

EPA's Proposed Ozone Regulation Puts Chicago Area Jobs at Risk



The Center For
Regulatory Solutions

www.centerforregulatoryolutions.org



Executive Summary

A new economic analysis conducted by the Center for Regulatory Solutions found that the U.S. Environmental Protection Agency's (EPA) proposed new regulation to tighten ozone standards could hamstring economic growth in areas of Illinois that support 80 percent of the state's jobs.

The report details how the EPA's ozone rule, which would be the [most expensive regulation in history](#), could cause significant economic harm in Illinois – triggering substantial job cuts, reduced business spending, and economic uncertainty as manufacturing companies scramble to comply.

According to EPA data, 21 counties in Illinois would be out of compliance or in “non-attainment” if EPA lowers ground level ozone standards from 75 parts per billion (ppb) to 65 ppb. These 21 counties represent 79 percent, or \$613.4 billion, of the state's gross domestic product (GDP) and 80 percent of its jobs. Costs to comply with this rule and retrofit plants and equipment in order to drastically cut ozone emissions to this level could measure into the [billions of dollars](#).

Specifically, the six counties surrounding Chicago – Cook, DuPage, Kane, Lake, McHenry and Will – would be ground zero for the most onerous reduction obligations. These six counties are home to 65 percent of the state's population, 73 percent of the state's GDP and almost 70 percent of the state's employment. At 65 ppb, five of the six counties would be in non-attainment, which significantly encumbers 65 percent of the state's jobs.

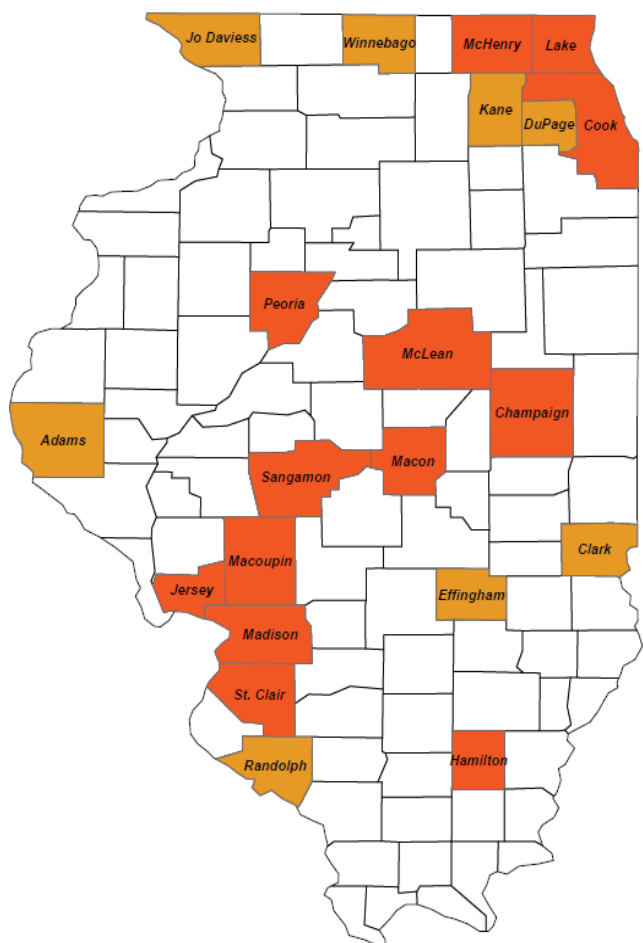
The EPA ozone rule presents potential economic hardships for the diverse county economies surrounding Chicago. Service-driven counties like Cook County and DuPage County will struggle to find ways to reduce their emissions, and manufacturing-intensive counties like Lake County, McHenry County, and Kane County will be in jeopardy of losing high paying manufacturing jobs due to expensive “known and unknown” compliance costs. For example:

- In Lake County, the manufacturing sector is the largest employer and provides an average annual compensation of \$126,850 per employee. These good-paying jobs could be on the chopping block if the EPA rule is implemented.
- In Kane County, 94 percent of its power generating capacity comes from fossil fuels. The EPA's rule would force families and small businesses to pay higher energy costs.

Several of these counties already face double-digit poverty rates and can ill-afford the job cuts, energy price spikes, and uncertainty that will result from the EPA's rule. Furthermore, both Moody's and Fitch Investors Service consider Illinois the most financially troubled state in the country. The rule would be an extra hit to an already fragile state economy. Today, even before these rules are put into effect, Illinois had the [Midwest's worst job creation](#) rate in 2014, leading to twenty-two percent of households in the state to be dependent on food stamps, more than [2 million Illinoisans](#). In fact, new food stamp enrollees outnumbered new jobs by a [2-1 margin](#) in 2014. Accordingly, an increasingly viable option for people who are willing and able to work is to simply leave the state, which significantly decreases the tax base. In 2014, Illinois lost [95,000 people](#).

Simply put, EPA's proposed ozone regulation would impose a severe penalty on manufacturers in the state, which would in turn hobble an already fragile state economy, making it harder for Illinois residents to find quality job opportunities and for those living in poverty to climb out of it.

According to EPA data, 21 counties in Illinois would be in non-attainment if EPA lowers Ozone NAAQS to 65ppb. Together, these counties represent 79% of the state's GDP.



Counties that violate 65 ppb
 Counties that violate 70 ppb
 Counties that do not violate proposed range

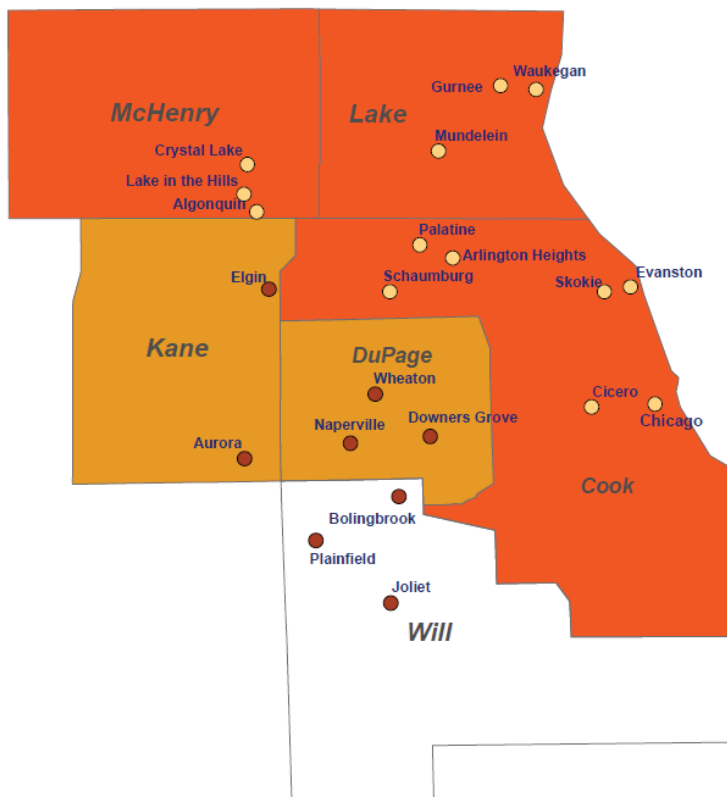
The 21 counties represent the following:

- \$613.4 billion or 79% of the state's GDP
- 6.0 million or 80% of the state's employment
- \$347.9 billion or 85% of total employment compensation in the state
- Approximately 75% of the state's population

Non-Attainment Counties*	2014 GDP Estimate (Bn \$)	2013 Employment Estimate
Adams	3.4	43,166
Champaign	9.3	124,403
Clark	0.4	7,670
Cook	336.6	3,332,105
Du Page	89.5	742,072
Effingham	1.9	26,060
Hamilton	0.2	3,600
Jersey	0.4	8,130
Jo Daviess	0.7	12,536
Kane	33.8	270,028
Lake	45.2	446,048
Macon	6	63,262
Macoupin	1	16,057
Madison	10.6	127,105
McHenry	19.7	122,981
McLean	10.7	111,669
Peoria	10.4	124,483
Randolph	1.1	14,696
Sangamon	9.2	122,964
St Clair	11.4	127,215
Winnebago	11.9	160,258
Total	613.4	6,006,508
Illinois	774.8	7,507,203

* Based on EPA analysis of 2011-2013 ozone data, accessed at <http://www.epa.gov/groundlevelozone/pdfs/20141126-20112013datatable.pdf>

The six Chicago collar counties – Cook, DuPage, Kane, Lake, McHenry, and Will represent 73% of the state’s GDP. 5 out of the 6 counties would be in non-attainment at 65ppb, imposing a hefty financial burden on Illinois’ economic engine.



- Counties that violate 65 ppb
- Counties that violate 70 ppb
- Counties that do not violate proposed range

The 6 counties surrounding Chicago represent the following:

- \$568.8 billion or 73% of the state’s GDP
- 5.2 million or almost 70% of the state’s employment
- \$308.9 billion or 75% of total employment compensation in the state
- Approximately 65% of the state’s population

Chicago Collar Counties	2014 GDP Estimate (Bn \$)	2013 Employment Estimate
Du Page	89.5	742,072
Kane	33.8	270,028
Lake	45.2	446,048
McHenry	19.7	122,981
Will*	44	277,541
Total	568.8	5,190,775
Illinois	774.8	7,507,203

* Will County would be near nonattainment at 64 ppb based on its 2011 to 2013 average.

Currently with ozone levels of 80 ppb, **Cook County** would need to reduce its ozone levels substantially to comply; its service-driven economy will be challenged to find low-cost reduction opportunities.

County Map



Summary Statistics

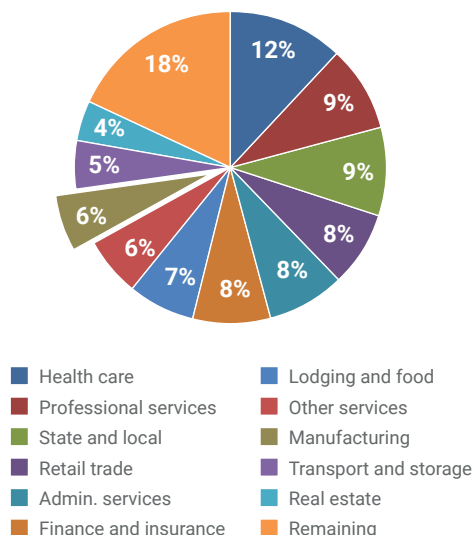
Population (2014) ¹	5,246,456
Households (2009-2013) ²	1,933,335
Total Employment (2013) ³	3,332,105
Manufacturing Employment (2013) ³	197,530
Unemployment Rate (2014) ⁴	7.40%
Employee Compensation (2014\$) ⁵	\$199.3 Bn
GDP estimate (2014\$) ⁶	\$336.6 Bn
Median Household Income (2014\$) ⁷	\$56,664
Poverty Rate ⁸	17.80%
2011-2013 Average Ozone ⁹	80

Employment Highlights

Top 15 Employers

- The U.S. Government
- Chicago Public Schools
- City of Chicago
- Cook County
- UPS
- Advocate Health Care
- SBC Communications
- Walmart
- J.P. Morgan Chase & Co.
- University of Chicago
- State of Illinois
- AT&T
- United Continental Holdings, Inc.
- Walgreens
- Abbott

Employment by Sector



Industries Challenged

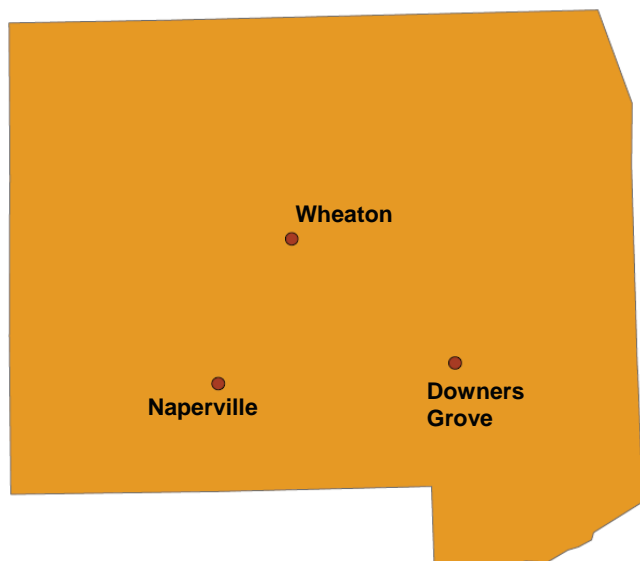
Transport Infrastructure: The Chicago area is the largest rail hub in the country; freight traffic is expected to increase by 80% by 2020.

Manufacturing: Average estimated annual compensation per employee in 2014 was \$77,600.

Power Generation: Six fossil plants totaling 955 MW represent 92% of the county's generating capacity – Calumet, Fisk Street, Ingredient Illinois, Southeast Chicago Energy Project, University of Illinois Cogen Facility, and Winnetka

DuPage County also has a service driven economy and will be challenged to find low-cost emission reductions.

County Map



Summary Statistics

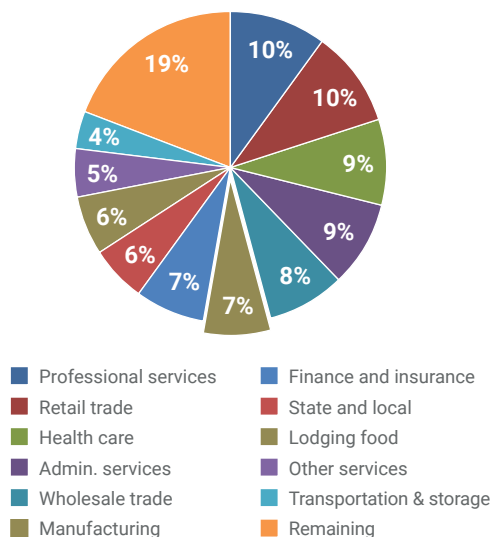
Population (2014) ¹	932,708
Households (2009-2013) ²	336,028
Total Employment (2013) ³	742,072
Manufacturing Employment (2013) ³	54,716
Unemployment Rate (2014) ⁴	7.40%
Employee Compensation (2014\$) ⁵	\$47.5 Bn
GDP estimate (2014\$) ⁶	\$89.5 Bn
Median Household Income (2014\$) ⁷	\$81,532
Poverty Rate ⁸	7.0%
2011-2013 Average Ozone ⁹	68

Employment Highlights

Top 15 Employers

- Dover Corporation
- Arthur J. Gallagher & Co.
- DeVry Education Group
- AAR Corp.
- Treehouse Foods, Inc.
- Federal Signal Corp.
- Molex Incorporated
- Navistar International Corporation
- HUB Group, Inc.
- Fellowes Incorporated
- First Midwest Bancorp
- A.M. Castle & Co.
- Alcatel-Lucent
- Great Lakes Dredge and Dock
- Suncoke Energy, Inc

Employment by Sector



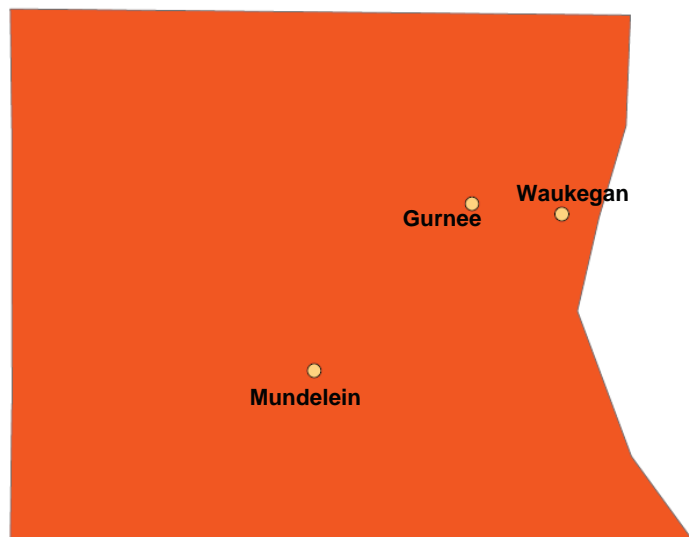
Industries Challenged

Manufacturing: largest manufacturing sub-sectors include fabricated metals, food, machinery, computer & electronics, electrical equipment & appliance, and chemicals. Average estimated annual compensation per employee in 2014 was \$87,300.

Power Generation: The Aurora power plant is an 832 MW natural-gas fired generating facility that represents 95% of the county's generating capacity. Additional NO_x controls for Aurora would be costly and relatively ineffective as the plant is used for peaking purposes.

Lake County is at economic risk as manufacturing is the largest employment sector with average annual compensation of \$126,850 per employee.

County Map



Summary Statistics

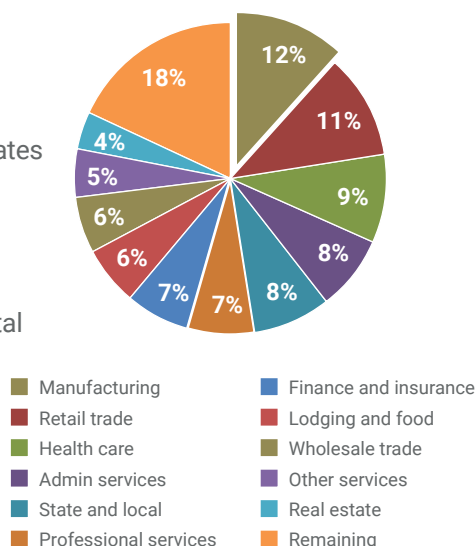
Population (2014) ¹	705,186
Households (2009-2013) ²	241,072
Total Employment (2013) ³	446,048
Manufacturing Employment (2013) ³	51,753
Unemployment Rate (2014) ⁴	6.5%
Employee Compensation (2014\$) ⁵	\$30.6 Bn
GDP estimate (2014\$) ⁶	\$45.2 Bn
Median Household Income (2014\$) ⁷	\$80,475
Poverty Rate ⁸	9.5%
2011-2013 Average Ozone ⁹	80

Employment Highlights

Top 15 Employers

- Abbott Laboratories and Affiliates
- Walgreens and Affiliates
- W. W. Grainger and Affiliates
- Baxter International and Affiliates
- Medline
- Advocate Condell
- Baxter Healthcare Corp.
- CDW
- Northwest Lake Forest Hospital
- Highland Park Hospital
- Lovell Federal Health Care Center
- NorthShore University Health System
- Eastek International
- Takeda
- Vista Health System

Employment by Sector



Industries Challenged

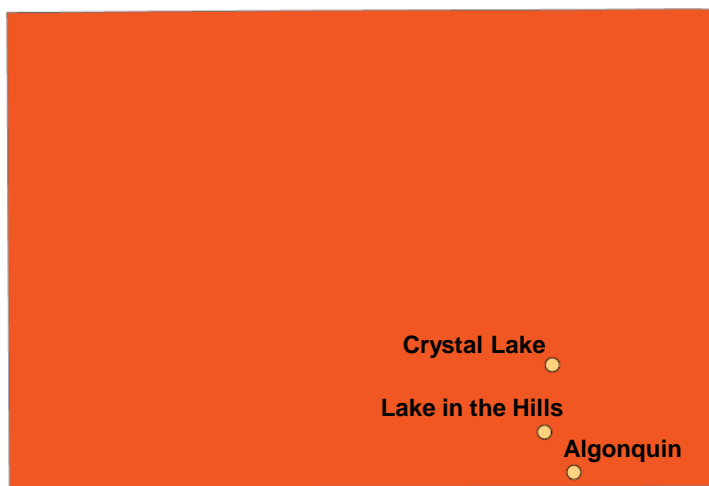
Manufacturing:

- Largest sub-sectors include chemicals, plastic & rubber products, fabricated metal product, and computer & electronics manufacturing.
- Average estimated annual compensation per employee in 2014 was \$126,850.

Power Generation: Three fossil fuel plants – North Chicago Energy Center, Waukegan, and Zion Energy Center – total 1,265 MW and represent 99% of the county's generating capacity.

Mc Henry County faces significant economic risk as manufacturing is the largest sector at 13% of total employment and 20% of total employment compensation.

County Map



Summary Statistics

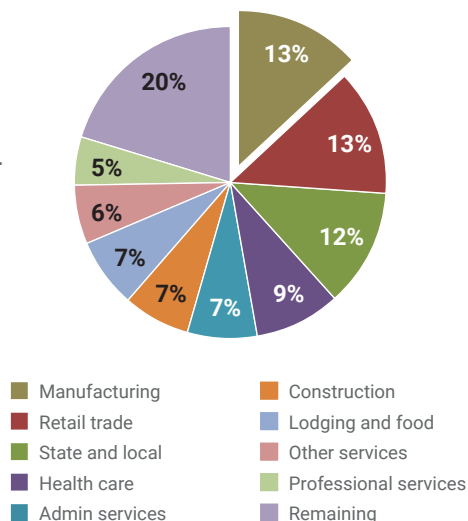
Population (2014) ¹	307,283
Households (2009-2013) ²	108,852
Total Employment (2013) ³	122,981
Manufacturing Employment (2013) ³	15,659
Unemployment Rate (2014) ⁴	6.4%
Employee Compensation (2014\$) ⁵	\$5.6 Bn
GDP estimate (2014\$) ⁶	\$19.7Bn
Median Household Income (2014\$) ⁷	\$79,099
Poverty Rate ⁸	7.1%
2011-2013 Average Ozone ⁹	71

Employment Highlights

Top 15 Employers

- Centegra Health System
- Walmart
- Jewel-Osco
- McHenry County
- Follett Library Resources, Inc.
- McHenry County College
- Catalent Pharma Solutions
- Mercy Health System
- Brown Printing
- Snap-On, Inc.
- Medela, Inc.
- Intren, Inc.
- Sage Products, Inc.
- Aptargroup, Inc
- Covidien

Employment by Sector



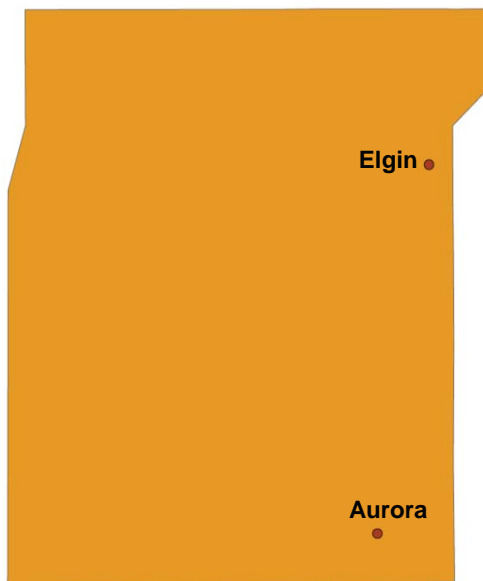
Industries Challenged

Manufacturing:

- Largest sub-sectors include fabricated metals, plastics & rubber products, and printing.
- 20% of total employment compensation in the county.
- Average estimated annual compensation per employee for the entire sector was \$69,000 in 2014.

Kane County's economy would be at risk with manufacturing representing the largest employment sector and 94% of its power generating capacity relying on fossil fuels.

County Map



Summary Statistics

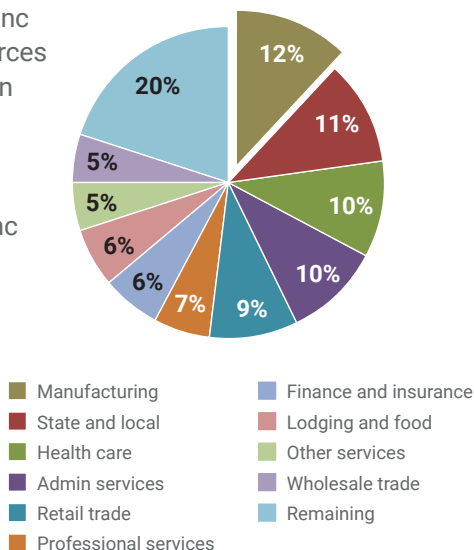
Population (2014) ¹	527,306
Households (2009-2013) ²	170,358
Total Employment (2013) ³	270,028
Manufacturing Employment (2013) ³	32,037
Unemployment Rate (2014) ⁴	7.0%
Employee Compensation (2014\$) ⁵	\$12.6 Bn
GDP estimate (2014\$) ⁶	\$33.8 Bn
Median Household Income (2014\$) ⁷	\$72,228
Poverty Rate ⁸	10.9%
2011-2013 Average Ozone ⁹	69

Employment Highlights

Top 15 Employers

- Universities Res Association, Inc
- Illinois Dept. of Human Resources
- Bank One National Association
- Delnor Community Hospital
- Dryer Cancer Center
- Grand Victoria Casino
- Hollywood Casino – Aurora, Inc
- Delnor Community Health Systems
- Provena Hospitals
- Dreyer Clinic, Inc.
- Dukane Corporation
- Kane County
- Provena Health
- SKF USA, Inc
- US Can Corporation

Employment by Sector



Industries Challenged

Manufacturing:

- Largest sub-sectors include chemicals, computer & electronics, electrical equipment & appliance, fabricated metals, food, and machinery.
- Average estimated annual compensation per employee in 2014 was \$69,200.

Power Generation: The Elgin Energy Center and the Rocky Road Power facilities constitute 787 MW of gas-fired capacity and represents 94% of the county's generating capacity.

Will County has more fossil fuel power generating and refining capacity than any of the other five collar counties, yet has the lowest average ozone level.

County Map



Summary Statistics

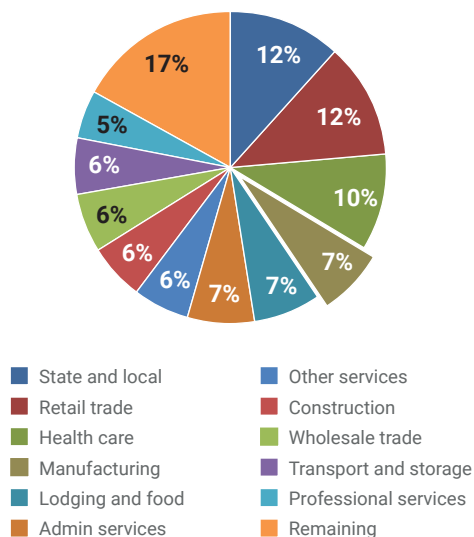
Population (2014) ¹	685,419
Households (2009-2013) ²	222,652
Total Employment (2013) ³	277,541
Manufacturing Employment (2013) ³	20,574
Unemployment Rate (2014) ⁴	7.40%
Employee Compensation (2014\$) ⁵	\$13.4 Bn
GDP estimate (2014\$) ⁶	\$44 Bn
Median Household Income (2014\$) ⁷	\$79,102
Poverty Rate ⁸	8.5%
2011-2013 Average Ozone ⁹	64

Employment Highlights

Top 15 Employers

- Presence St. Joseph Medical Center
- Silver Cross Hospital
- Will County Government
- Walmart Supercenter
- Valley View School District
- Peacock Engineering
- Trinity Services
- Harrah's Casino Joliet
- WeatherTech
- Promenade Bolingbrook
- NRG Energy
- Corrections Dept.
- Southern Wine & Spirits of Illinois
- Stateville Correctional Center
- Exelon Braidwood Gen. Station

Employment by Sector



Industries Challenged

Manufacturing (non-refining):

approximately 19,200 high-paying jobs averaging \$80,640 annually.

Refining: Two refineries – ExxonMobil Joliet and PDV Midwest Refining – represent ~415,000 barrels per day in capacity and employ more than 1,400 employees in high-paying jobs averaging almost \$100,000 a year.

Power Generation: Six fossil plants totaling 5,188 MW represent 68% of the county's generating capacity – Crete Energy Venture, Elwood Energy, Joliet, Lincoln Generating Facility, University Park North, and University Park South.

End Notes

- 1 U.S. Census Population estimates, July 1, 2014, accessed at <http://www.census.gov/quickfacts/>
- 2 U.S. Census Household 5-Year estimates 2009 - 2013, American Community Survey, accessed at <http://www.census.gov/quickfacts/>
- 3 BEA 2013 Employment estimates, accessed at <http://bea.gov/index.htm>.
- 4 U.S. Department of Labor, Bureau of Labor Statistics, 2014 unemployment rate, accessed at <http://data.bls.gov/map/>
- 5 U.S. Bureau of Economic Analysis 2013 Compensation of Employees by NAICS Industry adjusted to 2014 dollars, accessed at <http://bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=1&isuri=1>
- 6 BEA 2013 GDP by State and MSA adjusted to 2014 dollars; U. S. Bureau of Economic Analysis 2013 Compensation of Employees by NAICS Industry adjusted to 2014 dollars and applied a GDP multiplier, accessed at <http://bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=1&isuri=1>
- 7 U.S. Census Median Household Income estimates 2009-2013 in adjusted to 2014 dollars, accessed at <http://www.census.gov/quickfacts/>
- 8 U.S. Census Persons in poverty, percent, accessed at <http://www.census.gov/quickfacts/>
- 9 U.S. EPA Counties Violating the Primary Ground-level Ozone Standard, accessed at <http://www.epa.gov/groundlevelozone/pdfs/20141126-20112013datatable.pdf>