

Data Bulletin 04-1

Spatial Distribution of Employment in Northeastern Illinois 2000

October 2004

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Introduction

This bulletin contains estimates, by minor civil division (political township), of non-agricultural wage and salary employment in northeastern Illinois for April, 2000.

The Northeastern Illinois Planning Commission (NIPC) produces estimates of regional employment approximately every five years.¹ NIPC uses this data to support its long range population, employment and household forecasting. This estimate series, begun in 1974, provides a unique economic information resource for northeastern Illinois.² This activity takes its charge from NIPC's 1957 enabling legislation that requires NIPC to "conduct research required for planning... including the collection of data with respect to population trends and the social, economic, physical, esthetic and governmental factors affecting the development of the area, and make its findings available to persons interested." NIPC obtains base data from the Illinois Department of Employment Security (IDES) in April of each survey year. This allows NIPC estimate data to be used alongside data from the decennial US Census. Published sources and direct employer contact supplement the IDES data.

NIPC staff prepared estimates of employment for each survey township quarter section in the region, using 11 employment categories.³ In addition, staff produced a second estimate file, using six categories and including estimates for self-employed workers, that the Chicago Area Transportation Study (CATS) used in preparing the 2030 Regional Transportation Plan (table 1).⁴ Preparing the estimates at the geographic scale of quarter sections allows aggregation of the data to many different levels of geography.

While preparing the 2000 estimates, staff made updates and corrections to the 1995 estimates, where necessary. The corrected 1995 file, as well as the quarter section level estimates for 2000, are available from NIPC in computer-readable format. Due to estimation method and confidentiality agreements, figures for individual quarter sections may not be reliable. The data should be aggregated into larger areas, such as political townships (as done here), survey townships or counties. As municipal boundaries rarely coincide with quarter section boundaries, aggregation to municipalities is not possible from the data set.

¹ 1974, 1980, 1985, 1990, 1995, 2000

² The 1980 and 1985 estimates are not compatible with the remaining years, due to different base data and methodology.

³ A quarter-section, with few exceptions, is a 1/2 by 1/2 mile square.

⁴ Chicago Area Transportation Study requests specific categories for transportation modeling purposes. These include allowances to cover self-employed, unpaid family and domestic workers.

Employment Covered In These Estimates

These estimates include wage and salary workers employed the first week of April 2000 and covered by the State of Illinois unemployment insurance (UI) program. These estimates do not include: laid off employees, self-employed, agricultural, unpaid family, and domestic workers. Railroad employees are covered under the Railroad Retirement Board, not the UI system, and are thus not included in the original data file. Attempts to include these employees were undertaken by contacting the railroads directly, but met with little success. Please see Appendix C for definitions of employment terms.

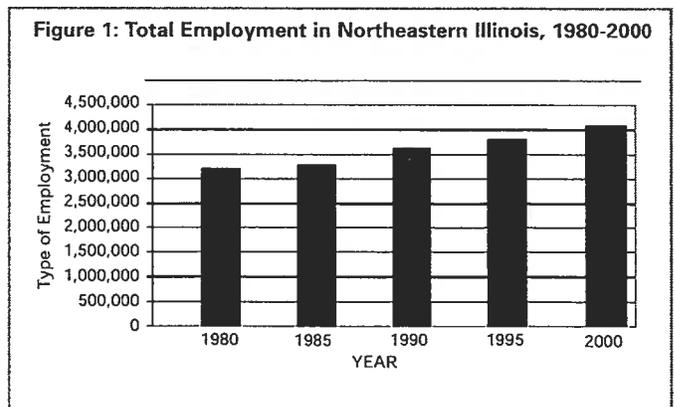
Industry Classification Systems

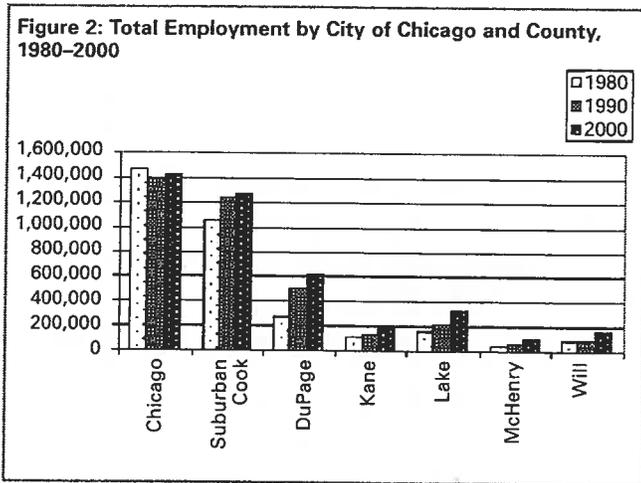
Industry categories used in this data bulletin are based on the Standard Industrial Classification (SIC) system (1987 revision). In 1997, the North American Industry Classification System (NAICS) was adopted by the US, Canadian and Mexican governments. Federal data sources, such as the Census Bureau, started using NAICS in 1997. The Illinois Department of Employment Security (IDES), however, used SIC codes in 2000 and adopted NAICS in 2001.

Since IDES is the primary data source for this report, these estimates rely on the SIC system and adjusted NAICS-based sources to reflect SIC standards (for example, restaurants were classified as Retail Trade under SIC and Services under NAICS). Future employment estimates will be based exclusively on NAICS. See Appendix A for a more detailed discussion of the SIC-NAICS adjustments.

Employment Growth And Change 1980-2000

Employment in the northeastern Illinois region (Cook, DuPage, Kane, Lake, McHenry, and Will Counties) grew steadily in the period from 1980 to 2000. The region grew from 3.2 million jobs in 1980 to almost 4.1 million by 2000; an increase of almost 900,000 jobs (Figure 1). Employment grew two percent between 1980 and 1985, nearly 10 percent between 1985 and 1990, almost five percent between 1990 and 1995, and about seven percent between 1995 and 2000.





Region-wide, employment continues to decentralize. Except for the City of Chicago between 1980 and 1990, all areas of the region experienced employment growth during the last two decades.

Suburban Cook and DuPage Counties, however, grew at a slower pace than Kane and Lake Counties, which saw job creation accelerating between 1980 and 2000. McHenry and Will Counties posted strong job growth from relatively small employment bases, reflecting their location on the metropolitan fringe, and their position in the path of growth. These counties will continue to add employment in the future.

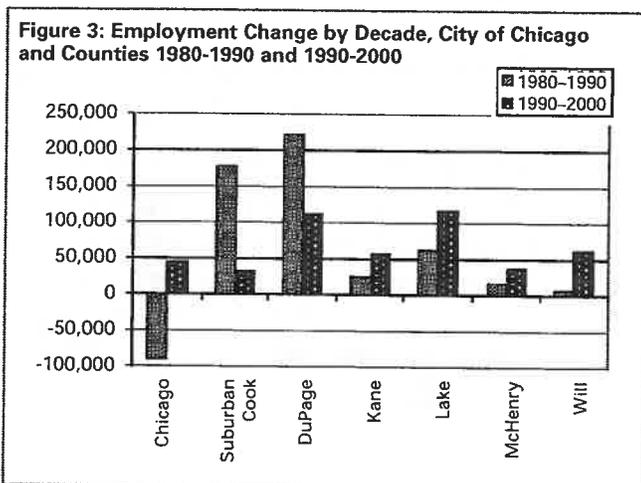
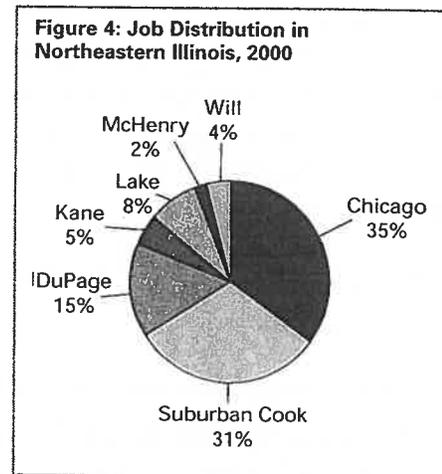


Figure 2 depicts total employment in the region between 1980 and 2000, and Figure 3 shows change in total employment per decade between 1980 and 2000.

Although the City of Chicago retains the greatest number of jobs in the region, it lost almost 91,000 jobs between 1980 and 1990. Although a recovery occurred between 1990 and 2000, employment has not reached the 1980 level.



The City of Chicago continues to hold the largest number of jobs in the region, with 34.8 percent of the total in 2000 (Figure 4). This is virtually unchanged from the 1995 percentage and down from 38.3 percent in 1990. Suburban Cook County held 31 percent of the region's employment in 2000, down from 34 percent in 1990. The collar counties all increased their percentage of the region's employment during the same time period.

Employment Distribution

While the region's economic base remains relatively diverse, the service sector predominates. Between 1990 and 2000, the service sector grew from 20 percent to over 25 percent of the region's employment. Services and health services combined represent one-third of total employment. Much of this growth came at the expense of manufacturing, which declined from 19 percent to 15 percent of the region's employment. Other sectors, such as retail trade, declined slightly, but not as much as manufacturing.

The change in employment distribution between sectors results almost entirely from the growth of the services sector. Between 1990 and 2000, only the manufacturing sector lost employment. All other sectors gained employment, but tremendous growth in the service sector lowered their share of the region's total employment (Figures 5, 6).

Figure 5: Employment Distribution by Sector, northeastern Illinois, 1990-2000

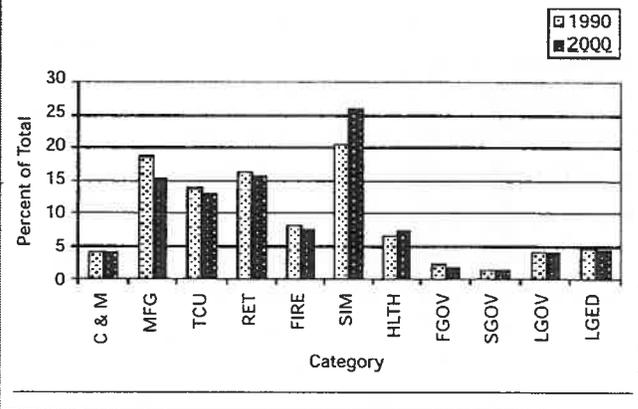
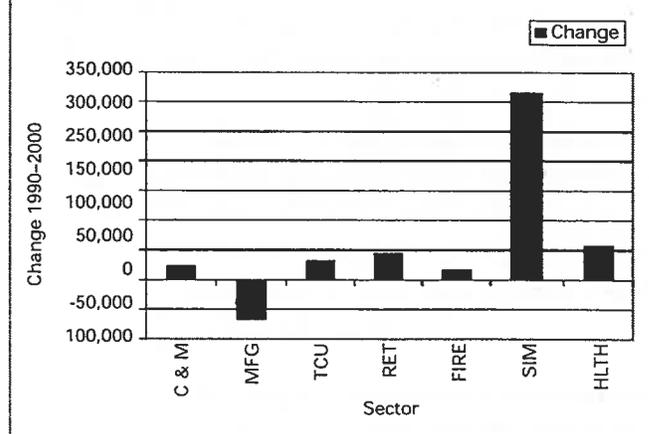


Figure 6: Private Sector Employment Change, 1990-2000



Tables 1-8

Table 1: Industry Categories Used in Employment Estimates

NIPC Category	Description	2-digit SIC equivalent	Included in CATS Category
C & M	Construction and Mining	10 – 17	Other
MFG	Manufacturing	20 – 39	Manufacturing
TCUW	Transportation, Communication, Utilities, Wholesale Trade	40 – 51	Transportation, Communication, Utilities, Wholesale Trade
RETL	Retail Trade	52 – 59	Retail Trade
FIRE	Finance, Insurance, Real Estate	60 – 67	Services
SIM	Services (except health) and Miscellaneous	07, 09, 70 – 79, 81 – 89, 99	Services
HLTH	Health Services	80	Services
FGOV	Federal Government	*	Government/Institutional
SGOV	State Government	*	Government/Institutional
LGOV	Local Government (except education)	*	Government/Institutional
LGED	Local Government (education)	*	Government/Institutional

* All governmental employment is coded in NIPC categories FGOV, SGOV, LGOV and LGED, and included in CATS category Government/Institutional. The remaining categories contain private sector employees.

Table 2: Employment by Category and Township, Cook County, 2000

	TOTALS	C&M	MFG	TCU	RET	FIRE	SIM	HLTH	FGOV	SGOV	LGOV	LGED
Total	2,688,100	92,100	377,100	328,900	393,900	213,600	718,200	213,600	54,000	46,400	131,600	118,700
Barrington	15,000	300	100	2,500	7,800	1,200	2,000	500	100	*	400	100
Berwyn	9,800	300	600	300	2,500	300	1,200	3,600	*	*	500	500
Bloom	26,700	1,500	6,700	3,300	3,700	400	3,500	4,000	300	100	800	2,400
Bremen	33,700	2,900	4,400	4,700	7,600	800	3,900	2,700	200	300	3,900	2,300
Calumet	7,000	300	1,900	500	900	300	800	2,000	*	*	200	100
Chicago City	1,414,000	30,000	138,800	163,700	158,600	155,500	444,800	100,500	45,900	39,700	81,500	55,000
Cicero	18,300	600	3,900	2,100	1,800	300	6,600	100	*	*	900	2,000
Elk Grove	100,900	9,000	26,800	21,900	8,700	2,300	21,100	5,800	200	200	2,900	2,000
Evanston	39,200	700	2,900	1,600	6,800	900	14,900	7,200	100	*	1,800	2,300
Hanover	24,000	1,600	5,300	600	6,100	600	5,100	1,300	*	*	1,000	2,400
Lemont	4,600	800	200	600	700	100	700	700	*	*	300	500
Leyden	85,600	3,000	26,700	17,900	13,100	2,100	13,900	3,200	*	*	2,700	3,000
Lyons	51,700	4,300	13,000	8,300	8,300	1,100	8,300	3,400	100	*	2,400	2,500
Maine	82,000	1,800	14,900	8,500	13,300	3,200	19,200	10,500	4,800	*	1,700	4,100
New Trier	15,400	700	700	400	3,500	1,000	4,500	800	*	*	1,700	2,100
Niles	86,500	3,900	26,000	12,500	13,600	2,400	17,400	5,500	400	*	2,700	2,100
Northfield	90,300	4,100	11,100	7,800	16,800	17,600	24,000	4,900	*	*	1,500	2,500
Norwood Pk	13,500	200	3,400	700	2,600	900	3,200	500	*	1,100	500	400
Oak Park	20,900	600	600	500	2,800	1,300	7,300	5,300	*	*	1,100	1,400
Orland	27,000	1,500	2,200	1,200	11,300	1,000	3,800	700	*	1,700	1,200	2,400
Palatine	58,800	2,500	20,800	5,500	6,600	1,600	14,000	900	600	*	2,500	3,800
Palos	22,900	2,000	900	2,000	2,600	1,200	6,100	5,200	*	*	700	2,200
Proviso	81,600	3,700	17,200	8,200	12,600	1,400	15,600	14,400	600	1,000	3,900	3,000
Rich	19,000	300	500	400	6,600	1,200	4,700	900	400	1,100	1,200	1,700
River Forest	5,000	*	*	100	1,100	*	2,200	100	*	*	1,000	500
Riverside	6,000	100	100	500	2,700	100	1,400	500	*	*	400	200
Schaumburg	84,200	2,900	4,600	12,600	20,200	6,700	25,900	4,300	*	900	2,900	3,200
Stickney	29,100	100	5,400	14,700	4,700	300	1,700	600	*	*	600	1,000
Thornton	67,200	4,100	9,400	7,400	17,700	2,100	11,400	6,600	100	200	2,900	5,300
Wheeling	87,000	4,900	22,700	10,500	12,100	3,800	17,200	7,100	200	*	3,000	5,500
Worth	61,200	3,400	5,300	7,400	16,500	1,900	11,800	9,800	*	100	2,800	2,200

*Indicates fewer than 50 employees

Source:  northeastern illinois planning commission

Table 3: Employment by Category and Location, City of Chicago, 2000

	TOTALS	C&M	MFG	TCU	RET	FIRE	SIM	HLTH	FGOV	SGOV	LGOV	LGED
Total	1,414,000	30,000	138,800	163,700	158,600	155,500	444,800	100,500	45,900	39,700	81,500	55,000
Expanded CBD ⁵	570,200	5,100	27,300	31,400	36,600	123,300	251,200	14,800	37,900	7,600	21,700	13,300
Outer Central Area ⁶	129,300	4,400	8,800	17,400	21,600	6,300	47,500	1,300	5,100	7,900	6,800	2,200
Rest of City	714,500	20,500	102,700	114,900	100,400	25,900	146,100	84,400	2,900	24,200	53,000	39,500

Table 4: Employment by Category and Location, DuPage County, 2000

	TOTALS	C&M	MFG	TCU	RET	FIRE	SIM	HLTH	FGOV	SGOV	LGOV	LGED
Total	612,900	29,800	81,800	106,500	100,300	48,400	179,800	32,000	2,600	300	13,200	18,200
Addison	138,300	8,500	30,300	44,900	11,000	11,700	27,800	1,900	*	*	1,400	800
Bloomingtondale	63,200	4,400	14,700	16,700	13,000	1,000	9,000	1,500	100	*	1,200	1,600
Downers Grove	69,900	2,800	6,300	6,500	15,500	5,300	23,000	5,100	700	*	1,600	3,100
Lisle	66,300	2,500	8,300	7,000	10,800	5,500	28,800	700	900	*	700	1,100
Milton	51,300	2,000	4,100	3,200	9,900	2,700	17,100	3,500	200	100	4,100	4,400
Naperville	51,400	2,000	6,600	6,600	9,200	6,300	14,100	3,500	*	*	1,600	1,500
Wayne	10,700	1,100	2,500	1,300	2,200	100	2,200	200	*	*	200	900
Winfield	18,600	1,400	2,500	1,600	1,800	300	6,800	2,800	*	*	400	1,000
York	143,200	5,100	6,500	18,700	26,900	15,500	51,000	12,800	700	200	2,000	3,800

⁵ Bounded by Chicago Avenue, Halsted Street, Roosevelt Road and Lake Michigan

⁶ Bounded by North Avenue, Ashland Avenue, Cermak Road and Lake Michigan, excluding Expanded CBD

Table 5: Employment by Category and Location, Kane County, 2000

	TOTALS	C&M	MFG	TCU	RET	FIRE	SIM	HLTH	FGOV	SGOV	LGOV	LGED
Total	193,700	12,000	44,600	15,800	32,900	9,400	41,900	14,100	1,800	3,000	6,200	12,000
Aurora	56,200	2,400	10,000	5,400	7,500	4,300	14,700	4,800	1,500	300	2,300	3,000
Batavia	10,300	1,300	2,400	1,400	1,700	300	2,000	*	*	100	400	700
Big Rock	600	100	200	100	*	100	100	*	*	*	*	*
Blackberry	1,700	400	400	200	300	*	400	*	*	*	*	*
Burlington	600	100	300	100	100	*	*	*	*	*	*	*
Campton	600	200	*	100	100	*	100	*	*	*	*	100
Dundee	25,300	1,400	8,300	1,200	7,400	1,100	3,800	300	*	*	900	900
Elgin	47,000	2,900	9,000	3,000	4,200	1,800	12,700	5,600	300	2,600	1,200	3,700
Geneva	18,800	500	4,500	2,200	4,600	900	2,500	2,300	*	*	600	700
Hampshire	1,700	400	500	*	300	100	200	*	*	*	100	100
Kaneville	300	*	*	100	*	*	*	*	*	*	*	200
Plato	600	*	*	*	*	*	300	*	*	*	*	300
Rutlan	1,900	700	600	100	100	*	400	*	*	*	*	*
St. Charles	25,400	1,300	8,000	1,700	6,300	800	4,300	900	*	*	600	1,500
Sugar Grove	2,300	100	300	200	200	*	400	200	*	*	100	800
Virgil	400	200	100	*	100	*	*	*	*	*	*	*

Table 6: Employment by Category and Location, Lake County, 2000

	TOTALS	C&M	MFG	TCU	RET	FIRE	SIM	HLTH	FGOV	SGOV	LGOV	LGED
Total	334,200	13,900	55,800	54,100	60,800	30,000	72,600	19,800	1,600	1,600	8,400	15,600
Antioch	5,400	500	1,100	300	1,700	500	600	200	*	*	100	400
Avon	12,200	800	900	1,300	3,600	400	1,700	400	*	200	600	2,300
Cuba	9,100	2,500	900	900	1,400	1,100	1,400	200	*	*	100	600
Ela	21,800	700	1,100	4,200	3,100	8,500	3,000	300	200	*	200	500
Fremont	7,200	300	700	3,900	300	*	1,100	100	*	*	*	800
Grant	3,800	400	1,800	100	700	*	300	*	*	*	200	300
Lake Villa	4,600	200	200	300	800	*	2,600	*	*	*	200	300
Libertyville	57,100	2,400	19,800	6,400	8,700	6,100	9,000	2,600	500	*	700	900
Moraine	16,800	500	1,800	900	5,700	400	3,100	2,300	*	*	500	1,600
Newport	1,500	100	200	400	200	*	500	*	*	*	*	100
Shields	22,100	400	2,300	2,300	2,900	1,000	6,400	4,700	300	*	800	1,000
Vernon	65,500	1,300	11,400	15,400	7,300	8,200	17,900	1,800	100	*	600	1,500
Warren	31,200	700	4,000	7,600	8,900	800	5,900	700	100	*	400	2,100
Wauconda	10,600	1,000	2,500	1,600	1,200	100	3,300	300	*	*	200	400
Waukegan	32,600	1,000	5,600	2,900	4,600	1,600	6,800	3,900	400	1,400	3,100	1,300
West Deerfield	26,000	700	1,200	4,800	8,300	1,200	8,100	800	*	*	300	600
Zion/Benton	6,700	400	300	800	1,400	100	900	1,500	*	*	400	900

Table 7: Employment by Category and Location, McHenry County, 2000

	TOTALS	C&M	MFG	TCU	RET	FIRE	SIM	HLTH	FGOV	SGOV	LGOV	LGED
Total	99,000	7,600	29,100	8,400	18,800	2,600	17,000	5,300	400	200	3,600	6,000
Alden	100	*	100	*	*	*	*	*	*	*	*	*
Algonquin	33,500	2,100	8,300	2,900	9,200	1,000	6,100	600	100	*	1,000	2,200
Burton	100	*	*	*	100	**	*	*	*	*	*	*
Chemung	2,500	200	800	100	200	200	400	200	*	*	100	300
Coral	1,000	100	700	*	100	*	100	*	*	*	*	*
Dorr	14,100	500	3,500	900	1,800	300	3,500	1,400	100	100	400	1,600
Dunham	800	*	100	100	500	*	100	*	*	*	*	*
Grafton	3,700	500	1,000	1,000	200	*	500	*	*	*	200	300
Greenwood	1,400	200	*	100	*	*	200	*	*	100	800	*
Hartland	100	*	*	*	*	*	100 *	*	*	*	*	*
Hebron	900	*	800	*	*	*	*	*	*	*	*	100
McHenry	13,800	1,900	2,200	700	4,200	500	2,400	400	200	*	300	1,000
Marengo	4,300	100	2,900	300	300	100	300	100	*	*	100	100
Nunda	16,900	1,400	5,200	1,700	1,800	500	3,000	2,600	*	*	600	100
Richmond	5,300	600	3,400	400	400	*	200	*	*	*	100	200
Riley	300	*	100	100	**	*	*	*	*	*	100	*
Seneca	200	*	*	100	*	*	100	*	*	*	*	*

*Indicates fewer than 50 employees

Source:  northeastern illinois planning commission

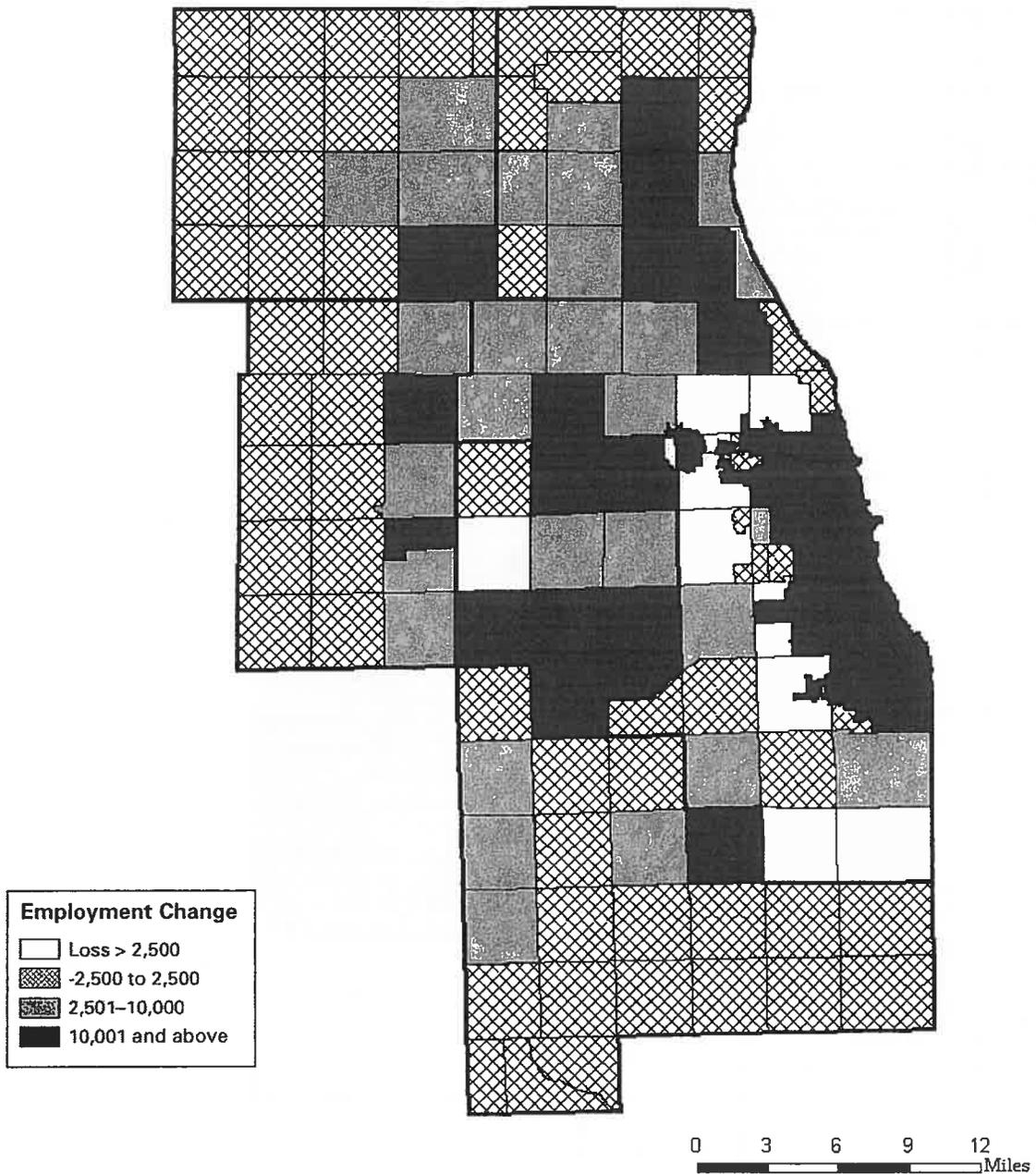
Table 8: Employment by Category and Location, Will County, 2000

	TOTALS	C&M	MFG	TCU	RET	FIRE	SIM	HLTH	FGOV	SGOV	LGOV	LGED
Total	155,500	14,800	26,600	15,900	28,800	4,700	33,300	10,200	1,300	3,700	6,200	10,000
Channahon	5,700	1,200	2,400	700	400	*	500	*	*	*	200	300
Crete	3,700	400	600	100	500	200	1,100	*	*	*	200	600
Custer	*	*	*	*	*	*	*	*	*	*	*	*
DuPage	29,400	1,600	6,200	3,000	7,200	2,300	6,300	300	200	*	900	1,400
Florence	*	*	*	*	*	*	*	*	*	*	*	*
Frankfort	15,400	2,600	2,300	2,000	3,300	300	2,800	600	200	*	400	900
Green Garden	100	*	*	*	*	*	100	*	*	*	*	*
Homer	1,500	400	*	100	500	100	300	*	*	*	100	*
Jackson	*	*	*	*	*	*	*	*	*	*	*	*
Joliet	40,500	2,000	3,500	4,300	5,700	700	11,800	5,300	700	1,400	2,800	2,300
Lockport	9,100	700	1,000	700	1,700	100	2,000	200	200	1,100	400	1,000
Manhattan	1,000	600	*	*	100	*	100	*	*	*	100	100
Monee	6,400	100	2,700	1,600	200	*	600	*	*	1,100	100	*
New Lenox	10,300	1,100	700	1,000	1,000	300	2,300	2,900	*	100	300	600
Peotone	900	100	200	100	100	*	100	*	*	*	100	200
Plainfield	9,600	900	1,400	900	4,000	100	1,600	500	*	*	200	*
Reed	800	100	*	200	100	*	100	*	*	*	*	300
Troy	14,000	900	4,300	900	2,500	500	2,600	300	*	*	300	1,700
Washington	400	*	100	*	200	100	*	*	*	*	*	*
Wesley	*	*	*	*	*	*	*	*	*	*	*	*
Wheatland	4,100	1,600	500	200	500	*	900	*	*	*	*	400
Will	200	*	*	*	200	*	*	*	*	*	*	*
Wilmington	2,400	500	700	100	600	*	100	100	*	*	100	200
Wilton	*	*	*	*	*	*	*	*	*	*	*	*

*Indicates fewer than 50 employees

Source:  northeastern illinois planning commission

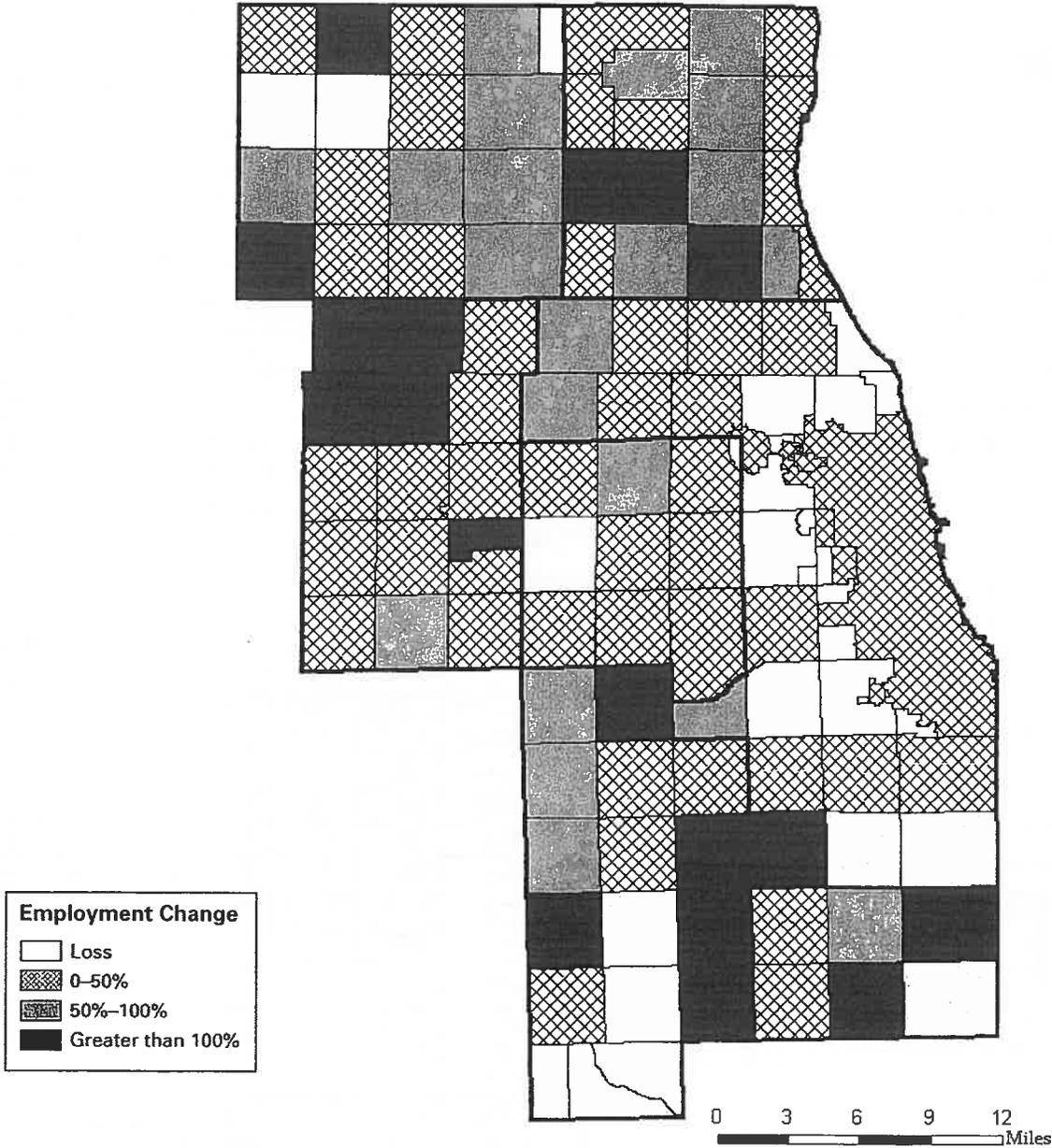
Employment Change 1990–2000



Minor Civil Divisions are equal to Political Townships.
The City of Chicago is treated as one Minor Civil Division.

Source:  northeastern illinois planning commission

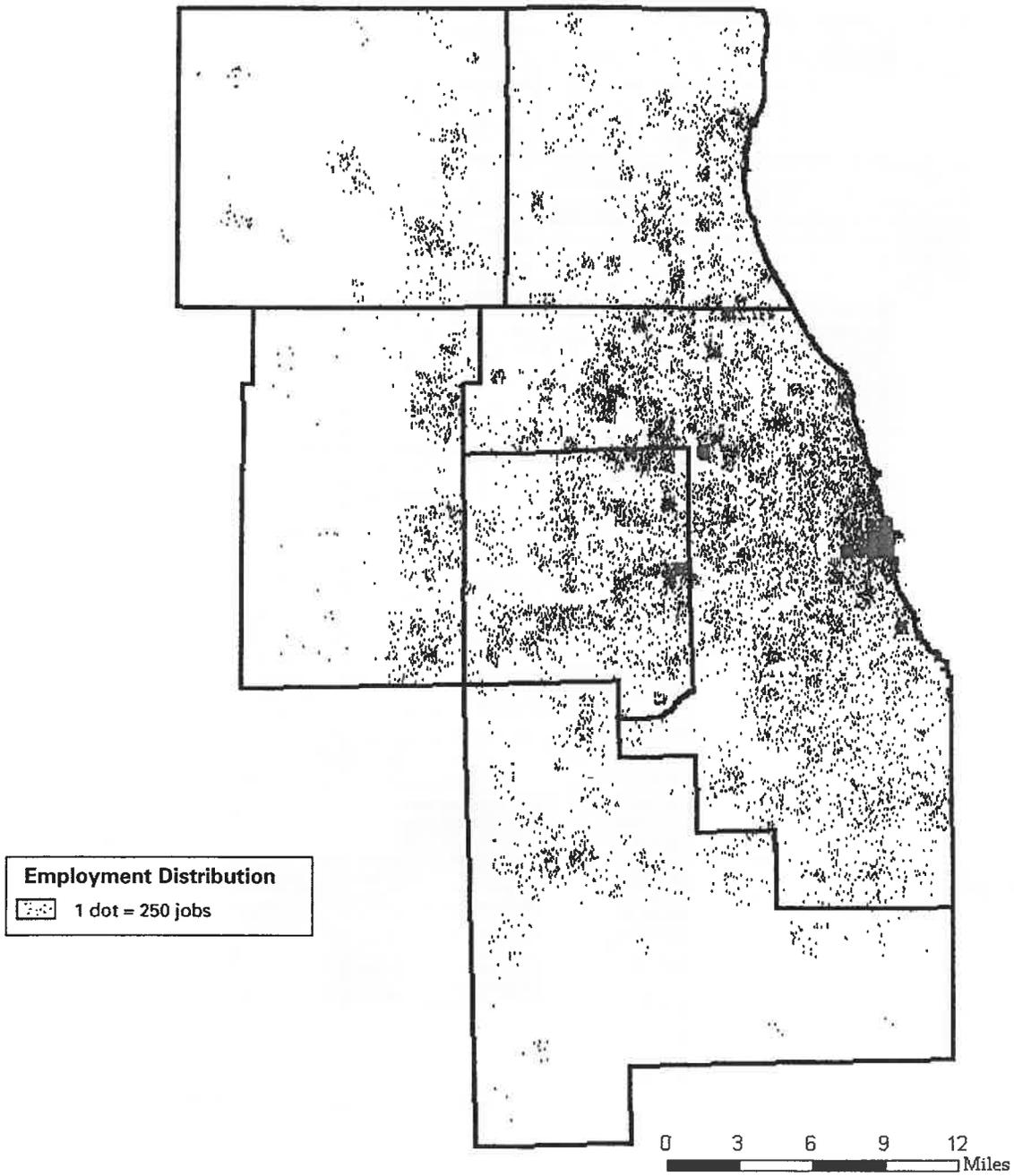
Employment Percentage Change 1990–2000



Minor Civil Divisions are equal to Political Townships.
The City of Chicago is treated as one Minor Civil Division.

Source:  northeastern illinois planning commission

Employment Distribution 2000



Source:  northeastern illinois planning commission

Appendix A: Method

The 2000 employment estimate process used data sources and methods virtually identical to the 1990 and 1995 processes to promote comparability of the data sets.

Data Source

The unemployment insurance (UI) file from the Illinois Department of Employment Security (IDES) was used as the primary data source for these estimates. This file contains the name, address, and number of employees for each employer in Illinois covered by the unemployment insurance system.

Generation of Original Establishment List

A sub-file from the original IDES file was created by extracting records where an IDES code indicated that the employer was in the six-county northeastern Illinois region, or where the record covered all of a particular employer's workers in Illinois. Due to constraints in time and resources, the sub-file contained those establishments listed with five or more employees. In past estimates, those employers with 10 or more employees were included. These employers comprise about 30 percent of the establishments in the region and about 90 percent of all employment. A mathematical process accounted for those workers at establishments of fewer than five employees (discussed below under Control Totals and Expansion).

Initial Review

The establishment list was reviewed to identify records requiring individual attention. First, records with invalid addresses were identified. There were thousands of these, including unreadable addresses, out-of-state addresses, Post Office boxes, home addresses of proprietors and Accounting/Payroll firms. These addresses were corrected wherever possible, by referring to telephone books, business directories, and online databases.

Next, the largest employers were reviewed to determine if the location and number of employees were accurate. IDES requires each employer to provide the address and number of employees for each location an employer has, but not all employers comply. Many employers report all of their employees at one location, even though they have many locations across the state. In these cases, employers were contacted by telephone, with follow-up letters as required. The data obtained were added to the establishment file, superceding the original IDES record.

For employers who declined to assist, other public sources were consulted. In those cases where a breakout was not possible, and where including the record would unduly bias the estimates, the record was not counted. Due to limited resources, it was not possible to contact all employers who did not provide IDES with a proper breakout.

For public school districts, the Illinois Office of Education provided a report giving the number of teachers at each school. Non-teaching employees were allocated to the various schools in direct proportion to their teaching staffs, as was done in 1990 and 1995. The Chicago Public Schools and School District U-46 (the two largest districts in the region) were contacted to obtain their staff breakouts directly.

SIC codes came directly from the IDES records which were corrected as needed. Note that as of 2000, IDES still used SIC codes in the UI file. IDES switched to North American Industry Classification System (NAICS) codes starting in 2001.

This review process produced as accurate an establishment file as resources allowed.

Geocoding

Geocoding is the attachment of survey township quarter section information to each record.⁷ In the past, as many records as possible were manually attached to an earlier establishment file (for example, matching 1995 records to the 1990 file), and then manually geocoded using aerial photographs, maps and municipal address bases.

For the 2000 estimates, the Chicago Area Geographic Information Study did the initial geocoding electronically by address matching. Geocoding was done manually to correct records and data provided by employers. For

large employers located in more than one quarter section, only one quarter section was assigned; either the quarter section with the greatest employment, the quarter section with the largest building, or the quarter section with the formal street address. All establishments where the address read O'Hare Airport were geocoded to the quarter section containing the main terminal.

Control Totals and Expansion

The geocoded establishment file generated using the process detailed above does not contain an accurate and properly geocoded record for every employment location in northeastern Illinois. To compensate, control totals and expansion factors were generated to adjust the sum of the establishment records.

The control totals were developed to use in the estimates from information provided by IDES and the U.S. Census Bureau. IDES, using methods prescribed by the U.S. Department of Labor, produces monthly estimates of employment for each census-designated Metropolitan Statistical Area.

For northeastern Illinois, this includes Cook, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, and Will Counties. *County Business Patterns*, a publication of the Census Bureau, provided estimates of employment by industry category for each county in the region. This source allowed employment outside of the six-county region to be deleted from the IDES source.

⁷ See Appendix C.

Because *County Business Patterns* covers only private-sector employment, the 1997 Census of Governments was used to allocate government employment to counties. These figures established total wage and salary employment for each industry category in each county.

As noted earlier, a discrepancy arose between the control totals, based on the North American Industry Classification System (NAICS) and the establishment file based on the Standard Industrial Classification (SIC) system. In developing NAICS, certain industries moved from one industry category to another. The following adjustments were made to the control totals to bring them in line with the earlier SIC categories (Table 9).

From these totals, a series of expansion factors were generated. These factors are the ratio, by industry category and county, of geocoded employment to actual employment as displayed in Table 9. This allows the employment level for each quarter section to be adjusted, to compensate for those employees not located during the geocoding process.

Confidentiality Edit

As a condition of receiving access to IDES employment records, IDES prohibits NIPC from disclosing information for individual employers. For the purposes of the estimates, this means that for each quarter section covered, there should be at least four employers, no one of which accounts for more than 80 percent of the employment involved.

Table 9: Control Total Adjustments Made to Compensate for SIC/NAICS Discrepancies

NAICS Category	Removed from NAICS-Based Category	Added to SIC-Based Category
722	Services	Retail Trade
511	TCUW	Manufacturing
54171	Services	Manufacturing
55	Services	FIRE
623312	Health Services	Services
6239	Health Services	Services
624	Health Services	Services

Because estimates are generated at such a small geography (quarter section), many quarter sections contain confidential data. In order to allow aggregation to larger geographies, substitute numbers were inserted into those quarter sections where data needed to be suppressed. These substitute numbers are generated by dividing employment levels into size classes and then taking the mean employment for each class. The size classes are the same as those used for suppressed data in *County Business Patterns*.

All employment information is considered confidential except that obtained from government agencies, published sources or where employers specifically agreed that confidentiality need not be respected.

Sources of Error in the 2000 Estimates

Had a 100 percent door-to-door survey of nonagricultural employment been conducted in April 2000, it would have produced numbers different from the estimates presented here. Sources of error in the estimates may include the following:

- Addresses were not reported for some establishments.
- Addresses reported for some establishments may be incorrect.
- Not all multiple establishments were properly disaggregated.
- Errors may exist in sources used to estimate control totals, including the discrepancy between SIC and NAICS-based sources.
- Some employers are possibly not paying proper UI tax.
- Quarter sections may have been incorrectly assigned, due to human error, the address matching process or incorrect maps.
- In most quarter sections, staff intentionally distorted data to protect confidentiality.

Appendix B: Other Sources Of Employment-Related Data

NIPC's employment estimates by quarter section are prepared for modeling and analytical purposes, most notably for the generation of NIPC's long range population and employment forecasts. There are other sources of employment-related data which are developed by different methods. These sources may be more useful if the data needed does not require the level of geographic detail included in NIPC's estimates.

Illinois Department of Employment Security

IDES produces *Where Workers Work*, which covers the number of private-sector workers in each Chicago ZIP code and major suburban municipality in northeastern Illinois. *Where Workers Work*, for years 2001 - 2003: <http://lmi.ides.state.il.us/wwwork>.

IDES first published *Where Workers Work* in 1957 and continues to publish it annually. Some interruptions to its historical continuity have occurred over the years, including changes in Unemployment Compensation coverage, revision to SIC codes, and most recently, the conversion from SIC to NAICS codes.

Among other products, IDES also publishes monthly and annual average estimates of employment in each Primary Metropolitan Statistical Area. The number of industry categories varies by area. The Current Employment Statistics website is: <http://lmi.ides.state.il.us/cesfiles/cesavear.html>

U.S. Census Bureau

The U.S. Census Bureau produces several employment-related products. The Economic Census covers nearly all of the U.S. economy. The Census Bureau produces the Economic Census, as well as censuses of agriculture and governments, every five years. The latest results cover the year 1997. The 2002 census will be released between 2004 and 2006. For more information, see <http://www.census.gov/econ/census02/guide/g02intro.htm>.

The Census Bureau also produces *County Business Patterns*, noted in Appendix A. This series, published annually since 1964, covers private sector employment by industry at the county level. This source is used to help set control totals for the employment estimates. For more information, see <http://www.census.gov/epcd/cbp/view/cpbview.html>.

The Census Transportation Planning Package (CTPP) provides information, based on the decennial census, on households, persons and workers. CTPP summarizes this data by place of residence, place of work, and for worker flows between home and work. For more information, see <http://www.fhwa.dot.gov/ctpp/about.htm>

Dun and Bradstreet

Dun and Bradstreet compiles and publishes lists of establishments including location, industry, and number of employees. Users may tabulate this data by ZIP code or other geographic unit. Please note that Dun and Bradstreet data was not used to prepare Year 2000 estimates due to problems incurred with the 1995 data.

U.S. Bureau of Economic Analysis

The BEA publishes county-level employment estimates by 13 industry categories, with slightly broader coverage than other sources. Personal income by industry is included in these estimates.

<http://www.bea.gov/bea/regional/reis/>

Info USA

Info USA (formerly ABI) publishes lists of employers. Info USA information is used to account for multiple establishment employers. <http://www.infousa.com>

Appendix C: Definitions

Employment for any geographic area is defined as the number of persons who worked, during the week of April 1, 2000, at establishments in that geographic area. Part-time workers are counted. A person holding more than one job is counted for each job held (for example, a person holding two jobs is counted twice). Persons absent due to illness or vacation are counted, but not persons on layoff. NIPC also omits:

- Agricultural workers
- Military Personnel
- Self-employed workers
- Unpaid family workers
- Domestic household workers
- Employees of foreign governments

ES-202 is a computer file that the Illinois Department of Employment Security generates, containing information about each employer covered by the Unemployment Insurance system.

Expanded Central Business District (CBD) is the entire area in the City of Chicago bounded by Chicago Avenue, Halsted Street, Roosevelt Road and Lake Michigan.

IDES is the Illinois Department of Employment Security.

Minor Civil Divisions (MCD) in northeastern Illinois are generally equivalent to civil townships. Certain exceptions exist, notably the Town of Berwyn and the Town of Cicero. Internal township boundaries in the City of Chicago are ignored, and the entire city is treated as one MCD.

Zion and Benton Townships in Lake County are combined in this bulletin. The borders of the City of Zion and the Township of Zion are coterminous, and contained within the Township of Benton. Thus, when the City of Zion expands due to annexation, the Township also expands. To ensure that data remains comparable between survey years, Zion and Benton Townships are combined into a single Zion/Benton Township.

Multiple-Establishment Employers are employers who have more than one location in northeastern Illinois.

Outer Central Area is the entire area in the City of Chicago bounded by North Avenue, Ashland Avenue, Cermak Road and Lake Michigan, excluding the Expanded CBD (defined above).

PMSA (Primary Metropolitan Statistical Area)

PMSAs consist of a large urbanized county or cluster of counties that demonstrate very strong internal economic and social links. When PMSAs are established, the larger area of which they are component parts is designated

a Consolidated Metropolitan Statistical Area (CMSA). In northeastern Illinois, the PMSA consists of Cook, DeKalb, DuPage, Grundy, Kane, Kendall, Lake, McHenry and Will Counties. The Census Bureau no longer uses the designation PMSA, but it was valid for the 2000 census.

Quarter Sections are based on the township-range system (see Survey Townships above) but also recognize civil township boundaries where they are irregular. A typical quarter section is a square one-half mile on each side and contains 160 acres.

For large establishments that occupy parts of more than one quarter section, all employees are assigned to the quarter section that contains the largest portion of the employees. If this information is not available, then the quarter section is based on the street address.

In the case of O'Hare Airport, establishments which had only the airport as a street address, and no other way to determine where on the airport property they were located, were placed in the quarter section containing the main terminal.

Survey Townships are townships as established under the Northwest Ordinance of 1787. In northeastern Illinois, most townships were surveyed in the early 19th century. Each survey township is nominally 36 square miles, and each is nominally coterminous with a political township.

UI is unemployment insurance.



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What is NIPC?

NIPC was created by the state legislature in 1957 to lead comprehensive planning for the northeastern part of Illinois. NIPC is committed to finding regional consensus on policies and plans that promote the sound and orderly development of northeastern Illinois. It serves the local governments and citizens of the region by providing information, fostering regional cooperation in the comprehensive planning process, developing policies on evolving areawide issues, and seeking maximum local participation in its deliberations. NIPC is governed by thirty-four commissioners.



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