

**DRAFT FOR
REVIEW AND
COMMENT**

**Planned Manufacturing District
Modernization Report**

Prepared for:
**City of Chicago Department of Housing and
Economic Development**

By:
U.S. Equities Realty, LLC

In collaboration with:
Applied Real Estate Analysis, Inc.,

**Fitzgerald Earles
Architects and Associates,**

Koo and Associates Ltd.

September 9, 2013

U.S. Equities Realty

COMMERCIAL REAL ESTATE SERVICES

20 North Michigan Avenue Chicago, Illinois 60602
312.456.7000 | www.usequities.com

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Introduction

In the late 1980s, development pressures on Chicago's north side were creating conflicts with industrial uses along the north branch of the Chicago River. In response to this, and in recognition of the importance of retaining industrial jobs to a balanced economy, the City of Chicago designated its first three Planned Manufacturing Districts (PMDs) -- the Clybourn Corridor, Elston Corridor, and Goose Island PMDs. Among the objectives of the PMDs was to establish district-wide zoning -- in place of property-by-property zoning -- to discourage further piecemeal conversion of scarce industrial land. The zoning code associated with PMDs set forth permitted land uses that were consistent with -- and supportive of -- industrial uses, specifically prohibiting all residential uses and large-scale retail uses in core PMD areas. "Buffer Zones", which later became B Subdistricts, were established in areas that were appropriate for more intensive retail uses and as transition zones to adjacent neighborhoods.

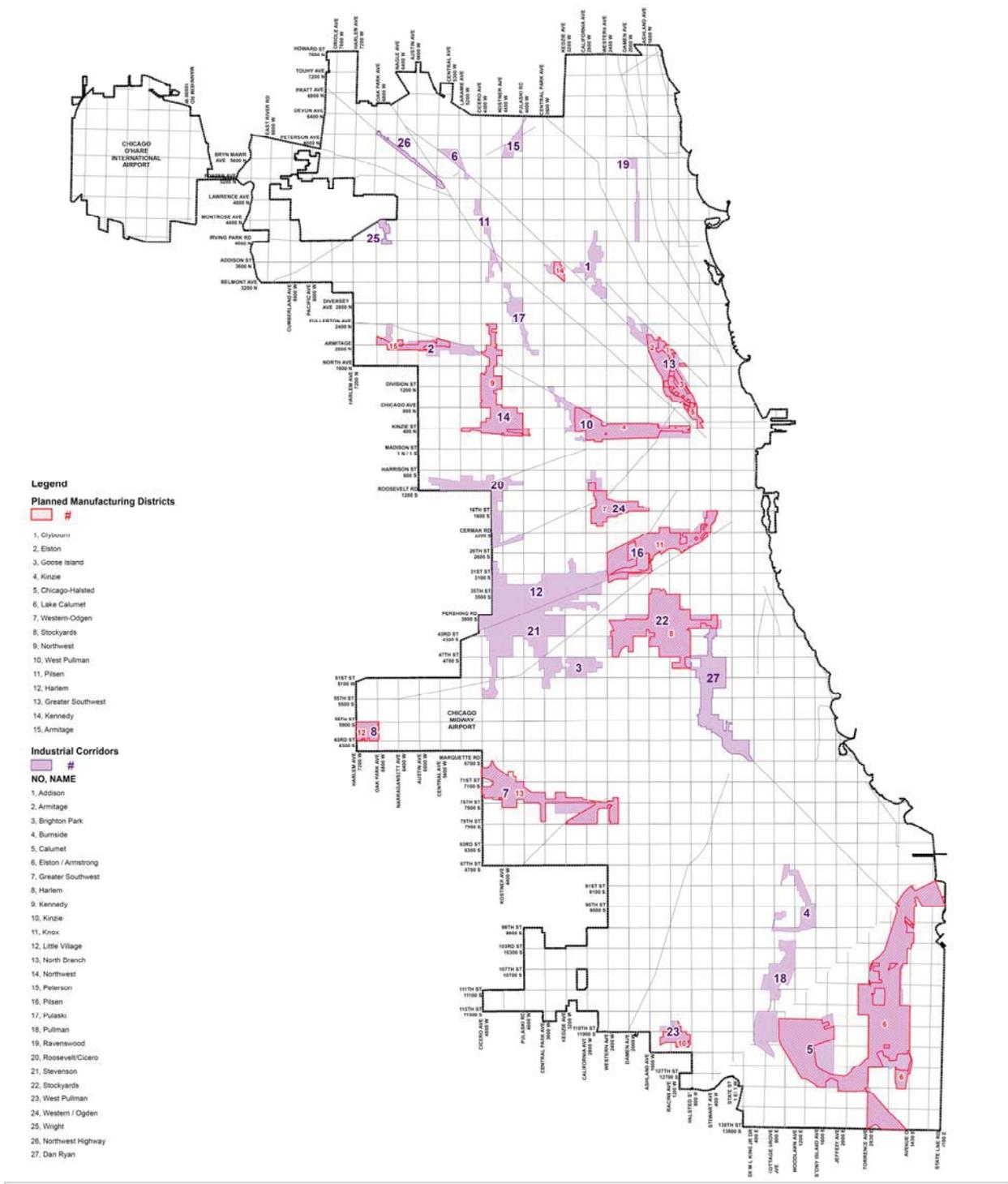
The initial three PMD designations were followed by the establishment of industrial corridors throughout the city. While not formal zoning districts, industrial corridors are intended to recognize large concentrations of industrial uses to help facilitate investment in industrial infrastructure, land use policies, and industrial marketing efforts. A total of twenty-seven industrial corridors have been identified throughout Chicago. Subsequent to the initial three PMD designations, an additional ten PMDs have been designated to establish additional zoning protection, all but one of which is located within larger industrial corridors. Figure 1 illustrates Chicago's Industrial Corridors and PMDs.

U.S. Equities Realty was hired by the City of Chicago in January of 2013 as part of the City's Chicago Sustainable Industries Initiative (CSI) to assist in modernizing aspects of the City's Planned Manufacturing District policy. Specifically, U.S. Equities was charged with evaluating the characteristics and performance of Chicago's industrial districts to assess whether greater zoning flexibility is needed in any current PMDs, and/or whether additional PMD designations are warranted. The assignment also included evaluating ways in which PMD zoning code should be updated to support the characteristics of today's industrial businesses and range of activities desired in modern urban employment districts.

To address all aspects of the assignment, the study team was supplemented with additional expertise. Specifically, Fitzgerald Earles Architects assisted with defining trends and implications of modern and advanced manufacturing, Applied Real Estate Associates investigated trends in new industrial space construction, and Koo and Associates researched industrial zoning strategies and trends in other manufacturing cities. Additionally, the City of Chicago assembled an advisory group of local elected officials, industry groups, company representatives, and academics to provide input and guidance to the study. The full list of the PMD Advisory Committee is included as Attachment A of this report.

This effort represents only one piece of the City's much broader Chicago Sustainable Industries (CSI) initiative. The CSI effort is moving forward on a wide range of other issues that are critical to industrial investment and employment growth. Furthermore, the land use recommendations in this report represent a first step, and are next intended for discussion and input from local elected officials, community organizations and industry representatives. They should ultimately be viewed as a base upon which marketing, incentives, infrastructure and other targeted public actions and investment can be layered to enhance Chicago's diverse employment base.

1. Introduction



Department of Housing and Economic Development Bureau of Planning and Zoning

Andrew J. Mooney Commissioner

Chicago Department of HOUSING and ECONOMIC DEVELOPMENT

PLANNED MANUFACTURING DISTRICTS

INDUSTRIAL CORRIDORS

Aerial Map Title: Industrial Corridors and Planned Manufacturing Districts

GIS Analyst: Lisa M. Montemurro 060212
Data Source: Planning & Urban Design Division

Scale: 0 1,960 3,920 7,840 Feet

* For reference purposes only, information contained herein is not guaranteed.
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Figure 1

Industrial Zoning Context

Planned Manufacturing Districts are defined by the Chicago zoning ordinance as districts of five or more contiguous acres that are suitable in size, location, and character that may benefit from such designation, specifically to:

- foster the city's industrial base;
- maintain the city's diversified economy for the general welfare of its citizens;
- encourage industrial investment, modernization, and expansion by providing for stable and predictable industrial environments; and
- help plan and direct programs and initiatives to promote growth and development of the city's industrial employment base.

PMD designation is intended to discourage conversion of property to non-industrial use. As such, PMD boundaries are meant to define areas that are competitive not only for the retention of industrial activities, but also for new investment and future industrial development. Section 6 of this report will discuss the team's findings regarding characteristics of competitive industrial areas for today's urban employment districts.

Industrial corridors are planning designations -- as opposed to zoning districts -- that in some cases include PMDs as well as other large contiguous areas of industrial activity. Taken together, industrial corridors (including PMDs) constitute the bulk of the city's major employment areas outside the central business district. As a practical matter, industrial corridor designation provides less zoning protection than PMDs, though also gives the City more flexibility in considering new non-industrial development and investment. Retention of industrial companies and minimizing impacts on the larger industrial corridor remain the primary objectives in considering any use conversions. Specifically, review of any proposed rezoning of land within industrial corridors must take into account the following:

- the size of the district;
- the number of existing firms and employees that would be affected;
- recent and planned public and private investments within the district;
- the potential of the district to support additional industrial uses and increased manufacturing employment;
- the proportion of land in the district currently devoted to industrial uses;
- the proportion of land in the district currently devoted to non-manufacturing uses; and
- the area's importance to the city as an industrial district.

Scattered Manufacturing-Zoned Land also exists outside PMDs and Industrial Corridors, some of which is actively used, while in other cases the zoning is a remnant only of historic uses.

A useful way in which to think about the relationship and distinction among these three levels of industrial geographies is as follows:

2. Industrial Zoning Context

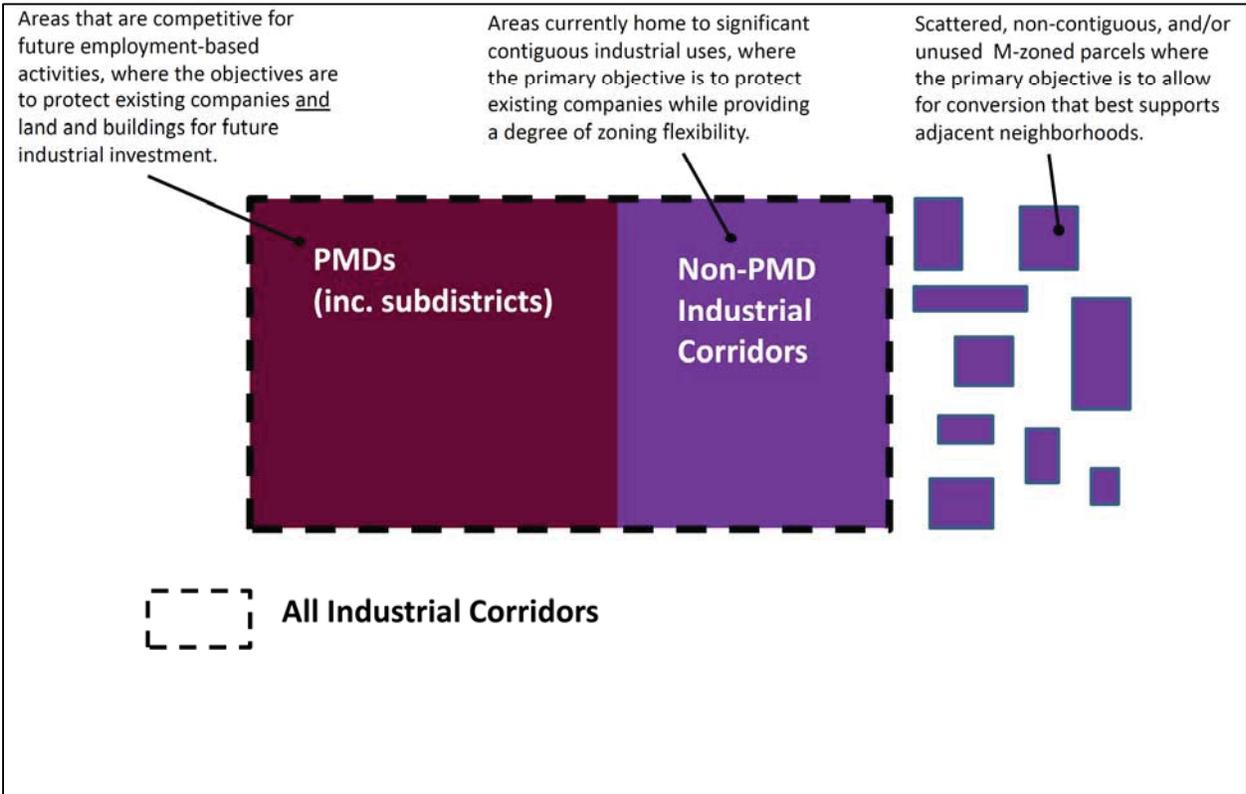


Figure 2

Achieving the appropriate balance between protected employment districts and more flexible zoning areas facilitates a balance between economic and neighborhood development. Over-protecting industrial land can result in lost opportunities for enhancing residential neighborhoods and their base of retail and amenities, while less zoning protection can leave competitive industrial space vulnerable to market pressures, potentially resulting in the permanent loss of a scarce resource critical to Chicago’s diverse economy. Achieving the correct balance is not a precise science, but it is also not a zero-sum game. An examination of the amount of land and space available for new development and investment reveals the magnitude of opportunities for new employment-based investment, while still retaining flexibility to consider conversions where appropriate.

Land and Vacant Building Space in all Industrial Corridors (inc. PMDs)	
Total vacant land in Industrial Corridors (inc. PMDs)	1,033 acres (44,997,000 sf)
Total potential industrial building space (assume 35% lot coverage on the above)	15,750,000 sf
Total existing vacant industrial building space	21,530,000 sf
TOTAL EXISTING and POTENTIALLY BUILDABLE INDUSTRIAL SPACE	37,280,000 sf
<i>Source: Costar</i>	

Figure 3

The figures above are a very high-level and somewhat crude measure of opportunity; clearly not all land and building space is equally competitive and appropriate for new investment. Nevertheless, the figures paint a picture of the magnitude of opportunity for new activity in Chicago’s industrial areas, constituting nearly 5 times the total new and rehabilitated industrial square footage put into use in Chicago over the previous 10 years. Not included in the vacant total is currently occupied but underutilized space that has the potential for rehab and re-purposing for different and/or more modern industrial uses.

Today's Industry and Advanced Manufacturing

Much has been written recently about the changing nature of manufacturing in this country. Advances in technologies used in production and innovative ways in which raw materials and production inputs are being utilized have come to be included under the umbrella of activities called "Advanced Manufacturing". The President's Council of Advisors on Science and Technology has defined Advanced Manufacturing in the following way:

"Advanced Manufacturing is a family of activities that (a) depend on the use and coordination of information, automation, computation, software, sensing, and networking, and/or (b) make use of cutting edge materials and emerging capabilities enabled by the physical and biological sciences, for example nanotechnology, chemistry, and biology. It involves both new ways to manufacture existing products, and the manufacture of new products emerging from new advanced technologies."

Many manufacturing companies have employed new technologies and processes to achieve efficiencies, cost savings, and enhanced safety. New and specialized machinery is improving performance and reducing waste, using cutting edge materials and emerging capabilities that rely heavily on applied research, design and development. New equipment and digital technology are enabling R&D and production to be more integrally related – in some cases more favorably located proximate to one another. More efficient processes also help to reduce production delays and unnecessary costs. Other advances in technology have improved supply chain logistics and integrated worldwide production.

There are certainly individual companies that are labeled "advanced manufacturers". The 2012 Illinois Nanotechnology Report, for example, identifies 74 "nanotechnology companies" in Illinois. However, the report adds that nanotechnology itself is not a business, but encompasses virtually every manufacturer of chemicals, drugs, or electronic devices.

Likewise, based on the study team's research and interviews with industry representatives, the vast majority of companies employing advanced manufacturing techniques are traditional manufacturers that are adapting their businesses to remain competitive. In fact, several industry representatives indicated that companies that are not finding new ways of doing things were, by-and-large, not weathering the economic changes of recent years.

Among the range of activities often grouped under the umbrella of advanced manufacturing include the following:

- Sustained use of automation and robotics
- Computer Numerical Control (CNC) and Computer-Aided Manufacturing (CAM)
- Use of laser cutters and 3D lathes
- Digital manufacturing and 3D printing, enabling digital fabrication from portable desktop-size machines
- Micro-manufacturing and nanotechnology
- IT integration of worldwide production processes

3. Today's Industry and Advanced Manufacturing

The team was charged with identifying the unique facility, location, and infrastructure requirements of advanced manufacturers. As the assignment evolved, however, it became clear that the ubiquitous nature of at least some aspect of advanced manufacturing among traditional manufacturers meant that ***separating advanced manufacturing needs from traditional manufacturing needs was both difficult and not entirely meaningful.***

Nevertheless, the influence that new processes and technologies are having on today's manufacturers is resulting in trends that are specifically relevant to urban environments like the city of Chicago. Among these trends are the following:

- Manufacturing is being viewed as more entrepreneurial. The relative low cost of 3D printing machines, some as low as \$500, is reducing barriers to entry into the industry, resulting in more entrepreneurial manufacturing ventures and encouraging the growth of manufacturing start-ups.
- Urban locations are viewed as desirable by some start-ups and technology-focused companies in particular. This allows for better access to a younger and more educated workforce, as well as to a broad support network of business services and vendors. Urban locations and proximity to the amenities of the central business district are also often preferred as a lifestyle choice by young entrepreneurs.
- Flexibility in physical space and building types is important to accommodate small and growing businesses. At the same time, reductions in the scale of production and its technology can make smaller and vintage building space attractive again to specific types of users. The result can be stronger demand for very well-located industrial areas in the city – despite the presence of older and less functional buildings.
- Higher levels of digital connectivity are important to support data-intensive activities and the demands of advanced technology. Additionally, shared technology and proximity to research institutions can be valuable to some businesses, particularly to start-ups and companies in the early stages of their business evolution. Facilities such as Innovation Factory, located in the West Loop, enable their clients to quickly and cost effectively transform design ideas into test-market prototypes using 3D CAD modeling, 3D printing, CNC milling and laser cutting. The University of Illinois' proposed Manufacturing Lab is intended – in part – to offer shared technology for small companies that are unable to afford such technology on their own.
- Manufacturers are employing higher concentrations of highly-trained personnel, scientists and engineers, with technological skills to maximize the commercial impact of products and processes. As a result, employees in firms that incorporate advanced manufacturing processes are generally more highly educated, more specialized and higher paid. Furthermore, manufacturers are harnessing the knowledge of their employees to innovate, taking advantage of employees' direct experience with the logistics and efficiencies of production. Post-secondary and higher education institutions are beginning to recognize the need for a more skill manufacturing workforce. The Illinois Institute of Technology offers a Master of Industrial Technology and Operations. The City Colleges of Chicago offer various degrees geared towards manufacturing, such as Manufacturing Technology Daley College and Process Technology at Olive-Harvey. Austin Polytechnical Academy partners

3. Today's Industry and Advanced Manufacturing

with local manufacturing companies to help prepare students for modern manufacturing opportunities and skill requirements. Nevertheless, several industry representatives indicated that skills gaps remain between the local workforce and the requirements of today's manufacturing processes.

While the above trends do have important implications for cities like Chicago, its workforce, and its stock of industrial buildings, the study team was careful to maintain a broader view of the much larger picture of traditional manufacturers that continue to evolve and adapt, constituting the bulk of Chicago's manufacturing economy and opportunities for growth into the future.

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4. Industrial Building Space Characteristics

Industrial Building Space Characteristics

Much of the potential for future industrial growth and investment in Chicago centers around the city's existing building stock. This is not only because most of Chicago's industrial areas are already built-out, but also due to the fact that ground-up industrial development is nearly always more costly than building reuse, and often not cost-competitive with new development on greenfield sites outside the city. Attachment B further explores the recent history of new industrial building development in the city, and its challenges. The chart below summarizes the magnitude of new building construction and renovations over the past ten years in the metropolitan area.

Industrial Space Additions 2003-2013		
	New Construction (Square Feet)	Renovations (Square Feet)
City of Chicago	3,777,133	3,766,506
Suburban Cook County	17,753,645	5,209,138
Lake County	6,479,622	888,241
Will County	52,900,938	1,173,471
Totals	84,579,012	13,015,542

Sources: CoStar; Cushman and Wakefield; CB Richard Ellis; Reed Construction Data; Applied Real Estate Analysis, Inc.

Figure 4

The data above illustrates not only that the bulk of industrial space built recently has been in the suburbs (most notably in Will County), but that the relative importance of building *renovations* to total space deliveries is strongest in the city of Chicago, constituting half of all space delivered. The following chart is a snapshot of current new industrial space construction, summarizing the square footage completed and underway as of the end of the Second Quarter of 2013. This further illustrates the dominance of the I-55 and I-80 corridors with regard to new industrial construction in the region.

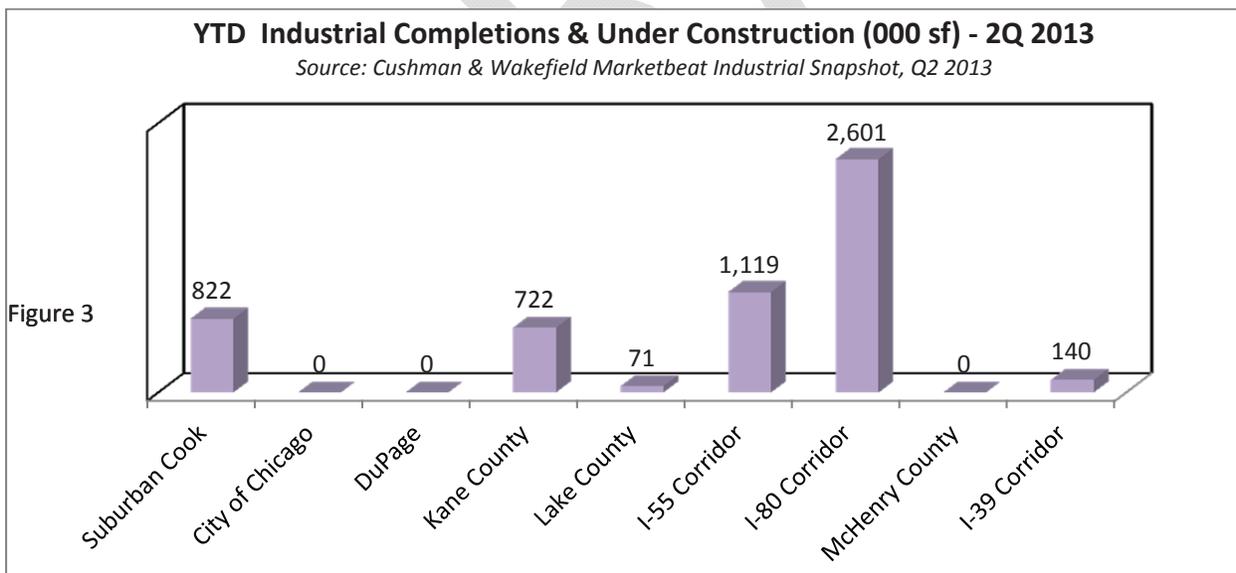


Figure 5

4. Industrial Building Space Characteristics

Opportunities for new industrial space development in the city remain. Build-to-suit development is likely to continue in key locations in Chicago, and the City has a key role in facilitating such opportunities. However, a very large part of the city's industrial investment potential focuses on Chicago's existing building stock. For this reason, the study team examined building age, spatial characteristics, and vacancy rates in each of Chicago PMDs and Industrial Corridors, which is summarized below.

PMD	Total Space (sf)	Available (sf)	Available (%)	>1 story (% bldgs)
Armitage	2,312,731	667,964	28.9%	22.2%
Calumet	9,304,579	714,098	7.7%	5.9%
Chicago-Halsted	1,915,494	49,891	2.6%	55.6%
Greater SW	6,352,100	224,824	3.5%	6.1%
Harlem	2,185,694	86,150	3.9%	1.7%
Kennedy	1,237,456	229,723	18.6%	6.3%
Kinzie	9,820,199	1,307,515	13.3%	45.5%
North Branch	7,541,341	825,765	10.9%	44.2%
Northwest	12,944,356	2,834,666	21.9%	27.0%
Pilsen	8,189,804	875,841	10.7%	43.1%
Stockyards	17,365,224	2,720,835	15.7%	33.8%
Western Ogden	4,719,121	1,079,098	22.9%	50.0%
West Pullman	147,261	0	0.0%	33.3%
TOTALS	82,119,866	11,566,479	14.1%	35.5%
<i>Source: Costar</i>				

Figure 6

The five largest PMDs (Stockyards, Northwest, Kinzie, Calumet, and Pilsen) contain more than 70% of all PMD building space, while the smallest five (West Pullman, Kennedy, Chicago-Halsted, Armitage, and Harlem) contain less than 10%. The bar chart below re-states the data visually to give a better sense of the relative magnitudes of industrial building space in each PMD.

4. Industrial Building Space Characteristics

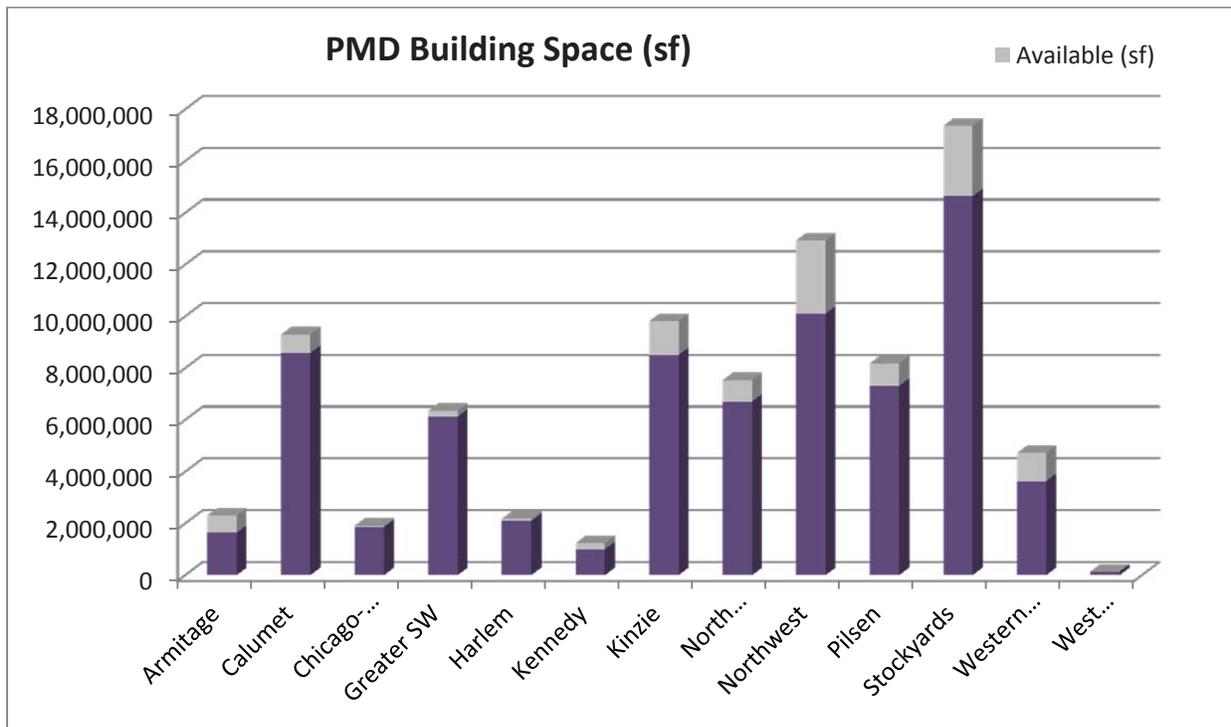


Figure 7

The same building data is summarized below for non-PMD Industrial Corridors, illustrating the generally smaller scale of non-PMD Industrial Corridors as compared to PMDs.

Industrial Corridor	Total Space (sf)	Available (sf)	Available (%)	>1 story (% bldgs)
Addison	2,313,385	479,673	20.7%	9.4%
Brighton Park	6,975,295	1,033,446	14.8%	11.5%
Burnside	3,714,417	644,406	17.3%	0.0%
Elston-Armstrong	997,127	30,387	3.0%	13.6%
Knox	1,794,279	171,725	9.6%	9.1%
Little Village	4,490,541	1,154,962	25.7%	9.3%
Northwest HWY	1,241,494	165,645	13.3%	24.3%
Peterson	1,586,799	133,215	8.4%	15.6%
Pulaski	5,401,166	2,129,889	39.4%	29.7%
Pullman	2,985,911	99,247	3.3%	10.3%
Ravenswood	2,189,580	53,165	2.4%	53.2%
Roosevelt-Cicero	8,707,064	1,282,549	14.7%	29.9%
Stevenson	12,872,084	2,551,616	19.8%	8.1%
Wright	880,265	33,524	3.8%	0.0%
TOTALS	56,149,407	9,963,449	17.7%	16.8%

Source: Costar

Figure 8

4. Industrial Building Space Characteristics

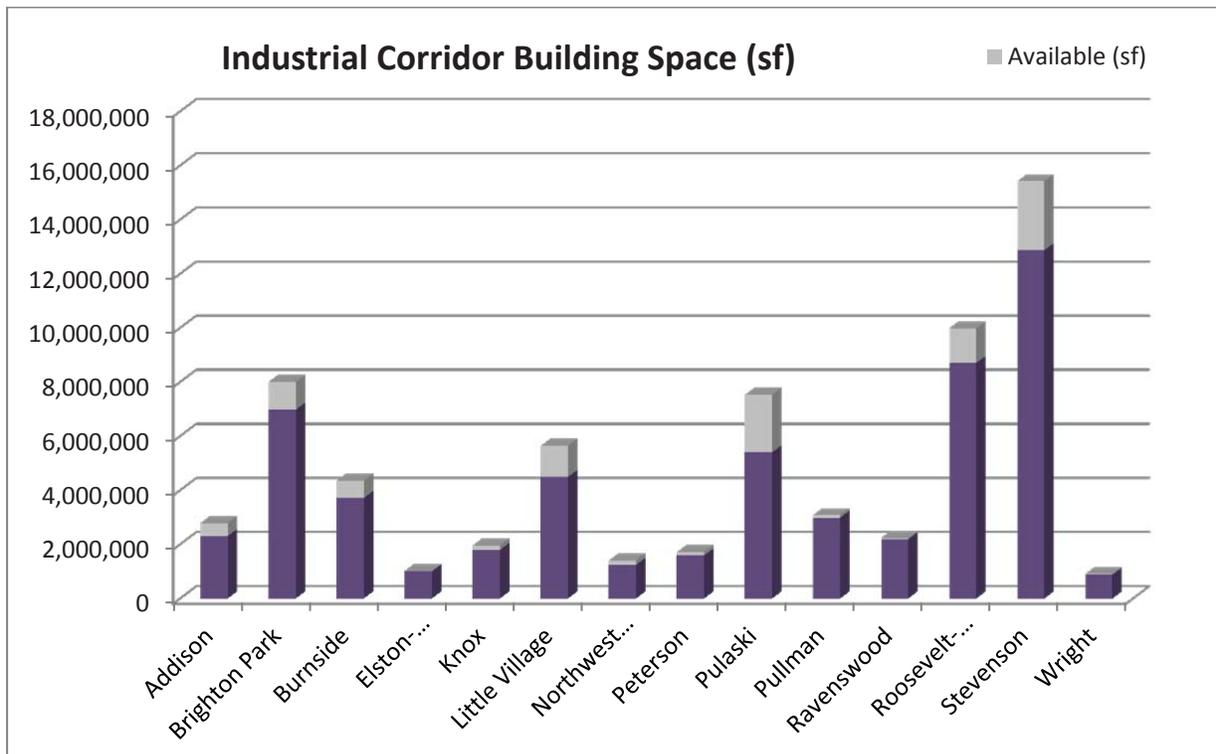


Figure 9

Figure 10 below shows the average age of buildings in each PMD and non-PMD industrial corridor, from newest to oldest. It is not surprising that the oldest building stock is general located in industrial areas closest to the Central Business District where much of the earliest industrial development occurred. Also included in the table for comparison are select competitive suburban submarkets, illustrating that the city's building stock is – with some variation -- generally among the oldest. This comparison does not include the newest submarkets farther out along the I-55 and I-80 corridors where the bulk of new distribution space is being built today, as those markets and Chicago are generally not competing head-to-head with Chicago for the same users.

Average Age of Industrial Buildings			
Willowbrook/Willow Springs	1987	Pullman IC	1953
McCook	1983	Stevenson IC	1953
Northbrook	1977	Armitage PMD	1952
Elk Grove Village	1976	Cicero	1952
Alsip	1975	Addison IC	1951
Harlem PMD	1971	Stockyards PMD	1950
Des Plaines	1970	Hammond	1948
Bedford Park	1968	Kennedy PMD	1948
Franklin Park	1966	Brighton Park IC	1946
Summit / Argo	1964	North Branch PMDs	1946
Calumet PMD	1963	Pulaski IC	1945
Peterson IC	1960	Roosevelt-Cicero IC	1942

4. Industrial Building Space Characteristics

Elston-Armstrong IC	1955		Pilsen PMD	1941
Burnside IC	1954		Kinzie PMD	1939
Greater SW PMD	1954		Ravenswood IC	1938
Knox IC	1953		Chicago-Halsted PMD	1937
Little Village IC	1953		East Chicago	1934
<i>Source: Costar</i>				
			<i>Chicago PMDs and Industrial Corridors</i>	
			<i>Select Suburbs</i>	

Figure 10

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Employment Trends

The Land Use Task Force that was formed as part of the Chicago Sustainable Industries initiative previously analyzed employment trends in manufacturing and related industrial sectors in the Industrial Corridors between the years of 2002 and 2010. With recent research suggesting that 2010 represented the floor for U.S. manufacturing employment¹, U.S. Equities extended the analysis to the most recently-available data (2011) to capture and understand the local impacts of this national trend, and to inform recommendations in updating the City's PMD policy.

In extending the Land Use Task Force analysis, U.S. Equities relied on the same data source as was used to extract the 2002 – 2010 employment data: the U.S. Census Bureau Center for Economic Studies' (CES) OnTheMap tool.² The OnTheMap tool allows users to access annual employment and worker-demographic data by NAICs code based on user selected, or defined, geographic areas. For the purposes of this analysis, U.S. Equities followed the methodology used in the original Land Use Task Force Report, using the OnTheMap tool to access total annual CES employment count estimates³ by NAICs code in order to perform an analysis of:

1. The City of Chicago's manufacturing employment trends relative to Illinois, Cook County, and the Chicago Metropolitan Statistical Area (MSA) from 2002 - 2011;
2. How, more specifically, the individual Industrial Corridors⁴ performed over the same period of time.

Using the Land Use Task Force employment analysis as a framework, U.S. Equities grouped the City's Industrial Corridor employment data into four sub-categories in order to understand employment trends in manufacturing and as well as related employment sectors suitable for PMD-zoned districts. The following three sub-categories represent activities that align with the employment objectives of PMDs:

1. **Manufacturing Sub-category.** Core manufacturing activity comprised of:
 - a. NAICS 31-33: Manufacturing
2. **Non-manufacturing Industrial Sub-category.** Industrial activity suitable for PMD -zoned land that is not strictly defined as manufacturing, comprised of:
 - a. NAICS 22: Utilities
 - b. NAICS 23: Construction
 - c. NAICS 42: Wholesale Trade

¹ http://data.bls.gov/timeseries/CES3000000001?data_tool=XGtable/
<http://www.brookings.edu/~media/events/2013/7/25%20manufacturing/the%20case%20for%20a%20manufaturing%20renaissancegene%20sperling7252013finalp.pdf>;

² U.S. Census Bureau, Center for Economic Studies, OnTheMap Application and LEHD Employment Statistics.
<http://onthemap.ces.census.gov/>

³ Employment and/ or demographic filters were not applied; data represents setting for *All Jobs, All Workers* estimates from CES.

⁴ City of Chicago DHED provided the GIS Shapefile used to define the area selection for the industrial corridors: CoC_Industrial_Corridors_26.shp 01.23.2013.

5. Employment Trends

- d. NAICS 48-49: Transportation and Warehousing
 - e. NAICS 56: Administrative Support, Waste Management & Remediation
3. **Related to Industrial / Manufacturing Sub-category.** This sub-category was revised from the Land Use Task Force's *Compatible with Manufacturing Sub-category* during the course of this study to represent economic activity that is related to and supportive of industrial operations, includes technology—focused activities that are more akin to office uses, but excludes retail, consumer-oriented, or activities that are public facing in nature. This sub-category is comprised of:
- a. NAICS 51: Information
 - b. NAICS 54: Professional, Scientific and Technical Services
 - c. NAICS 55: Management of Companies and Enterprises
4. **Other Sectors Sub-category.** The following sectors were considered activities that are either incompatible with PMDs, or for which other districts in the city are intended and zoned to support (though may be technically compatible with industrial uses). This sub-category is comprised of:
- a. NAICS 11: Agriculture, Forestry, Fishing & Hunting
 - b. NAICS 21: Mining
 - c. NAICS 44-45: Retail Trade
 - d. NAICS 52: Finance and Insurance
 - e. NAICS 53: Real Estate
 - f. NAICS 61: Educational Services
 - g. NAICS 62: Health Care and Social Assistance
 - h. NAICS 71: Arts, Entertainment and Recreation
 - i. NAICS 72: Accommodation and Food Service
 - j. NAICS 81: Other Services (except Public Administration)
 - k. NAICS 92: Public Administration

City of Chicago Manufacturing Employment 2002 – 2011

The City of Chicago manufacturing employment between 2002 and 2011 generally follows the State's, MSA's, and the County's manufacturing employment trends, see Figure 2 below. Worth noting is that while Chicago shed manufacturing jobs at a greater rate than the State, MSA, and -- with the exception of a couple of years -- the County between 2002 and 2009, Chicago performs in-line with the State and MSA, and slightly better than the County in slowing loss and recovering manufacturing jobs between 2010 and 2011.

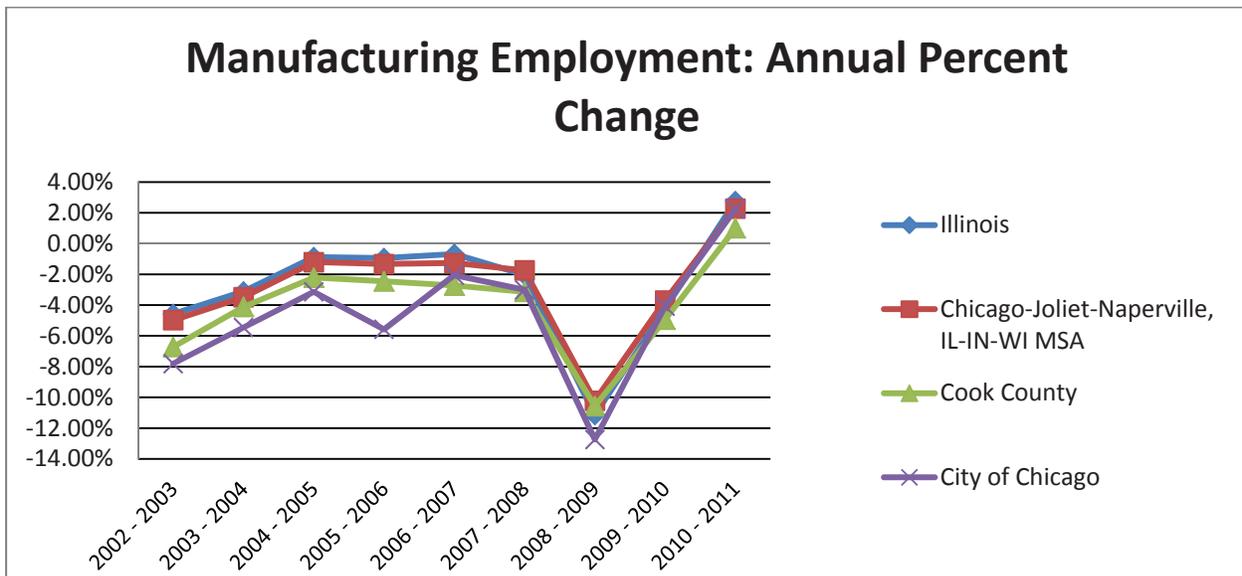


Figure 11

City of Chicago Industrial Employment 2002 – 2011

U.S. Equities also looked at employment in the individual industrial corridors over the same period of time, by sub-category. Figure 12 below shows the employment change in each of the three sub-categories per industrial corridor, and is sorted from best-performing to worst-performing by total percentage change; industrial corridors with a PMD designation are in bold. Both the top and the bottom performers are a mix of Industrial Corridors with and without the PMD designations.

Figure 12: City of Chicago Industrial Corridor Employment Percent Change 2002-2011 by Sub-category

2002 - 2011 Employment Percent Change ⁵				
Chicago Industrial Corridors	MANUFACTURING sub-category	NON-MANUFACTURING - INDUSTRIAL sub-category	RELATED TO INDUSTRIAL/ MANUFACTURING sub-category	TOTAL 3 sub-categories
Little Village	1.0%	178.2%	*	66.3%
Elston / Armstrong	6.0%	303.8%	*	59.6%
North Branch	-15.5%	79.9%	69.4%	44.4%
Kinzie	-46.9%	145.7%	53.9%	43.9%
Greater Southwest	24.3%	46.5%	*	29.7%
Calumet	13.2%	0.2%	-17.4%	8.8%
Pilsen	-9.0%	-2.7%	266.5%	2.8%
Addison	9.5%	-5.4%	-15.0%	2.4%

⁵ Full table with 2002 and 2011 employment counts as well as employment counts for the *Other Sectors* is included in Attachment D.

5. Employment Trends

Harlem	-22.2%	13.7%	*	-2.1%
Ravenswood	-43.3%	26.7%	24.0%	-15.1%
Knox	-46.2%	11.7%	-15.1%	-17.3%
Stevenson	-11.6%	-36.0%	-27.0%	-25.6%
Stockyards	-39.2%	2.8%	132.8%	-25.9%
Kennedy	-41.6%	10.1%	*	-26.8%
Pulaski	15.4%	-82.0%	*	-28.2%
Roosevelt/ Cicero	-47.3%	-20.7%	6.1%	-34.2%
Northwest	-22.8%	-52.1%	-90.0%	-38.0%
Armitage	-50.6%	-33.9%	93.5%	-42.1%
Western/Ogden	-45.6%	-44.8%	*	-45.1%
Pullman	-19.4%	-61.9%	*	-48.4%
Peterson	-50.7%	-43.3%	-96.8%	-53.4%
Brighton Park	-68.2%	-47.3%	*	-53.6%
Burnside	-76.4%	*	-98.8%	-80.1%
West Pullman	-94.1%	*	*	-95.4%
Northwest Hwy	<i>Not Available</i>			
Wright Business Park	<i>Not Available</i>			
Totals	-26.9%	7.6%	33.2%	-9.4%

Figure 12 *For sub-categories where the 2002 base employment count was less than 100, percentage change is not included. It is however represented in the percentage change for total of the three sub-categories.

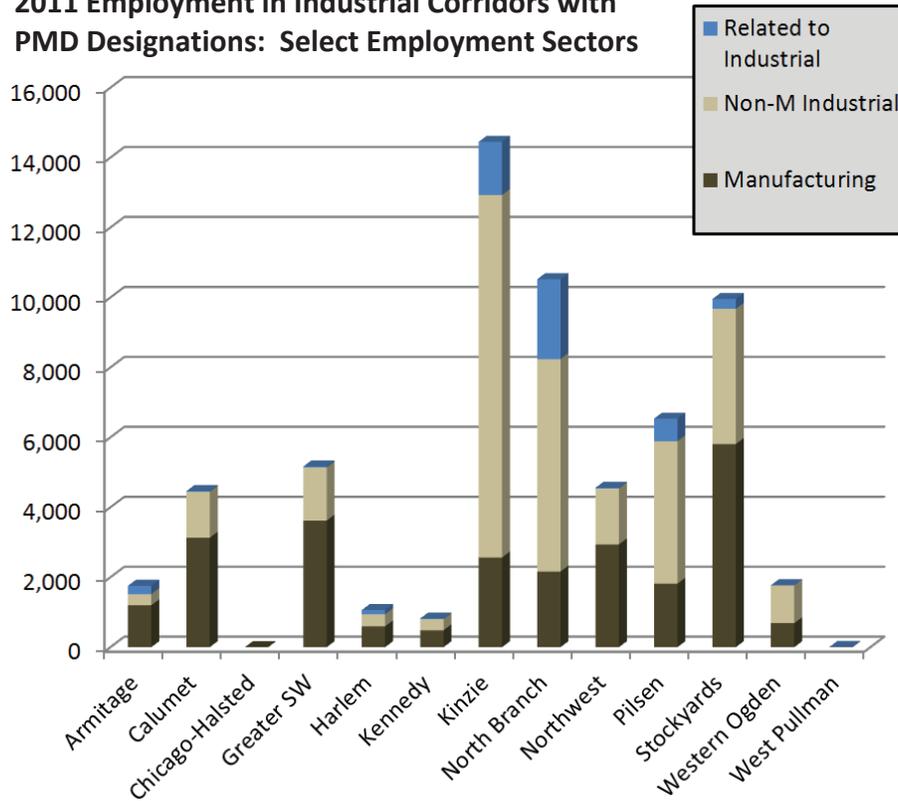
Finally, U.S. Equities looked at the most recent available employment data in the industrial corridors. The following charts in Figure 13 show the 2011 total employment in the industrial corridors for the three NAICS sub-categories; the top chart includes industrial corridors with the PMD designations, while the chart below includes those without the PMD designation. Both charts use the same scale for ease in comparing employment among districts. While the data is not normalized for land area, generally the industrial corridors with the PMD designation have greater levels of employment in manufacturing and the related industrial sectors.

Notably, strong performers in the *Related to Industrial/ Manufacturing* sub-category include the Kinzie, North Branch, and Pilsen PMDs, which may be a function of proximity to the central business district and an indicator of the importance of urban location to some categories of modern employment growth sectors.

Employment data was used as one indicator of competitiveness and performance in evaluating the individual PMDs and industrial corridors. Related considerations and recommendations are discussed in more detail in the following section of the report.

5. Employment Trends

2011 Employment in Industrial Corridors with PMD Designations: Select Employment Sectors



2011 Employment in Industrial Corridors without PMD Designations: Select Employment Sectors

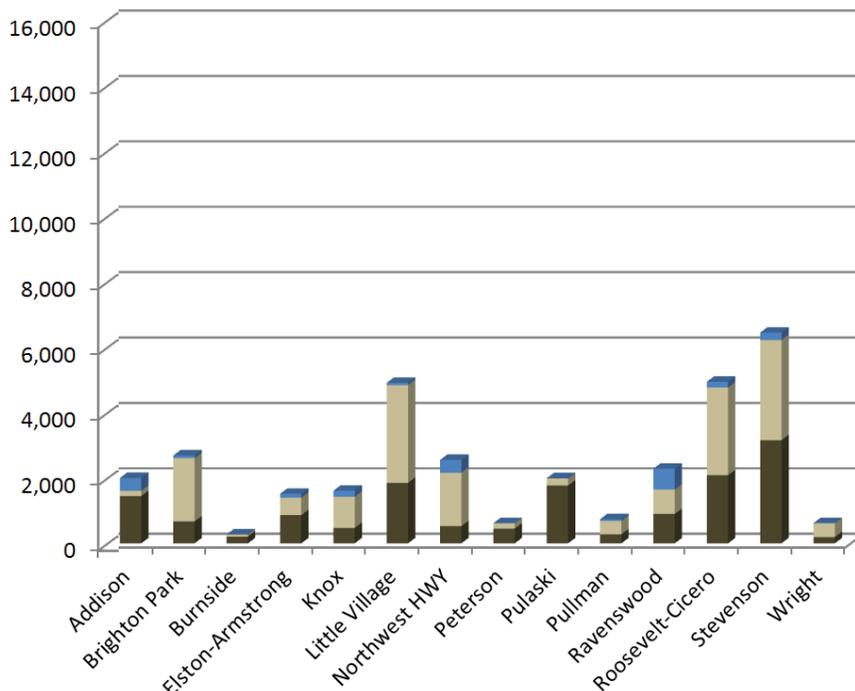


Figure 13

List of Attachments

- A. Planned Manufacturing District Advisory Committee Members
- B. Additional Individuals Interviewed for the Assignment
- C. Recent Industrial Development in Chicago
- D. Industrial Corridor Employment Data Detail
- E. Competitive Evaluation of PMDs
- F. Competitive Evaluation of Industrial Corridors
- G. Recommended Use Definition Modifications

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ATTACHMENT A

Planned Manufacturing District Advisory Committee Members

Name	Organization
Pam McDonough	DM Construction Management - Co-Chair
Peter Testa	Testa Produce - Co-Chair
Honorable James Balcer	Alderman, City of Chicago, 11 th Ward
Bruce Baker	Chicago Manufacturing Renaissance Council
Honorable Walter Burnett, Jr.	Alderman, City of Chicago, 27 th Ward
Jim Capraro	Capraro Consulting Services
Craig Chico	The Back of the Yards Neighborhood Council
Jon B. DeVries	Marshall Bennett Institute, Roosevelt University
Steve DeBretto	Industrial Council of Nearwest Chicago
Beth Dybala	Calumet Area Industrial Commission
Theresa O. Frankiewicz	Crown Community Development
Mike Holzer	North Branch Works
Burt Klein	Portion Pac Chemical Corporation
Honorable John Pope	Alderman, City of Chicago, 10 th Ward
Ted Stalnos	Calumet Area Industrial Commission
Honorable Scott Waguespack	Alderman, City of Chicago, 32 nd Ward
Robert Weissbourd	RW Ventures, LLC
Ted Wysocki	North Branch Works

Attachment B. Additional Individuals Interviewed for the Assignment

ATTACHMENT B

Additional Individuals Interviewed for the Assignment

In addition to the participation of members of the PMD Advisory Committee, a number of brokers, developers, civic leaders, and academics provided valuable input to aspects of the assignment. Below is a partial list of such individuals.

Name	Organization
Mitch Adams	CBRE
Jim Bolduc	CBRE
Anne Byrne	CMAP
Donna Ducharme	Delta Institute
Jeff Girling	Paine Wetzel
Larry Goldwasser	Cushman Wakefield
Mary Howe	Howe Corporation
Neil Kane	Illinois Nanotech Collaborative
Burt Klein	PortionPac
Steve Kohn	Colliers International
Mike Laube	Laube and Associates
Mike Magliano	Cushman Wakefield
Kathleen Nelson	Cushman Wakefield
Bruce Nesbitt	Orion Industries
Ted Novak	DLA Piper
Caralynn Nowinski	University of Illinois
David Reifman	DLA Piper
Patrick O'Connor	Sterling Bay
Paul O'Connor	SOM
George Philips	Sipi Metals
Adam Schneiderman	Newmark Knight Frank
Mike Senner	Colliers International
Carol Stubblefield	Neal and Leroy
John Tolva	Chicago Dept. of Innovation & Technology
Dennis Vicchiarelli	World Business Chicago

ATTACHMENT C

Speculative Industrial Space in Chicago

Authored by Applied Real Estate Analysis

Applied Real Estate Analysis (AREA), Inc., was tasked with identifying and assessing the performance of speculative industrial buildings constructed in Chicago since 2000. The assignment was later expanded to include older buildings that had been speculatively renovated for industrial use. In addition, we identified a few new buildings in adjacent communities where location issues appear to be similar to those in the city. The concept was to explore whether these buildings were performing well economically and the extent to which their performance might inform the development of citywide industrial policies.

The initial research showed very few buildings had been built or renovated over the past decade. Of those that were built or renovated, the majority were developed for a specific company. Only three speculatively developed industrial buildings were identified. Other buildings were developed for a specific firm but contained more space than the anchor tenant would occupy; this space was then made available for lease. Thus, a portion of the building might be considered to have been “speculatively” developed. We were unable to identify any older buildings that were renovated without an existing tenant. We identified several multi-story buildings still in use for manufacturing purposes, but they have long-term occupants who upgraded the structures to meet their corporate needs. More common were single-story industrial buildings built in the 1940s through the 1970s that have been renovated for industrial use. However, there was always a user in place prior to the renovation. The lower clear heights and fewer dock spaces in the older structures make them too risky for speculative renovation.

New buildings constructed in Chicago over the past decade have included both manufacturing and distribution facilities, with warehousing and distribution accounting for a substantial portion of the space. The most significant new manufacturing complex developed over the past decade, the **Ford Supplier Park**, was not built on speculation, but the 1.6 million square-foot facility is approximately 25 percent vacant. Three of the complex’s four buildings have been continuously occupied since they opened in 2003. However, they anticipated tenants for the fourth, 400,000 square-foot building did not materialize, effectively making it a speculative structure.

Although originally built for specific users who were providing supplies to the Torrence Avenue Ford assembly plant, the property’s performance has been adversely impacted by changes at the Ford plant as well as overall economic conditions. Ford has relaxed some of its “just in time” delivery policies, and this has made it possible for some firms to continue supplying the plant from more remote locations. Thus, there is less demand for space than was originally anticipated. In addition, the recent recession put downward pressure on rents, with reductions averaging about 25 percent. Current rents are in the \$3.50 per square foot range, down from as high as \$6.00 when the current owners acquired the property.

Although one of the four buildings in the development is available for permanent lease, the poor economic performance of the complex has been mitigated by the owner’s ability to lease a portion of the vacant space on a temporary basis. The complex’s 6B tax status expires in a couple of years and the

Attachment C. Speculative Industrial Space in Chicago

owners are seeking an extension to maintain the already limited viability of the project.

Non-manufacturing buildings developed over the past decade include 815 West Pershing Road, 1900 West Walnut Street, and 2700 West Roosevelt Road. A brief discussion of each property follows.

Halsted Pershing Business Center

815 West Pershing Road

Built:	2008
Size:	104,000 square feet
Characteristics:	Flexible space with 30-foot clear height, 10 docks, and 4 drive-in doors
Space Available:	25,500 square feet (minimum divisible 10,000 sf)
Asking Rent:	\$6.75 (has been as high as \$8.00)
Taxes:	\$16,750 (2010-latest year available)

The timing on this product was very unfortunate. It was completed just after the real estate market had peaked, and it was marketed as the recession gained momentum in 2009. It was the last speculative industrial building completed in Chicago, and the common wisdom is that it may have been the last for a long time. The main tenant in the building is a Houston-based manufacturer of heating and air-conditioning equipment. There are two smaller tenants in the building, but there are also 25,000 square feet of vacant space.

One factor, other than the economy, that affected the initial leasing of the building was the timing of a Metropolitan Reclamation District (MRD) determined that the development site was the ideal location to drop a shaft as part of the Deep Tunnel project. Under an initial agreement with the developer, the MRD indicated the project would be complete before the developer began construction. However, the project actually started just before the developer completed construction, and access to the building's docks was blocked for several months. In addition, the developer's lender developed regulatory problems and was unable to provide all of the committed funding. In spite of these problems, the building is now stabilized financially and negotiations are underway for at least a portion of the vacant space. Rents are still slightly less than pro forma.

1900 West Walnut

Built:	2007
Size:	58,500 square feet
Characteristics:	Flexible space
Asking Rent:	"Below Market"
Taxes:	\$42,838 (15 Tax Parcels-2012 annualized based on first installment)

According to the building's representative, "this building would not be built today." The developer of the property was reportedly not experienced with industrial development. However, he owned land on a site zoned for industrial use and was encouraged by the apparent robustness of the economy. The result was a new building that had limited maneuvering room for trucks, with docks that forced trucks to block the street when they backed up to them. Also, there was inadequate parking for the size of the structure. Fortunately for the developer, a

Attachment C. Speculative Industrial Space in Chicago

business service firm that helps companies build brand awareness found the space suitable for its needs, and it leased the entire building. The new tenant seldom has need of the loading docks so the inadequate design was not an issue. As a result, the building has been financially successful.

2700 West Roosevelt Road

Built: 2001/2006
Size: 103,450 square feet
Characteristics: Flexible space
Asking Rent: \$5.50
Taxes: \$7,741 (2012 taxes annualized based on first installment.)

This property was built in 2001 for a specific tenant, but it was purchased in 2004 and renovated and expanded so that it was basically a speculative building when it was placed in service in early 200. The building has struggled financially. It is currently fully leased but at rents below pro forma. A food-processing tenant occupies a portion of the building, and the remainder is leased to the City for storage. In addition to the economy, the surrounding neighborhood makes leasing the building a difficult task. In addition to being in a PMD, it is also in an Enterprise Zone and has 6B tax status.

An example of a building that was only partially speculative is located at:

3423 North Drake Avenue.

Built: 2002/2006
Size: 103,450 square feet
Characteristics: Flexible space
Space Available: none
Asking Rent: \$8.90 for warehouse; \$10.50 for office showroom
Taxes: \$161,227(2012-eight tax parcels)

The site is an industrially zoned triangle bounded by Kimball Avenue on the east, a railroad embankment to the north, and I-94, which curves around the south side of the site. The location is just southwest of PMD 14. Several older industrial buildings on the site were purchased by a construction company in the 1990s. In the construction company built a two-story, precast concrete structure for its own use. The company put its name on the building in large letters near the roofline of the building so that it was highly visible from the expressway. In6, the construction company added speculative space to its building. However, the addition has only 18-foot clear space, so it has limitations for industrial use. Some of the space has been fished for office/showroom use. The remainder of the site has subsequently been cleared and sold to an educational institution that plans to build a college there that would target the area's Hispanic population.

Attachment C. Speculative Industrial Space in Chicago

We identified additional industrial buildings in Bedford Park, Cicero, and Melrose Park that were built on speculation during the past decade. Several of the buildings are completely empty and all have space available. Although the general economic conditions have no doubt affected the ability of the owners to lease these properties, the buildings do share many of the locational characteristics of Chicago industrial properties.

- Building 1 in the Cicero Industrial Park at 1330 South 54th Avenue was developed in 2008 and its 260,000 square feet were never leased. The adjacent 290,000 square foot Building 2 was leased to a bakery in 2010 for \$5.66 per square foot. The site had rail access and reasonable access to I-290 via 16th Street and Central Avenue. It also had all of the features of a Class A industrial building with 32 foot ceiling height and 30 exterior docks. It appears timing was the main issue affecting leasing of the property. It was recently sold to Cook County.
- Three buildings on West 73rd Street, just west of Cicero Avenue in Bedford Park, were built on speculation in mid portion of the past decade. A 308,000 square-foot building at 5025 W. 73rd Street has a about 100,000 square feet available at an asking rent of \$3.75 per square foot. The building has a 6B tax status. Approximately one-third of the building is occupied by a national firm, headquartered in Chicago that distributes high end furniture, lighting, flooring and accessories. The other two buildings, known as the Bedford Park Corporate Center, contain a total of 540,000 square feet and are only about 60% occupied. Asking rent was \$4.25 but may have been lowered.

RENOVATED –REPURPOSED INDUSTRIAL BUILDINGS

Two older, but distinctly different, industrial buildings have been recently renovated in Chicago. **The Green Exchange**, at 2545 West Diversey Avenue, is the conversion of a four-story, 272,000 square-foot manufacturing building into a home for a diverse group of environmentally-conscious firms. Tenants include, an architecture/interior-design firm, a design-build firm, an firm that designs and installs organic gardens, a non-profit organization that provides nutrition education, an early childhood learning center, a pest-control company, an intellectual property law firm, a logistics company, a bank, a restaurant, a company that designs and installs alternative energy systems and a variety of consulting firms. Chicago's food processing industry is also represented by a tea packaging company and a craft brewery.

Although the building was formerly a manufacturing facility, most of the current tenant space is in offices. A few of the tenants might have located in a typical industrial district because of their need for warehouse type space, but none would be excluded for locating in most commercially zoned districts. The uses in the building are not considered incompatible with the residential character of the neighborhood. The Green Exchange might not have been feasible in a Planned Manufacturing District. Certainly, the law firm and some of the consulting firms would have been subject to review before being allowed in a PMD.

The Cylinder Works, at 1765 North Elston, is in the North River PMD. When Hanna Cylinder Company relocated, the building was slated for demolition. There was little likelihood of locating a single manufacturing firm to occupy the 65,000 square foot space with two-story high ceiling. The logical use

Attachment C. Speculative Industrial Space in Chicago

for the site, given its location, was for a big box retailer. However, this use was prohibited in the PMD. A new owner with a preservation orientation developed a concept for converting the structure into a year-around indoor food market. But this use was also prohibited by PMD zoning. The alternative concept was to develop an industrial incubator with space of varying sizes to accommodate start-up firms that could then grow into larger spaces within the building. The building's height allowed for the construction of a second level within a portion of the existing building. This increased the usable square footage to 122,000 square feet. The ground floor is now occupied by a wholesale food firm that specializes in connecting organic farmers from within about a six-hour drive of Chicago with local chefs and restaurants and a firm that refurbishes and distributes point of sale cash registers and computer systems. The new second level houses a logistics firm with 300 employees. However, this space is essentially an office use and could be located in almost anywhere in the Loop. Rents are \$10 to \$14 per square foot, double to triple rents for industrial space in the suburbs.

The developer had hoped to secure a few personal service tenants for the frontage on Elson Avenue but the zoning was changed to prohibit this use before the renovation was complete. The zoning change forced a change of plans. Space facing Elston could have commanded rents that were double the current rent levels if it had been occupied by personal service firms.

Next door to the Cylinder Works, at **1731 North Elston Avenue**, is another repurposed industrial building. However, this building is a single-story structure that would be considered more compatible with contemporary industrial uses. The renovation was completed in 2008. The developer renovated the building with five spaces of under 3,000 square feet facing Elston Avenue. These spaces were slated for "personal service" firms, a use that is allowed under one variation of PMD zoning. Two spaces were leased to a fitness club and a day care center but the zoning was changed to a level that did not allow personal services as a permitted use. The two tenants were allowed to remain but, as a result, it became difficult to lease the other units and two of these spaces are still vacant. There are two tenants in the remainder of the 77,000 square foot building. An advertising agency that also warehouses wine and other products leases a portion of the space and the remainder functions as the headquarters and warehouse for Akira, a local chain of clothing boutiques. Rents are in the \$10 to \$15 range. The development also includes parking for 140 cars.

Single-story industrial buildings on the city's North Side are more likely to find a user than older multistory buildings or buildings in other areas of the city. WMS, a Waukegan-based manufacturer of casino slot machines and other gaming equipment renovated a single story industrial building at **3401 North California Avenue** to house its Technical Center. Similarly, Voges Haut-Chocolat is renovating a 43,000 square-foot, single-story building at **2950 North Oakley Avenue** to expand its production capacity for the firm's line of high-end chocolates. Both of these firms have a workforce of younger persons who want to live in the city but who also want their place of employment to be convenient to where they live.

During our research, several factors were commonly mentioned that inhibit industrial development in the city.

- **Cost.** The main problem cited for the poor economic performance of industrial buildings in the city is the cost to build. Compared to most suburban locations, the land is more expensive, the cost of meeting and obtaining City permits is higher, as is the cost of meeting the City's code requirements. As a result, rents are not competitive with outlying locations.

Attachment C. Speculative Industrial Space in Chicago

- **Access.** Especially for large warehouse and distribution space, locations along the Interstate corridors are more convenient and efficient. For goods that are being shipped throughout the Midwest, accessing Interstate 80 directly from a location 10 or even 40 miles outside the city saves a tremendous amount of time, especially during peak commute hours when traffic closer to the city is more congested.

In older industrial areas, especially the Kinzie PMD, narrow streets create another type of access problem, sometimes aggravated by the lack of parking for buildings built to the lot line. The availability of vacant parcels near older industrial buildings may help alleviate parking issues but do little to make the locations more desirable.

- **General Neighborhood Environment.** Many of the larger industrial sites in Chicago are in locations in which the surrounding neighborhoods are in varying states of deterioration. Even if the owners of a firm might find advantages in the location, they are often concerned about the safety of their existing employees and how the neighborhood will impact their ability to recruit new employees.
- **Financing.** For existing buildings, lending institutions are hesitant to approve renovation loans unless a tenant is in place. Even with a tenant in place, if there is already debt on the property, a lender is unlikely to provide an improvement loan that will be in second position behind the mortgage.

A more general comment relative to PMDs was that their boundaries need to be rationalized. It is claimed that in some areas the boundaries include sites that are too small or improperly configured for industrial development and they should be removed from the PMD to encourage their development for alternative uses.

A Note About Craft Breweries and Industrial Space

Many craft brewers begin their operations as home brewers and then decide to start their own brewery. The Goose Island Brewery was among the first small craft breweries to expand into larger production facilities in an industrial area. Its success has, no doubt, inspired other craft brewers in Chicago. Although Goose Island continues to brew beer in the Goose Island PMD, it is now a subsidiary of Anheuser Busch and 312 beer is now brewed in New York State, rather than within the 312 area code geography.

Some craft breweries, like Revolution, start as brew-pubs and then expand into production. Others, including Metropolitan and Half Acre find small buildings with large open spaces in which to begin production. In the case of Half Acre, it was an older industrial building in the middle of a retail stretch of Lincoln Avenue south of Montrose. Metropolitan located in a multi-tenant building in the Ravenswood Industrial corridor, an area with small older industrial buildings that buffer the residential neighborhood from Metra tracks. A craft distillery, Koval, is another tenant in the same building in the 5100 block of North Ravenswood Avenue. The Ale Syndicate has its start-up operation located in the Green Works and 5 Rabbit is located in a single-story, multi-tenant industrial building on West 74th street in Bedford Park.

Attachment C. Speculative Industrial Space in Chicago

When Revolution Brewery needed to expand production beyond the capacity of its Milwaukee Avenue brew-pub, it leased a unit in a multi-tenant industrial building in the Kedzie PMD. Proximity to its brew pub was one factor in the location decision, in addition to the availability of several spaces within the long, narrow structure on Kedzie Avenue just north of the Kennedy Expressway.

Although older industrial buildings provide excellent space for small craft breweries, the industrial space does not need to be located in a PMD, or even and in an industrially zoned area. Many craft breweries are located in older industrial buildings in commercial The operations are not incompatible with residential areas, at least while the breweries are still small. Once a brewery reaches the production capacity of a Goose Island Brewery, delivery of supplies and distribution of product creates enough truck traffic that location in an industrial area rather than a commercial strip, becomes more desirable.

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Attachment D. Industrial Corridor Employment Detail

Chicago Industrial Corridors	2002						2011						2002 - 2011 Change						2002 - 2011 Percent Change					
	MANUFACTURING subcategory	NON-MANUFACTURING INDUSTRIAL subcategory	RELATED TO INDUSTRIAL/MANUFACTURING subcategory	TOTAL Selected Sectors	Total Other Sectors	TOTAL ALL Sectors	MANUFACTURING subcategory	NON-MANUFACTURING INDUSTRIAL subcategory	RELATED TO INDUSTRIAL/MANUFACTURING subcategory	TOTAL Selected Sectors	Total Other Sectors	TOTAL ALL Sectors	MANUFACTURING RING subcategory	NON-MANUFACTURING RING INDUSTRIAL subcategory	RELATED TO INDUSTRIAL/MANUFACTURING subcategory	TOTAL Selected Sectors	Total Other Sectors	TOTAL ALL Sectors	MANUFACTURING RING subcategory	NON-MANUFACTURING RING INDUSTRIAL subcategory	RELATED TO INDUSTRIAL/MANUFACTURING subcategory	TOTAL Selected Sectors	Total Other Sectors	TOTAL ALL Sectors
Addison	1,320	168	466	1,954	606	2,560	1,446	159	396	2,001	169	2,170	126	-9	-70	47	-437	-390	9.5%	-5.4%	-15.0%	2.4%	-72.1%	-15.2%
Armitage	2,428	481	123	3,032	256	3,288	1,200	318	238	1,756	79	1,835	-1,228	-163	115	-1,276	-177	-1,453	-50.6%	-33.9%	93.5%	-42.1%	-69.1%	-44.2%
Brighton Park	2,107	3,679	5	5,791	547	6,338	669	1,937	82	2,688	700	3,388	-1,438	-1,742	77	-3,103	153	-2,950	-68.2%	-47.3%	1540.0%	-53.6%	28.0%	-46.5%
Burnside	883	78	408	1,369	73	1,442	208	60	5	273	315	588	-675	-18	-403	-1,096	242	-854	-76.4%	-23.1%	-98.8%	-80.1%	331.5%	-59.2%
Calumet	2,766	1,312	23	4,101	103	4,204	3,130	1,314	19	4,463	174	4,637	364	2	-4	362	71	433	13.2%	0.2%	-17.4%	8.8%	68.9%	10.3%
Elston / Armstrong	816	131	2	949	316	1,265	865	529	121	1,515	57	1,572	49	398	119	566	-259	307	6.0%	303.8%	5950.0%	59.6%	-82.0%	24.3%
Greater Southwest	2,912	1,037	36	3,985	2,020	6,005	3,621	1,519	28	5,168	1,709	6,877	709	482	-8	1,183	-311	872	24.3%	46.5%	-22.2%	29.7%	-15.4%	14.5%
Harlem	767	306	12	1,085	52	1,137	597	348	117	1,062	70	1,132	-170	42	105	-23	18	-5	-22.2%	13.7%	875.0%	-2.1%	34.6%	-0.4%
Kennedy	830	288	3	1,121	347	1,468	485	317	19	821	356	1,177	-345	29	16	-300	9	-291	-41.6%	10.1%	533.3%	-26.8%	2.6%	-19.8%
Kinzie	4,836	4,218	989	10,043	2,355	12,398	2,566	10,363	1,522	14,451	3,269	17,720	-2,270	6,145	533	4,408	914	5,322	-46.9%	145.7%	53.9%	43.9%	38.8%	42.9%
Knox	875	854	218	1,947	199	2,146	471	954	185	1,610	344	1,954	-404	100	-33	-337	145	-192	-46.2%	11.7%	-15.1%	-17.3%	72.9%	-8.9%
Little Village	1,832	1,075	45	2,952	397	3,349	1,851	2,991	67	4,909	527	5,436	19	1,916	22	1,957	130	2,087	1.0%	178.2%	48.9%	66.3%	32.7%	62.3%
North Branch	2,560	3,377	1,348	7,285	3,795	11,080	2,163	6,075	2,283	10,521	7,240	17,761	-397	2,698	935	3,236	3,445	6,681	-15.5%	79.9%	69.4%	44.4%	90.8%	60.3%
Northwest	3,805	3,339	210	7,354	1,458	8,812	2,939	1,601	21	4,561	1,141	5,702	-866	-1,738	-189	-2,793	-317	-3,110	-22.8%	-52.1%	-90.0%	-38.0%	-21.7%	-35.3%
Northwest Hwy																								
Peterson	913	291	124	1,328	94	1,422	450	165	4	619	288	907	-463	-126	-120	-709	194	-515	-50.7%	-43.3%	-96.8%	-53.4%	206.4%	-36.2%
Pilsen	1,994	4,188	176	6,358	900	7,258	1,815	4,075	645	6,535	1,109	7,644	-179	-113	469	177	209	386	-9.0%	-2.7%	266.5%	2.8%	23.2%	5.3%
Pulaski	1,531	1,197	48	2,776	518	3,294	1,767	215	12	1,994	307	2,301	236	-982	-36	-782	-211	-993	15.4%	-82.0%	-75.0%	-28.2%	-40.7%	-30.1%
Pullman	341	1,088	3	1,432	20	1,452	275	414	50	739	28	767	-66	-674	47	-693	8	-685	-19.4%	-61.9%	1566.7%	-48.4%	40.0%	-47.2%
Ravenswood	1,586	589	516	2,691	544	3,235	899	746	640	2,285	1649	3,934	-687	157	124	-406	1105	699	-43.3%	26.7%	24.0%	-15.1%	203.1%	21.6%
Roosevelt/ Cicero	3,962	3,382	165	7,509	1,392	8,901	2,086	2,681	175	4,942	553	5,495	-1,876	-701	10	-2,567	-839	-3,406	-47.3%	-20.7%	6.1%	-34.2%	-60.3%	-38.3%
Stevenson	3,567	4,791	307	8,665	499	9,164	3,155	3,065	224	6,444	649	7,093	-412	-1,726	-83	-2,221	150	-2,071	-11.6%	-36.0%	-27.0%	-25.6%	30.1%	-22.6%
Stockyards	9,560	3,757	122	13,439	978	14,417	5,811	3,863	284	9,958	2,071	12,029	-3,749	106	162	-3,481	1,093	-2,388	-39.2%	2.8%	132.8%	-25.9%	111.8%	-16.6%
West Pullman	101	28	1	130	18	148	6	0	0	6	2	8	-95	-28	-1	-124	-16	-140	-94.1%	-100.0%	-100.0%	-95.4%	-88.9%	-94.6%
Western/Ogden	1,264	1,954	12	3,230	242	3,472	688	1,078	7	1,773	162	1,935	-576	-876	-5	-1,457	-80	-1,537	-45.6%	-44.8%	-41.7%	-45.1%	-33.1%	-44.3%
Wright Business Park																								
Totals	53,556	41,608	5,362	100,526	17,729	118,255	39,163	44,787	7,144	91,094	22,968	114,062	-14,393	3,179	1,782	-9,432	5,239	-4,193	-26.9%	7.6%	33.2%	-9.4%	29.6%	-3.5%
Percent Total	45.3%	35.2%	4.5%	85.0%	15.0%	100.0%	34.3%	39.3%	6.3%	79.9%	20.1%	100.0%												

Industrial Corridors with PMDs are in bold
 Recently added ICs were not included in this analysis

NAICS Codes per Category
 MANUFACTURING: 31-33
 NON-MANUFACTURING INDUSTRIAL: 22, 23, 42, 48-49, 56
 RELATED TO INDUSTRIAL/ MANUFACTURING: 51,54,55
 OTHER SECTORS: 11, 21, 44-45, 52, 53, 61, 62, 71, 72, 81, 92

Source: U.S. Census Bureau, Center for Economic Studies