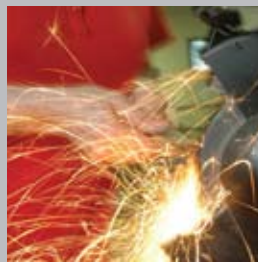




# chicago sustainable industries

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**Phase One: A Manufacturing Work Plan for the 21st Century**



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Mayor

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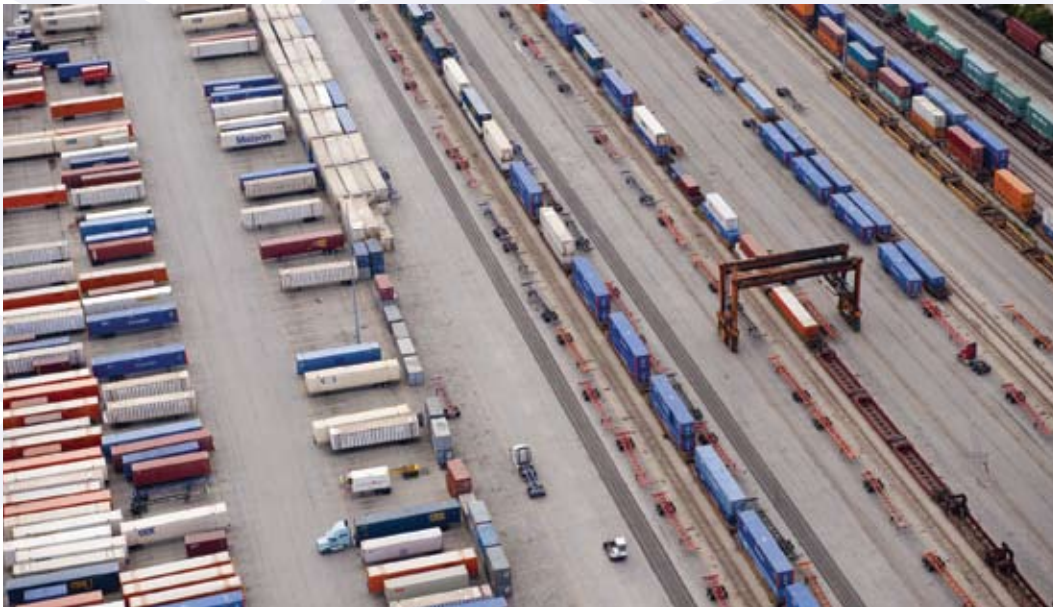
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# Introduction:

Chicago's Sustainable Industries (CSI) initiative is being developed to support the city's manufacturing sector within an evolving global economy. The initiative's first phase establishes a process that will lead to a formal government strategy that maximizes public resources for the sector's long-term viability for local workers, the business community and the urban environment. The process, background and relevant resources are presented in this document.

The CSI initiative is targeting existing manufacturers along with specific manufacturing sub-sectors that demonstrate an enduring, positive influence on Chicago's economy. These sub-sectors, collectively referred to as the city's manufacturing base, are characterized by a greater labor concentration than national norms, sales activities that occur beyond the city and region, and exceptional connections with other types of local businesses.

Manufacturers, by definition, are engaged in the mechanical, physical, or chemical transformation of materials, substances or components into new products, typically within establishments referred to as factories, plants and mills. Though Chicago and the United States have experienced substantial declines in manufacturing employment in recent decades, the city remains the nexus of the country's historically most production-oriented region. In 2010, approximately 65,000 people were employed by 2,600 companies operating within city limits, according to the Illinois Department of Employment Security. The United States, meanwhile, still produces more goods than any other country; approximately 20 percent of the world's total output, according to the Chicago Federal Reserve.



Urban U.S. manufacturers that thrive in today's global economy are not affiliated with the smokestack industries that defined prior eras. They are advanced, high-tech companies that lead other sectors in sustainable practices and employee training, especially for jobs that involve complex, computerized production equipment. Successful companies also heavily invest in research and development (R&D) efforts, with manufacturing firms accounting for 45 percent of all R&D conducted domestically by private firms, according to the Manufacturing Institute.

Local economies are directly influenced by manufacturing through goods-producing employment and indirectly through the outsourcing of transportation and logistics, accounting, marketing, legal and other related services. In Chicago, these characteristics are reflected in a skilled manufacturing workforce, comprehensive transportation networks and dedicated land use policies that provide suitable work environments for production- and distribution-oriented business activities.

As the global economy presents new opportunities and challenges for manufacturers and affiliated service providers, government agencies are seeking ways to provide competitive advantages. By focusing on existing companies, the sub-sectors most closely associated with Chicago's manufacturing base, and the city's competitive advantages, the CSI initiative will reinforce this important aspect of the city's overall business diversity and its historic role as the country's production capital.

## CSI's Definition of Sustainability

Sustainable industries are those economic sectors with potential for long-term, positive impact on Chicago's economy, environment and workers. These "base sectors" either export goods or services or provide crucial support to the companies that do. Chicago's sustainable industries possess operating needs and requirements that align with the area's indigenous assets (market demand, industrial base, workforce, real estate, transportation and technology) and provide well-paying jobs for residents. They may also function in support of the environment through the products or services they deliver or by their sensitivity to the area's natural resources, or both. Businesses and jobs that are characterized as "green" are one component of sustainable industries, provided they also help achieve Chicago's broader economic development objectives.

# Manufacturing in Chicago:



For much of its history, Chicago was synonymous with the production of durable and non-durable goods for both business and consumer use. While many factors have reduced manufacturing employment in Chicago and throughout the US to about one fourth of its levels in 1950, local manufacturers continue to provide high-skill jobs and above-average wages that have long served as a threshold to the middle class. Instead of the steel, consumer electronics, sporting goods, toys and musical instruments that dominated the local output of previous eras, the sector today leads the country in the production of electrical equipment and components, fabricated and primary metals and food, among other goods.

The history of manufacturing in Chicago both reflects and rejects national and global trends. While employment swelled when the nation's economy was more production-oriented in the first half of the 20th century, local manufacturing jobs started to drop as the economy became more consumer-oriented following World War II. Numerous factors contributed to the decrease: manufacturing productivity gains reduced labor demands; the expansion of the interstate highway system made manufacturers less dependent on urban areas for transportation and labor resources; cheaper taxes, labor and land costs in other cities and countries offered greater profit margins; federal policies protected the viability of certain industries at the expense of others; and manufacturers focused on core competencies by outsourcing certain services to specialized firms, resulting in lower employment totals for the sector.

Despite these factors, manufacturing remains a vital part of Chicago's economy and the city remains closely associated with manufacturing compared to the nation's other traditional production centers. The association persists, in part, due to the infrastructure and labor skills available to Chicago manufacturers. According to a recent, independent survey of 1,000 industrial businesses, nearly two thirds indicated they operated in Chicago due to its air, truck, rail and inter-modal connections. The remaining third almost entirely said Chicago's number one community strength was its workforce; a labor pool that tops 4.5 million people region-wide.

Exceptional location, transportation and labor resources have long served to attract and retain industrial companies in Chicago. The transportation network developed more than 150 years ago with the convergence of railroads serving the Union Stockyards. The rail lines eventually expanded to serve industrial users along local waterways and in other parts of the city that offered competitive advantages. The concentrated industrial uses in these areas eventually led to specific zoning provisions to protect and enhance their roles for industry. Today, a large percent of city land with a manufacturing (M) zoning designation is located within or adjacent to one of the city's 24 designated Industrial Corridors. Recognizing the value of these areas, the City established the Industrial Corridors in the 1990s and focused its industrial retention efforts there. In addition to providing the appropriate zoning and a compatible industrial environment, Chicago's industrial corridors provide convenient access to truck routes, interstate highways, waterways, rail yards and other infrastructure assets that are essential to industrial companies. Half of the corridors also contain Planned Manufacturing Districts (PMDs), a zoning designation that discourages opportunities for incursion by certain retail and all types of residential development. Most corridors also offer Tax Increment Financing (TIF) and other incentives to encourage existing businesses to invest in their facilities and new companies to locate in the city.

## Thoughts on Industry

*The Midwest is the traditional spear-point for the American economy. It was the frontier when the first pioneers moved west. Its mills and factories powered America's Industrial Revolution. Here, commerce boomed and labor wars first raged. The Great Depression began on Midwestern farms; when the nation recovered, the Midwest recovered first. Two decades later, the Midwest felt the first ravages of the Rust Belt and the first sting of Japanese competition. What happens to America happens first in the Midwest.*

*Richard C. Longworth. Can the Midwest regain its economic clout?  
Chicago Tribune Magazine. January 6, 2008.*

*Since the 19th century, Chicago and the surrounding region have functioned as the primary hub of the North American rail network. All of the largest North American Class I railroad networks directly access the region, and, in recent years, more than one out of every four railroad shipments have impacted the region by traversing, starting or ending here. With the addition of well-developed highway and air facilities during the 20th, Chicago became the freight hub of the Midwest, a position that has now been strengthened through its development as a key international gateway; Chicago is now the third-largest transit point for international freight worldwide, after Hong Kong and Singapore.*

*Global Insight. Chicago Railroad Economic Opportunity Plan Technical Memorandum No. 1.  
Prepared for the City of Chicago Department of Transportation. December 21, 2007.*

## Evolution of CSI:

CSI is the City of Chicago's first effort to coordinate the economic, social and environmental aspects of Chicago's manufacturing sector as part of a single, comprehensive planning effort. While each aspect has been addressed through individual departments and programs, the coordinated initiative evolved in conjunction with a grant from the U.S. Department of Commerce's Economic Development Administration (EDA), which operates a trade assistance program for communities experiencing job losses as a result of international trade agreements. In Chicago, 75 percent of all businesses certified by EDA to have suffered job losses since 2007 due to trade agreements are classified as manufacturers. The grant will be used on behalf of these and other goods-producing companies to develop CSI strategies that foster their viability.

The City of Chicago already serves manufacturers in many ways. Through various departments and sister agencies, it has made ongoing investments in public infrastructure; provided financial assistance for company relocation and expansion projects; established the Local Industrial Retention Initiative (LIRI) to help companies within individual industrial corridors; started long-term initiatives to address rail-specific transportation improvements; modified its building code and parking requirements for industrial structures; hosted conferences to highlight changes and improvements involving city policies and sustainable assistance programs; and sought federal assistance in dealing with foreign policy and trade issues.

The city has also addressed the sustainability of its built environment. The efforts include a 2004 mandate that all new and rehabilitated public buildings, as well as private buildings that utilize city assistance, include sustainable elements such as LEED, an internationally recognized green building certification system. The city also started participation in the Waste to Profit Network to divert reusable waste from landfills; established the Eat Local Live Healthy Plan to, in part, support local food manufacturers; and hosted the Green Expo to give more than 300 manufacturers an update on the movement toward green products.

The city has also focused resources on its labor force. The city's workforce development activities include TIFWorks, which helps manufacturers finance worker-training initiatives, and participation in the Chicago Manufacturing Renaissance Council (CMRC), a partnership focused on making Chicago the global leader in modern manufacturing and preparing job seekers for well-paying manufacturing jobs. CMRC founded Austin Polytechnical Academy (APA) in 2007, to educate the next generation of leaders in advanced manufacturing. Located on Chicago's West Side, APA is a college and career prep public high school with a focus on manufacturing and engineering.





## Thoughts on Industry

*In a paper co-authored with the Cameroonian economist Celestin Monga, Justin Yifu Lin, the current chief economist at the World Bank argued that governments must "regain center stage." Industrial Policy (known to critics as "picking winners") has a bad name in the West, he said, and for good reason: it has failed more often than it has succeeded. But the only thing worse is not having an industrial policy. He and Monga cited a major 2008 study that looked at thirteen countries that had managed to sustain high growth for long periods after the Second World War. "In all the successful countries, the governments play a very proactive role," he told me. He favors a kind of "soft" industrial policy, in which a clamorous free market produces new industries and firms, and the government spots the best prospects and helps them grow by giving them tax breaks and building infrastructure like ports and highways. It's a marriage of Chicago and China: to rise out of poverty, he and Monga write, markets are "indispensable" but government is "equally indispensable."*

*Evan Osnos. The Boom Doctor. The New Yorker. October 11, 2010.*

*Unfortunately, the broad public view of manufacturing is negative and cynical. Manufacturing exists in a societal context. As one employer put it: "It seems to me that the issue at stake is to raise the bar on what it means to be in the (manufacturing) trades in society. In Europe it's wonderful to be in the trades, you're considered on par with other respected trades. It is just another path that you have chosen for your career. Here it's 'Oh, you work in a factory – gee, I'm sorry to hear that.' We need to change that, and that is largely a cultural issue. . ."*

*Center for Labor and Community Research. The State of Illinois Manufacturing – A report for the Illinois Manufacturers' Association. December 2003.*

# Vision and Work Plan:

Once established, the CSI strategy will guide and advocate for public resources that promote the viability of Chicago's manufacturing base. It will support goods-producing companies that draw dollars into Chicago from other areas, serve to retain and re-circulate those dollars within city limits, guide policies that promote the sector's sustainability, and re-establish public awareness about the importance of manufacturing to the local economy.

## THE CSI TEAM HAS FORUMULATED THE FOLLOWING GOALS AND WORK PLAN FOR DEVELOPING THE STRATEGY:

- Examine the effectiveness of the planned manufacturing districts as stipulated by the Chicago Zoning Ordinance and review industrial corridor boundaries to determine if amendments are needed
- Set infrastructure priorities to reflect key industry goals
- Identify business service priorities by sector, geographic and/or other focuses





- Specify performance objectives for meeting the short and long-term business and workforce program goals
- Design publicly accessible interactive data base for industrial properties, using the 2011 land use and company survey
- Assess the need for industrial land assemblage, and if warranted, develop priorities and an associated management structure/organization
- Review industry developed environmental certifications for key industries for use with city assisted projects
- Provide renewable energy technology incentive options
- Explore corridor-wide storm water management strategies for each industrial corridor

## Thoughts on Industry

*One of the perversities of this recession is that as the unemployment rate has risen, the job vacancy rate has risen, too. Manufacturing firms can't find skilled machinists. Naryana Kocherlakota of the Minneapolis Federal Reserve Bank calculates that if we had a normal match between the skills workers possess and the skill employers require, the unemployment rate would be 6.5 percent, not 9.6 percent. . . There are several factors contributing to this mismatch (people are finding it hard to sell their homes and move to new opportunities), but one problem is that we have too many mortgage brokers and not enough mechanics.*

*Brooks, David. The Genteel Nation. Op-ed columnist, NYTimes.com. September 9, 2010.*