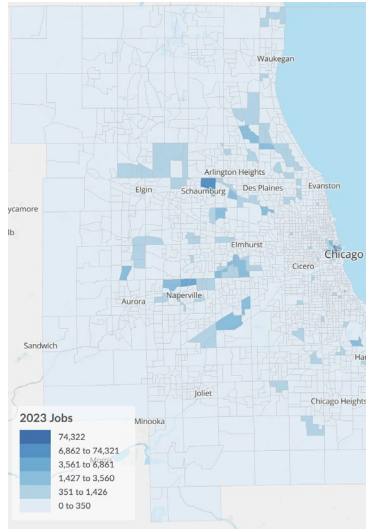


# Employment Throughout the Chicagoland Region:

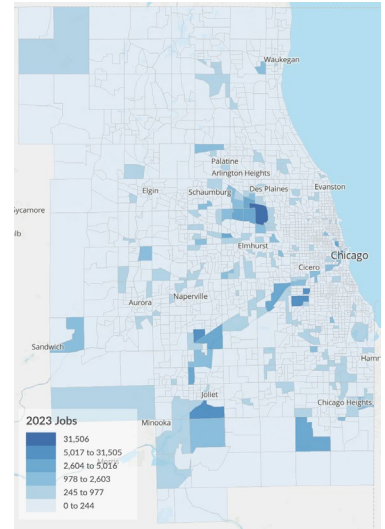
## Manufacturing



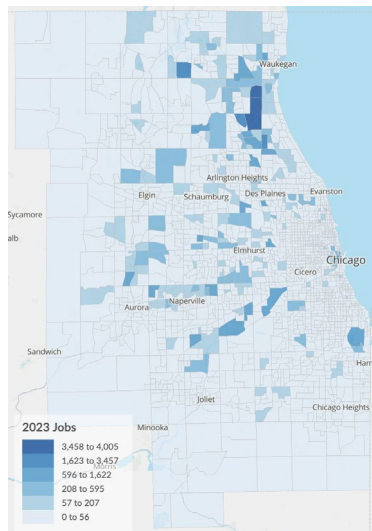
## Professional, Scientific & Technical Services



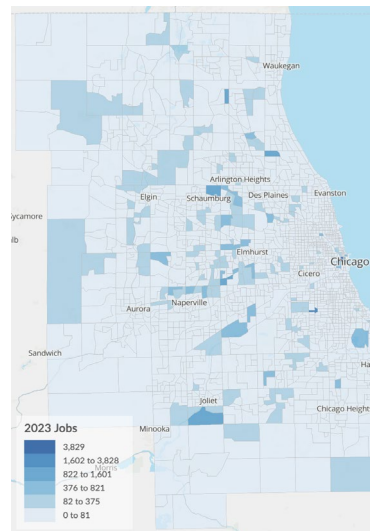
## Transportation & Warehousing



## Life Sciences



## Green Economy



See more about how the WBC Research Center defines the Green Economy in our October 2023 Chicago Business Bulletin, "*Chicagoland's Green Future.*"

An aerial, high-angle view of a dense city skyline, likely New York City, with numerous skyscrapers. The entire image is overlaid with a uniform blue color. The text 'QUALITY OF LIFE' is written vertically in white, bold, sans-serif capital letters on the left side of the image.

**QUALITY OF LIFE**



# QUALITY OF LIFE

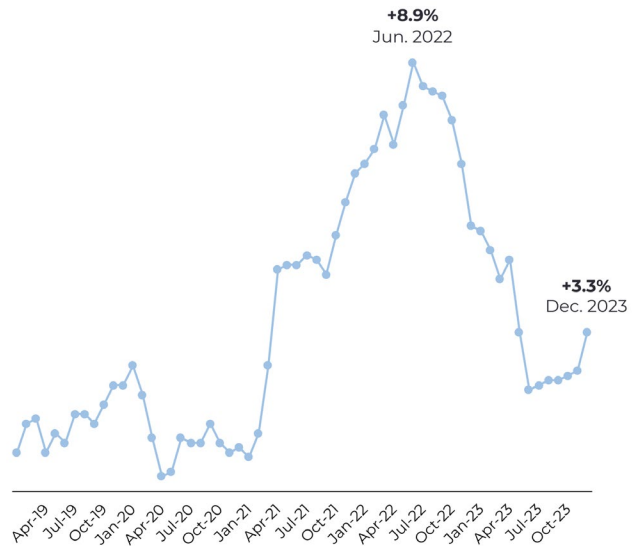
**How Chicagoland’s residents experience the economy through personal purchasing power is perhaps a bellwether for economic and population growth. Chicagoland’s continued affordability and opportunities for prosperity make it an attractive place to live and work, and a growing labor pool is a key advantage over other leading metro areas.**

## **Inflation in Chicagoland continues to ease.**

At the close of 2023, consumer prices were 3.3 percent higher than they were in December 2022. The Consumer Price Index, a measure of inflation, indicates as of December 2023 that Chicagoland's consumer prices are down from a peak of 8.9 percent in July 2022. While 3.3 percent is still above 2.0 %, or the target inflation rate, it's starting to ease.

Chicagoland's inflation is also below metro areas like Atlanta, Houston, and Miami. However, while inflation has been on the decline, prices nationally are still well-elevated from recent memory. Simply put, \$100 in December 2019 would be equivalent to \$119.37 in December 2023 in terms of purchasing power.

**Chicagoland's Consumer Price Index, 2019—2023**  
Percentage change in prices from 12 months ago

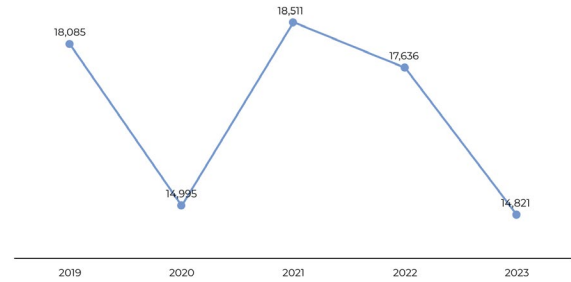


## New housing falls short of other leading metro areas.

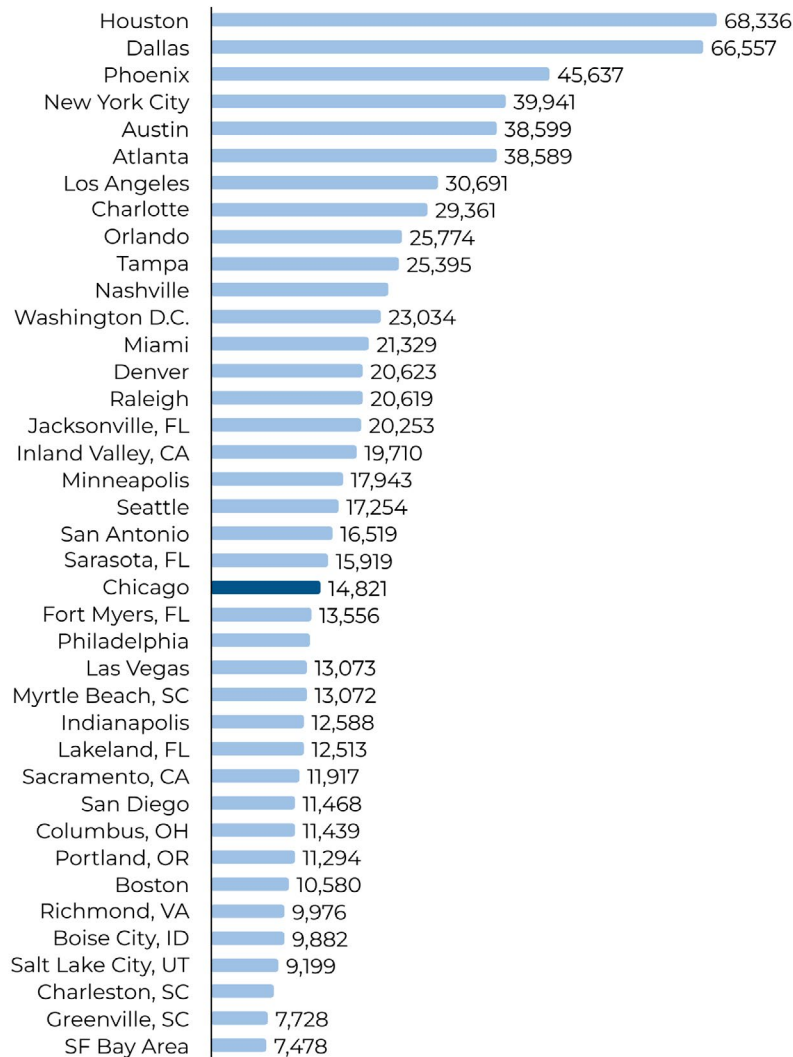
In 2023, 14,821 new residential units were authorized in the Chicago metro area – a decrease from 17,636 in 2022. Within the city of Chicago, there were 1,035 new construction building permit applications in 2023, down 35.6 percent from 2022. Chicagoland’s housing construction is outpaced by metro areas in Texas and Florida – Dallas and Houston, for example, each boast over 65,000 new residential units in 2023.

Why is housing important for the economy? By ensuring an adequate supply of housing, the region can continue to house resident workers at affordable costs – maintaining the economy’s competitive edge and catalyzing economic growth.

Building permits issued in the Chicago metro area



## Residential unit building permit authorization in 2023 in top metro areas







# STARTUP ECOSYSTEM



# STARTUP ECOSYSTEM

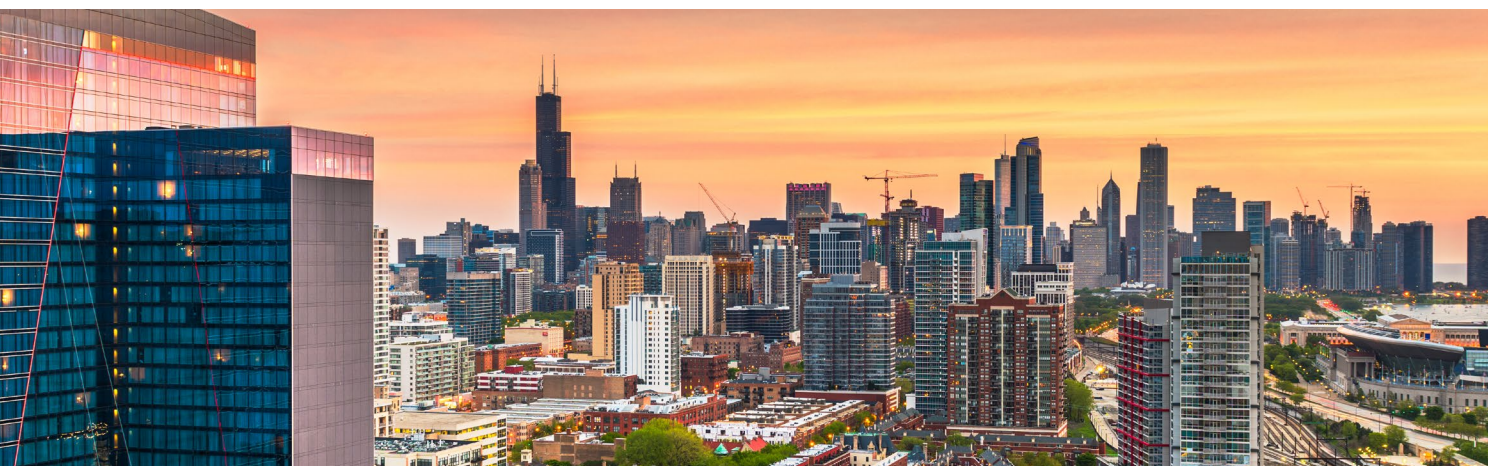
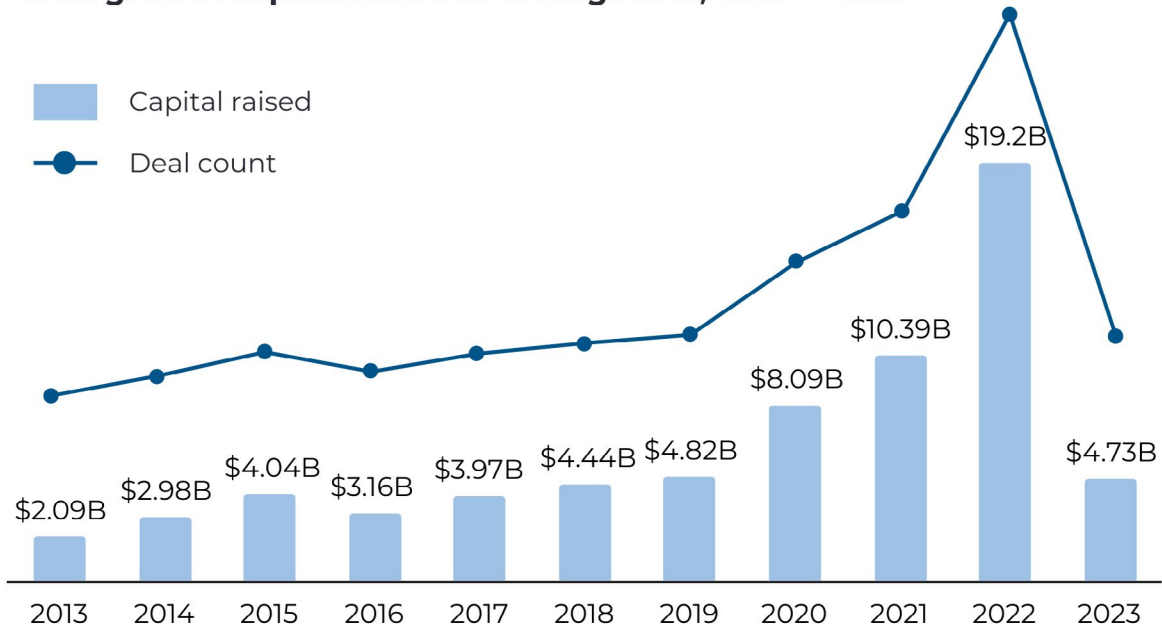
**Chicagoland raised \$4.73 billion in growth capital in 2023: a decrease from 2022, but in line with national trends.**

After an unprecedented amount of growth capital raised by Chicagoland startups in 2021 and 2022, investment slowed in 2023 in line with national and global trends. Rising interest rates and foreign conflicts continue to tighten capital availability and the risk investors are willing to take.

## KEY FACTS FOR 2023

- **\$4.73 billion** total growth capital raised
- **516** companies raised growth capital
- **587** growth capital deals
- **\$24 million** median growth capital deal value
- **788** investors in Chicago startups
- **\$1 billion** largest deal, raised by Invenergy

**Total growth capital raised in Chicagoland, 2013 — 2023**



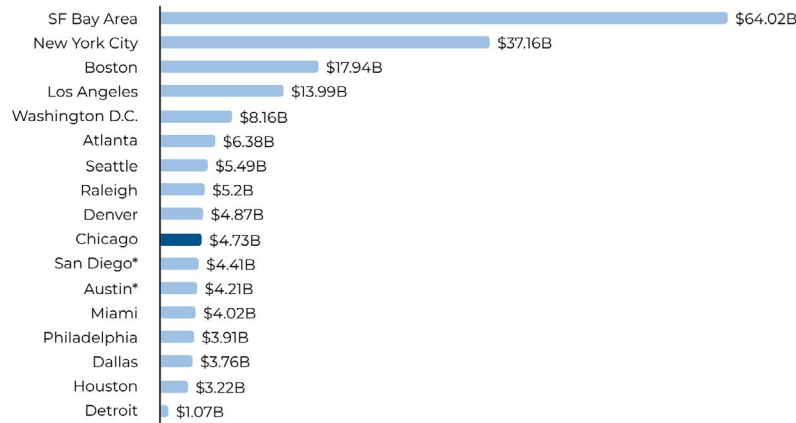


## Chicagoland experienced the smallest decrease in deal count between 2022 and 2023 compared to other leading metro areas.

Compared to leading startup ecosystems in the U.S., Chicago ranked eighth by deal count in 2023 and tenth for growth capital raised. However, the volume of deals remained steadier in Chicago between 2022

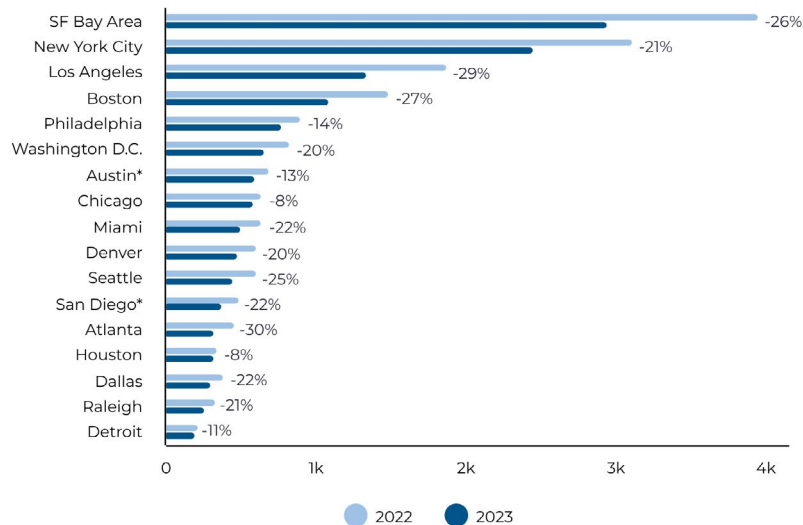
and 2023: there were just 8 percent fewer deals in 2023, the smallest drop among compared metro areas.

### Metro area comparison of growth capital raised in 2023



\* Combined statistical area (CBSA) not available for this geography. Growth capital figure is the sum for all cities in the metro area with more than 20,000 residents.

### Metro area comparison of deal counts, 2022-2023



\* Combined statistical area (CBSA) not available for this geography. Growth capital figure is the sum for all cities in the metro area with more than 20,000 residents.

## Companies in tech, media, telecommunications, industrials, and infrastructure raised the most growth capital in 2023.

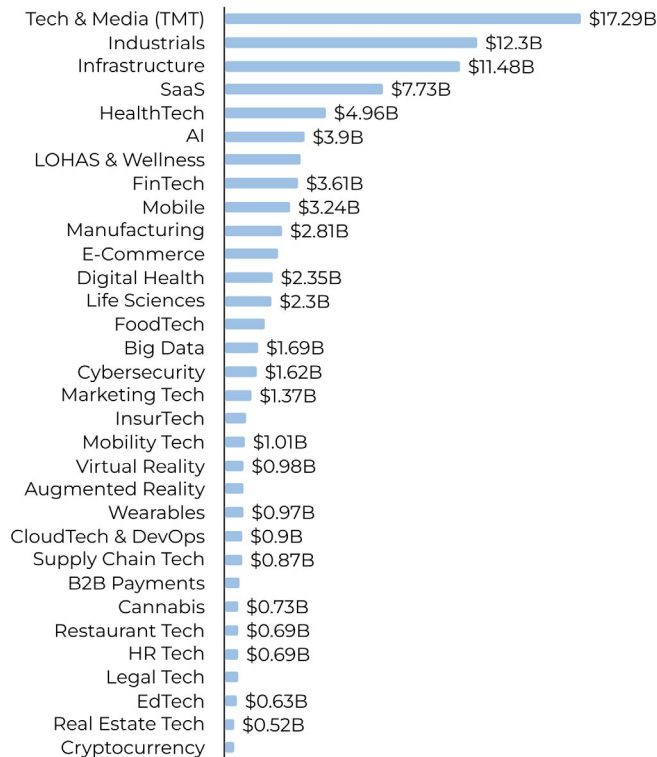
The diversity in Chicagoland’s startup ecosystem is reflective of the region’s overall economic diversity, where no one industry makes up more than 14 percent. Outside of Tech, Media, and Telecomms (TMT) and Software (SaaS), the largest verticals by investment include industrials, healthtech, and fintech which is reflective of the size of their respective legacy industries (manufacturing, healthcare, and finance). Companies in emerging industries like AI

and life sciences are also raising significant capital and represent some of the largest venture capital deals in 2023.

### Top venture capital deals in 2023:

- **Pixis - AI** - \$85M - Series C1
- **CADDi - Industrials** - \$83.05M - Series C
- **Augmedics - HealthTech** - \$82.5M - Series D
- **Evozyne - Life Sciences** - \$81M - Series B

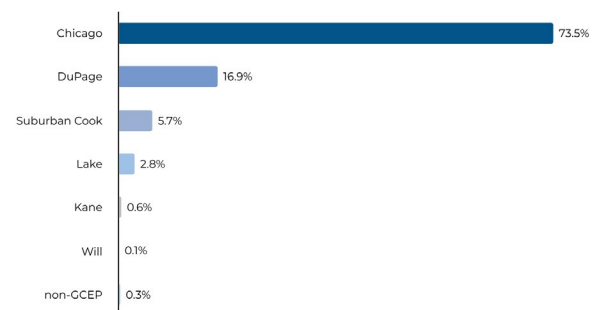
### Top verticals in 2023 by growth capital raised



## Growth capital was raised by companies throughout the Chicagoland area.

Over 26 percent of growth capital raised in 2023 was by companies outside of the city of Chicago – highlighting the regional nature of the region’s startup ecosystem. The second largest deal in the region in 2023 involved Spotless Car Wash Brands, a DuPage County-based company that raised \$600 million in private equity to scale operations.

Percentage of Chicagoland growth capital raised in 2023, by county



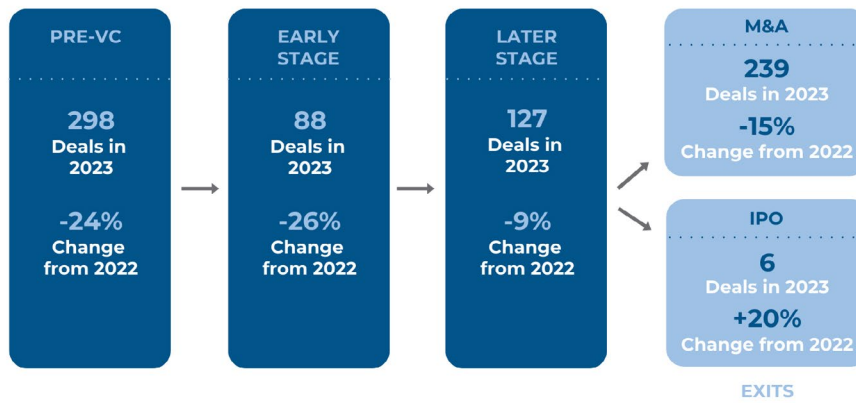


## Fewer startups are raising early stage venture capital (VC), although more mature startups are continuing in the venture capital pipeline.

In 2023, fewer startups in Chicagoland raised pre-venture capital or early stage funding than in 2022: there were 298 pre-VC deals, 24 percent fewer deals than in 2022, and 88 early stage VC deals, 26

percent fewer than in 2022. The decrease was not as pronounced for companies further along the venture capital pipeline: there were 127 later stage VC deals, 9 percent fewer than in 2022.

### Chicagoland venture capital deal count by stage



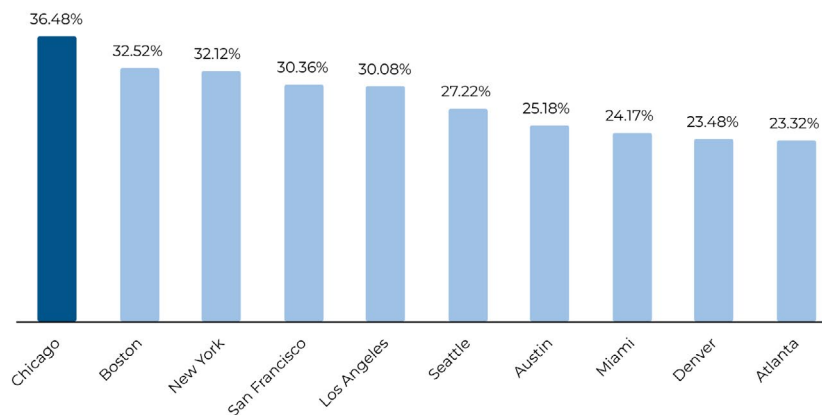
## Chicago proves to be the best place for women-founded startups.

According to the Chicago:Blend Startup Diversity Report co-authored by The WBC Research Center, Chicago is home to 36.5 percent of the 307 new venture-backed companies founded between 2018 and 2023. For comparison, 239 (32.5 percent) of Boston's 735 new venture-backed startups had at least

one woman founder, and New York follows closely behind with 654 (32.1 percent.)

To read more about gender and racial diversity within the start-up ecosystem, please see the full report at [chicagoblend.org](http://chicagoblend.org).

### Share of venture-backed companies founded by women: 2018 - 2023



\* Combined statistical area (CBSA) not available for this geography. Growth capital figure is the sum for all cities in the metro area with more than 20,000 residents.



# TRADE & FOREIGN DIRECT INVESTMENT





# TRADE & FOREIGN DIRECT INVESTMENT

## Continuing its reign as one of the top ports by value in the nation, O'Hare International Airport trailed only Port Laredo and Port of Los Angeles in 2023.

Trade through O'Hare reached \$271 billion in 2023, a slight decline from the \$282 billion it reached in 2022, and accounted for 5.3 percent of the nation's overall trade. Outside Port Laredo, whose total trade

value surged in 2023 given increased nearshoring and national trade with Mexico, O'Hare saw the smallest decrease in trade value among the top five ports by value between 2022 and 2023.

### 2023 Top Trade Ports by Value

Port	Value	Change from 2022
Port Laredo	\$320B	+7.4%
Port of Los Angeles	\$292B	-6.1%
<b>Chicago O'Hare International Airport</b>	<b>\$271B</b>	<b>-3.9%</b>
John F. Kennedy International Airport	\$244B	-4.7%
Port of Houston	\$226B	-5.8%

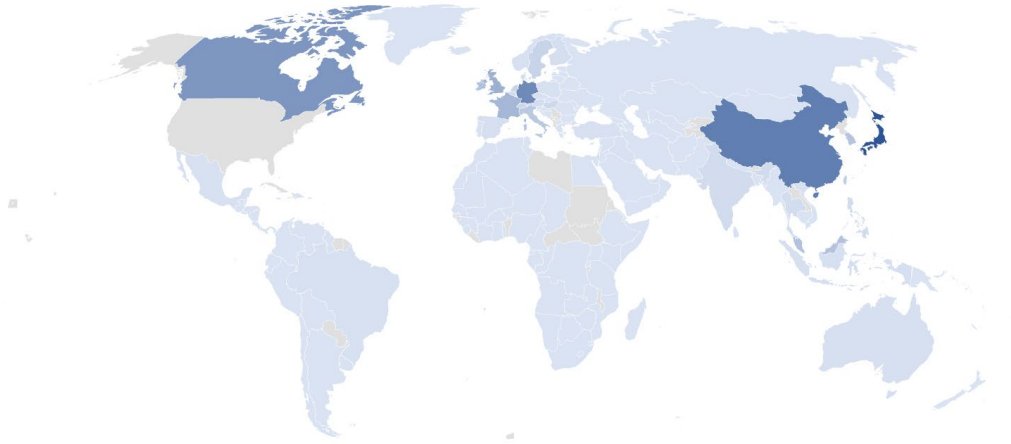
## Japan, China, and Germany are Chicago's top trade partners, while Mexico is the nation's top trade partner.

While Mexico has overtaken China to become the United States' foremost trading partner, Mexico does not rank among Chicago's top trading partners. This presents an opportunity for the Chicagoland region

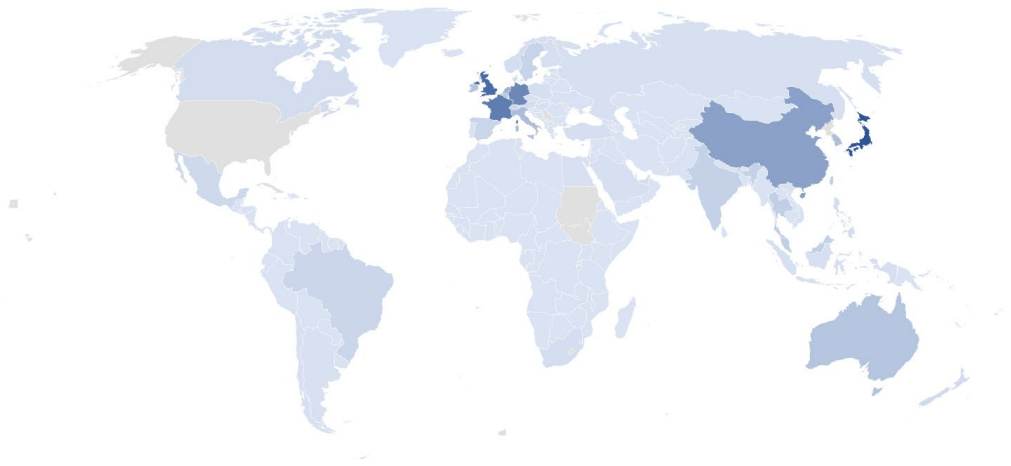
to foster and enhance its existing partnerships with Mexico. The table below reflects top national trade partners for goods moving through O'Hare.

Trade Partner	2023 Import Value	2023 Export Value
Japan	\$7,856,045,201	\$2,898,146,579
China	\$5,555,683,528	\$1,339,741,189
Germany	\$4,924,472,712	\$1,852,701,750
United Kingdom	\$2,785,711,084	\$2,446,334,393
France	\$2,394,562,030	\$2,066,560,264
Canada	\$4,243,125,606	\$118,741,328

### 2023 Trade Partners - Annual Import Total



### 2023 Trade Partners - Annual Export Total

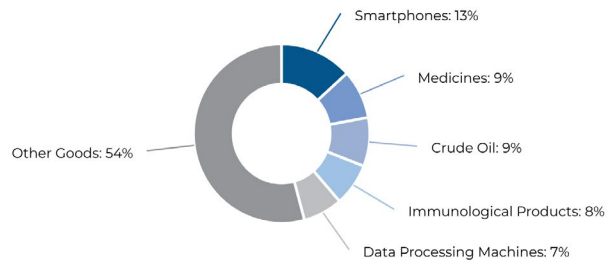




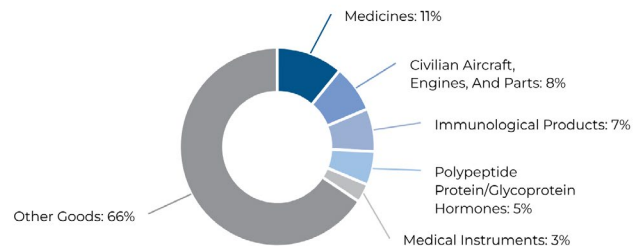
## Top traded items include medical products and electronics.

Top imports through O'Hare in 2023 consisted of smartphones, medicines, crude oil, immunological products, and smaller portable digital data processing machines, which made up 46 percent of total imports by value. Top exports consisted of medicines and immunological products as well as civilian aircraft parts, polypeptide protein/glycoprotein hormones and medical instruments. These top exports accounted for 36 percent of the total exports by value.

**Top Imports by Value in 2023**



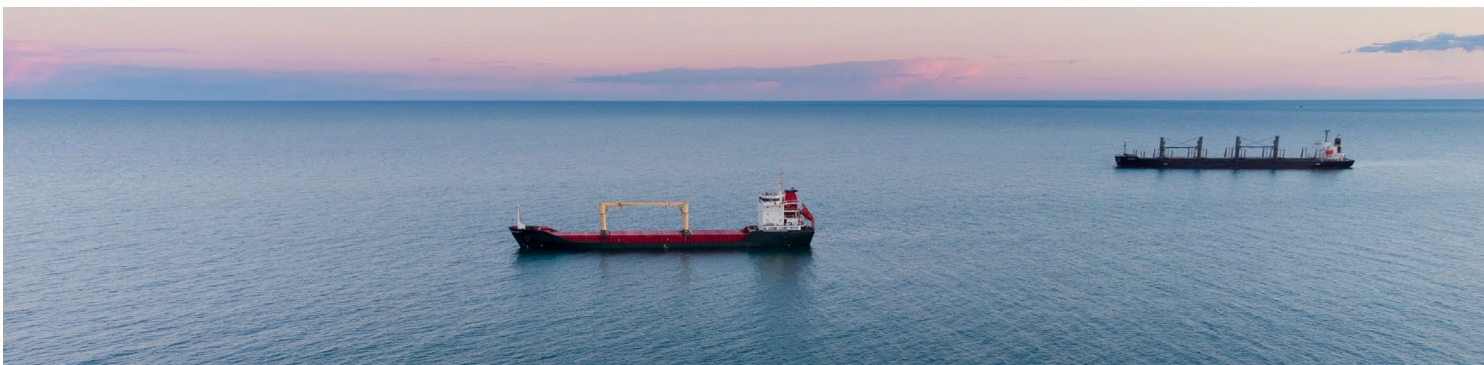
**Top Exports by Value in 2023**



## The Chicagoland region continues to be a destination for foreign direct investment.

In 2023, 150 foreign investors made direct investments in businesses within Chicagoland. Of those, 60 foreign based companies also have locations in Chicago. While foreign direct investments in Chicagoland were, on average, smaller than investments into the startup ecosystem, the largest deal in 2023 reflected an investment of \$8.1 million in Univar Solutions, headquartered in Downers Grove in DuPage County. Univar Solutions specializes in commodity, specialty chemicals, and ingredients distribution to global customers across a wide range of diverse industries. Note that while World Business Chicago does not

work directly on developing trade relationships, they are an important aspect of the economy that the WBC Research Center tracks. As the WBC Research Center publishes the Chicago Business Bulletin throughout 2024, we plan to release an issue focused on trade, foreign direct investment, and Chicagoland's global identity.



An aerial photograph of the Chicago skyline and Lake Michigan, overlaid with a semi-transparent blue filter. The skyline is visible in the background, with various skyscrapers. In the foreground, there's a large body of water (Lake Michigan) and some greenery. The text 'COMPANY SPOTLIGHTS' is written vertically on the left side of the image.

# COMPANY SPOTLIGHTS

The Chicago region consistently secures site selection awards year after year due to a combination of strategic advantages that make it an ideal location for businesses. From its central geographic location in the United States, robust transportation infrastructure, including major airports and extensive rail networks, and access to the Great Lakes, position it as a logistical hub, facilitating efficient supply chain management. Chicago's diverse and highly skilled workforce, coupled with world-class educational institutions, ensures a talent pool that meets the demands of various industries. Additionally, the region's cultural vibrancy, diverse communities, and quality of life factors play a role in attracting and retaining top talent. The region's commitment to sustainability, coupled with ongoing urban revitalization projects, further enhances its appeal.

Collectively, the following companies underscore Chicagoland's multifaceted economic landscape and reflect innovation and technological advancement across diverse industries.



# INNOVAFEED

**Created by Aude Guo, Bastien Oggeri, and Clément Ray, Innovafeed is a biotech company and leading insect producer for animal and plant nutrition. Through the combination of three pioneering expertises for high-quality, sustainable and high-performance products, Innovafeed contributes to the construction of tomorrow's sustainable food system. To do so, they developed a unique and pioneering technology to rear and transform the *Hermetia illucens* fly for animal and plant nutrition, thus offering alternatives to the fishmeal and vegetable oils used in fish and animal feed.**

Research & Development is at the heart of Innovafeed's model, with more than €10M invested over the last four years and more than a hundred tests conducted in research stations or in real conditions to push back the frontiers of scientific knowledge of the insect and guarantee a unique and competitive nutritional quality of the product. Innovafeed's unique technology makes it possible to reproduce the natural cycle of the insect on a large scale under controlled

and optimized conditions. Additionally, as a by-product of industrial symbiosis, Innovafeed is able to valorize local agricultural by-products to aid in efforts for developing sustainable and high-quality products. Innovafeed has made it a competitive argument, enabling them to offer premium and sustainable ingredients for all.

For more information, visit [innovafeed.com](https://innovafeed.com)



# CADDi

**CADDi is revitalizing American manufacturing by unlocking the potential of historical drawings and supply chain data. CADDi Drawer, empowers customers to break the cycle of reinventing the wheel, transforming individual tribal knowledge into valuable company assets. Equipping their clients with Drawer, CADDi is paving the way for a more efficient and innovative manufacturing future. Placed in the “center of all customers,” CEO Yushiro Kato states that in addition to Chicago being a manufacturing powerhouse with an abundance of untapped talent, its collaborative and resourceful environment is a perfect central location for CADDi, a SaaS provider in the manufacturing space to expand its operations.**

CADDi exhibits three key components in its innovation process; rapid technology adoption, achieving substantial cost reduction, and enhancing worker productivity. By adopting new technology, innovators are able to proactively set trends that others typically follow within two to three years. With the introduction of new solutions comes the opportunity for rapid cost reduction. CADDi’s software is designed to integrate effortlessly into existing workflow, ensuring significant cost reduction in a way that minimizes disruption and maximizes benefit. At the heart of CADDi’s innovative efforts is the aim to improve productivity per worker.

The company’s AI-enabled Drawings Search Software enhances the capability of each employee, allowing them to work smarter and leverage data to make informed decisions.

Over the next five years, CADDi reports to place an emphasis on vertical AI solutions, transitioning to machine-readable drawings, integrating robotics into manufacturing, and focusing on product differentiation.

For more information, visit [drawer.caddi.com](https://drawer.caddi.com)



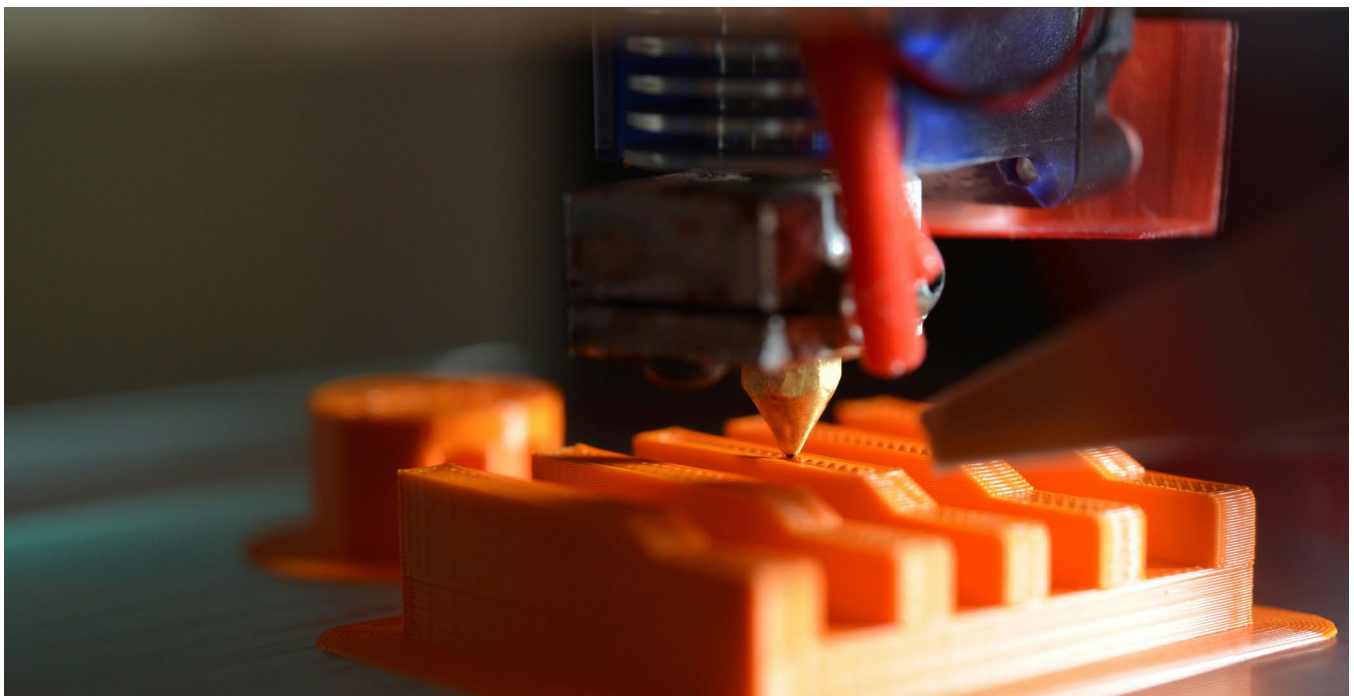


# MASSPERSONA

**2023 pro-Chicagoland decision; MassPersona specializes in fast, easy, and custom manufacturing at scale through 3D printing. This relatively new technology, also known as additive manufacturing offers a host of advantages and is expected to change the way many companies do business. MassPersona focuses on two main services: design and nylon based 3D manufacturing for plastic products and rapid prototyping. These services are expected to have a significant impact on multiple industries;**

- 1. Medical** - The implications of 3D printing in healthcare are vast, ranging from dentists using it to create precise models of patients' dental arches, surgeons printing models to help explain surgical procedures to patients, to the use of creating customized prosthetic devices. Potential applications for 3D printing within the medical field will continue to grow as the technology advances.
- 2. Gaming** - Though this industry is inherently digital, to interact with any game, you must have a physical devices and accessories. It's through this angle that MassPersona dominates. Since no two items have to be exactly the same, we are the only manufacturer that can produce tens of thousands of custom key boards to headphone covers every night, fulfilling each and every gamers individuality.
- 3. Replicas and Collectibles** - From action figures, a unicorn to the exact replica of a car you owned at 16. MassPersona has the ability to produce and deliver any format of character or object at scale, regardless of how unique or lifelike the item is. With near endless possibilities, MassPersona is the only brand that can deliver near injection mold quality items in full color of custom replicas and collectibles for any brand that sells direct to consumer.

To find out more, visit [masspersona.com](https://masspersona.com)



# LEGACY, SYNERGY, INNOVATION: CHICAGO'S TRADING INDUSTRY

**Chicago is home to many established and global trading firms. The city has a long history as the center of the derivatives universe, and is home to the CME and CBOE. Chicago's leading proprietary trading firms work to make markets function more efficiently and transparently. With innovation as a constant focus for the industry, trading firms are at the forefront of technological advancement in the financial sector.**

They utilize advanced algorithms, data science, and build proprietary software, which not only drives their business but also contributes to the technological framework of the region. Additionally, the industry also has a long history of funding specialist firms to pursue innovation in fields such as wireless communications, FPGAs and advanced networking devices. With Chicagoland as home base, the region's central location is strategically advantageous for trading as it allows firms like Optiver, CTC, DRW, IMC, and Wolverine, to name a few, to operate more effectively across multiple time zones, engaging in both domestic and international markets. Furthermore, Chicago boasts a highly developed technological infrastructure, which is essential to trading firms. The presence of state-of-the-art data centers and telecommunications facilities supports the high-speed infrastructure necessary for trading. The robust financial ecosystem of Chicago, comprised of clearing firms, brokerages, asset managers, exchanges, and market making firms allows for a vibrant and diverse landscape, which allows participants to efficiently manage risk and express market opinions. But it is Chicago's role as the derivatives capital which draws in top trading firms. These firms provide a range of employment opportunities for the Chicagoland area, not only in trading but also in technology, operations, risk management, and support roles.

In 2023, the derivatives industry employed 58,800 people in Illinois, expanding 19 percent over the past decade. Trading firms draw in a highly-educated, talented workforce, including engineers, technologists, traders and other professionals. This influx of talent enriches the region's talent pool, potentially leading to broader economic and technological benefits for Chicagoland.

The future of trading, and thus the financial ecosystem of Chicago, are set to evolve greatly in the next five years. According to Optiver, the capital markets are likely to experience a rise in overall liquidity and the introduction of new financially tradable products. The integration of advanced technologies, particularly artificial intelligence and machine learning, will continue to evolve the trading landscape. The regulatory landscape for electronic trading is expected to evolve, with new regulations potentially being introduced to address the complexities introduced by advanced technologies and changing market dynamics. As trading relies heavily on technology, cybersecurity will remain a critical concern. Trading firms will likely invest more in securing their platforms and data against cyber threats, ensuring the integrity and reliability of their trading systems.

To learn more about Chicago's exchanges, visit: [cme.com](http://cme.com), [cboe.com](http://cboe.com). To discover Chicago's top trading firms, visit: [optiver.com](http://optiver.com), [imc.com](http://imc.com), [chicagotrading.com](http://chicagotrading.com), [drw.com](http://drw.com), [wolve.com](http://wolve.com)





# SOURCES

- CADDi
- Innovafeed
- Lightcast™
- MassPersona
- Moody's Analytics
- Optiver
- PitchBook Data, Inc., pitchbook.com 2023. Source: PitchBook, accessed Jan. 15, 2024; \*Data has not been reviewed by PitchBook analysts.
- U.S. Bureau of Labor Statistics, Consumer Price Index
- U.S. Bureau of Labor Statistics, Current Employment Statistics
- U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics
- U.S. Census Bureau, U.S. Census Bureau Building Permits Survey
- U.S. Census Bureau, USA Trade Online

# 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 Chicagoland as a leading global region. Our vision is to ensure that all Chicagoans prosper.

## The WBC Research Center Team



**Robin Ficke**

Senior Vice President, Research  
rficke@worldbusinesschicago.com



**Hannah Loftus**

Director, Research  
hloftus@worldbusinesschicago.com



**Wendy Wu**

Director, Research  
wwu@worldbusinesschicago.com



**Himashi Jayasundera**

Research Analyst  
hjayasundera@worldbusinesschicago.com



**Justine Ingram**

Research Coordinator  
jingham@worldbusinesschicago.com



Stay ahead of economic trends and business developments in Chicagoland by following World Business Chicago on LinkedIn. Sign up for our weekly Business Pulse newsletter and visit us regularly here for our monthly economic dashboard, future editions of the Chicago Business Bulletin, and to stay informed about companies making pro-Chicagoland decisions.



# CHICAGOLAND RANKED TOP U.S. METRO FOR 11<sup>TH</sup> CONSECUTIVE YEAR\*



UNPRECEDENTED COLLABORATION IS RESHAPING THE GREATER CHICAGOLAND REGION, WITH THE CITY OF CHICAGO AND ITS SEVEN SURROUNDING COUNTIES (COOK, DUPAGE, KANE, KENDALL, LAKE, MCHENRY, AND WILL) FORMING THE GREATER CHICAGOLAND ECONOMIC PARTNERSHIP.

TOGETHER, WE ARE DRIVING SIGNIFICANT CORPORATE RELOCATIONS, SECURING SUBSTANTIAL FEDERAL INVESTMENTS, AND IGNITING AN ERA OF UNPARALLELED INNOVATION.

Stay informed with daily news, announcements, and data-backed original content by following World Business Chicago on LinkedIn.



\* Site Selection Magazine

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---









WORLD  
BUSINESS  
CHICAGO

THE  
RESEARCH  
CENTER