



**Great Cities
Institute**

Elevating Manufacturing in Chicago

Manufacturing Summit

North Branch Works

March 24, 2022

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Great Cities Institute

<https://greatcities.uic.edu>

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Industrial Growth in Chicago

- “Hog butcher for the world”
- “Tool maker, stacker of wheat,” “nation’s freight handler”
- Large # of industrial jobs attracted more people to Chicago
- Chicago becomes one of the most important industrial cities in the world
- “City of Broad Shoulders”



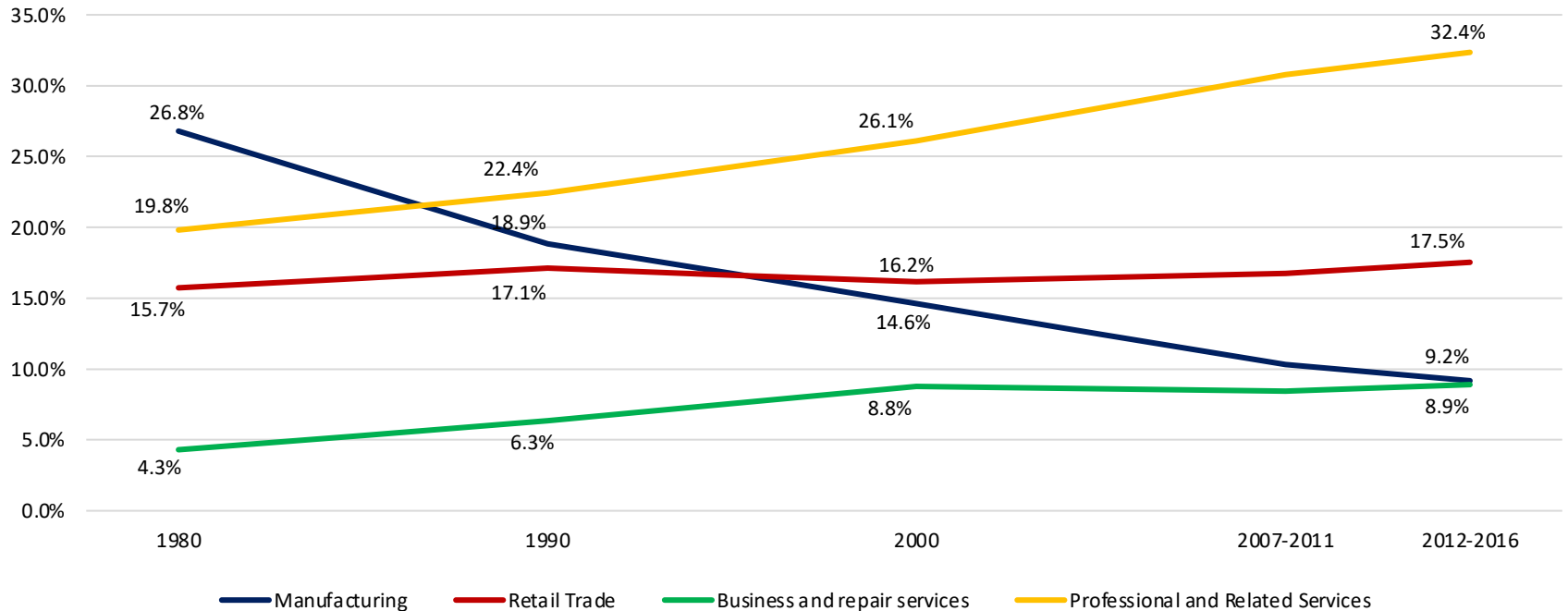
Manufacturing

At its height in 1950, 668,000 manufacturing jobs in
Chicago

In 1980, the number dropped to 277,000
Metro area, however, had 468,000 (up from 185,000)

Employment by Industry in Chicago, 1980 to 2012-2016

The proportion of Chicago's population in manufacturing has decreased by 66%



Abandoned in their Neighborhoods: Youth Joblessness Amidst the Flight of Jobs and Opportunity. Great Cities Institute 2017
Data source: 1980, 1990, and 2000 Decennial Censuses, 2007-2011 and 2012-2016 American Community Survey, Public use files.

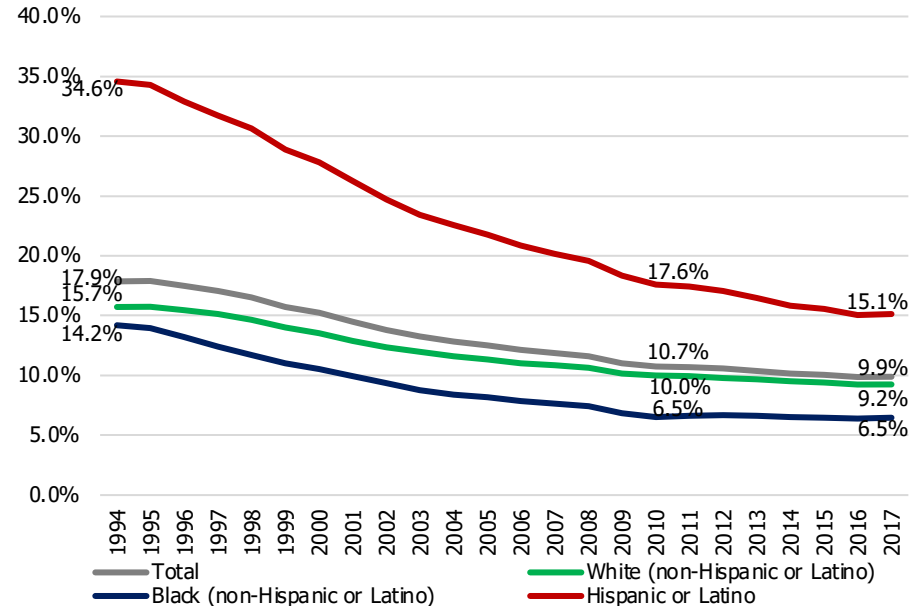
The Racial/Ethnic Makeup of the Manufacturing Industry

The proportion of racial/ethnic group's labor force working in manufacturing shows:

- From 1994 to 2010, Blacks and Latinos experienced relatively larger declines in manufacturing work as the proportion of black workers in manufacturing decreased by 54.2 percent, for Latinos by 49.1 percent, and Whites by 36.3 percent.
- From 2010 and 2017, the sector has is showing much slower decline than previous decades.

With slowing decline in the proportions of Blacks and Latinos in manufacturing, a stable and inclusive manufacturing sector is not far out of reach.

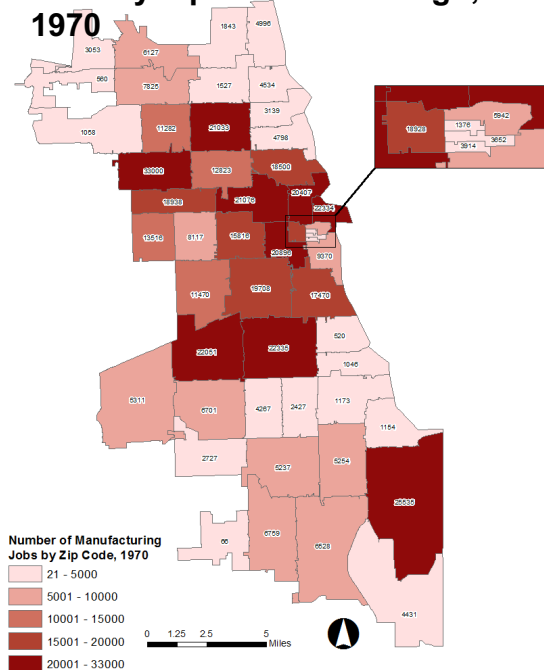
Figure 9: Manufacturing Employment as a Share of Total Private Sector Employment by Race/Ethnicity in the Chicago Region, 1994-2017



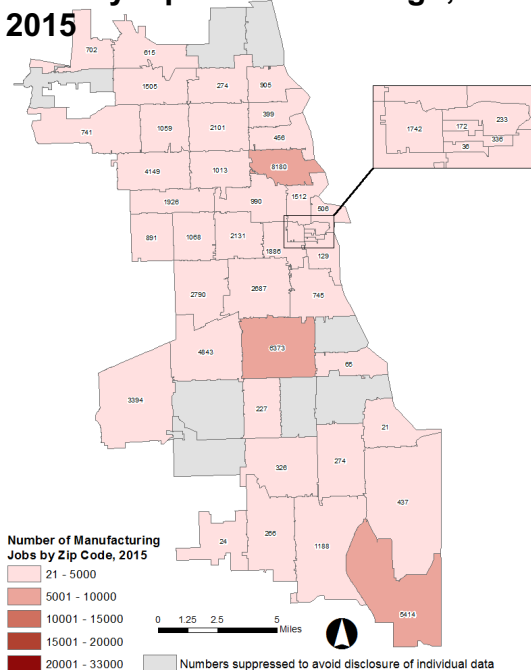
Abandoned in their Neighborhoods: Youth Joblessness Amidst the Flight of Jobs and Opportunity." Great Cities Institute 2017
Data Source: Quarterly Workforce Indicators (QWI), U.S. Census Bureau.

Location of Manufacturing Jobs 1970 to 2015

Map 3: Number of Manufacturing Jobs by Zip Code in Chicago, 1970



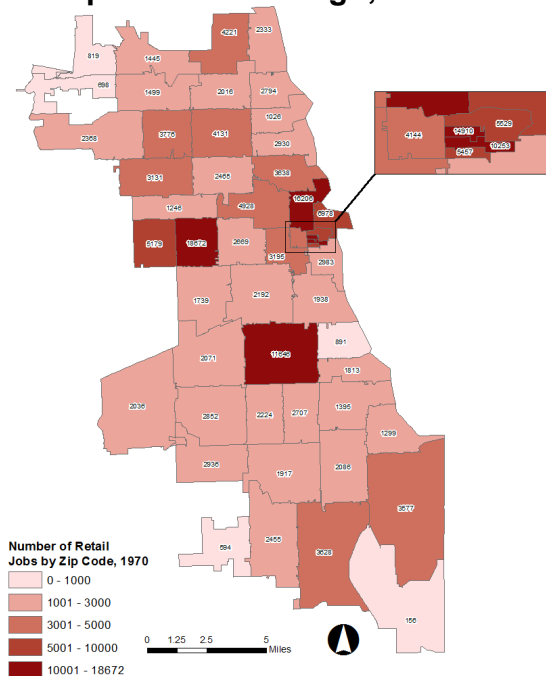
Map 4: Number of Manufacturing Jobs by Zip Code in Chicago, 2015



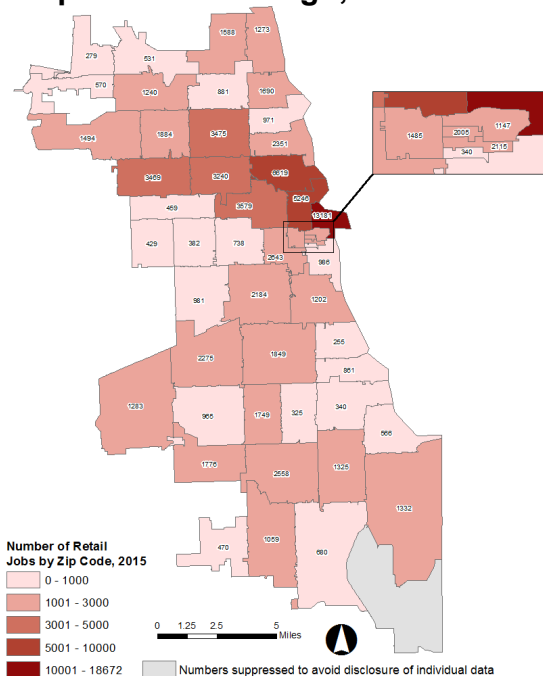
Data Source: 1970 and 2015 Where Workers Work. Illinois Department of Employment Security.
 Maps Prepared by Great Cities Institute, University of Illinois at Chicago.

Location of Retail Jobs 1970 and 2015

Map 5: Number of Retail Jobs by Zip Code in Chicago, 1970

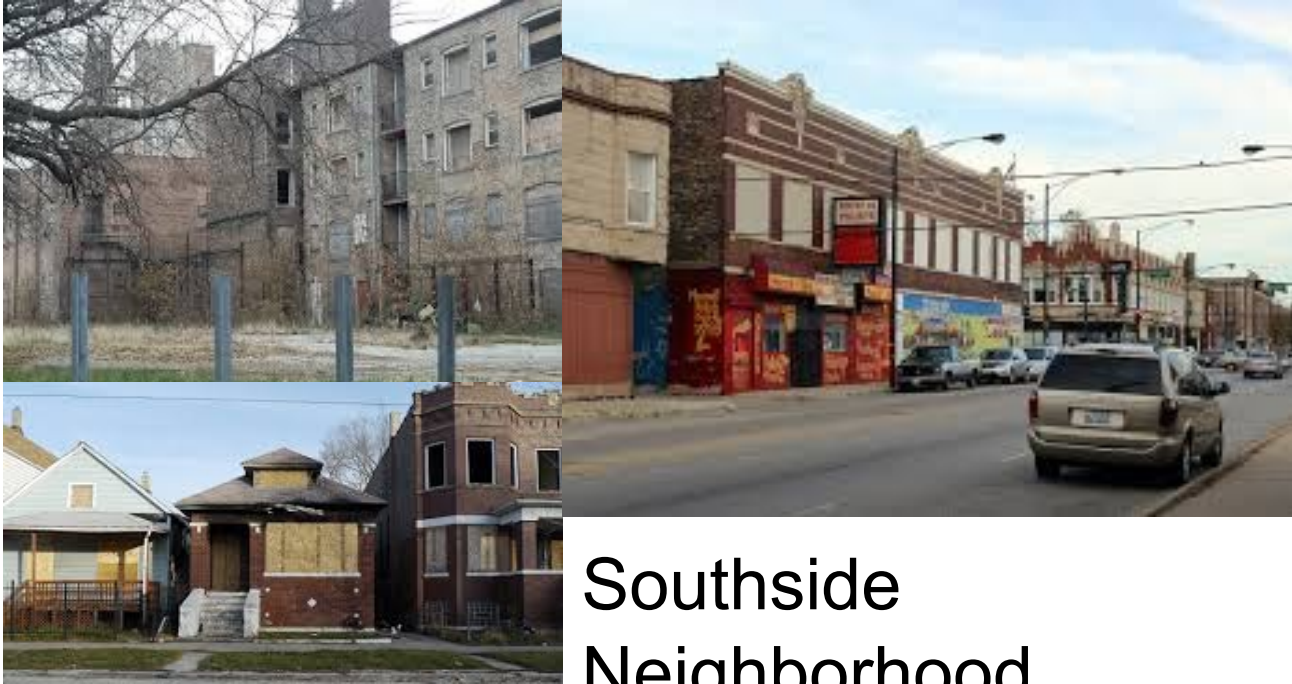


Map 6: Number of Retail Jobs by Zip Code in Chicago, 2015



Data Source: 1970 and 2015 Where Workers Work. Illinois Department of Employment Security.
 Maps Prepared by Great Cities Institute, University of Illinois at Chicago.

Impact on Neighborhoods of Job Loss



Southside
Neighborhood

Youth Joblessness



Abandoned in their Neighborhoods: Youth Joblessness amidst the Flight of Industry and Opportunity

Produced for: Alternative Schools Network

January 2017

Great Cities Institute
University of Illinois at Chicago

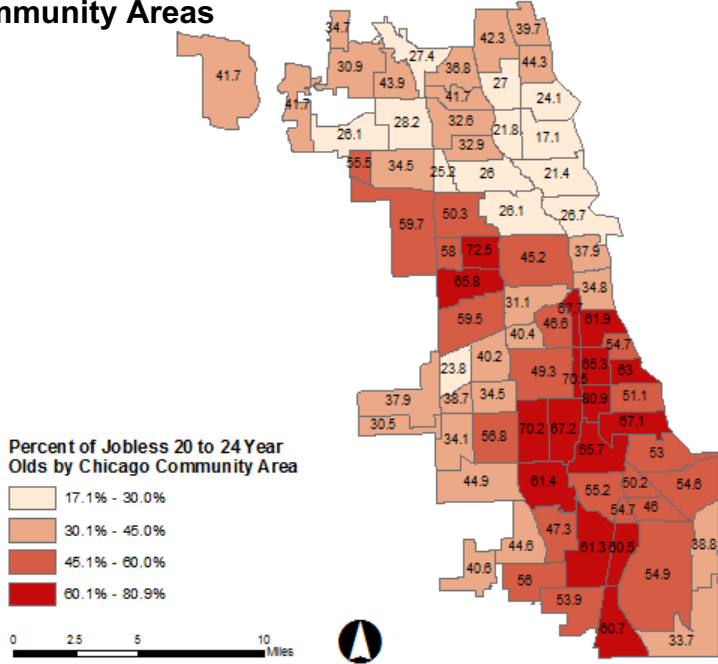
- 20 to 24 year olds were worse off in Chicago in 2015 than in 1960. (In Illinois and the U.S., this trend is reversed, where they were better off in 2015 than 1960).
- The Great Recession severely impacted every racial/ethnic group of 16 to 19 year olds in Chicago, Illinois and the U.S. but had the largest impacts in Chicago. Even after a period of recovery from 2010 to 2015, no group of 16 to 19 year olds in Chicago, Illinois and the U.S. had employment to population ratios at pre-recession levels.
- Latinos in Chicago were the only racial/ethnic group of 16 to 19 year olds that did not show any recovery after the recession but continued to decline after 2010.
- Data on Impact of COVID not yet available

Our reports dramatically revealed a downward and long-term trend of economic abandonment in many of Chicago's neighborhoods, leaving behind *chronic and concentrated* conditions of joblessness that have affected generations of young people, their households and their communities.

<https://greatcities.uic.edu/news/youth-employment-research-news/>

Joblessness Continues to be Concentrated and Directly related to Racial Segregation

Map 11: Jobless Rate for 20 to 24 Year Olds by Chicago Community Areas



Data Source: 2011-2015 American Community Survey 5-Year Estimates, U.S. Census Bureau.
Map Prepared by Great Cities Institute, University of Illinois at Chicago.

Thus,

- In a region where manufacturing was once the largest sector in the economy, economic restructuring that began in the late 1970s resulted in deindustrialization that left behind massive numbers of jobless residents and disinvested neighborhoods that continue to display the legacy of decline.
- Populations that once had a high concentration of their workforce in manufacturing have found themselves in a changing economy where most occupations are becoming increasingly technical and require high levels of education or training.

Manufacturing Is Not Dead

- Not only is manufacturing not dead in Chicago, but it is vital to a vibrant, stable economy
- There is already evidence of growth of the sector in Chicago
- Everyone here is committed to ensuring that we do not experience further deterioration of such a vital sector while simultaneously build on the many opportunities of new technologies in what is called, Advanced Manufacturing
- There are opportunities

Elevating Manufacturing: Marketing Manufacturing's Multiplier

- Durable manufacturing creates 7.44 indirect jobs for every direct job
- Manufacturing contributed to 11.1% of the U.S.'s GDP in 2021



Employment multipliers per 100 direct jobs, by major private-sector industry group

Major industry group	Direct jobs	Supplier jobs*	Induced jobs**	Total indirect jobs
<i>Agriculture, forest, fishing, and hunting</i>	100	93.6	134.8	228.5
<i>Mining</i>	100	224.0	166.0	390.0
<i>Utilities</i>	100	515.4	442.2	957.7
<i>Construction</i>	100	88.0	138.1	226.1
<i>Durable manufacturing</i>	100	289.1	454.9	744.1
<i>Nondurable manufacturing</i>	100	184.8	329.5	514.3
<i>Wholesale trade</i>	100	107.3	128.0	235.3
<i>Retail trade</i>	100	46.7	75.4	122.1
<i>Transportation and warehousing</i>	100	112.8	163.3	276.0
<i>Information</i>	100	252.0	321.1	573.1
<i>Finance and insurance</i>	100	149.7	214.7	364.4
<i>Real estate and rental leasing</i>	100	396.6	483.1	879.7
<i>Professional, scientific, and technical services</i>	100	142.1	276.2	418.3
<i>Management of companies</i>	100	144.4	255.4	399.9
<i>Administrative and support services and waste management</i>	100	45.5	89.1	134.5
<i>Educational services</i>	100	63.8	129.9	193.7
<i>Health care and social assistance</i>	100	69.4	136.2	205.6
<i>Arts, entertainment, and recreation</i>	100	123.3	255.2	378.5
<i>Accommodation and food services</i>	100	53.8	107.4	161.2
<i>Other services (except public administration)</i>	100	70.7	139.6	210.3

Source: EPI analysis of data from the Bureau of Labor Statistics (BLS) Employment Requirements Matrices, the BLS Current Employment Statistics program, and the Bureau of Economic Analysis GDP-by-industry accounts

Manufacturing in Illinois

Leading Illinois Industries by Employment:

- 17% Industrial machinery and equipment*
- 12% Food and kindred products*
- 12% Fabricated metal products*
- 8% Rubber and miscellaneous plastic products*
- 8% Printing and publishing*

Largest Illinois Manufacturers by Employees:

- Ford Motor Co., Chicago Assembly Plt. (Chicago) - 5,236*
- FCA US, LLC (Belvidere) - 5,100*
- Caterpillar Inc., Electric Power Div. (Mossville) - 4,950*
- AbbVie, Inc. (North Chicago) - 3,450*
- Continental Tire The Americas (Mount Vernon) - 3,400*

Illinois Counties with the Most Manufacturing Jobs:


- Cook - 297,425*
- DuPage - 81,432*
- Lake - 56,180*
- Kane - 52,745*
- Winnebago - 31,274*

Illinois Cities with the Most Manufacturing Jobs:

- Chicago - 110,616*
- Elk Grove Village - 19,660*
- Rockford - 19,227*
- Elgin - 13,180*
- Wheeling - 11,477*

Revitalizing Manufacturing and Expanding Opportunities for Chicago's Black and Latino Communities





Revitalizing Manufacturing and Expanding Opportunities for Chicago's Black and Latino Communities

JUNE 6, 2018 — TERESA L. CORDOVA, PH.D., MATTHEW D. WILSON, AND ANDREW STETTNER

The Century Foundation | cxf.org

- First, the report presents a new analysis of job openings in the manufacturing industry.
- Next, the report explores the current state of employment conditions in Chicago.
- After that, the racial/ethnic makeup of the manufacturing sector is examined to measure the extent to which inclusion occurs in the industry.
- Lastly, to combat underrepresentation and occupational disparities within the industry, the report outlines some actions that would help manufacturers meet their needs for skilled workers while creating pathways to opportunities for more blacks and Latinos into well-paid manufacturing careers.

<https://greatcities.uic.edu/2018/06/06/revitalizing-manufacturing-and-expanding-opportunities-for-chicagos-black-and-latino-communities/>

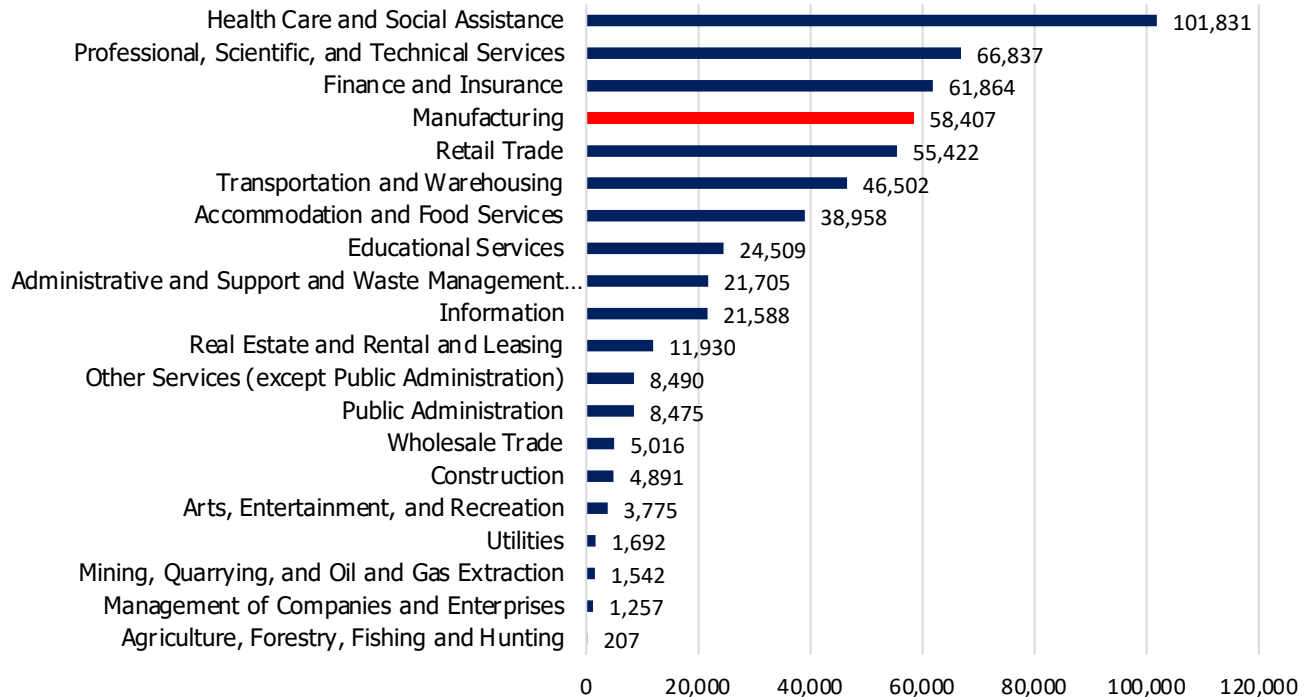
Job Openings in the Manufacturing Sector

Figure 1: Job Postings by Industry in the Chicago Region, April 1, 2017 - March 31, 2018

Analysis of job postings data shows:

- 58,407 job postings in manufacturing sector in the Chicago Region.
- Manufacturing had the 4th most job postings out of 20 sector groups.

Manufacturing sector has a high capacity for new and potentially more diverse hiring.



Data Source: Labor Insight Jobs (Burning Glass Technologies).

Ratio of Job Postings to Hires

Table 2: Total Employment, Hires, Job Postings, Ratio of Openings to Hires, and Ratio of Openings to Total Employment for Industries in the Chicago Region, 2017

Industries	Job Postings	Hires	Ratio of Job Postings to Hires
Mining, Quarrying, and Oil and Gas Extraction	1,669	175	9.5
Finance and Insurance	66,275	20,360	3.3
Utilities	1,825	750	2.4
Information	24,458	10,688	2.3
Transportation and Warehousing	54,472	24,233	2.2
Manufacturing	61,468	30,892	2.0
Health Care and Social Assistance	111,984	60,701	1.8
Real Estate and Rental and Leasing	13,691	9,038	1.5
Professional, Scientific, and Technical Services	69,710	48,731	1.4
Public Administration	8,505	8,760	1.0
Retail Trade	56,838	68,551	0.8
Educational Services	23,920	29,370	0.8
Accommodation and Food Services	42,514	96,457	0.4
Other Services (except Public Administration)	8,964	22,564	0.4
Wholesale Trade	5,285	23,417	0.2
Management of Companies and Enterprises	1,313	7,034	0.2
Agriculture, Forestry, Fishing and Hunting	209	1,157	0.2
Administrative and Support and Waste Management and Remediation Services	25,788	151,451	0.2
Construction	5,012	34,888	0.1
Arts, Entertainment, and Recreation	4,312	36,125	0.1

Ratio of job postings to hires shows:

- Manufacturing had two openings for every hire in 2017.
- Manufacturing had the sixth highest ratio of job postings to hires.

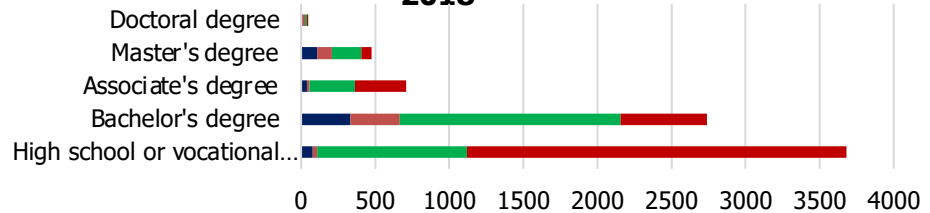
Manufacturers may be unable to fulfill job postings because of a skills shortage.

Manufacturing Openings and the Education and Experience Required for Employment

Figure 3: Levels of Education and Experience Requested for Manufacturing and Production Occupation Job Postings in the Chicago Region, April 1, 2017 - March 31, 2018

Levels of education and experience requested for manufacturing and production occupation job postings show:

- Nearly 40% of openings required just a high school diploma or vocational training and 0-2 years of experience.
- Separating school and experience requirements, high school or vocational training and 0-2 years of experience had the highest numbers of job postings for their respective categories.



	High school or vocational training	Bachelor's degree	Associate's degree	Master's degree	Doctoral degree
9+ years of experience	77	335	39	107	11
6 to 8 years of experience	32	333	19	99	15
3 to 5 years of experience	1009	1488	307	200	12
0 to 2 years of experience	2562	585	343	69	11

■ 9+ years of experience ■ 6 to 8 years of experience
■ 3 to 5 years of experience ■ 0 to 2 years of experience

Data Source: Labor Insight Jobs (Burning Glass Technologies)

Manufacturing and production occupations have immediate potential for hiring of lower skilled and less experienced workers.

Embracing Manufacturing: Expanding Opportunities

With a commitment to expand opportunities for education and job training, the manufacturing sector and communities of color can simultaneously address their respective employment needs.

Importance of Education and Training

Manufacturing 4.0

- Groups like Manufacturing Renaissance have worked consistently for 40 years to elevate the importance of the manufacturing sector – there is much that we can learn from them, e.g., Manufacturing Connect
- Germany – established as priority with pathways created
- Basque Country – value-driven with cooperative structure

Embracing Manufacturing: Succession Planning for Manufacturing Business Longevity

- The mortality of family-owned businesses due to closure is often attributed in the business and management literature to the lack of succession planning and adequate preparation of a successor.
- Business successions play a vital role in promoting economic stability and growth by reducing the evident exposures of local economies to disruptions resulting from business closures, even if closure is a more probable exit strategy (Ip & Jacobs, 2006).
- A significant social and economic challenge facing the United States and other advanced western economies, is the aging of the population. The increasing population over age 65 will have an impact on the number of business transfers in the coming years not only in terms of the ownership of businesses but also on potential employment and economic growth.

GCI's Succession Study

- GCI conducted a study in 2017 to assess if aging manufacturing firm owners in the Chicago Metropolitan Area had succession plans.
- Information on manufacturing establishments was obtained from Dun & Bradstreet.
- Companies were selected using three criteria: 1.) if the company owner was the highest executive officer, 2.) if there was a matching surname with the owner and highest executive officer; and 3.) any other company information that indicated strong family control.
- These criterion yielded 365 companies.
- Phone or mail surveys were completed by 89 companies resulting in a 28% response rate.

Intervening with Aging Owners to Save Industrial Jobs: A Study Update. Great Cities Institute, 2019
<https://greatcities.uic.edu/2019/03/15/intervening-with-aging-owners-to-save-industrial-jobs-a-study-update/>

Results

- 73% of survey respondents indicated that they were over the age of 55 years old, indicating a high likelihood of retirement in the next few decades. However, 48.3% indicated that they plan to retire more than 5 years from now. 19.1% plan to retire in 3 to 5 years, and 12.4% plan to retire in 13 months to 2 years from now.
- Of the family-owned firms surveyed, 86.5% of them had one or more family members working for the company.
- Of the respondents, 48.3% of firms have made plans for succession while 50.6% have not yet made plans for succession. 61.8% of firms surveyed had no successor indicated. Of those that did have a successor chosen, 6.7% chose a family member currently working in the company, 12.4% chose a family member from outside of the company, 7.9% chose a family member but didn't indicate whether they work for the company or not, 6.7% chose a non-related successor from within the company, one firm had chosen a non-related successor from outside of the company, and the remaining firms indicated they had other succession plans such as selling the company or transferring ownership to another entity.

Government Fight for Industrial Retention

While the initial decline was occurring, industrial retention was key for some figures within Harold Washington administration, e.g., Rob Mier, Bob Giloth, etc.

- Funded infrastructure improvements in industrial areas, e.g., roads
- Business Incubators
- Concepts of “Jobs not Real Estate” and “Balanced Growth”
- Other job training and retention strategies
- Eventual shifts in personnel delayed some progress, e.g., enabling legislation for PMDs)

CBO Fight for Industrial Retention

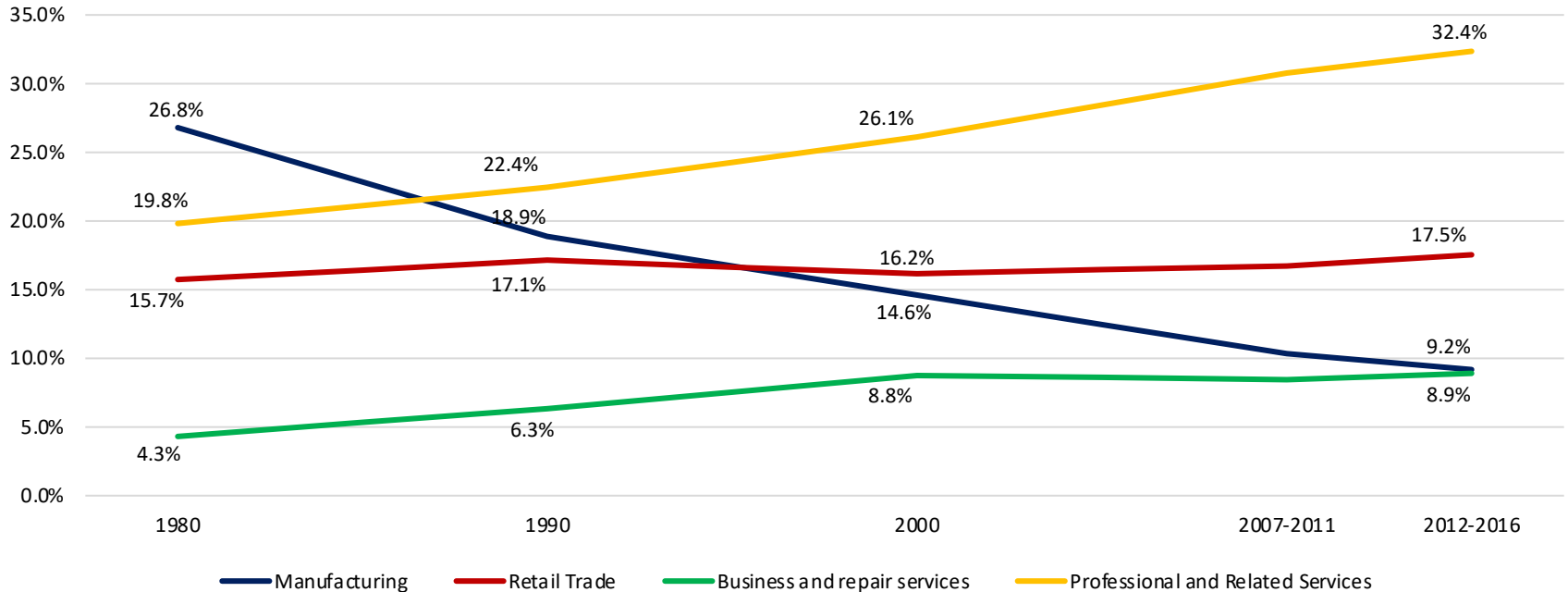
- Multiple organizations formed and coalesced Local Employment and Development Council (LEED), Community Workshop for Economic Development (CWED), Center for Urban Economic Development (CUED), Manufacturing Renaissance, Chicago Jobs Council, North Branch Works, etc.
- Job training, Local hiring, community benefits agreements
- Fight against plant closures, PMDs etc.

Elevating Manufacturing: Preserving the zoning/manufacturing corridors

- In the 1980s, the conversion of buildings from manufacturing use to residential lofts and upscale commercial, e.g., Clyborn Corridor, Near North River Industrial Corridor, Goose Island, Elston, etc.
- Zoning changes fought – lengthy land use battles but nothing to stop speculation and rise in the property values
- PMDs (Planned Manufacturing Districts) devised to stem displacement – late 1980s

Employment by Industry in Chicago, 1980 to 2012-2016

The proportion of Chicago's population in manufacturing has decreased by 66%



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Industrial conversion: Cities' Response to Global Economic Restructuring

- Pressure for cities to convert land from industrial uses to new housing or commercial uses as urban economies restructure and demand for urban living increases
- Converted industrial land to commercial and residential
- Many cities responded to loss of manufacturing by building another sector, e.g., Pittsburgh
- Cities confronts a tradeoff between preserving manufacturing jobs and generating residential and commercial property tax revenues
- Since 2010, industrial conversion in Chicago has accelerated

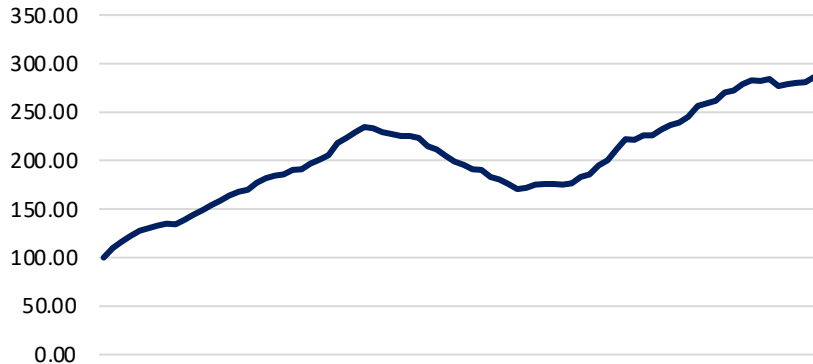
Geography of Conversion (Lester et. Al. 2013)

- In more affluent areas, north loop
- Centrally located in relation to central business district (CBD)
- Within Industrial Corridors, less likely to convert
- The further from rail depots or highway exchanges, less likely to convert
- Parcels close to multimodal transfer points are less likely to convert
- In Chicago, proximity not a protection from conversion

Land conversion and Gentrification

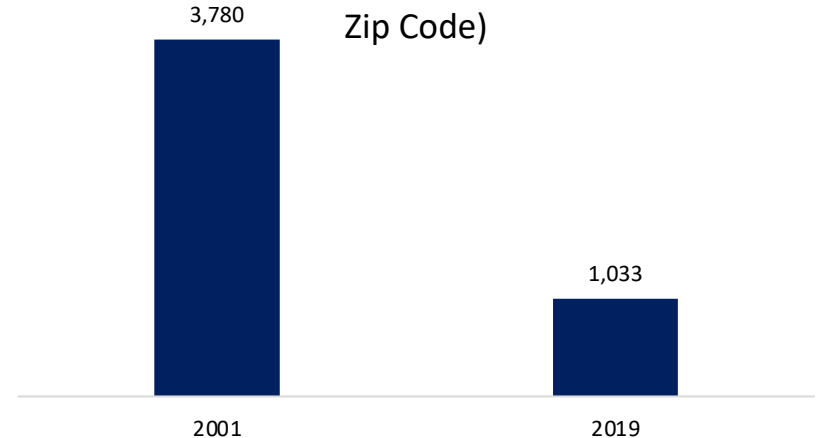
- Wicker Park as case study illustrates how gentrification leads to land conversion away from industrial uses as commercial and housing markets have increases in demand.
- As real-estate values have nearly tripled around Wicker Park since 2001, over 2,700 manufacturing jobs have been lost in Wicker Park

Housing Price index in West Town and Near West Side



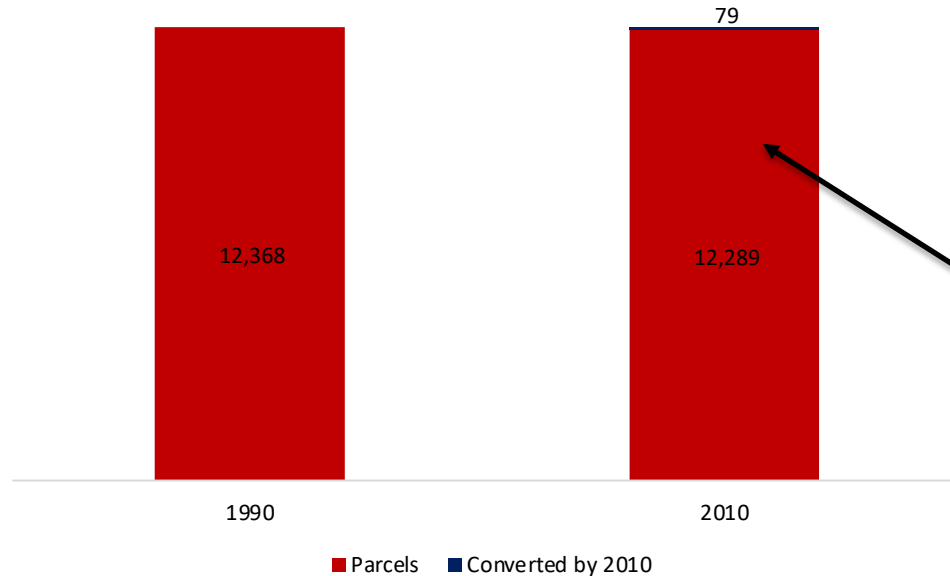
Data Source: DePaul Institute of Housing Studies, 2021.

Manufacturing Jobs in Wicker Park (60622 Zip Code)



Data Source: Where Workers Work. IDES. 2001 and 2019

Land conversion



- Industrial preservation policies effectively slow land conversion
- Chicago's Industrial Corridor (IC) program is effective
- There were 12,368 industrial parcels located within Chicago's industrial districts, of which only 79 were converted from 1990-2010 (0.6%) (Lester et. al. 2014).
- Conversion more likely in areas closer to Loop where real-estate markets have shown price appreciation.

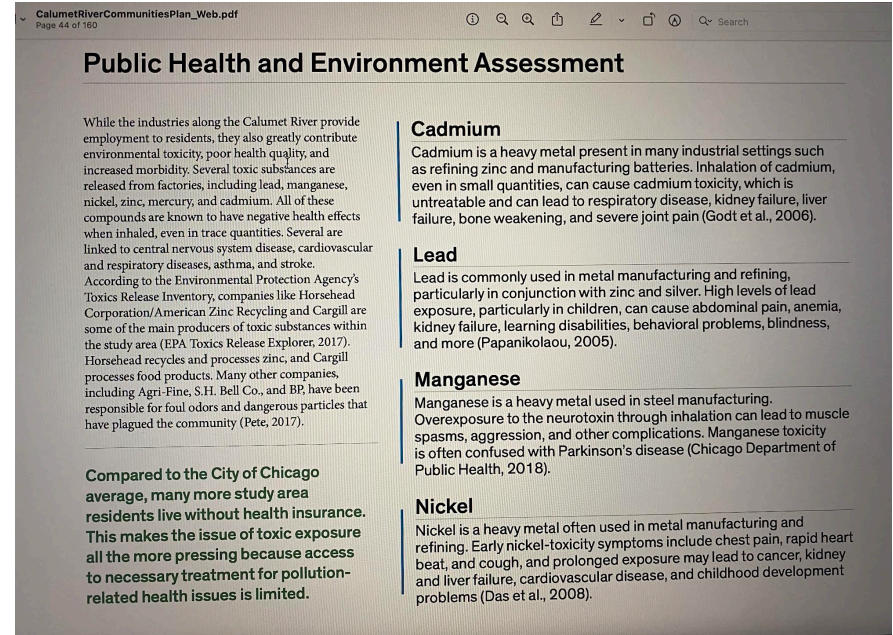
Incentives

- Federal Empowerment Zones – “empowerment incentives provide tax incentives to business owners rather than redevelopment subsidies to developers” (Lester et. al. 2013)
- “But for” condition – how do you measure?
- Build in conditions, e.g., job generation and first source hiring, no contamination
- Clawbacks and penalties for non-compliance
- Industrial TIF’s?

Elevating Manufacturing: Preserving the zoning/manufacturing corridors

- Recommit to preserving industrial land and corridors
- Reinvigorate the Industrial Corridors and PMDs (Planned Manufacturing Districts)
- Groups like North Branch Works have worked consistently for 43 years to protect industrial property – there is much that we can learn from them
- The dispersed corridors also discourage the concentration in certain neighborhoods of heavy industry
- What will this take?

The problem of concentrated and contaminated sites



<https://greatcities.uic.edu/uic-neighborhoods-initiative/calumet-river-communities-planning-framework/>

Elevating Manufacturing: Embracing The Changing Nature of Manufacturing Work

- Manufacturing's perception problem requires popular marketing campaign to change perception of manufacturing work.
- Some state Manufacturing Extension Partnerships (MEPs) credit success to branding manufacturing programs as mechatronics and robots.
- Leverage workforce and innovation hubs as facilities that can expose young people to emergent manufacturing technologies.



MxD, Chicago



mHUB, Chicago

If we elevate manufacturing in Chicago

We can benefit from a clean, green, sustainable economic boom that:

- stabilizes the economy
- avoids economic decline
- provides potentially good jobs with livable wages
- strengthens the industrial supply chain
- tackles the climate crisis

Industrial Policy must include:

- Job training and education; vocational training – focus on inclusion
- Succession strategies for ownership – focus on inclusion
- Industrial retention through industrial land preservation
- Geographic dispersion in multiple corridors
- Industrial retention through strategic incentives, particularly for clean energy manufacturing
- Clean-up and mitigation of contaminated sites with no further contamination

But this time,

- There must be more opportunities for Blacks and Latinos in firm ownership and advancement within the occupational ladder
- It can't be dirty – therefore causing global warming and health risks to workers and surrounding neighborhoods
- We need a Just Transition for workers affected by changes
- There must be a commitment of good corporate citizenship



**Great Cities
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Thank you!

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