

State of the Workforce Report 2017

Northwest Central Illinois Works (NCI Works)

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Contents

Executive Summary	5
Introduction	5
Community Audit	5
Labor Market Study	5
Key Findings.....	6
Infrastructure Review	7
Community Resources.....	7
Education Capability	8
Natural Resources	8
Technological Capability	8
Transportation.....	8
Workforce Development	9
Underemployed Survey	9
Business Survey	9
Individual Workforce Survey	10
Recommendations	11
Community Audit	12
Geographic Overview	12
Demographic and Labor Force Characteristics	12
Population	12
Ethnicity	13
Median Household Income and Poverty Rates	13
Educational Attainment	14
Labor Force Trends	15
Commuting Patterns	16
Industry Overview	16
Industry Sector Analysis (2-Digit NAICS)	17
Top 20 Industries by Number of Jobs (4-Digit NAICS)	20
Top 20 Industries by Number of New Jobs (4-Digit NAICS)	21
Occupation Analysis	22
Current Occupational Mix (2-Digit SOC).....	22
Top Occupations (5-Digit SOC).....	24

Table of Contents

5 Year Projections	25
Top Growing Occupations (5-Digit SOC)	26
Labor Market Information Report Conclusion	27
Data Sources and Glossary of Key Terms	27
Local Infrastructure Review	46
Cultural Resources and Activities	47
Bureau County	47
Carroll County	47
Jo Daviess County.....	47
LaSalle County.....	48
Lee.....	48
Ogle.....	48
Putnam.....	48
Whiteside.....	48
Community Resources.....	49
Quality of Life.....	49
Housing Costs.....	49
Crime	50
Substance Abuse	50
Childcare.....	51
Disability Services.....	51
Domestic Violence Services.....	51
Health Care, Health and Wellness.....	51
Housing and Homelessness	53
Mental Health / Substance Abuse Services	54
Senior Services.....	55
Veterans Services.....	55
Youth Services.....	56
Education Capacity.....	57
K-12.....	57
Top 100 Rankings	57
Illinois School District Rankings	58
Post-Secondary Community Colleges and Training Institutions	59
Four-Year College	60

Table of Contents

Natural Resources	61
Agriculture.....	61
Natural Reserves, Tourism and Agritourism	62
Technology Infrastructure.....	63
Broadband.....	63
Fiber Optic.....	64
Resources.....	65
Transportation Infrastructure.....	66
Public Transportation.....	66
Roads.....	67
Airports	68
Rail	70
Waterways.....	71
Workforce Development.....	73
Infrastructure Review Conclusion	74
Underemployed Workforce Survey Analysis	75
Individual Workforce Survey	75
Employment Status and Challenges	76
Business Workforce Survey	78
Employment Size and Growth	78
Employee Retention	80
Hiring.....	82
Recruiting Employees	86
Employee Training	87
Underemployed Survey Conclusion	87
State of the Workforce.....	88
Final Recommendations.....	88
Establish and Support Sector Partnerships.....	88
Develop Competency-Based Career Pathways.....	88
Promote the Public Workforce System	89
Capitalize on Natural Resources and Tourism Opportunities	89

Executive Summary

Introduction

The Workforce Innovation and Opportunity Act requires local workforce development boards such as Northwest Central Illinois (NCI) Works to develop a local workforce investment system that improves the quality of the workforce, reduces welfare dependency, and enhances the productivity and competitiveness of the local workforce area. To that end, NCI Works contracted Thomas P. Miller & Associates (TPMA) to conduct a Community Audit of its 8-county area, supplemented by an Underemployment Survey. The NCI Works region is delineated as the Local Workforce Development Area #4 in Illinois. This area includes the counties of Bureau, Carroll, Jo Daviess, LaSalle, Lee, Ogle, Putnam, and Whiteside, within the northwest central region of Illinois.¹

The Community Audit provides an overall picture of the structure and composition of the eight-county economy including the region's strengths and weaknesses, economic and workforce issues that need to be addressed to assure the region's continued growth, and the capacity of NCI Works to unite the region in order to address the priorities that are identified in this audit. The Underemployed Survey, distributed to both employers and jobseekers, provides NCI Works with an inside look of the hidden workforce and strategies that can align with the purpose of education and economic development partners. Findings from the Community Audit and Underemployed Survey were then combined into this comprehensive State of the Workforce Report. As part of this State of the Workforce Report, TPMA has identified the strengths of the current workforce system, the challenges that emerged through the Community Audit and Underemployed Survey, and opportunities for success. These findings provide NCI Works the opportunity to position itself as a vibrant competitor in the global economy and ensure the region's ability to grow and prosper in an ever-changing world.

Community Audit

Labor Market Study

This Labor Market Study is aimed at providing a deeper look into the workforce characteristics of the region. The three sections for analysis included Demographic and Labor Force Characteristics; Industry Analysis; and Occupational Analysis. The Demographic and Labor Force Characteristics provide detailed information and data of the past, current, and projected population and how it is comprised based upon age, ethnicity, educational attainment, median household income and poverty rate. The Industry Analysis is incorporated in this study to gain a broad-level picture of the region's economic composition, revealing top industries at the 2 and 4-Digit Level NAICS². Finally, the Occupational Analysis of the region shows the top occupations and how they are projected to change over the next 5 years. A snapshot of the key findings of this study are outlined below.

¹ Throughout this Report, the terms "NCI Works area" and "region" may be used interchangeably to refer to this area. It is important to note that the area is defined through State of Illinois policy related to WIOA, but the area is not consistent with other common regional definitions.

² NAICS: North American Industry Classification System

Key Findings

Based on findings in the Target Industry Analysis, discussed in detail in the report, the largest industry sectors and their largest subsectors³ across the region are:

- Government (21,236 jobs)
 - Education and Hospitals (Local Government) (11,516 jobs)
 - Local Government, Excluding Education and Hospitals (6,330 jobs)
 - State Government, Excluding Education and Hospitals (1,474 jobs)
- Manufacturing (19,705 jobs)
 - Plastics Product Manufacturing (1,395 jobs)
 - Agriculture, Construction, and Mining Machinery Manufacturing (1,367 jobs)
 - Animal Slaughtering and Processing (1,155 jobs)
 - Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing (1,008 jobs)
 - Household Appliance Manufacturing (1,005 jobs)
- Retail Trade (14,449 jobs)
 - Grocery Stores (2,737 jobs)
 - Other General Merchandise Stores (2,525 jobs)
 - Gasoline Stations (1,826 jobs)
 - Automobile Dealers (1,380 jobs)
- Health Care and Social Assistance (12,220 jobs)
 - General Medical and Surgical Hospitals (3,340 jobs)
 - Nursing Care Facilities (Skilled Nursing Facilities) (2,671 jobs)
 - Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly (1,176 jobs)
- Accommodation and Food Services (10,131 jobs)
 - Restaurants and Other Eating Places (7,464 jobs)
 - Traveler Accommodation (1,594 jobs)

The top growing industry sectors in the region are:

- Manufacturing (projected growth of roughly 1,700 jobs by 2021). This growth remains the prediction by DOL's LMI data, even though the area has faced significant layoffs and closures in the past several years. The top growing subsectors include:
 - Cement and Concrete Production Manufacturing (351 new jobs)
 - Animal Slaughtering and Processing (306 new jobs)
 - Motor Vehicle Parts Manufacturing (304 new jobs)
 - Railroad rolling stock Manufacturing (244 new jobs)
- Transportation and Warehousing (projected growth of roughly 1,100 jobs by 2021)
 - Warehousing and Storage (632 new jobs)
 - General Freight Trucking (281 new jobs)

³ By 4-Digit NAICS Code

Top Occupations

The top high-level occupations in the region include:

- Office and Administrative Support Occupations
- Production Occupations
- Transportation and Material Moving Occupations
- Sales and Related Occupations
- Food Preparation and Serving Related Occupations

Transportation and Material Moving Occupations added the most jobs over the past five years (1,507) and is projected to add the most jobs through 2021 (1,337).

Top Growing Occupations

The top growing occupations (as projected through 2021) in the region include:

- Heavy and Tractor-Trailer Truck Drivers
- Laborers and Freight, Stock, and Material Movers, Hand
- Team Assemblers
- Retail Salespersons
- Customer Service Representatives

The two top growing occupations, Heavy and Tractor-Trailer Truck Drivers and Laborers and Freight, Stock, and Material Movers, Hand are expected to grow by 15% and 10% respectively. These two occupations lead the growth in the Transportation and Warehousing sector identified above. Additionally, both occupations have large location quotients (2.11 and 1.64 respectively) indicating that these jobs are more concentrated in the region as compared to other areas across the country.

Infrastructure Review

To gain a full understanding of the 8-county region's infrastructure, TPMA conducted an inventory scan, supplemented with the Business Employment Skills Team's (BEST, Inc.) Resource Mapping Guide. In the style of an asset map spreadsheet, research was organized into six (6) elements:

1. Community Resources
2. Educational Capability
3. Natural Resources
4. Technological Capability
5. Transportation
6. Workforce

The Community Audit identifies what is currently available in the region and the potential impact it may have on positioning itself for growth and competition in the world economy.

Community Resources

The region has a wide array of community resources available including social service agencies, community-based organizations, organizations serving special populations, and more that are critical components of the workforce needs. It also has several branch offices of the Illinois Department of Human Services (DHS) which are supplemented with a range of non-profit organizations that provide

customized services to families and individuals. The region is well suited with these types of organizations including childcare, healthcare and support services for domestic abuse. Although the region is rural, individuals have access to a number of resources, but the primary challenges in access are limited the hours of operation and limited locations for many services. For example, if an individual was seeking shelter and support for domestic abuse, residents outside of LaSalle, Bureau, Ogle, and Jo Daviess counties have to travel long distances to access to services.

Education Capability

The eight-county region is home to several schools, encompassed into 73 school districts, but only four school districts were ranked in the top 100 schools in Illinois. In addition, the region is served by four community colleges including Highland Community College, Sauk Valley Community College, Illinois Valley Community College, and Kishwaukee Community College. With these community colleges and two technical schools located in the region, a wide range of partnerships and collaboration can exist to improve the workforce system. Whether it is through career pathways or sector partnerships, training and educational resources are available in the region to adequately supply those demands.

Natural Resources

One of the greatest assets to the mostly-rural region is the area's array of natural resources including rivers, state parks, nature preserves, and farmland. Together, these resources contribute to the region's economic growth through agritourism, recreational tourism, and more. One of the most notable tourist destinations to these natural resources is Starved Rock State Park in LaSalle County, which draws over 2 million visitors each year. The economic impact of these destinations flows into other industry sectors including restaurants, hospitality, and more. While southern Illinois is a more established center of agritourism, this region's natural resources have the ability to make it a significant destination and have a powerful impact on the area's economy.

Technological Capability

In an age when the internet plays a critical role in our daily lives, the eight-county region's technological infrastructure provides significant broadband access to its residents. The state of Illinois ranks 14th in the nation for technological connectivity.⁴ When compared to the neighboring states, Illinois outperforms Missouri, Iowa, Indiana, Wisconsin, and Kentucky. The fiber optic network in the region has undergone recent construction to provide faster, more affordable, access across the region. All of these characteristics play a considerable role for attracting and retaining businesses who require a strong technology infrastructure.

Transportation

Located directly west of the major metropolitan area of Chicago, major highway routes to and from that metropolis play an integral part in the region's economic and workforce activity. The major intersection of I-80 and I-39 in the LaSalle area drives some of the economic activity occurring throughout the region. On the local level, public transportation is not widely utilized. According to a 2007 State of the Workforce Report, only 0.2% of workers commute by public transit which is interesting when compared to the Underemployed Survey (as mentioned below) where nearly one-third of respondents identified

⁴ <http://broadbandnow.com/illinois> (data is collected via the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA)).

the greatest challenge in finding employment was the commute/traveling issues. Public transportation is available on the municipal level in Ottawa only, but some public transportation is available on the county level in all eight counties. Rail and air transportation is also available but the impact it has on business expansion is minimal.

Workforce Development

The workforce system in the eight-county region is supported by NCI Works and the Workforce Innovation and Opportunity Act (WIOA) delivery entity BEST, Inc. along with partners including the State of Illinois Department of Employment Security (IDES), Department of Human Services and Department of Rehabilitation Services, Illinois Valley Community College, Sauk Valley Community College, Carroll County Housing Authority, National Able Network, and the Tri-County Opportunity Council. The NCI Works region has one comprehensive American Job Center (also known in Illinois as the Illinois workNet Centers) in Ottawa, IL, one Affiliate AJC in Sterling, IL, additional branch locations in Bureau, Carroll, Jo Daviess, Lee, and Ogle counties, and additional service sites at Sauk Valley and Illinois Valley Community College. It is critical for residents in the region to have access to job search/job training services and institutions that provide training opportunities are spread out amongst the region in places like Illinois Valley Community College, Sauk Valley Community College, Whiteside Area Career Center and other local community colleges. Area youth receive workforce services at these locations and at Area Career Centers at LaSalle Peru Township High School (covering several schools in Bureau and Putnam Counties), in Elizabeth (covering Jo Daviess and Carroll Counties), and in Ogle County in a coordinated partnership with neighboring DeKalb County. Support is also provided to the region through local chambers of commerce, economic development organizations, and local/regional government institutions.

Underemployed Survey

The Underemployed Survey was designed to quantify the extent to which underemployment exists in the area; document the cost, skills, experience, desired pay rate, and education of the hidden workforce; and provide accurate workforce data for employers in the Manufacturing, Transportation/Distribution/Logistics, Healthcare, Agriculture, and Information Technology industry sector. Two surveys were created to capture this information: one for business and one for individual jobseekers.

Business Survey

The business survey was composed with questions about employment numbers and projections, skills needs and gaps, education and training needs, training challenges, and desired recognized credentials. Through a collected list of over 4,000 individuals involved in the hiring process for their respected businesses, TPMA distributed the survey electronically. In addition, NCI Works distributed information about the survey to businesses to garner a higher volume of responses. In total, responses from individuals at 89 companies were analyzed as part of this study.

The top industry sectors to participate in the survey were Manufacturing (18%); Health Care and Social Assistance (12%); and Educational Services (11%). As these industries and others grow over the next ten years, the hiring within these industries are also projected to grow, Manufacturing by 75%, Health Care and Social Assistance by 64%, and Educational Services by 30%. It is worth noting, however, that industries that were anticipating 100% increased hiring due to growth included Information Technology;

Utilities; Professional, Scientific, and Technical Services; and Accommodation and Hospitality. As these industries plan to increase hire over the next decade, it is important for the region to prepare the talent pool with the skills and training necessary to successfully fill these positions and hit the ground running.

A majority of the hiring that has been made by businesses on a yearly average was between 0-9 employees (67% of responses). With two-thirds of the hiring being made in small increments, businesses can position themselves to adequately train the workforce in a more focused setting versus one where hiring is on a much larger scale. However, one of the greatest concerns businesses face is the retention of employees. On average, most companies anticipate losing fewer than 10 employees each year due to retirement, recession, or job placement. Considering the fact that a majority of businesses who responded to the survey indicated that they hire 0-9 employees on a yearly basis, this small job loss can cause a significant effect on the company. Most of the positions that are being filled are entry-level positions, which are the easiest to fill, as indicated by the responses. In addition, the educational attainment necessary to fill those positions is a high school diploma or GED (82.3%). With that said, businesses in the region can leverage their relationship with educational institutions, whether it is at the high school level or collegiate level, to create career pathway programs. For top industries in the region like Manufacturing or Health Care and Social Assistance, some type of training is required and if it is easy to fill these entry level positions, it is in the best interest of everyone to provide continued professional development. Adopting new skills and investing in their careers will create a workforce that meets the top skills employers have difficulty finding: critical thinking, problem solving, reliability, and initiative.

Individual Workforce Survey

The individual workforce survey was composed with basic questions regarding employment including their age, location, educational achievement, employment status, income and employment challenges. The survey was distributed by workforce staff at the local American Job Centers (Illinois workNet Centers) to jobseekers who volunteered to participate. In total, responses from 164 jobseekers were analyzed as part of this study. The survey was released on March 12, 2017 and closed on April 19, 2017.

Just under half of the jobseekers who participated in the survey defined their employment status as being underemployed (48%), with a yearly earning of less than \$20,000. It should be noted that for this study, the term *underemployed* is defined as an individual undercompensated for the skills and abilities he/she possesses. A majority of survey respondents reported that their greatest challenges in finding employment that meets their expectations are low wages and the limited number of positions available. Nearly one-third of respondents reported that they have been looking for employment that meets their expectation for longer than a year (34%). The majority of these survey respondents hailed from LaSalle County (27%) followed by Lee County (15%) and Ogle County (14%). Businesses have identified the difficulty of hiring individuals with the necessary skills and attributes for their company, though investing in training can provide them with a more adaptable workforce.

The greatest concern to businesses that intend to hire additional employees because of growth is the quality of candidates for those positions. Individuals who are making less than \$20,000 per year are making near minimum wage in Illinois of \$8.25 per hour, and of those respondents, 6% are working full-time and unable to meet their family's financial needs (respondents may be working part-time or making minimum wage). Only 20% of respondents indicated working in a position that is commensurate with their skills, credentials and experience.

Recommendations

Based upon the research and data collected and analyzed, the following recommendations are made to enhance the productivity and competitiveness of the local workforce area:

- 1. Establish and Support Sector Partnerships**
- 2. Develop Competency-Based Career Pathways**
- 3. Promote the Public Workforce System**
- 4. Capitalize on Natural Resources and Tourism Opportunities**

By investing in these recommendations, the region will have the ability to leverage its workforce and community resources in ways that make the region a competitive location within Illinois and the mid-west for economic growth.

Community Audit

Geographic Overview

The geographic region included in this analysis consists of the eight (8) counties that make up the NCI Works Region. The counties include Bureau, Carroll, Jo Daviess, LaSalle, Lee, Ogle, Putnam and Whiteside.

The region makes up just 2.6% of Illinois' population while the geographic area is more than 9.4% of the total land area of Illinois⁵.



Geographic Location	Total Sq. Mi.	% of the State
Bureau County	873.504	1.5%
Carroll County	466.624	0.8%
Jo Daviess County	618.580	1.1%
LaSalle County	1,148.146	2.0%
Lee County	728.950	1.3%
Ogle County	762.989	1.3%
Putnam County	172.224	0.3%
Whiteside County	696.526	1.2%
NCI Works Region	5,467.543	9.4%
Illinois	57,913.579	100%

Demographic and Labor Force Characteristics

Population

The population has been declining, experiencing a 3% decline over the past ten years. Over the next five years, the population is projected to continue to decline but at a slower rate of 2%. The population for the region is also aging with 9% growth among those over the age of 65. This group is projected to continue to grow at the same rate over the next five years. This may present a challenge to employers in the region, as they look to replace retiring workers. During this same timeframe, the population under age five is projected to grow.

⁵ <https://onthemap.ces.census.gov/>

Age Cohort	2011 Population	2016 Population	Change (2006-2016)		Projected Change (2016-2021)	
Under 5	18,937	17,525	(1,412)	(7%)	1,203	7%
5-19	65,556	60,275	(5,281)	(8%)	(3,735)	(6%)
20-34	55,968	55,784	(184)	0%	(2,276)	(4%)
35-54	92,728	82,040	(10,688)	(12%)	(6,432)	(8%)
55-64	47,200	49,256	2,056	4%	(1,212)	(3%)
Over 65	58,708	64,169	5,461	9%	6,062	9%
Total	339,097	329,052	(10,045)	(3%)	(6,393)	(2%)

Source: Emsi 2017.1

Ethnicity

Constituting nearly 87% of the region’s population, the number of White individuals has experienced a 5% decline over the last five years. All of the remaining ethnic groups has experienced an increase in population, most notably the Asian and Black population. Respectively, they have experienced a 22% and 18% increase since 2011. Although the region’s population remains more than 87% White, increases in diverse populations could indicate a need for more diverse community resources to best serve those populations.

Race/Ethnicity	2011 Population	2016 Population	% of Cohort	Change (2011-2016)	% Change (2011-2016)
White	300,472	286,086	87%	(14,386)	(5%)
Hispanic	26,842	29,278	9%	2,439	9%
Black	5,820	6,839	2%	1,019	18%
Two or More Races	3,322	3,701	1%	379	11%
Asian	2,039	2,497	< 1%	458	22%
American Indian or Alaskan Native	559	600	< 1%	41	7%
Native Hawaiian or Pacific Islander	44	51	< 1%	7	16%
TOTAL	339,097	329,052	100%	(10,045)	(3%)

Source: Emsi 2017.1

Median Household Income and Poverty Rates

The median household incomes within the region are consistent, ranging from \$47,401 for Whiteside County to \$56,358 for Putnam County. Both Ogle and Putnam County have median incomes that are higher than the US median. However, the entire region trails the Illinois median of \$57,574. Poverty rates within the region range from a high of 12.6% in Carroll County to a low of 9.2% in Jo Daviess. The region as a whole has a lower poverty rate than both Illinois and the U.S., suggesting a better standard of living is within the region than the state or nation.

County	Median Household Income	Poverty Rate
Bureau, IL	\$50,423	12.5%
Carroll, IL	\$48,631	12.6%
Jo Daviess, IL	\$53,221	9.2%
LaSalle, IL	\$50,633	13.2%
Lee, IL	\$52,379	11.1%
Ogle, IL	\$54,849	10.6%
Putnam, IL	\$56,358	12.0%
Whiteside, IL	\$47,401	12.0%
Illinois	\$57,574	14.3%
U.S.	\$53,889	15.5%

Source: U.S. Census Bureau

Educational Attainment

Overall, the region has a higher percentage of the population with a high school diploma than Illinois and US. However, the percentage of those with a Bachelor’s Degree or higher trails Illinois and the US. A large percentage of the population graduates from high school and goes on to complete an Associates’ Degree and/or at least some college classes, but there are challenges in individuals completing college. In a region where the poverty level is low, the educational attainment overall is high.

Education Level	Regional Population	Regional Percent	Illinois Percent	U.S. Percent
Less Than 9th Grade	12,057	5%	7%	7%
9th Grade to 12th Grade	15,763	7%	6%	7%
High School Diploma	87,580	38%	27%	28%
Some College	55,506	24%	21%	21%
Associate's Degree	20,686	9%	8%	8%
Bachelor's Degree	26,420	11%	20%	18%
Graduate Degree and Higher	14,404	6%	12%	11%

Source: Emsi 2017.1

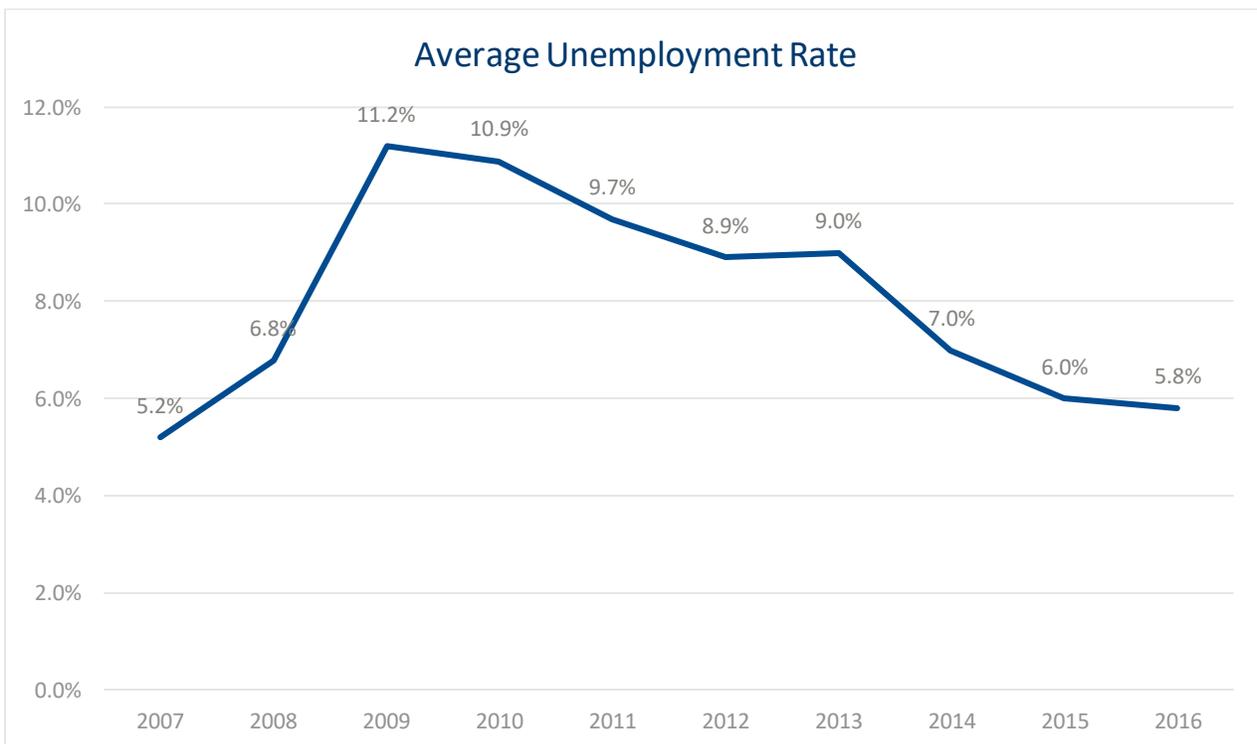
Labor Force Trends

The region has a current labor force of 169,305. Just under half of the workforce is in the two counties of LaSalle and Ogle. Unemployment within the region ranges from 5.1% in Lee County to 6.7% in LaSalle County. Overall, the unemployment rate is in line with the statewide rate of 5.9%.

County	Total Labor Force 2016	Employed 2016	Unemployed 2016	Unemployment Rate 2016
Bureau County, IL	17,353	16,303	1,050	6.1%
Carroll County, IL	7,850	7,406	444	5.7%
Jo Daviess County, IL	11,353	10,739	614	5.4%
LaSalle County, IL	57,245	53,384	3,861	6.7%
Lee County, IL	17,948	17,024	924	5.1%
Ogle County, IL	25,819	24,293	1,526	5.9%
Putnam County, IL	3,115	2,941	174	5.6%
Whiteside County, IL	28,622	26,954	1,668	5.8%
Total	169,305	159,044	10,261	5.8%
Illinois	6,539,008	6,154,867	386,452	5.9%

Source: Bureau of Labor Statistics (BLS)

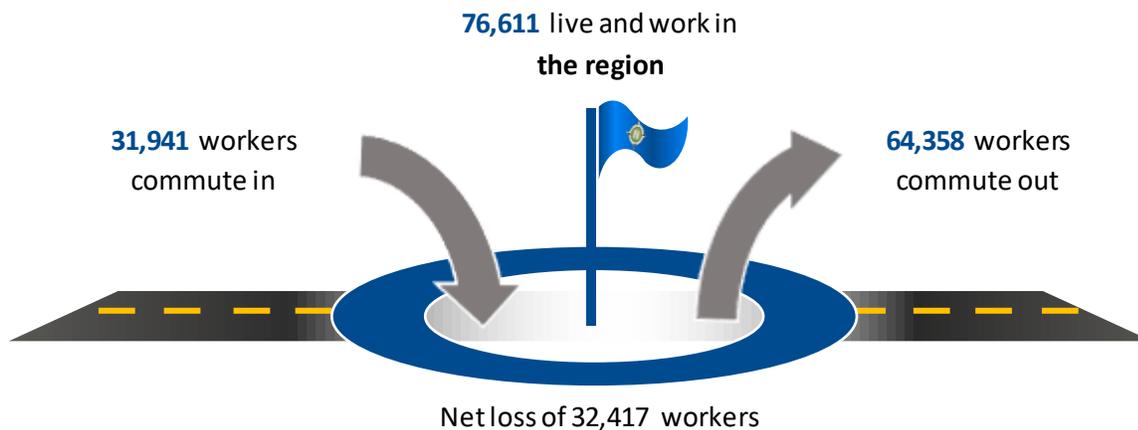
The following chart details the annual average unemployment rate for the 8-county region between 2007 and 2016. Unemployment increased from 2007 and peaked at a rate of 11.2% in 2009, at the height of the recent recession. Since 2010, unemployment has decreased each year with the exception of 2013 when the unemployment rate jumped slightly 0.1%. The current low of 5.8% in 2016 is second lowest rate over the ten-year period.



Commuting Patterns

Commuting patterns are a helpful way to understand migration patterns amongst the workforce within the region. These data points measure the number and destination of both inbound and outbound workers. If a region has a larger number of outbound workers than inbound, there are likely either fewer or less desirable job opportunities within that region. Thus, residents are leaving the region for work opportunities. Conversely, if there are more inbound workers, the region likely has a greater number of available jobs. A region's proximity to large urban centers can affect this as well. For example, if a region is within close proximity to a major city, there are going to be more job opportunities in that large city, so residents may be willing to commute outside of the region.

In 2014, the region had nearly 32,000 workers commuting in and over 64,000 commuting out, making the region a net exporter of workers.⁶ The largest share (76,611) of the workforce both live and work in the area, but nearly as many (64,358) commute for work.



The largest contributor of in-commuting workers into the region is Cook County, IL with 3.4% of the region's workforce, followed by Winnebago County, IL with 2.5%. The top destinations for out-commuting in the region is Cook County, IL with 6.5% of the region's workforce, followed by Winnebago County, IL with (4.6%).

Industry Overview

The Industry Overview analyzes the broad industry mix and significant recent employment trends in the region. Regional importance is determined based on a combination of factors, including job growth trends, Location Quotients (the extent to which an industry is concentrated within the region, compared to the national average), and Competitive Effect (the extent to which job growth is reflective of unique regional factors rather than national and industry trends). Though the intent of the Target Industry Analysis is to highlight industries that are ripe for further development, the study is intended to provide a

⁶ U.S. Census Bureau, OnTheMap, 2014 (most recently available) <http://onthemap.ces.census.gov/>

high-level overview on the economy, which is necessary for understanding the more detailed cluster recommendations.

Industry Sector Analysis (2-Digit NAICS)

Government makes up the largest industry sector in the region, with over 21,000 jobs, or 18% of all employment in the region.⁷ Rounding out the top five industry sectors are: Manufacturing (19,705, 17%); Retail Trade (14,449, 12%); Health Care and Social Assistance (12,220, 10%); and Accommodation and Food Services (10,131, 9%).



Source: Emsi 2017.1

Over the past five years, most of the top industry sectors declined, with Retail Trade declining by 1,365. The greatest percentage share of job decline was within Management of Companies and Enterprises (-61%). Other industry sectors experiencing declines include Information (-16%); Wholesale Trade (-9%); Crop and Animal Production (-8%); and Health Care and Social Assistance (-6%). Industries with the

⁷ Government includes Federal, State, and Local Government; Education; and Hospitals (State Government).

greatest decline in raw numbers over the period include Health Care and Social Assistance (-728); Management of Companies and Enterprises (-579); Wholesale Trade (-513); Other Services (except Public Administration) (-203); and Information (-184).

Industries that have experienced the greatest percentage growth include Real Estate and Rental and Leasing (100%); Mining, Quarrying, and Oil and Gas Extraction (49%); Educational Services (29%); Transportation and Warehousing (29%); and Construction (13%). The greatest share of job growth within this period was within the Manufacturing sector (1,852), Transportation, and Warehousing (1,603).

Average total earnings within these top industries in the region range from \$15,924 (Accommodation and Food Services) to \$182,881 (Utilities). It is worth noting that for the industry with the greatest decline over the past five years, Retail Trade was accompanied by a total income earning in the lower half of those in the region (\$28,825). While Manufacturing and Transportation and Warehousing have experienced the largest growth in job openings the past five years, they are also accompanied by a total income earning in the top half of those in the region, \$69,388 and \$49,646, respectively.



Industry	2011 Jobs	2016 Jobs	Change in Jobs 2011 - 2016		Earnings	2016 LQ	Comp. Effect
Government	21,196	21,236	40	0%	\$58,478	1.19	(2)
Manufacturing	17,853	19,705	1,852	10%	\$69,388	1.91	932
Retail Trade	15,814	14,449	(1,365)	(9%)	\$28,825	1.09	(2,540)
Health Care and Social Assistance	12,948	12,220	(728)	(6%)	\$44,389	0.78	(2,411)
Accommodation and Food Services	9,581	10,131	550	6%	\$15,924	0.92	(949)
Transportation and Warehousing	5,573	7,176	1,603	29%	\$49,646	1.82	744
Wholesale Trade	5,729	5,216	(513)	(9%)	\$56,233	1.06	(851)
Construction	4,211	4,768	557	13%	\$67,077	0.86	(290)
Administrative and Support and Waste Management and Remediation Services	4,457	4,383	(74)	(2%)	\$33,422	0.59	(753)
Finance and Insurance	3,711	3,646	(65)	(2%)	\$54,712	0.75	(251)
Other Services (except Public Administration)	3,758	3,555	(203)	(5%)	\$30,644	0.97	(152)
Professional, Scientific, and Technical Services	2,367	2,635	268	11%	\$51,351	0.36	(60)
Crop and Animal Production	2,166	1,989	(177)	(8%)	\$37,941	1.89	(349)
Utilities	1,800	1,775	(25)	(1%)	\$182,881	3.81	(39)
Real Estate and Rental and Leasing	595	1,189	594	100%	\$41,145	0.67	532
Arts, Entertainment, and Recreation	1,053	1,022	(31)	(3%)	\$17,950	0.55	(183)
Information	1,144	960	(184)	(16%)	\$49,443	0.41	(228)
Mining, Quarrying, and Oil and Gas Extraction	628	938	310	49%	\$99,998	1.67	362
Educational Services	650	838	188	29%	\$28,006	0.36	138
Management of Companies and Enterprises	949	370	(579)	(61%)	\$106,069	0.20	(728)
Unclassified Industry	<10	128	Insf. Data	Insf. Data	\$21,917	0.56	114

Source: Emsi 2017.1

Looking at industry growth for the next five years, most of the industry sectors are projected to grow. Manufacturing is projected to add the greatest number of jobs, with nearly 1,700 additional jobs (most

by replacement) by 2021, followed by Transportation and Warehousing with just under 1,100 new jobs. Although manufacturing is projected to grow, some key layoffs and plants closings over the past few years has occurred. The chart below provides a more detailed glimpse into those layoffs.

Company	Layoffs
Dura Automotive Systems	171
Robertshaw	103
Austin-Westran	83 ⁸
FlexiForce	8
Nippon Sharyo	322 ⁹
Plews Edelman	8
Anchor Coupling, Inc.	123

Other sectors projected to add at least 300 new jobs include Wholesale Trade (338); Retail Trade (409); Real Estate and Rental and Leasing (411); Construction (442); and Government (593).

Industry	2016 Jobs	2021 Jobs	Change in Jobs 2016 - 2021		Comp. Effect
Government	21,236	21,829	593	3%	260
Manufacturing	19,705	21,351	1,646	8%	1,111
Retail Trade	14,449	14,858	409	3%	(222)
Health Care and Social Assistance	12,220	12,138	(82)	(1%)	(1,508)
Accommodation and Food Services	10,131	10,251	120	1%	(693)
Transportation and Warehousing	7,176	8,265	1,089	15%	504
Wholesale Trade	5,216	5,554	338	6%	85
Construction	4,768	5,210	442	9%	168
Administrative and Support and Waste Management and Remediation Services	4,383	4,596	213	5%	(172)
Finance and Insurance	3,646	3,687	41	1%	(128)
Other Services (except Public Administration)	3,555	3,603	48	1%	(105)
Professional, Scientific, and Technical Services	2,635	2,820	185	7%	(67)
Crop and Animal Production	1,989	1,931	(58)	(3%)	163
Utilities	1,775	2,049	274	15%	(147)
Real Estate and Rental and Leasing	1,189	1,600	411	35%	342
Arts, Entertainment, and Recreation	1,022	1,032	10	1%	147
Information	960	958	(2)	(0%)	(81)
Mining, Quarrying, and Oil and Gas Extraction	938	1,148	210	22%	(24)
Educational Services	838	920	82	10%	9
Management of Companies and Enterprises	370	263	(107)	(29%)	(138)
Unclassified Industry	128	183	55	43%	25

It should be noted that while many of these industries are projected to add jobs, many will not add as many as expected from national and overall industry trends. In other words, while Retail Trade is projected to add over 400 new jobs, based on national and industry trends it should be adding an additional 200 jobs. This indicates that the region is not as competitive for this industry sector. Other industry sectors in

⁸ 83 was the final layoff total after 50 employees voluntarily left before getting their official notice.

⁹ 104 additional layoffs will be made in July 2017 for a total of 437 layoffs

a similar situation include Administrative and Support and Waste Management and Remediation Services; Finance and Insurance; Other Services; Professional, Scientific, and Technical Services; Utilities; and Mining, Quarrying, and Oil and Gas Extraction.

Source: EMSI 2017.1

Top 20 Industries by Number of Jobs (4-Digit NAICS)



This section analyzes the top industries by employment at the 4-digit NAICS level. The top subsectors by employment include: Education and Hospitals (Local Government); Restaurants and Other Eating Places; Local Government, Excluding Education and Hospitals; Warehousing and Storage; and General Medical and Surgical Hospitals. All employ over 3,000.

Three industries have a very high (greater than 4.0) 2016 location quotient, indicating a much higher concentration of industry employment compared to the US average. These include Agriculture, Construction, and Mining Machinery Manufacturing (7.41); Warehousing and Storage (4.91); and Electric Power Generation, Transmission, and Distribution (4.83).

Industry	2011 Jobs	2016 Jobs	Change in Jobs 2011 - 2016		2016 LQ	CE
Education and Hospitals (Local Government)	11,965	11,516	(449)	(4%)	1.64	(498)
Restaurants and Other Eating Places	6,758	7,464	706	10%	0.87	(459)
Local Government, Excluding Education and Hospitals	6,299	6,330	31	0%	1.35	(65)
Warehousing and Storage	2,814	3,598	784	28%	4.91	(194)
General Medical and Surgical Hospitals	3,751	3,340	(411)	(11%)	0.87	(569)
Grocery Stores	2,875	2,737	(138)	(5%)	1.21	(386)
Nursing Care Facilities (Skilled Nursing Facilities)	2,841	2,671	(170)	(6%)	1.94	(120)
Other General Merchandise Stores	2,227	2,525	298	13%	1.61	(169)
Depository Credit Intermediation	2,639	2,458	(181)	(7%)	1.74	(106)
General Freight Trucking	1,480	2,047	567	38%	2.45	413
Gasoline Stations	1,603	1,826	223	14%	2.38	46
Electric Power Generation, Transmission and Distribution	1,648	1,598	(50)	(3%)	4.83	(39)
Traveler Accommodation	1,721	1,594	(127)	(7%)	1.02	(263)
Employment Services	1,681	1,552	(129)	(8%)	0.52	(462)
State Government, Excluding Education and Hospitals	1,542	1,474	(68)	(4%)	0.77	(39)
Plastics Product Manufacturing	1,008	1,395	387	38%	2.96	280
Automobile Dealers	1,298	1,380	82	6%	1.30	(177)
Agriculture, Construction, and Mining Machinery Manufacturing	1,273	1,367	94	7%	7.41	130
Services to Buildings and Dwellings	1,206	1,280	74	6%	0.75	(100)
Building Equipment Contractors	1,103	1,225	122	11%	0.74	(102)

Source: Emsi 2017.1

Top 20 Industries by Number of New Jobs (4-Digit NAICS)

The top subsectors projected to grow through 2021 include: Warehousing and Storage (632 new jobs); Education and Hospitals (State Government) (464 new jobs); Other General Merchandise Stores (384 new jobs); Cement and Concrete Product Manufacturing (351 new jobs); Animal Slaughtering and Processing (306 new jobs); and Motor Vehicle Parts Manufacturing (304 new jobs). All but two subsectors have a positive Competitive Effect (CE), indicating that much of the projected growth is due to competitive reasons within the region. Several of these sectors have high Location Quotients, which means that employment across these sectors is more highly concentrated within the region. Industries with a high Location Quotient include Railroad Rolling Stock Manufacturing (24.47); Household Appliance Manufacturing (21.72); and Nonmetallic Mineral Mining and Quarrying (13.47). High Location Quotients often indicate the presence of a significant employment within in the region, and while these subsectors are projected to grow, the region should be aware of global trends and potential regional issues that may impact future employment in order to protect against possible future economic downturns.



Industry	2016 Jobs	2021 Jobs	Change in Jobs 2016 - 2021		2016 LQ	CE
Warehousing and Storage	3,598	4,230	632	18%	5.11	122
Education and Hospitals (State Government)	948	1,412	464	49%	0.71	427
Other General Merchandise Stores	2,525	2,909	384	15%	1.63	(5)
Cement and Concrete Product Manufacturing	966	1,317	351	36%	8.22	324
Animal Slaughtering and Processing	1,155	1,461	306	26%	3.47	266
Motor Vehicle Parts Manufacturing	985	1,289	304	31%	2.50	224
General Freight Trucking	2,047	2,328	281	14%	2.68	178
Utility System Construction	759	1,014	255	34%	2.21	143
Railroad Rolling Stock Manufacturing	418	662	244	58%	24.47	190
Electric Power Generation, Transmission and Distribution	1,598	1,842	244	15%	5.27	134
Automotive Equipment Rental and Leasing	479	703	224	47%	3.86	187
Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	1,176	1,398	222	19%	1.61	4
Local Government, Excluding Education and Hospitals	6,330	6,540	210	3%	1.38	90
Nonmetallic Mineral Mining and Quarrying	903	1,093	190	21%	13.47	130
State Government, Excluding Education and Hospitals	1,474	1,652	178	12%	0.88	183
Restaurants and Other Eating Places	7,464	7,639	175	2%	0.83	(471)
Household Appliance Manufacturing	1,005	1,175	170	17%	21.72	127
Dairy Product Manufacturing	479	647	168	35%	5.29	137
Business Support Services	650	815	165	25%	0.99	99
Miscellaneous Nondurable Goods Merchant Wholesalers	1,117	1,281	164	15%	4.67	148

Source: Emsi 2017.1

Occupation Analysis

Current Occupational Mix (2-Digit SOC)

The top occupations in the region include Office and Administrative Support Occupations; Production Operations; Transportation and Material Moving Occupations; Sales and Related Occupations; and Food Preparation and Serving Related Occupation. Office and Administrative Support is the largest occupation, employing nearly 17,300 workers in 2016. Over the next five years, it is projected to add just over 400 new jobs. Transportation and Material Moving Occupations added the most jobs over the past five years (1,507) and is projected to add the most jobs through 2021 (1,337).

Description	2011 Jobs	2016 Jobs	Change in Jobs 2011 - 2016		Annual Openings	Median Hourly Earnings	2016 LQ
Office and Administrative Support Occupations	17,919	17,262	(657)	(4%)	618	\$14.46	0.93
Production Occupations	11,893	12,709	816	7%	781	\$16.68	1.67
Transportation and Material Moving Occupations	10,652	12,159	1,507	14%	830	\$16.33	1.51
Sales and Related Occupations	11,234	10,815	(419)	(4%)	579	\$13.58	0.88
Food Preparation and Serving Related Occupations	9,901	10,506	605	6%	637	\$9.68	0.97
Education, Training, and Library Occupations	8,301	8,047	(254)	(3%)	264	\$21.75	1.16
Management Occupations	6,589	6,715	126	2%	268	\$33.00	1.12
Healthcare Practitioners and Technical Occupations	6,628	6,617	(11)	(0%)	294	\$27.51	0.96
Installation, Maintenance, and Repair Occupations	4,826	5,192	366	8%	285	\$19.59	1.14
Construction and Extraction Occupations	3,755	4,263	508	14%	280	\$25.36	0.92
Building and Grounds Cleaning and Maintenance Occupations	3,973	4,091	118	3%	172	\$11.95	1.08
Business and Financial Operations Occupations	3,681	3,670	(11)	(0%)	151	\$25.99	0.60
Protective Service Occupations	3,347	3,353	6	0%	178	\$19.29	1.17
Healthcare Support Occupations	3,449	3,342	(107)	(3%)	139	\$11.96	0.96
Personal Care and Service Occupations	2,482	2,253	(229)	(9%)	109	\$10.31	0.55
Community and Social Service Occupations	1,675	1,745	70	4%	110	\$18.28	1.02
Farming, Fishing, and Forestry Occupations	1,676	1,542	(134)	(8%)	105	\$14.67	1.82
Architecture and Engineering Occupations	1,440	1,486	46	3%	96	\$34.85	0.70
Arts, Design, Entertainment, Sports, and Media Occupations	983	847	(136)	(14%)	55	\$14.90	0.54
Computer and Mathematical Occupations	868	798	(70)	(8%)	25	\$30.71	0.23

Source: Emsi 2017.1

Looking at the five-year-forward projections of regional occupations, the largest net increases in jobs are expected to occur in Transportation and Material Moving Occupations (1,337); Production occupations

1,009); and Sales and Related Occupations (573). The occupations with the largest expected percentage increases during the same timeframe include Computer and Mathematical Occupations (15%); Life, Physical, and Social Science Occupations (14%); and Transportation and Material Moving Occupations (11%).

Description	2016 Jobs	2021 Jobs	Change in Jobs 2016-2021		Annual Openings	Median Hourly Earnings	2016 LQ
Office and Administrative Support Occupations	17,262	17,675	413	2%	511	\$14.46	0.93
Production Occupations	12,709	13,718	1,009	8%	568	\$16.68	1.67
Transportation and Material Moving Occupations	12,159	13,496	1,337	11%	586	\$16.33	1.51
Sales and Related Occupations	10,815	11,388	573	5%	487	\$13.58	0.88
Food Preparation and Serving Related Occupations	10,506	10,737	231	2%	484	\$9.68	0.97
Education, Training, and Library Occupations	8,047	7,965	(82)	(1%)	203	\$21.75	1.16
Management Occupations	6,715	6,978	263	4%	229	\$33.00	1.12
Healthcare Practitioners and Technical Occupations	6,617	6,800	183	3%	217	\$27.51	0.96
Installation, Maintenance, and Repair Occupations	5,192	5,683	491	9%	240	\$19.59	1.14
Construction and Extraction Occupations	4,263	4,672	409	10%	168	\$25.36	0.92
Building and Grounds Cleaning and Maintenance Occupations	4,091	4,243	152	4%	124	\$11.95	1.08
Business and Financial Operations Occupations	3,670	3,976	306	8%	147	\$25.99	0.60
Protective Service Occupations	3,353	3,565	212	6%	151	\$19.29	1.17
Healthcare Support Occupations	3,342	3,410	68	2%	112	\$11.96	0.96
Personal Care and Service Occupations	2,253	2,243	(10)	(0%)	72	\$10.31	0.55
Community and Social Service Occupations	1,745	1,828	83	5%	65	\$18.28	1.02
Architecture and Engineering Occupations	1,486	1,617	131	9%	70	\$34.85	0.70
Farming, Fishing, and Forestry Occupations	1,542	1,514	(28)	(2%)	55	\$14.67	1.82
Computer and Mathematical Occupations	798	915	117	15%	36	\$30.71	0.23
Arts, Design, Entertainment, Sports, and Media Occupations	847	838	(9)	(1%)	34	\$14.90	0.54
Life, Physical, and Social Science Occupations	493	560	67	14%	32	\$31.42	0.49
Legal Occupations	423	425	2	0%	9	\$33.85	0.47

Source: Emsi 2017.1

Top Occupations (5-Digit SOC)

The top occupations by 5-digit SOC include Laborers and Freight, Stock, and Material Movers, Hand; Retail Salespersons; Heavy and Tractor-Trailer Truck Drivers; and Cashiers. Of these four, Heavy and Tractor-Trailer Truck Drivers pay the highest median wage at \$22.38/hr. Other occupations with a median wage above \$15/hr include Registered Nurses (\$25.05/hr); General and Operations Managers (\$30.40/hr); Elementary School Teachers, Except Special Education (\$25.22/hr); Maintenance and Repair Workers, General (\$16.25/hr); Bookkeeping, Accounting, and Auditing Clerks (\$15.15/hr); and Secondary School Teachers, Except Special and Career/Technical Education (\$27.68/hr).

Over the past five years, the sectors adding the most jobs include Heavy and Tractor-Trailer Truck Drivers (720), followed by Laborers and Freight, Stock, and Material Movers, Hand (355). Both also had the largest number of annual openings (232 and 241, respectively).

Description	2011 Jobs	2016 Jobs	Change in Jobs 2011 - 2016		Annual Openings	Median Hourly Earnings	2016 LQ
Laborers and Freight, Stock, and Material Movers, Hand	3,123	3,478	355	11%	241	\$12.39	1.64
Retail Salespersons	3,743	3,363	(380)	(10%)	167	\$10.39	0.87
Heavy and Tractor-Trailer Truck Drivers	2,285	3,005	720	32%	232	\$22.38	2.11
Cashiers	3,105	3,000	(105)	(3%)	160	\$9.34	1.02
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	2,274	2,309	35	2%	59	\$12.91	1.20
Office Clerks, General	2,295	2,300	5	0%	78	\$13.28	0.92
Registered Nurses	2,232	2,255	23	1%	97	\$25.05	0.95
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	2,119	2,203	84	4%	88	\$12.21	1.21
Combined Food Preparation and Serving Workers, Including Fast Food	2,059	2,187	128	6%	122	\$9.08	0.79
General and Operations Managers	2,083	2,179	96	5%	84	\$30.40	1.19
Waiters and Waitresses	1,783	1,933	150	8%	151	\$9.13	0.90
Nursing Assistants	1,845	1,816	(29)	(2%)	65	\$10.73	1.49
Elementary School Teachers, Except Special Education	1,846	1,797	(49)	(3%)	55	\$25.22	1.63
Stock Clerks and Order Fillers	1,924	1,765	(159)	(8%)	74	\$11.45	1.08
Maintenance and Repair Workers, General	1,344	1,483	139	10%	74	\$16.25	1.32
Customer Service Representatives	1,513	1,432	(81)	(5%)	58	\$13.83	0.65
Team Assemblers	1,308	1,414	106	8%	71	\$14.02	1.50
Bookkeeping, Accounting, and Auditing Clerks	1,384	1,309	(75)	(5%)	22	\$15.15	0.98
Teacher Assistants	1,292	1,240	(52)	(4%)	38	\$10.64	1.25
Secondary School Teachers, Except Special and Career/Technical Education	1,235	1,202	(33)	(3%)	39	\$27.68	1.56

Source: Emsi 2017.1

5 Year Projections

Keeping with the trend of the past five years, the projection for the next five years sees the most growth occurring in occupations within the Transportation and Warehousing sector. The three occupations projected to grow the most within the region are Heavy and Tractor-Trailer Truck Drivers; Laborers and Freight, Stock, and Material Movers, Hand; and Team Assemblers, with all three occupations showing 10% or larger growth. Among higher-paying occupations, Heavy and Tractor-Trailer Truck Drivers (15%); General and Operations Manager (6%); and Registered Nurses (5%) are among the highest growing.

Four occupations (mainly in education) are projected to decline over the next five years, including: Secondary School Teachers, Except Special and Career/Technical Education; Teacher Assistants; Bookkeeping, Accounting, and Auditing Clerks; and Elementary School Teachers, Except Special Education.

Description	2011 Jobs	2016 Jobs	2021 Jobs	Change in Jobs 2016-2021		Annual Openings	Median Hourly Earnings	2016 LQ
Laborers and Freight, Stock, and Material Movers, Hand	3,123	3,478	3,810	332	10%	179	\$12.39	1.70
Retail Salespersons	3,743	3,363	3,511	148	4%	157	\$10.39	0.88
Heavy and Tractor-Trailer Truck Drivers	2,285	3,005	3,464	459	15%	148	\$22.38	2.30
Cashiers	3,105	3,000	3,086	86	3%	149	\$9.34	1.02
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	2,274	2,309	2,347	38	2%	33	\$12.91	1.18
Office Clerks, General	2,295	2,300	2,370	70	3%	65	\$13.28	0.92
Registered Nurses	2,232	2,255	2,358	103	5%	84	\$25.05	0.93
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	2,119	2,203	2,298	95	4%	67	\$12.21	1.21
Combined Food Preparation and Serving Workers, Including Fast Food	2,059	2,187	2,286	99	5%	99	\$9.08	0.76
General and Operations Managers	2,083	2,179	2,304	125	6%	82	\$30.40	1.19
Waiters and Waitresses	1,783	1,933	1,946	13	1%	108	\$9.13	0.86
Nursing Assistants	1,845	1,816	1,860	44	2%	58	\$10.73	1.43
Elementary School Teachers, Except Special Education	1,846	1,797	1,772	(25)	(1%)	45	\$25.22	1.58
Stock Clerks and Order Fillers	1,924	1,765	1,867	102	6%	79	\$11.45	1.09
Maintenance and Repair Workers, General	1,344	1,483	1,608	125	8%	66	\$16.25	1.37
Customer Service Representatives	1,513	1,432	1,568	136	9%	65	\$13.83	0.67
Team Assemblers	1,308	1,414	1,564	150	11%	63	\$14.02	1.57
Bookkeeping, Accounting, and Auditing Clerks	1,384	1,309	1,288	(21)	(2%)	14	\$15.15	0.99
Teacher Assistants	1,292	1,240	1,221	(19)	(2%)	32	\$10.64	1.19
Secondary School Teachers, Except Special and Career/Technical Education	1,235	1,202	1,187	(15)	(1%)	32	\$27.68	1.51

Source: Emsi 2017.1

Top Growing Occupations (5-Digit SOC)

Among the top ten occupations adding the most net jobs from 2011-2016, four have median hourly earnings above \$15/hour – Driver/Sales Workers and Truck Drivers; Machinists; Maintenance and Repair Workers, General; and Industrial Truck and Tractor Operators. Four of the top ten occupations pay between \$10-\$15/hour while two (both in the food industry) pay a median wage less than \$10/hour – Waiters/Waitress and Cooks. As noted above, the large growth in relatively lower-paying jobs is not a positive sign for the region. While offering stable and self-sufficient wages, there are limited amounts of prosperous positions. Building growth in occupations that pay higher wages (i.e., \$20/hr) should be the area's focus.

Occupations with the highest location quotients in 2016, indicating that these occupations show a larger than average concentration in the region, are welding, Soldering, and Brazing Workers (3.32); Machinists (2.9); Miscellaneous Production Workers (2.15); Butchers and Other Meat, Poultry, and Fish Processing Workers (2.11); and Industrial Truck and Tractor Operators (2.08).

Description	2011 Jobs	2016 Jobs	Change in Jobs 2011 - 2016		Annual Openings	Median Hourly Earnings	2016 LQ
Driver/Sales Workers and Truck Drivers	3,606	4,372	766	21%	291	\$19.21	1.75
Laborers and Material Movers, Hand	4,386	4,811	425	10%	330	\$12.11	1.55
Welding, Soldering, and Brazing Workers	1,007	1,193	186	18%	91	\$14.95	3.32
Machinists	767	948	181	24%	72	\$17.70	2.90
Fast Food and Counter Workers	2,497	2,651	154	6%	159	\$9.10	0.83
Waiters and Waitresses	1,783	1,933	150	8%	151	\$9.13	0.90
Maintenance and Repair Workers, General	1,344	1,483	139	10%	74	\$16.25	1.32
Miscellaneous Production Workers	1,466	1,597	131	9%	99	\$13.57	2.15
Miscellaneous Assemblers and Fabricators	1,572	1,693	121	8%	86	\$13.67	1.47
Industrial Truck and Tractor Operators	846	963	117	14%	74	\$18.60	2.06
Cooks	2,249	2,364	115	5%	121	\$9.83	1.21
Construction Laborers	680	793	113	17%	54	\$21.43	1.05
General and Operations Managers	2,083	2,179	96	5%	84	\$30.40	1.19
Roofers	85	173	88	104%	25	\$19.03	1.83
Butchers and Other Meat, Poultry, and Fish Processing Workers	596	674	78	13%	45	\$12.03	2.11
Health Practitioner Support Technologists and Technicians	817	895	78	10%	47	\$13.62	1.46
Counselors	580	656	76	13%	50	\$19.11	1.22
Industrial Machinery Installation, Repair, and Maintenance Workers	484	560	76	16%	32	\$24.60	1.43
Taxi Drivers and Chauffeurs	167	239	72	43%	21	\$10.37	1.52
Bartenders	779	845	66	8%	57	\$9.47	1.66

Source: Emsi 2017.1

Labor Market Information Report Conclusion

Planning for the future, the region has the capability to meet the demands of the world economy. Considering the geographic location, the region is rural yet rich with opportunities in different industry sectors such as manufacturing and health care and social assistance, but it is critical to have the necessary training and education available to prepare the workforce. While these industries offer competitive wages, they also require training additional to a high school diploma. Compared to the state and nation, the region has a higher percentage of residents with a high school diploma and Associate's degree but lags in higher education. This poses a problem for the future, but a mix of variables also make an impact. The region lacks a four-year educational institution even though it has a number of community colleges within the region. For those who aspire to learn at a four-year educational institution, the means of travel is limited as there is no commuter transportation system conveniently located in the region.

Much of the workforce is centered within two of the eight counties within the regions: LaSalle and Ogle counties. The region should place an emphasis on promoting economic growth and vitality in the other six counties within the region. Overall, population numbers are decreasing and more people are leaving the region for work than coming in, all of which can lead to a considerable impact on the future. Local school districts are competitive with districts in LaSalle and Ogle counties and poverty levels are consistently low in each county, which are all positive attributes. The region needs to promote these things, train, and educate the future workforce for positions that extend beyond the region's largest occupation, office and administrative support, which pays a mere \$14.46/hr.

Data Sources and Glossary of Key Terms

Most of the quantitative data points referenced in this report are sourced from Economic Modeling Specialists International (Emsi) 2017.1. Data regarding employment and some of the demographics are from the U.S. Bureau of Labor Statistics and U.S. Census American Community Survey. Recommendations are based on the quantitative analysis; TPMA's understanding of NCI Works' goals; interviews with key stakeholders; site visits; and TPMA's economic development experience in other regions of the country.

Industries are classified by the North American Industrial Classification System (NAICS) and are hierarchical in nature, with fewer digits broader in their meaning, while longer (up to six) digits providing great specificity. Throughout the report both broad and specific codes, as well as related terms were used. For example, "sector" generally refers to broad industry groups such as Manufacturing and Health Care and Social Assistance. For the most specific codes, "industry" was used. This refers to a narrow grouping of business activities such as Motor Vehicle Seating and Interior Trim Manufacturing. Individual industries are not only classified according to hierarchy, but can also be grouped according to "clusters", which refer to industries that share common input and labor forces. An example of a cluster would be Advanced Manufacturing.

Occupations are similar to industries in that they are also aggregated and organized by their own set of codes called SOC codes. As with NAICS codes, the SOC coding is hierarchical, with fewer digit providing broad data (occupational categories), while longer codes provide more specific data (specific occupations). A key difference between SOC and NAICS codes is that a particular SOC code can be employed across multiple industries.

Data Sources

Much of the data and analysis for this report are directly or indirectly derived from information provided by either the U.S. Bureau of the Census or U.S. Bureau of Labor Statistics, while the industry profile information is from IBISWorld:

- Economic Modeling Specialists International (EMSI), 2017.1 Class of Worker data (based on the U.S. Quarterly Census of Employment and Wages) and general demographic estimates
- U.S. Census American Community Survey 2011-2015 Five-Year Estimates
- U.S. Census OnTheMap
- U.S. Bureau of Labor Statistics Local Area Unemployment Statistics
- IBISWorld Industry Reports

Competitive Effect

Used in conjunction with "Shift-Share Analysis" techniques¹⁰, *The Competitive Effect* metric seeks to isolate the influence of local dynamics from the influence of non-local factors on industries' employment growth or decline. A positive number indicates that the study area experienced more growth within a particular industry than would have been expected from non-local trends; the magnitude of *The Competitive Effect* indicates the strength of the purely local influence on the industry's employment change.

Location Quotient

Location Quotient (LQ) measures the relative importance of an industry's employment to a particular region, and uses the straightforward formula:

[% of total local employment/% of total national employment].

Location Quotients are one of the most common and important indicators of local economic characteristics; *LQ's* greater than 1.25 are typically considered to be the threshold for identifying an industry as especially strong.

NAICS Codes (The North American Industry Classification System)

NAICS is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. The numbering structure is hierarchical in nature, meaning that fewer digits are broader in their meaning, while longer (up to six) digits provide greater specificity.

SOC Codes (Standard Occupational Classification)

The 2000 Standard Occupational Classification (SOC) System was developed in response to a growing need for a universal occupational classification system. Such a classification system allows government agencies and private industry to produce comparable data. Users of occupational data include government program managers, industrial and labor relations practitioners, students considering career training, job seekers, vocational training schools, and employers wishing to set salary scales or locate a new plant. It is used by federal agencies collecting occupational data, providing a standard means to compare such data across agencies. It is designed to cover all occupations in which work is performed for pay or profit, reflecting the current occupational structure in the United States. As with NAICS, the SOC coding structure is hierarchical, with fewer digits provide broad data (occupational categories), while larger digits provide more specific data (specific professions).

¹⁰ Shift share is a standard regional analysis method that attempts to determine how much of regional job growth can be attributed to national trends and how much is due to unique regional factors. Shift share helps answer why employment is growing or declining in a regional industry, cluster, or occupation.



County Profiles

About Bureau County:

Bureau County has experienced an aging population in recent years. Over the last five years, the population has decreased in all age categories with the exception of those 55 year and older. As this baby-boomer generation retires from the workforce in the coming years, the impact it will have on the workforce is considerable, especially considering a continued decrease in the young workforce. The top industries in the county include Warehousing and Storage; Education and Hospitals (Local Government); and Local Government, Excluding Education and Hospitals. Of these top industries, Education and Hospitals (Local Government) is the only one to have experienced a decline over the past five years and projected to decline over the next five years. The significance of this declining industry is the total earnings it embodies: \$55,608. This total earning is the third most of the top industries (behind machine manufacturing industries). Drilling deeper, several of the top occupations have experienced a decrease over the last five years. The top two occupations, Laborers and Freight, Stock, and Material Movers, Hand; and Heavy Tractor-Trailer Truck Drivers are both projected to grow, though the hourly earnings of these two range from one of the lowest (Laborers and Freight, Stock, and Material Movers, Hand) at \$12.72 to one of the highest (Heavy and Tractor Trailer Truck Drivers) at \$20.60 amongst the top occupations. The County has a higher population with a high school diploma, some college, and Associate's degree than state and national levels but this trends contrasts with higher education including Bachelor's and Graduate Degrees. This is not too surprising considering many of the top occupations in the county require a certificate or Associate's degree (Registered Nurses being the exception). Planning for the future, Bureau County should continue to invest in manufacturing industries where employment has continued to grow, the total earnings are competitive, and the training is less than four years.

Demographics & Labor Force Characteristics:

\$50,423

Median Household Income

12.5%

Poverty Rate

Population

Age Cohort	2011 Population	2016 Population	Change (2011-2016)		Projected Change (2016-2021)	
Under 5 years	1,871	1,864	(7)	0%	101	5%
5 to 19 years	6,793	6,135	(658)	(10%)	(268)	(4%)
20 to 34 years	5,407	5,384	(23)	0%	(185)	(3%)
35 to 54 years	9,264	8,145	(1,119)	(12%)	(682)	(8%)
Over 55 years	11,314	11,859	545	5%	200	2%
TOTAL	34,651	33,389	(1,262)	(4%)	(836)	(3%)

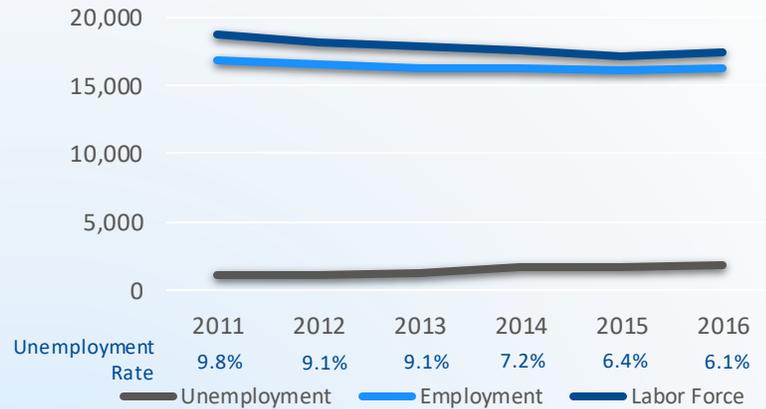
Top Industries (4-Digit NAICS)

Industry	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Warehousing and Storage	1,314	254	24%	312	24%	\$47,478
Education and Hospitals (Local Government)	1,255	(110)	(8%)	(80)	(6%)	\$55,608
Local Government, Excluding Education and Hospitals	749	46	7%	24	3%	\$39,868
Crop Production	576	(256)	(31%)	(119)	(21%)	\$35,753
General Medical and Surgical Hospitals	527	(39)	(7%)	(18)	(3%)	\$51,741
Restaurants and Other Eating Places	462	(65)	(12%)	(62)	(13%)	\$14,305
Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	368	133	57%	76	21%	\$60,810
General Freight Trucking	365	247	209%	136	37%	\$51,638
Other General Purpose Machinery Manufacturing	352	4	1%	1	0%	\$96,266
Support Activities for Crop Production	299	75	33%	36	12%	\$26,122

Commuting Patterns



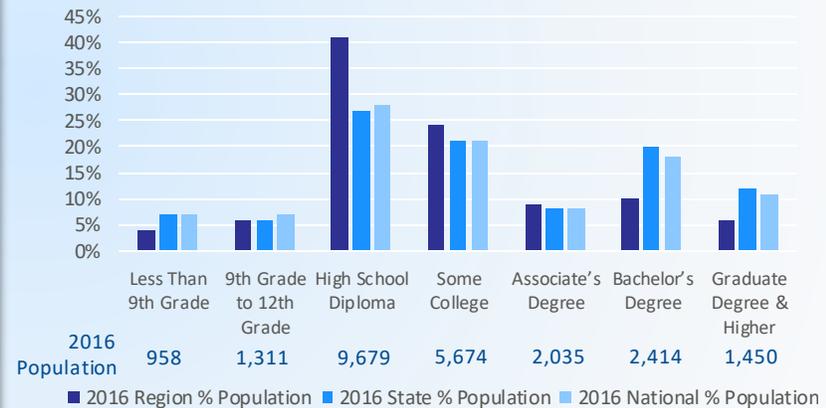
Labor Force Trends



Ethnicity

Race/Ethnicity	2011 Population	2016 Population	Change (2011-2016)	% Change (2011-2016)
White	31,119	29,305	(1,814)	(6%)
Hispanic	2,721	3,098	377	14%
Black	204	266	62	30%
Two or More Races	306	355	49	16%
Asian	236	296	60	25%
American Indian or Alaskan Native	58	61	3	5%
Native Hawaiian or Pacific Islander	7	7	0	0%

Educational Attainment



Top Occupations (5-Digit SOC)

Occupation	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Laborers and Freight, Stock, and Material Movers, Hand	585	94	19%	94	17%	\$12.72
Heavy and Tractor-Trailer Truck Drivers	445	167	60%	167	25%	\$20.60
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	425	(106)	(20%)	(106)	(10%)	\$12.20
Registered Nurses	334	(9)	(3%)	(9)	(3%)	\$23.04
Cashiers	240	(3)	(1%)	(3)	0%	\$9.72
Retail Salespersons	232	11	5%	11	3%	\$9.83
Office Clerks, General	231	(12)	(5%)	(12)	(3%)	\$13.25
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	216	(16)	(7%)	(16)	0%	\$12.87
General and Operations Managers	199	(2)	(1%)	(2)	(4%)	\$30.81
Machinists	191	50	16%	50	16%	\$19.31

About Carroll County:

The population of Carroll County has experienced a 5% decrease (-739) over the last five years and is projected to experience an additional 4% decrease (-560) over the next five years. The looming giant concern for the future workforce as the population in all age cohorts over the next five years are projected to decrease with the exception of those over 55 years old (+110). Of the eight counties in the region, Carroll County has the seventh lowest median household income at \$48,631. This is reflective of the current total earnings of some of the top industries. Restaurants and Other Eating Places, ranked third amongst industries, provides a total earning income of \$13,636 and Local Government, Excluding Education and Hospitals, ranked second, provide an income nearly \$9,000 less than that in Bureau County. This is also true when looking at the top occupations within the county. Six of the top ten occupations make an hourly income of less than \$12.00, which poses a great concern for the future. Nearly all of the top occupations in the county are projected to grow over the next five years but many of them are associated with low earnings. The skill and training level for these in-demand positions such as Cashiers, Retail Salesperson, and Office Clerks explains why the county's education levels are behind national and state levels for Bachelor's and Graduate Degrees. It is worth noting however that the population still exceeds state and national levels at those with High School Diploma, Some College, and Associate's Degree. Based upon the county's top industries, those with the highest total earnings are projected to lose the most jobs over the next five years, a concern Carroll County should take action to accommodate.

Demographics & Labor Force Characteristics:

\$48,631

Median Household Income

12.6%

Poverty Rate

Population

Age Cohort	2011 Population	2016 Population	Change (2011-2016)		Projected Change (2016-2021)	
			Change	%	Change	%
Under 5 years	747	697	(50)	(7%)	1	0%
5 to 19 years	2,677	2,342	(335)	(13%)	(158)	(7%)
20 to 34 years	2,224	2,219	(5)	(0%)	(192)	(9%)
35 to 54 years	3,839	3,346	(493)	(13%)	(322)	(10%)
Over 55 years	5,734	5,878	144	3%	110	2%
TOTAL	15,221	14,482	(739)	(5%)	(560)	(4%)

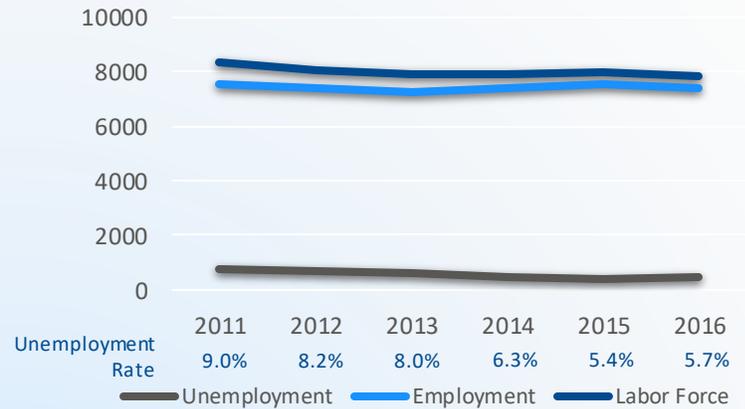
Top Industries (4-Digit NAICS)

Industry	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Education and Hospitals (Local Government)	419	(41)	(9%)	(37)	(9%)	\$49,021
Local Government, Excluding Education and Hospitals	286	10	4%	7	2%	\$31,480
Restaurants and Other Eating Places	247	34	16%	10	4%	\$13,636
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	201	2	1%	(17)	(8%)	\$57,500
Nursing Care Facilities (Skilled Nursing Facilities)	175	5	3%	(17)	(10%)	\$29,631
Spring and Wire Product Manufacturing	166	(29)	(15%)	(40)	(24%)	\$47,931
Depository Credit Intermediation	150	(15)	(9%)	(12)	(8%)	\$46,231
Grocery Stores	146	27	23%	15	10%	\$17,421
Gasoline Stations	128	42	49%	22	17%	\$16,222
Grocery and Related Product Merchant Wholesalers	120	39	48%	34	28%	\$24,165

Commuting Patterns



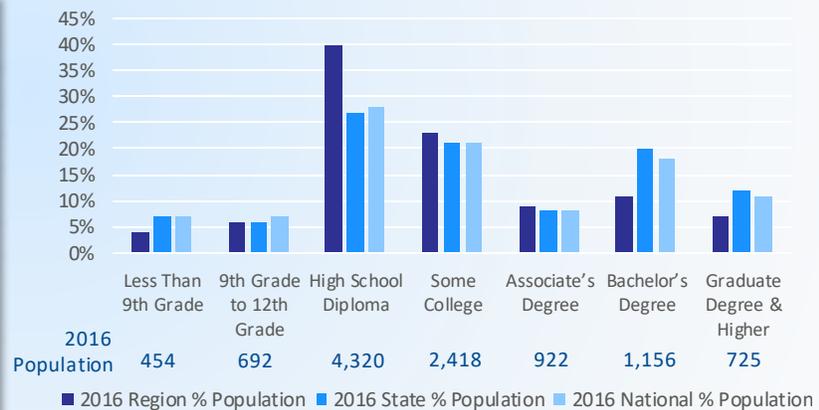
Labor Force Trends



Ethnicity

Race/Ethnicity	2011 Population	2016 Population	Change (2011-2016)	% Change (2011-2016)
White	14,376	13,493	(883)	(6%)
Hispanic	472	529	57	12%
Black	142	159	17	12%
Two or More Races	136	160	24	18%
Asian	58	103	45	78%
American Indian or Alaskan Native	35	35	0	0%
Native Hawaiian or Pacific Islander	2	2	0	0%

Educational Attainment



Top Occupations (5-Digit SOC)

Occupation	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Cashiers	139	33	31%	17	12%	\$8.82
Heavy and Tractor-Trailer Truck Drivers	107	8	8%	10	9%	\$19.95
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	96	3	3%	3	3%	\$11.73
Retail Salespersons	92	6	7%	20	22%	\$9.77
General and Operations Managers	90	7	8%	6	7%	\$27.82
Office Clerks, General	87	1	1%	4	5%	\$12.19
Laborers and Freight, Stock, and Material Movers, Hand	86	8	10%	10	12%	\$11.14
Combined Food Preparation and Serving Workers, Including Fast Food	79	18	30%	3	4%	\$8.88
Elementary School Teachers, Except Special Education	77	(7)	(8%)	(6)	(8%)	\$23.21
Nursing Assistants	74	4	6%	(7)	(9%)	\$10.29

About Jo Daviess County:

With the lowest poverty rate and third highest median household income, Jo Daviess County has experienced a steady unemployment rate over the last five years. However, the county has an aging population that may affect the future workforce. Jo Daviess County has one of the smallest populations in the region and has experienced a decline over the last five years with the exception of those over the age of 55. The only age cohorts that are projected to increase into 2021 are the two that are typically not part of the workforce: under 5 years old and over 55 years. Half of the top industries are projected to decline over the next 5 years, three of which are in the top four; however, those industries are some of the lowest total earnings of top industries. Education and Hospitals (Local Government) has added 39 new jobs in the last five years and is projected to add an additional 25 into 2021. This is good news considering this industry pays a total earnings of \$55,382. In fact, seven of the top ten industries is associated with a total earnings of over \$50,000. Drilling deeper into the occupations, seven of the top ten occupations are projected to grow over the next five year; however, the top three occupations pay an hourly wage of less than \$10.00. While the Education and Hospital (Local Government) industry is project to grow, Elementary School Teachers, Except Special Education is also projected to add 5 jobs in the next five years. The significance here is this occupation pay the highest hourly wage of all the top occupations. It is worth nothing though that the educational attainment in the county beyond a high school diploma is lower than both state and national levels. As industries such as Education and Hospitals; Motor Vehicle Parts Manufacturing; and Building Equipment Contractors grow, the county should work towards ensuring the workforce is educated and trained to meet the hiring needs of employers.

Demographics & Labor Force Characteristics:

\$53,221

Median Household
Income

9.2%

Poverty Rate

Population

Age Cohort	2011 Population	2016 Population	Change (2011-2016)		Projected Change (2016-2021)	
Under 5 years	1,141	1,008	(133)	(12%)	48	5%
5 to 19 years	3,951	3,623	(328)	(8%)	(271)	(7%)
20 to 34 years	3,078	3,042	(36)	(1%)	(193)	(6%)
35 to 54 years	5,780	5,064	(716)	(12%)	(419)	(8%)
Over 55 years	8,708	9,297	589	7%	441	5%
TOTAL	22,660	22,034	(626)	(3%)	(395)	(2%)

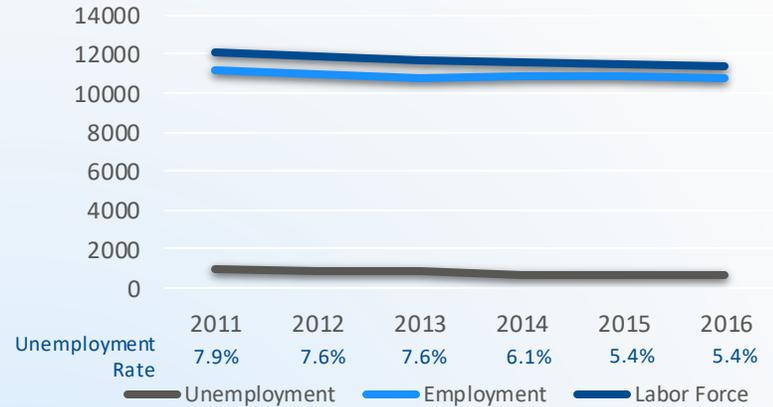
Top Industries (4-Digit NAICS)

Industry	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Education and Hospitals (Local Government)	866	39	5%	25	3%	\$55,382
Traveler Accommodation	710	(103)	(13%)	(57)	(8%)	\$23,174
Restaurants and Other Eating Places	656	(5)	(1%)	(21)	(3%)	\$15,193
Local Government, Excluding Education and Hospitals	374	0	0%	(2)	(1%)	\$40,285
Motor Vehicle Parts Manufacturing	331	38	13%	89	27%	\$63,861
Other General Merchandise Stores	193	16	9%	25	13%	\$28,255
Building Equipment Contractors	168	20	14%	17	10%	\$59,715
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	150	(69)	(32%)	(80)	(53%)	\$56,334
Depository Credit Intermediation	149	(51)	(26%)	(35)	(23%)	\$56,867
Automobile Dealers	149	36	32%	24	16%	\$47,091

Commuting Patterns



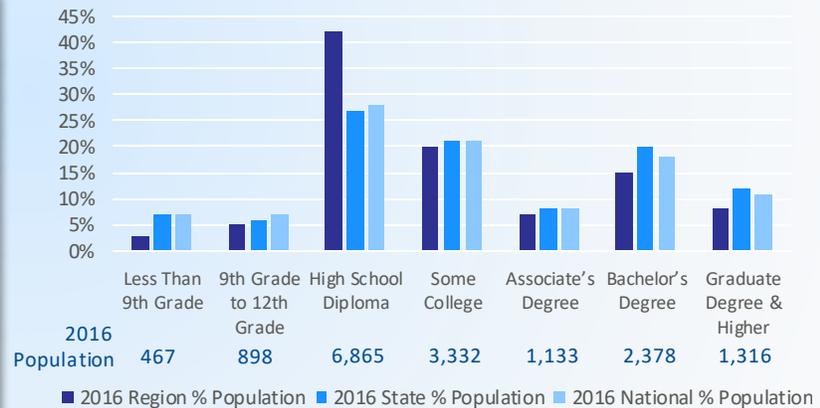
Labor Force Trends



Ethnicity

Race/Ethnicity	2011 Population	2016 Population	Change (2011-2016)	% Change (2011-2016)
White	21,557	20,820	(757)	(4%)
Hispanic	642	721	79	12%
Black	113	125	12	11%
Two or More Races	195	199	4	2%
Asian	98	135	37	38%
American Indian or Alaskan Native	29	28	(1)	(3%)
Native Hawaiian or Pacific Islander	7	6	(1)	(14%)

Educational Attainment



Top Occupations (5-Digit SOC)

Occupation	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Retail Salespersons	268	30	13%	37	14%	\$9.77
Waiters and Waitresses	254	(20)	(7%)	(21)	(8%)	\$9.29
Cashiers	208	(2)	(1%)	2	1%	\$9.04
Maids and Housekeeping Cleaners	201	(25)	(11%)	(12)	(6%)	\$10.24
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	163	0	0%	(1)	(1%)	\$12.27
Laborers and Freight, Stock, and Material Movers, Hand	155	(19)	(11%)	10	6%	\$11.14
General and Operations Managers	152	0	0%	2	1%	\$28.62
Office Clerks, General	146	(5)	(3%)	2	1%	\$12.27
Combined Food Preparation and Serving Workers, Including Fast Food	143	5	4%	5	3%	\$9.58
Elementary School Teachers, Except Special Education	132	8	6%	5	4%	\$24.96

About LaSalle County:

LaSalle County has the largest population of any of the eight counties in the region and has the highest poverty rate of 13.2%. This population has an educational attainment level higher than state and national levels between 9th Grade and 12th Grade, all the way to having an Associate's Degree. Of the top ten industries in the county, only three pay a total earnings of less than \$30,000 per year. Only one industry, Restaurants and Other Eating Places, pays less than \$50,000 annually; however, the top two highest paid industries in the top five are projected to experience a decrease in workers. The median household income within LaSalle County is \$50,633, fifth amongst the highest median household incomes in the region. When examining closer into the occupations, a positive trend is that nearly all of the top occupations are projected to grow into 2021. Waiters and Waitresses is the only occupation not following this trend but it is worth noting that this occupation pays one of the lowest hourly wages amongst the top occupations in LaSalle County at \$9.24 per hour. While the county has higher levels of educational attainment than the state and nation for High School Diploma, Some College, and Associate's Degree, the top occupations that are in-demand do not require post-secondary education. This should be of concern for the county. While it is difficult to prove, this could explain why LaSalle County experiences a net loss of nearly 8,000 workers based on commuting patterns. An opportunity the county should invest in is to work with employers in the region to develop career pathways in industries such as Plastics Product Manufacturing; State Government; and even General Freight Trucking as these have experienced growth and will be in-demand in the coming years. The impact could create could increase the number of workers who live and work in the region and have a higher educational attainment.

Demographics & Labor Force Characteristics:

\$50,633

Median Household
Income

13.2%

Poverty Rate

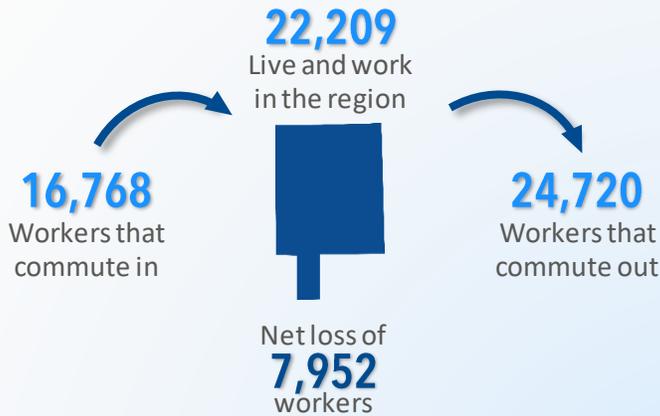
Population

Age Cohort	2011 Population	2016 Population	Change (2011-2016)		Projected Change (2016-2021)	
Under 5 years	6,483	5,953	(530)	(8%)	483	8%
5 to 19 years	22,042	20,547	(1,495)	(7%)	(1,370)	(7%)
20 to 34 years	20,311	19,949	(362)	(2%)	(750)	(4%)
35 to 54 years	31,090	27,973	(3,117)	(10%)	(1,863)	(7%)
Over 55 years	33,759	36,559	2,800	8%	1,780	5%
TOTAL	113,684	110,981	(2,703)	(2%)	(1,720)	(2%)

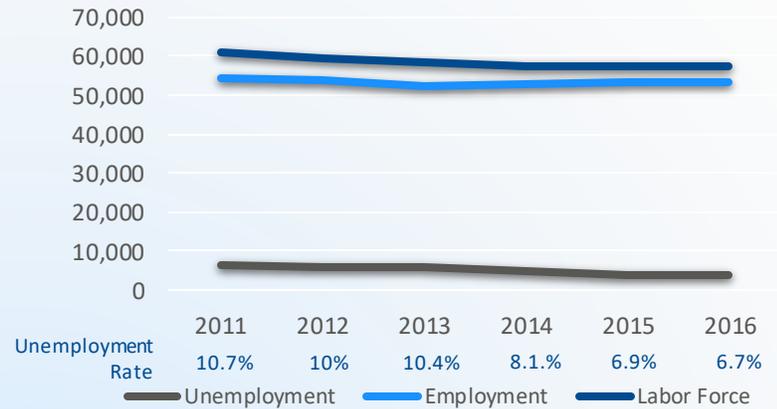
Top Industries (4-Digit NAICS)

Industry	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Education and Hospitals (Local Government)	3,372	(188)	(5%)	(45)	(1%)	\$56,079
Restaurants and Other Eating Places	3,192	393	14%	87	3%	\$15,062
Local Government, Excluding Education and Hospitals	1,875	12	1%	24	1%	\$52,008
General Medical and Surgical Hospitals	1,807	(202)	(10%)	(136)	(8%)	\$59,108
State Government, Excluding Education and Hospitals	1,219	362	42%	343	28%	\$96,265
Plastics Product Manufacturing	1,206	358	42%	137	11%	\$72,009
Grocery Stores	1,147	128	13%	58	5%	\$23,031
General Freight Trucking	1,045	253	32%	92	9%	\$62,254
Depository Credit Intermediation	987	7	1%	(9)	(1%)	\$52,194
Other General Merchandise Stores	876	62	8%	253	29%	\$28,904

Commuting Patterns



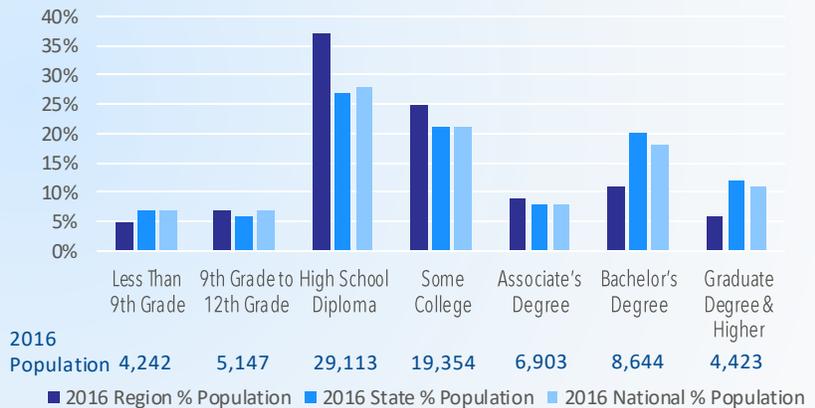
Labor Force Trends



Ethnicity

Race/Ethnicity	2011 Population	2016 Population	Change (2011-2016)	% Change (2011-2016)
White	99,756	95,043	(4,713)	(5%)
Hispanic	9,457	10,474	1,017	11%
Black	2,317	2,952	635	27%
Two or More Races	1,108	1,200	92	8%
Asian	835	1,091	256	31%
American Indian or Alaskan Native	199	206	7	4%
Native Hawaiian or Pacific Islander	12	14	2	17%

Educational Attainment



Top Occupations (5-Digit SOC)

Occupation	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Retail Salespersons	1,512	(63)	(4%)	21	1%	\$10.76
Heavy and Tractor-Trailer Truck Drivers	1,449	468	48%	228	16%	\$23.82
Cashiers	1,192	29	2%	18	2%	\$9.66
Laborers and Freight, Stock, and Material Movers, Hand	1,111	99	10%	90	8%	\$12.49
Combined Food Preparation and Serving Workers, Including Fast Food	925	121	15%	64	7%	\$9.19
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	885	57	7%	49	6%	\$11.28
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	851	8	1%	13	2%	\$13.21
Office Clerks, General	837	(13)	(2%)	18	2%	\$13.68
General and Operations Managers	821	38	5%	50	6%	\$31.55
Waiters and Waitresses	794	46	6%	(15)	(2%)	\$9.24

About Lee County:

With a population of 34,380, Lee County has a median household income of \$52,379, ranked fourth among the eight counties in the region. Like many of the other counties, Lee County has experienced a declining population over the last five years, which is projected to continue into 2021 (-780). The top industries in the county encompass a wide range of total earnings from \$15,172 to \$78,510. Within these top industries, those that experienced a decline in the last five years are projected to continue that decline into 2021. Education and Hospitals (State Government) added 588 jobs in the last 5 years and is projected to add 464 into the next five years. As this industry continues to grow, the county should position itself to invest in the training and educational attainment necessary to continue its success, especially considering its current total earnings are nearly \$71,000, significantly higher than the county's median household income. Other industries that are projected to grow and provide a higher total earnings include some manufacturing industries such as Dairy Product Manufacturing (178); Motor Vehicle Parts Manufacturing (127); and Engine, Turbine, and Power Transmission Equipment Manufacturing (63). Of the top occupations in the county, all are projected to grow in the next five years. As we experience a growth in the baby boomer population, we also experience a continued growth in Registered Nurses. Other occupations that are projected to add significant positions over the next five years include Retail Salespersons (71); Laborers and Freight, Stock, and Material Movers, Hand (49); and Team Assemblers (37). The educational attainment in Lee County is higher than state and national levels up to Associate's Degree. As occupations like Registered Nurses and assemblers increase, the county should focus on training their workforce to meet the demands of these industries and decrease the number of workers who live in the county and commute out for work.

Demographics & Labor Force Characteristics:

\$52,379

Median Household Income

11.1%

Poverty Rate

Population

Age Cohort	2011 Population	2016 Population	Change (2011-2016)		Projected Change (2016-2021)	
Under 5 years	1,896	1,769	(127)	(7%)	(7)	(0%)
5 to 19 years	6,368	5,802	(566)	(9%)	(226)	(4%)
20 to 34 years	6,292	6,316	24	0%	(421)	(7%)
35 to 54 years	10,322	8,963	(1,360)	(13%)	(774)	(9%)
Over 55 years	10,651	879	879	8%	650	6%
TOTAL	35,531	34,380	(1,151)	(3%)	(780)	(2%)

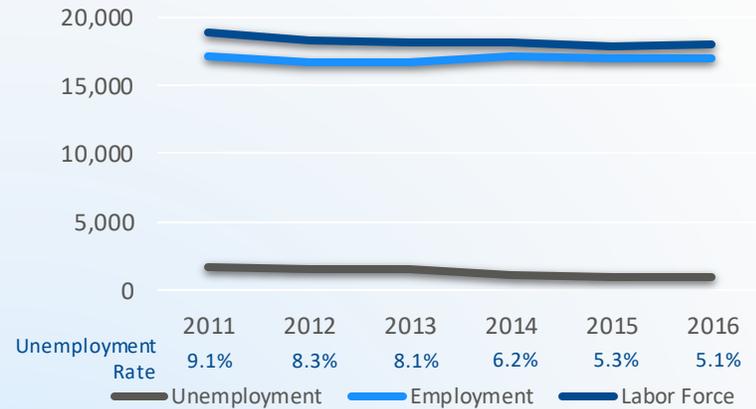
Top Industries (4-Digit NAICS)

Industry	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Education and Hospitals (State Government)	948	588	163%	464	49%	\$70,966
Education and Hospitals (Local Government)	922	(112)	(11%)	(73)	(8%)	\$51,497
General Medical and Surgical Hospitals	745	(221)	(23%)	(84)	(11%)	\$74,744
Restaurants and Other Eating Places	582	87	18%	46	8%	\$15,172
Dairy Product Manufacturing	455	Insf. Data	Insf. Data	178	39%	\$75,118
Motor Vehicle Parts Manufacturing	438	209	91%	127	29%	\$78,510
Local Government, Excluding Education and Hospitals	425	(38)	(8%)	(32)	(8%)	\$50,024
Other General Merchandise Stores	380	38	11%	56	15%	\$28,241
Architectural and Structural Metals Manufacturing	290	2	1%	(79)	(27%)	\$66,115
Engine, Turbine, and Power Transmission Equipment Manufacturing	288	166	136%	63	22%	\$61,286

Commuting Patterns



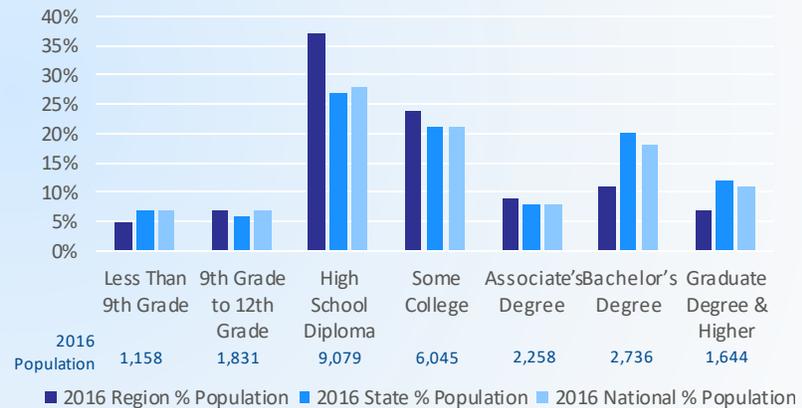
Labor Force Trends



Ethnicity

Race/Ethnicity	2011 Population	2016 Population	Change (2011-2016)	% Change (2011-2016)
White	31,226	29,599	(1,627)	(5%)
Hispanic	1,841	2,136	295	16%
Black	1,780	1,888	108	6%
Two or More Races	358	402	44	12%
Asian	266	293	27	10%
American Indian or Alaskan Native	54	54	0	0%
Native Hawaiian or Pacific Islander	6	9	3	50%

Educational Attainment



Top Occupations (5-Digit SOC)

Occupation	2016 Jobs	2011 - 2016 Change	2016-2021 Change	Current Total Earnings
Registered Nurses	482	66 (16%)	107 (22%)	\$26.98
Retail Salespersons	364	43 (13%)	71 (20%)	\$10.85
Laborers and Freight, Stock, and Material Movers, Hand	298	33 (12%)	49 (16%)	\$12.62
Cashiers	264	1 (0%)	27 (10%)	\$8.84
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	249	(3) (-1%)	9 (4%)	\$12.81
Office Clerks, General	246	(3) (-1%)	20 (8%)	\$13.20
Nursing Assistants	228	(1) (-0%)	16 (7%)	\$11.76
General and Operations Managers	226	5 (2%)	19 (8%)	\$29.74
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	215	45 (19%)	25 (12%)	\$12.85
Team Assemblers	205	33 (19%)	37 (18%)	\$14.23

About Ogle County:

Ogle County has the second highest median household income than any of the eight counties in the region. The population has been on the decline in all age cohorts except 20-34 years old and over 55 years old, a trend not seen often in other counties. What's more, the 20-34 years old population is projected to decrease by 119 in the next five years. Ogle County should devise a strategy to retain this age cohort, as they are critical components to the labor force in the region. It is worth noting that Ogle County has a net loss of 6,408 workers, meaning more workers commute out than commute in. The top industry in the region, Education and Hospitals (Local Government) has been in decline over the last five years and is projected to continue declining into 2021. As one of the higher paying industries, this could have a considerable impact on the county's economy; however, Electric Power Generation, Transmission and Distribution is projected to add 189 jobs into 2021. This industry provides the highest current total earnings of \$215,502 annually. Of the five top occupations that experienced a decline over the last five years, only two are projected to experience an increase in jobs over the next five years. Those occupations, unfortunately, pay some of the lowest hourly wages amongst the top occupations. Occupations that are projected to add the most jobs over the next five years coincidentally have the highest total earnings (Heavy Tractor-Trailer Truck Drivers and General and Operations Manager).

Demographics & Labor Force Characteristics:

\$54,849

Median Household
Income

10.6%

Poverty Rate

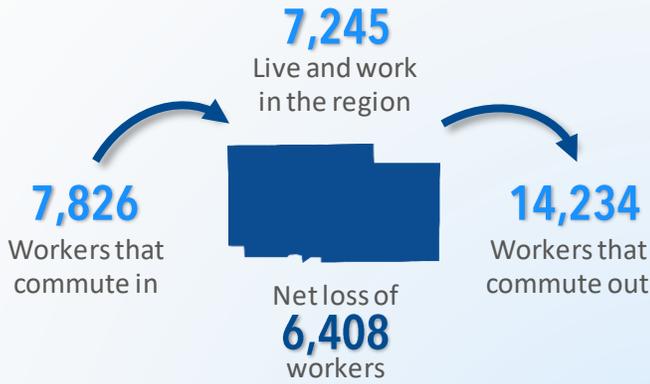
Population

Age Cohort	2011 Population	2016 Population	Change (2011-2016)		Projected Change (2016-2021)	
			Change	%	Change	%
Under 5 years	3,024	2,686	(338)	(11%)	334	12%
5 to 19 years	11,180	10,139	(1,041)	(9%)	(829)	(8%)
20 to 34 years	8,373	8,576	203	2%	(119)	(1%)
35 to 54 years	15,315	13,354	(1,961)	(13%)	(1,329)	(10%)
Over 55 years	15,257	16,674	1,417	9%	1,009	6%
TOTAL	53,150	51,428	(1,722)	(3%)	(934)	(2%)

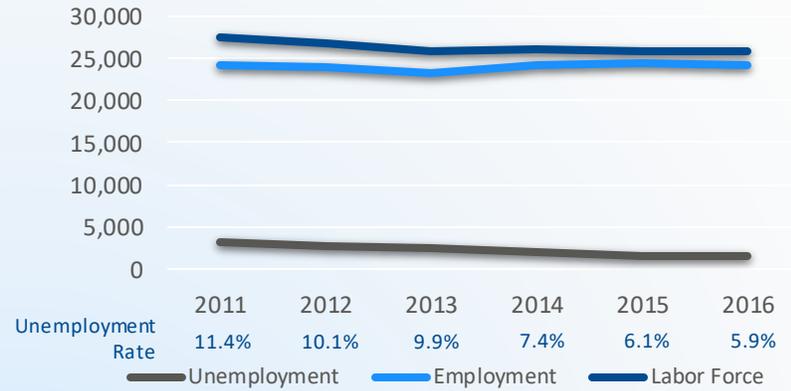
Top Industries (4-Digit NAICS)

Industry	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Education and Hospitals (Local Government)	1,619	(51)	(3%)	(37)	(2%)	\$53,443
Local Government, Excluding Education and Hospitals	1,060	(11)	(1%)	12	1%	\$52,165
Restaurants and Other Eating Places	892	67	8%	42	5%	\$14,324
Animal Slaughtering and Processing	817	39	5%	281	34%	\$55,653
Agriculture, Construction, and Mining Machinery Manufacturing	798	127	19%	53	7%	\$69,037
Electric Power Generation, Transmission and Distribution	729	9	1%	189	26%	\$215,502
Grocery Stores	687	(151)	(18%)	6	1%	\$23,523
Warehousing and Storage	529	(497)	(48%)	(200)	(38%)	\$56,171
Nursing Care Facilities (Skilled Nursing Facilities)	512	(31)	(6%)	(21)	(4%)	\$30,081
Railroad Rolling Stock Manufacturing	411	411	Insf. Data	240	58%	\$62,248

Commuting Patterns



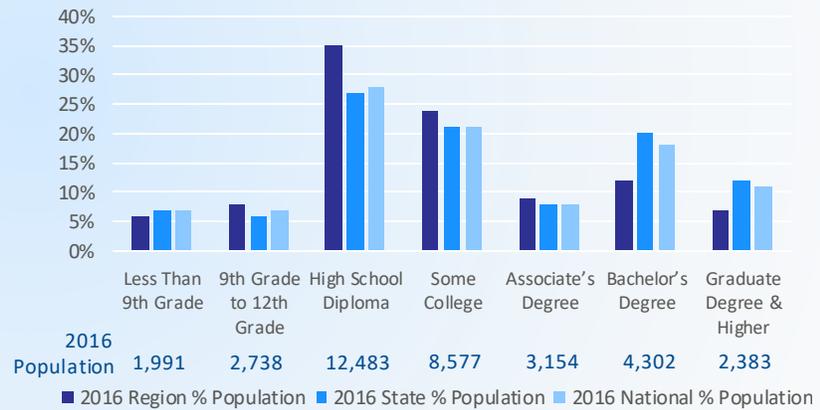
Labor Force Trends



Ethnicity

Race/Ethnicity	2011 Population	2016 Population	Change (2011-2016)	% Change (2011-2016)
White	46,991	44,790	(2,201)	(5%)
Hispanic	4,832	5,136	304	6%
Black	470	536	66	14%
Two or More Races	510	587	77	15%
Asian	252	265	13	5%
American Indian or Alaskan Native	89	106	17	19%
Native Hawaiian or Pacific Islander	5	7	2	40%

Educational Attainment



Top Occupations (5-Digit SOC)

Occupation	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Cashiers	487	(13)	(3%)	26	5%	\$9.40
Laborers and Freight, Stock, and Material Movers, Hand	478	(115)	(19%)	(13)	(3%)	\$13.21
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	362	(43)	(11%)	(2)	(1%)	\$13.61
Heavy and Tractor-Trailer Truck Drivers	349	51	17%	49	14%	\$22.36
Combined Food Preparation and Serving Workers, Including Fast Food	322	50	18%	47	15%	\$8.79
General and Operations Managers	299	22	8%	24	8%	\$30.69
Elementary School Teachers, Except Special Education	299	(7)	(2%)	(6)	(2%)	\$25.40
Office Clerks, General	297	10	3%	15	5%	\$13.52
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	295	14	5%	11	4%	\$13.15
Stock Clerks and Order Fillers	260	(46)	(15%)	8	3%	\$11.96

About Putnam County:

With the lowest population of the eight counties in the region, Putnam County has the highest median household incomes. Of the top industries that experienced a decrease over the last five years, only two are projected to continue that trend: Crop Production; and Iron and Steel Mills Manufacturing. The top two industries, Machine Shops, Turned Product, and Screw, Nut, and Bolt Manufacturing; and Crop Production are projected to experience the most significant loss in jobs into 2021; however, these industries also provide some of the lowest total earnings amongst the top industries. Nonmetallic Mineral Mining and Quarrying is projected to add the most jobs over the next five years and is accompanied by one of the highest total earnings of any of the top industries in the county (\$74,605). Among the top occupations, Farmworkers and Laborers, Crop, Nursery, and Greenhouse is the only one that experienced a decline in the last five years and projected to decrease over the next five years. While the educational attainment level is comparable to state and national levels for Some College, Putnam County exceeds state and national levels for High School Diploma and Associate's Degree. It is worth noting that among those occupations that are projected to grow over the next five years, Heavy and Tractor Trailer Truck Drivers; and Construction Laborers are anticipated to add the most. In addition, these occupations are associated with some of the highest hourly earnings amongst top occupations.

Demographics & Labor Force Characteristics:

\$56,358

Median Household Income

12%

Poverty Rate

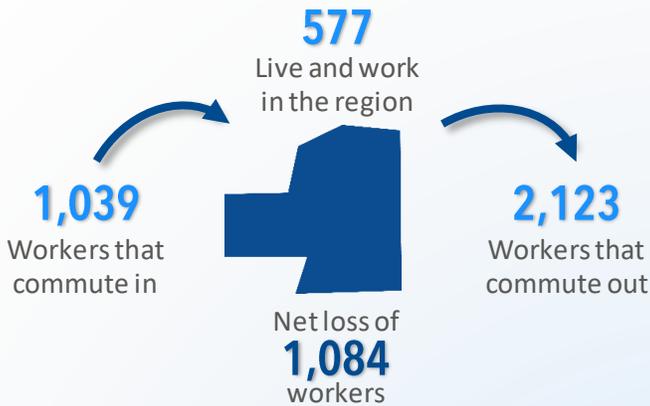
Population

Age Cohort	2011 Population	2016 Population	Change (2011-2016)		Projected Change (2016-2021)	
Under 5 years	295	243	(52)	(18%)	5	2%
5 to 19 years	1,076	961	(115)	(11%)	(99)	(10%)
20 to 34 years	908	870	(38)	(4%)	(73)	(8%)
35 to 54 years	1,642	1,391	(251)	(15%)	(123)	(9%)
Over 55 years	2,051	2,146	95	5%	61	3%
TOTAL	5,973	5,611	(362)	(6%)	(229)	(4%)

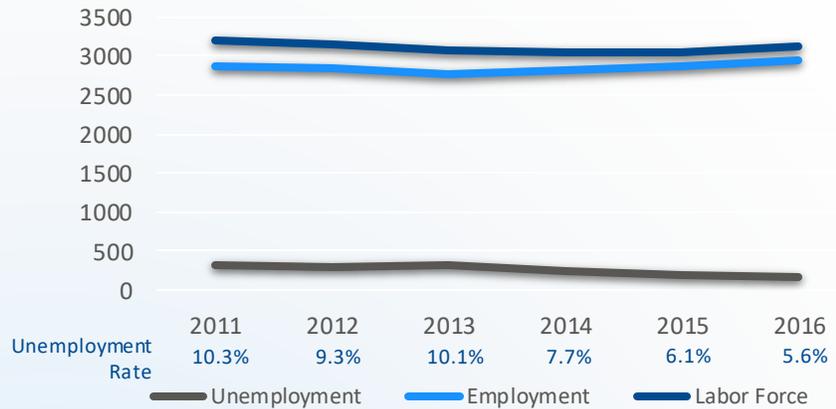
Top Industries (4-Digit NAICS)

Industry	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	259	12	5%	(38)	(15%)	\$39,029
Crop Production	186	(82)	(31%)	(55)	(30%)	\$23,031
Education and Hospitals (Local Government)	171	10	6%	3	2%	\$46,863
Local Government, Excluding Education and Hospitals	132	(6)	(4%)	5	4%	\$29,972
Other Nonmetallic Mineral Product Manufacturing	88	27	44%	27	31%	\$69,020
Building Equipment Contractors	67	3	5%	17	25%	\$63,527
Support Activities for Water Transportation	62	1	2%	12	19%	\$75,934
Residential Building Construction	56	46	460%	17	30%	\$51,715
Nonmetallic Mineral Mining and Quarrying	51	51	Insf. Data	29	57%	\$74,605
Iron and Steel Mills and Ferroalloy Manufacturing	49	(14)	(22%)	(25)	(51%)	\$82,957

Commuting Patterns



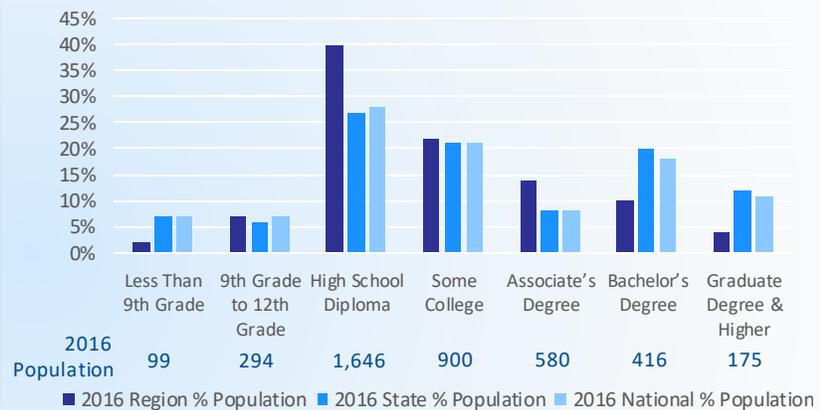
Labor Force Trends



Ethnicity

Race/Ethnicity	2011 Population	2016 Population	Change (2011-2016)	% Change (2011-2016)
White	5,593	5,196	(397)	(7%)
Hispanic	269	280	11	4%
Black	35	54	19	54%
Two or More Races	54	50	(4)	(7%)
Asian	15	17	2	13%
American Indian or Alaskan Native	6	12	6	100%
Native Hawaiian or Pacific Islander	1	1	0	0%

Educational Attainment



Top Occupations (5-Digit SOC)

Occupation	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Machinists	95	8	9%	(12)	(13%)	\$15.64
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	93	(42)	(31%)	(27)	(29%)	\$12.20
Heavy and Tractor-Trailer Truck Drivers	60	20	50%	13	22%	\$23.89
Laborers and Freight, Stock, and Material Movers, Hand	54	7	15%	6	11%	\$12.64
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	49	10	26%	3	6%	\$11.71
Office Clerks, General	47	10	27%	4	9%	\$12.19
General and Operations Managers	47	11	31%	5	11%	\$27.39
Construction Laborers	40	27	208%	12	30%	\$19.91
Cashiers	32	4	14%	1	3%	\$8.82
Elementary School Teachers, Except Special Education	31	2	7%	1	3%	\$22.46

About Whiteside County:

Whiteside County has the second largest population in the region with 56,747 residents but the lowest median household income (\$47,401). While a majority of the age cohorts experienced a decline over the last five years, 20-34 years old experienced a 1% increase (55). This age cohort is critical to the county's workforce, but the next five years projects this population to decrease by nearly four times that of the growth. The county has experienced a net loss of 1,084 workers due to commute outside the county, a figure lower than most. The reason for this may be that since it is so populous, there are opportunities for work within the county limits. The top six industries have experienced growth over the last five years and are projected to continue that trend into 2021. Among those industries, Warehousing and Storage; and Household Appliance Manufacturing are projected to add the most jobs over the next five years, which is significant considering they provide some of the highest annual earnings. Similar to other counties in the region, Whiteside County's educational attainment levels between High School Diploma and Associate's Degree is higher than those statewide and nationally, but unlike the other counties, Whiteside County is not much higher in Some College and Associate's Degree. The county should focus on increasing those numbers to meet the hiring needs of the top industries. The top occupation, Laborers and Freight, Stock, and Material Movers, Hand; is projected to add the most jobs into 2021 but the total earnings are less than \$12.00 per hour. With the exception of Registered Nurses, the hourly earnings of the top occupations are less than \$14.00, which poses a concern that the top occupations are low-paying careers.

Demographics & Labor Force Characteristics:

\$47,401

Median Household Income

12.0%

Poverty Rate

Population

Age Cohort	2011 Population	2016 Population	Change (2011-2016)		Projected Change (2016-2021)	
Under 5 years	3,480	3,305	(175)	(5%)	239	7%
5 to 19 years	11,467	10,725	(742)	(7%)	(513)	(5%)
20 to 34 years	9,375	9,430	55	1%	(346)	(4%)
35 to 54 years	15,472	13,804	(1,668)	(11%)	(918)	(7%)
Over 55 years	18,431	19,484	1,053	6%	598	3%
TOTAL	58,226	56,747	(1,479)	(3%)	(938)	(2%)

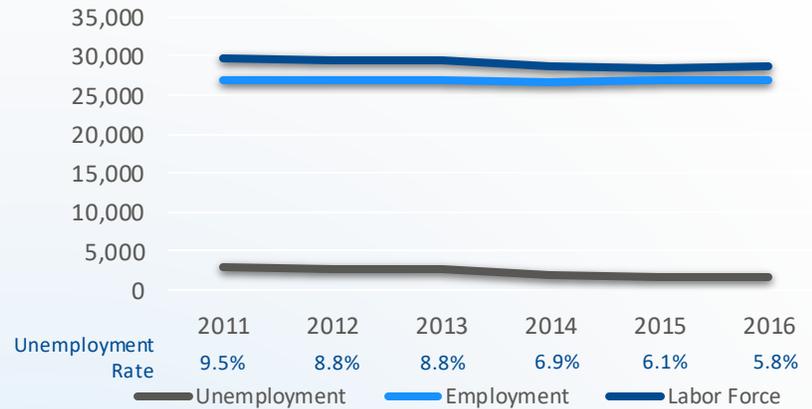
Top Industries (4-Digit NAICS)

Industry	2016 Jobs	2011 - 2016 Change		2016-2021 Change		Current Total Earnings
Education and Hospitals (Local Government)	2,892	5	0%	60	2%	\$57,956
Local Government, Excluding Education and Hospitals	1,429	18	1%	172	12%	\$52,654
Restaurants and Other Eating Places	1,389	198	17%	80	6%	\$15,107
Household Appliance Manufacturing	1,005	216	27%	170	17%	\$81,506
Nursing Care Facilities (Skilled Nursing Facilities)	893	88	11%	102	11%	\$28,420
Warehousing and Storage	851	774	1005%	239	28%	\$47,255
Employment Services	783	217	38%	(44)	(6%)	\$24,087
Other General Merchandise Stores	548	8	1%	34	6%	\$29,053
Forging and Stamping	481	(59)	(11%)	(51)	(11%)	\$57,349
Depository Credit Intermediation	452	38	9%	44	10%	\$53,129

Commuting Patterns



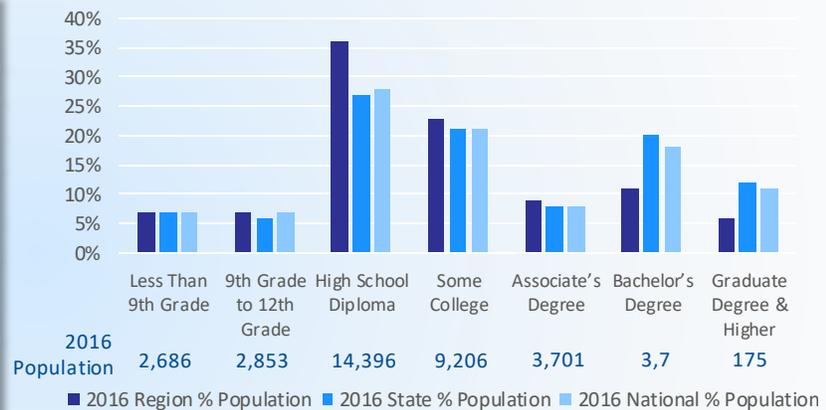
Labor Force Trends



Ethnicity

Race/Ethnicity	2011 Population	2016 Population	Change (2011-2016)	% Change (2011-2016)
White	49,833	47,840	(1,993)	(4%)
Hispanic	6,610	6,902	292	4%
Black	757	858	101	13%
Two or More Races	654	748	94	14%
Asian	279	296	17	6%
American Indian or Alaskan Native	89	98	9	10%
Native Hawaiian or Pacific Islander	4	5	1	25%

Educational Attainment



Top Occupations (5-Digit SOC)

Occupation	2016 Jobs	2011 - 2016 Change	2016-2021 Change	Current Total Earnings
Laborers and Freight, Stock, and Material Movers, Hand	711	249	54%	\$11.76
Retail Salespersons	648	(380)	(37%)	\$9.95
Nursing Assistants	511	28	6%	\$10.38
Registered Nurses	488	21	4%	\$25.98
Cashiers	438	(155)	(26%)	\$8.83
Office Clerks, General	408	16	4%	\$13.04
Combined Food Preparation and Serving Workers, Including Fast Food	404	6	2%	\$8.88
Team Assemblers	392	64	20%	\$13.60
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	389	17	5%	\$12.84
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	360	42	13%	\$12.42

Local Infrastructure Review

The Local Infrastructure Review is an inventory of resources available within the region, categorized into six elements: Community Resources, Education Capability, Natural Resources, Technological Capability, Transportation, and Workforce. This analysis of the information collected will aid the region in positioning itself to grow and compete in a world economy.

The resources outlined below serve a total region with a population of 329,052 persons.¹¹ The table below shows the scale of the region, as a means to give some context to the information that will be provided. Several of the counties in the region are comparably larger than others, while the majority are in the middle of the size of counties within Illinois' 102 counties.

State Ranking by Population	County	2016 Population
17	LaSalle County	110,981
25	Whiteside County	56,747
28	Ogle County	51,428
43	Lee County	34,380
45	Bureau County	33,389
55	Jo Daviess County	22,034
75	Carroll County	14,482
97	Putnam County	5,611
	Total Population	329,052

All content within this narrative report is intended to be read with the context of the supporting documentation in the excel tables of the Infrastructure Review Map that is being provided alongside the report. That map is also supplemented, particularly for the Community Resources section and to a lesser degree for the Education and Workforce categories, by the additional related content provided by the BEST Resource Mapping Guide, which was released in 2016. Thus, this report will not provide details on individual organizations but attempt to consider the number and scale of entities and their value to the region, and key insights that can be drawn from the data and information gathered on those entities.

¹¹ Source: EMSI Analyst 2017.1

Cultural Resources and Activities

The region hosts several cultural and historical sites and activities. By drawing visitors from outside the region, these activities can directly impact the economic picture as well as having more indirect and long-term effects. Many of these activities are family-friendly and are an integral component to the region's economic development through the crowds they draw from within and outside the region.

These events and activities can positively impact industries such as the Hospitality sector (Food & Accommodation and Restaurants). By adding to overall attractiveness of the region, these cultural resources can make direct impacts on both Quality of Life and things like housing value, attractiveness to business and other community factors.



Bureau County¹²

The region has a number of Civil War-based historical and cultural activities available. One of the most well-known in Bureau County is the Shadows of the Blue and Gray, a Civil War reenactment with portrayals of life on the battlefield. Museums and historical societies are spread out across the county and include places like the Owen Lovejoy Homestead, a former underground railroad, Bureau County Historical Society and Museum, and the Tiskilwa Historical Society Museum. The museum displays the history of the town's Native Americans, village, military, and more.¹³ Culturally, Festival 56 offers residents and visitors a glimpse into the performing arts. Located at the Grace Performing Arts Center in Princeton, Festival 56 performs productions in the summer, fall and winter.¹⁴

Carroll County¹⁵

Carroll County has two theatres: the Savanna Times Theatre and the Timber Lake Playhouse. The Timber Lake Playhouse is Illinois' oldest professional summer stock theatre. The Savanna Museum and Cultural Center provides residents and visitors with historical artifacts from the Civil War, local musicians, and railroad memorabilia. Other cultural activities and places in Carroll County include the Soldiers and Sailors Monuments and Annex, Thomson Depot Museum, and Monument Park.

Jo Daviess County

Jo Daviess County has several cultural activities for residents and visitors to the county to explore, many of which are of historical value. Galena, the once home to President Ulysses S. Grant, is a major tourist destination known for its sizable downtown historic district, shopping, architecture and history. Galena is home to the Galena and U.S. Grant Museum and offers daily tours. Other museums include the 1876 Banwarth House & Museum, Stockton Heritage Museum, and the Chicago Athenaeum Museum of Architecture and Design. The region also provides a live music scene at a number of local pubs, breweries, and theatres across the county. In addition, residents can explore the performing arts at the

¹² <http://www.bureaucounty-il.com/>

¹³ <http://www.bureaucounty-il.com/History>

¹⁴ <http://www.festival56.com>

¹⁵ <http://visitcharrollcountyil.com/attractions/history-heritage/>

Galena Center for the Arts, Galena Trolley Depot Theatre, P.T. Murphy Magic, and Sullivan Lavacek Enterprises.

LaSalle County¹⁶

LaSalle County offers several events for arts and entertainment throughout the year. The Chris Kringle Market in downtown Ottawa is a 20-vendor market that features locally crafted art and small Christmas items created by local artisans. For those who want to explore the local agribusiness, Vintage Illinois is the place to do so. Vintage Illinois is the state's largest wine tasting festival, held in Matthiessen State Park. Other wine tasting events are held at a number of distilleries and wineries. The county also offers numerous theatres including Engle Lane Theatre, Illinois Valley Symphony Orchestra, and Stage 212. The Ottawa Art League sponsors Art in the Park, a fine art festival with exhibits in oil painting, acrylics, pastels, pottery, glass, wood, and more.

Lee

Lee County is famous as being the home of President Ronald Reagan's boyhood and visitors can stop by the Ronald Reagan Boyhood Home & Welcome Center to participate in a tour. From the town of Grand Detour in Lee County, John Deere was founded and visitors can tour the home of the man whose name is known worldwide in agriculture and tractors. For those who are interested in the performing arts, the Historic Dixon Theatre is a local hot spot and known throughout the region as one of the Midwest's most beautiful show houses.¹⁷ Another theatre located in the county is the Midway Drive-In Theatre, which has been in continuous operation since 1950.

Ogle

In Ogle County, the autumn season is a celebrated time of year. The annual Autumn on Parade (AOP) festival features a local farmer's market, fine arts vendors, live entertainments, and myriad food options.¹⁸ For those interested in the local culture, the Ogle County Historical Museum provides visitors with a glimpse into what life was like from the 1800s through the early 1900s with displays of antiques and artifacts prevalent to Ogle County.

Putnam

With a population of less than 6,000 residents, Putnam County embraces its local community festivals. The Hennepin Business and Betterment Association, along with the Village of Hennepin, sponsors an annual Community Picnic and Pig Roast. This festival offers food and entertainment at no cost to the public.¹⁹

Whiteside

Like many counties in the region, Whiteside County also is proud of its historical background. Monthly for the last seven years, Fulton's de Immigrant Volunteer Millers sponsors events at the Windmill Cultural Center, one of which is the 108th Infantry Regiment reenactment. Other programs conducted at

¹⁶ <http://www.enjoylasallecounty.com/play/arts-and-entertainment/>

¹⁷ <https://leecountyfun.com/historic-dixon-theater/>

¹⁸ <http://www.discoveroregonillinois.com/discoveroregon/festivals-fairs/>

¹⁹ <http://www.villageofhennepin.com/p/community-picnic-pig-roast.html>

the Windmill Cultural Center include the woman’s reformation movement, Lincoln’s Assassination, and World War II historical events.²⁰

Community Resources

The region has several branch offices of the Illinois Department of Human Services (DHS), including several comprehensive Family Community Resource Centers that are “one stop” shops for all human service needs. Other locations are limited to a smaller menu of services such as providing linkages to Women Infant Children (WIC) or childcare resource and referral. These DHS locations are supplemented with a range of specialty nonprofit organizations that can provide customized services to individuals and families to support particular needs. While each county does not always have a service site for a given service within the county, an initial analysis suggests that services are available and accessible for the most part, except where noted. Details are included in the following sub-sections.

Quality of Life²¹

Housing Costs



The average listing prices of homes for sale in the region varies. In counties with higher poverty rates, the average listing price is typically lower and vice versa in counties where the poverty rates are low. For example, Jo Daviess County has the lowest poverty rate within the region (9.2%) and has the highest average-listing price (\$230,605).²² In addition, it is worth noting the median household income of residents. Whiteside County has the lowest median household income in the region and when compared with

the median sales price, it is the lowest – \$48,000.²³ It can be interpreted that, on average, the higher the median household income, the higher the median sales price of homes and median home value.

County	Avg. Listing Price (May 2017)	Median Sales Price (Feb-May 2017)	Median Home Value (4 th Quarter 2016) ²⁴
Bureau	\$120,308	\$82,500	\$112,025
Carroll	\$165,658	Data Unavailable	\$101,523
Jo Daviess	\$230,605	Data Unavailable	\$147,350
LaSalle	\$124,943	\$106,000	\$135,776
Lee	\$141,026	\$87,000	\$120,512
Ogle	\$158,073	\$124,500	\$148,518
Putnam	\$173,361	Data Unavailable	\$128,680
Whiteside	\$110,557	\$48,000	\$105,236
Illinois	\$265,685	\$190,000	Data Unavailable

²⁰ <http://www.cityoffulton.us/visit-fulton/fulton-attractions/windmill-cultural-center.html>

²¹ Some other Quality of Life considerations related to area assets and resources are found in the Infrastructure Review section, below.

²² Source: www.trulia.com

²³ Source: U.S. Census Bureau

²⁴ National Association of Realtors (economistoutlook.blogs.realtor.org/2017/03/09/county-median-home-prices/)

Crime

Crime in the region is comparably low. According to statistics compiled from the FBI Uniform Crime Report, the region has dramatically less violent crime incidents when compared to the state and national figures. Ogle County has the lowest number of violent crime incidents with 63 per 100,000 people, a figure comparable to national levels (62).²⁵ As outlined in the county reports below, the counties with the lowest violent crime statistic are also amongst those with the smallest population. Putnam County, for example, has the smallest population of all the counties in the region is also associated with the least amount of violent crimes per 100,000. The region also houses the Administrative United States Penitentiary (AUSP) Thomson in Carroll County. The penitentiary has 109 all male inmates and employs 215 full-time BOP staff.²⁶

County	Violent Crime (per 100,000 people)
Bureau	127
Carroll	70
Jo Daviess	124
LaSalle	115
Lee	87
Ogle	63
Putnam	19
Whiteside	163
Illinois	388
U.S.	380

Substance Abuse

The number of drug overdose deaths throughout the region compares higher than state and national levels, as indicated in the chart below. LaSalle County has the highest drug overdose deaths in the region (22 per 100,000 people), far higher than the state average (13 per 100,000) and the national average (9 per 100,000).²⁷ The percent of the population that smokes is near state and national averages with LaSalle County having 17% adult smokers. The national average for excessive drinking prevalence is 30%, however the Illinois average is 21%, and most of region is in line with this. Carroll County has the lowest excessive drinking prevalence at 18%. For the percentage of driving deaths involving alcohol, the region exceeds state and national levels. Putnam County has the highest percentage of driving deaths involving alcohol, nearly 3 in 4. These figures suggest some concerns for local human service, healthcare and law enforcement.

County	Drug Overdose Deaths (per 100,000)	Adult Smoking Prevalence	Excessive Drinking Prevalence	Percentage of Driving Deaths Involving Alcohol
Bureau	19	15%	20%	29%
Carroll	Data Unavailable	14%	18%	29%
Jo Daviess	Data Unavailable	13%	20%	36%
LaSalle	22	17%	19%	37%
Lee	15	16%	20%	26%
Ogle	9	15%	20%	33%
Putnam	Data Unavailable	14%	20%	75%
Whiteside	19	15%	19%	28%
Illinois	13	15%	21%	34%
U.S.	9	18%	18%	30%

²⁵ Source: University of Wisconsin County Health Rankings, FBI Uniform Crime Reporting (www.countyhealthrankings.org)

²⁶ <https://www.bop.gov/locations/institutions/tom/>; and Office of Public Affairs, Federal Bureau of Prisons

²⁷ Source: University of Wisconsin County Health Rankings (www.countyhealthrankings.org)

Childcare

The area is served by at least ten institutional childcare entities, with a majority of services available in LaSalle and Bureau counties. In the western portion of the region, more resources that are limited are available. There is Head Start and similar childcare options, but they are limited compared to the populations they serve, with perhaps only one or two institutional options. In addition, there are childcare options available only during traditional daytime hours and weekdays, with no centers reporting weekend or evening/night hours. This is not uncommon nationally, but presents a significant concern in any community where workers may work evening/night shifts. This data does not capture the number of available childcare options in home daycares, or the rate at which children are cared for by family within the home or with family members; however, based on the data available, there may be a need for more and more flexible childcare options beyond the few Head Starts and limited number of day care centers available. As mentioned earlier, the number of residents under the age of 5 has decreased over the last ten years by 7%, though expected to increase by 7% over the next five years. Childcare in places like Ogle County should be a focus of concern for the future where the population under 5 years old is projected to grow by 12% over the next five years.²⁸

Disability Services

Fewer than five dedicated entities provide disability services within the area, all with a primary focus of assisting people with developmental or other disabilities with living independently. Centers for Independent Living in several communities and a branch of the Access Network provide services that cover the region. This is supplemented by the wider services that are available through City and County health departments or related services funded by Illinois Department of Human Services (IDHS) and the Office of Vocational Rehabilitation.

Domestic Violence Services

Domestic Violence hotlines, shelters and counseling/support and legal services are limited within the region. Organizations specializing in these services are located in LaSalle, Bureau, Ogle, and Jo Daviess counties, and they are targeted to serve their individual communities. Residents of the other counties have limited options as it relates to domestic violence support. As with housing and homelessness services, there is a limited supply of shelters available to victims of domestic violence and their children in emergencies.

Health Care, Health and Wellness

Health care access can be limited in parts of the rural communities within the area. The region is served by eleven (11) comprehensive hospitals and another half-dozen urgent care establishments.²⁹ The largest hospitals include Ottawa Regional Hospital & Healthcare Center - DBA OSF Saint Elizabeth Medical Center in LaSalle County (97 beds) and CGH Medical Center in Sterling in Whiteside County (98

²⁸ Emsi 2017.1

²⁹ Sources include:

<https://data.illinois.gov/Public-Health/IDPH-Hospital-Directory/wsms-teqm>

<http://www.ihatoday.org/hospital-directory.aspx>

beds).³⁰ A number of the hospitals are *Critical Access Hospitals*, a designation for federally supported small rural hospitals with 25 or fewer beds that are more than 35 miles from another hospital.



The area’s hospitals are supplemented by at least twenty-two (22) urgent care centers and clinics that offer general outpatient health care, most on a free or on sliding scale based on family income. Data on such clinics is not always listed in centralized directories, so there may be additional small independent physicians’ offices functioning as urgent care centers as well. The clinics

identified are also not well distributed around the area, with Putnam and Jo Daviess counties having none and Whiteside having 13 associated with the CGH Hospital network in Sterling. As indicated earlier, the Health Care and Social Assistance industry in the region has experienced a slight decrease in jobs over the last five years.³¹ Because there are so many health care facilities across the region, this slight decrease most likely will not be dramatically seen.

There are sixty-nine (69) licensed assisted living facilities and nursing homes within the area. These range from intensive service centers connected to hospital networks to smaller group homes. All offer a range of skilled nursing care, intermediate care and community living arrangements.³² Research only identified a limited number of home health agencies across the region. All county health departments supplement medical care with health education, wellness, screenings and other services.



As survey responses indicate later on in this report, a number of respondents derived from the Health Care and Social Assistance industry. Having an adequate amount of access to health care and health wellness facilities in the 8-county region leads to both a healthy, maintained population but also a thriving healthcare economy for employment.

Health care access is available throughout the region and it is important to note that much of the population has health insurance to offset the costs incurred through treatment. The chart below identifies the percentage of the civilian noninstitutionalized population who are uninsured by gender and age. Compared to the state and nationwide, the region is considerably insured. The population cohort with the largest percentage of uninsured is between the ages of 19 to 25 years old in Illinois and the U.S. (23.8% & 26.5%, respectively) but in the region that figure is dramatically low (1.7%). This is

³⁰ <https://www.ihatoday.org/uploadDocs/1/capacityhosp.pdf>

³¹ Emsi Analyst 2017.1

³² Data from:

<https://data.illinois.gov/Public-Health/IDPH-Assisted-Living-and-Shared-Housing-Licensed-E/992y-d4p5/data>

<https://ltc.dph.illinois.gov/webapp/LTCApp/ltc.jsp>

significant considering the economic impact individuals without health insurance can make on the region.

Total, Civilian Noninstitutional Population (CNP)	NCI Works Region	Illinois	U.S.
% Uninsured; CNP	9.6%	12.3%	14.2%
% Uninsured; CNP – Male	5.3%	14.1%	15.6%
% Uninsured; CNP – Female	4.3%	10.6%	12.8%
% Uninsured; CNP – Age Under 18	0.8%	3.8%	7.1%
% Uninsured; CNP – Age 18-64 years old	8.7%	17.8%	19.8%
% Uninsured; CNP – 65 years and older	0.1%	1.2%	1.0%
% Uninsured; CNP – 19-25 years old	1.7%	23.8%	26.5%

Source: American Community Survey (ACS) 2010-2014 5-Year estimates (Table S2701)

In an effort to promote health and wellness in the region, the University of Illinois Extension provides nutritional education to individuals and families through Illinois Nutrition Education Programs (INEP).³³ These programs include nutrition and cooking classes and online resources that inform individuals about budgeting for groceries effectively.

Housing and Homelessness

The region’s housing stock is more than 90% occupied and is, on average, made up of older dwellings than state and national averages. As noted in the CEDS plan for the Blackhawk Hills region (six of the nine counties within LWA #4), there is a significant concern with the aging of the housing stock in the region.³⁴ Since the Construction industry has increased over the last five years by 13%, the workforce is available to update and improve the housing stock.³⁵ It will be critical for the area to continue building new housing to meet future needs, as some of the significantly older houses are likely to reach their usable lifespans in the coming years. In 2016, there were a limited number of new housing starts within the area, with fewer than 263 housing starts across the entire area. The following table provides some insight into the scale, with most being single-family dwellings.

2016 Housing Permits by County	1 Unit Bldgs.	1 Unit Units	2-Unit Bldgs.	2-Unit Units
Bureau County	20	20	0	0
Carroll County	16	16	0	0
Jo Daviess County	50	50	0	0
La Salle County	72	72	1	2
Lee County	31	31	0	0
Ogle County	40	40	1	2
Putnam County	16	16	0	0
Whiteside County	18	18	0	0
TOTALS	263	263	2	4

³³ <http://web.extension.illinois.edu/INEP/>

³⁴ CEDS, p17.

³⁵ Emsi Analyst 2017.1

There were not any 3-4 or 5+ unit permits issued in 2016. In 2015, there were permits issued for eight 5+ Unit buildings in Bureau County, two 2-Unit buildings in Ogle County, and one 2-Unit building in La Salle County.

Particularly if the area is interested in retaining and attracting young professionals and other younger workers, there may be a need for communities and developers to consider expanding the scale of multi-unit housing options.

There appears to be a solid level of public and supported housing for both families and senior citizens within the region. Each county's housing department reports the ability to provide for families in their community through low cost and affordable housing options for low and moderate-income residents of their communities. The Carroll County Housing Authority provides apartments for more than 24 families and 66 seniors through its public housing developments. The Jo Daviess Housing Authority provides more than 100 units of family and senior housing in five developments across the county. Whiteside County Housing Authority offers more than 150 senior units and 200 family units across six developments. The LaSalle County Housing Authority provides housing for more than 1,600 families at developments and scattered site units as well as facilitating the U.S. Department of Housing and Urban Development Housing Choice Voucher (HCV) program (formerly "Section 8").³⁶ All counties offer HCV in addition to stand-alone or scattered site developments.



A 2016 U.S. Department of Housing and Urban Development report states that there are over 11,590 homeless individuals across the State of Illinois.³⁷ A Chicago Coalition for the Homeless study reports that 38,036 Illinois residents were served in state-funded shelters in 2014.³⁸ What available data suggests, however, is that the LWA 4 area does not have a significant portion of the state's homeless population as a portion of overall population. The problem is not negligible, but the area's several homeless shelters may be close to sufficiently addressing the need. The Public Action to Deliver Shelter (PADS) network of homeless shelters has a long history in northern Illinois and delivers case management, education and other supports in addition to shelter for families and individuals. There are PADS shelters in Dixon (Lee County), Ottawa and Peru (LaSalle County), and Sterling (Whiteside County), a faith-based shelter in Princeton in Bureau County, and several domestic-violence shelter operations. The LaSalle Veterans Home is described in the section on Veterans, below.

Mental Health / Substance Abuse Services

The area is home to more than a dozen mental health and substance abuse providers including North Central Behavioral Health and the Sinnissippi Centers, each of which has locations in several of the area's counties, as well as several other treatment and service locations as well as mental health services through the hospital and clinic networks. Providers offer emergency services, in-patient and

³⁶ https://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/hcv/about/fact_sheet

³⁷ <https://www.hudexchange.info/resources/documents/2016-AHAR-Part-1.pdf>

³⁸ <http://www.chicagohomeless.org/faq-studies/>

outpatient care, and are able to serve both youth and adults. A number of broader human service agencies also offer mental health services as part of a wider menu of available services. There are a number of Alcoholics Anonymous groups across the area as well, though there is not a comprehensive list since some meetings are not publicly listed.

Senior Services

In addition to senior public housing offered by each County, there are more than seventeen (17) senior centers or senior citizen service agencies including City or County Aging Departments and nonprofit organizations within the area. While most of these are day programs and centers that offer a range of services including counseling, social networking, food and a range of activities, the region also has numerous home visiting programs, all with a focus on improving the quality of life of seniors through counseling, homemaking assistance, and community gathering. Other senior services include food distribution services such as Meals on Wheels offered by County Human Service Departments and transportation services such as the county Demand Response Transit Systems (described in the Transportation section below) and a range of social and support services. The programs generally only have daytime workday hours, however with limited mention of weekend or evening availability. As the baby boomer generation ages over the next five years, these senior services will play an even more critical role. The projected change into 2021 for residents 65 years and older is 9% or +6,062.³⁹

Veterans Services

The area is served by the *Veterans Service Office* program under the Department of Veterans Affairs. With a dedicated staff focused on serving the needs of residents who are veterans, their mission is to assist veterans in navigating the complex web of services and benefits available in relation to health care, education, employment, housing, transportation, and a range of military records, pension and related services. These offices are staffed by individual Veteran Service Officers (VSO's), fellow veterans who are experts on federal, state and local veteran resources. Veteran Service Offices are available in Jo Daviess, LaSalle, Ogle and Whiteside counties, with limited hours (one or two days per week). Veterans from the other counties can access these centers.

Veterans Administration (VA) hospitals in Chicago and the Edward Hines, Jr. facility are more than 2 hours driving distance from the region. Hines has an extension branch at the LaSalle Community Based Outpatient Clinic (CBOC) in Peru that provides primary care services, prescriptions, laboratory and



behavioral health services for veterans in LaSalle County and surrounding areas. Moreover, the Sterling VA Outpatient Clinic offers same services with that in addition to substance abuse treatment and counseling, physical therapy, additional lab services and onsite social workers. Both clinics have weekday hours.

The Illinois Department of Employment Security (IDES) operates the USDOL Jobs for Veterans Grant program with a grant of \$6,805,066 for FY2018.⁴⁰ The area

³⁹ Emsi Analyst 2017.1

⁴⁰ <http://www.ides.illinois.gov/IDES%20Forms%20and%20Publications/JobsForIllinoisVeterans.pdf>

benefits from this to some degree though as a statewide grant, the majority of funding serves Chicago and some of the more populated counties.

And the Adjutant Illinois Veterans Home provides residential care and skilled nursing services for up to 184 veterans, including 40 special-needs veterans, on a four-acre campus in a residential area in LaSalle.

Youth Services

Besides traditional services such as Head Start and services that are more specialized (i.e., group homes for troubled youth or youth with substance abuse or mental health problems), there are a limited supply of youth-oriented services. There are a few after-school programs beyond those provided by schools as listed in the Map, and a few teen programs focused on providing a safe space for teens to hang out. YMCAs are located in Dixon, Mendota, Ottawa, Peru, Sterling, and Streator, but within the northwest section of the region, there are none available (Carroll, Jo Daviess, and Ogle Counties). Our research did not surface faith-based youth groups, which may be supplementing these other nonprofit and public program offerings.



The University of Illinois Extension provides youth services to the region through 4-H clubs that sponsors annual programs such as Illini Summer Academies, leadership preparation, Illinois 4-H Teens as Teachers, and sports leagues.⁴¹

The Youth Service Bureau of Illinois Valley is a major youth agency serving the entire area, with NCI Works area offices in Ottawa, LaSalle, Princeton and Streator as well as surrounding offices in nearby Rockford and Aurora. Youth Service Bureau’s mission is to “help young people and families succeed by serving them in their home, school and community.”⁴² The organization provides supports such as foster care, homeless youth services, street outreach, substance abuse treatment, child development, and programs for parenting youth. Their programs serve more than 3000 youth annually.

Giving Power to Adolescents (GPA) is a relatively new (launched in 2009) organization, located in Sterling, which “provide a safe and positive environment for young adults to improve and unite the community as one while building new friendships, developing assets, and creating social acceptance.”⁴³ GPA supports youth through sponsoring volunteer opportunities, community engagement and community events.

There are a range of advancement and workforce related activities available for youth such as Manufacturing Day events, firms and Chambers sponsoring internships and similar services and initiatives.

⁴¹ <http://web.extension.illinois.edu/state/youth/index.php>

⁴² <http://www.ysbiv.org>

⁴³ <http://www.givingpowertoadolescents.com>

Education Capacity

K-12

There are more than 150 schools within 73 school districts in the region. The following table shows the breakdown of schools and districts.⁴⁴

County	Districts	Elementary Schools	Middle Schools	High Schools	Schools
Bureau	13	13	2	6	23
Carroll	3	4	2	3	9
Jo Daviess	6	6	5	6	17
LaSalle	26	30	6	8	45
Lee	5	7	2	4	14
Ogle	10	14	5	6	25
Putnam	1	2	1	1	4
Whiteside	9	14	6	6	28
NCI Works Region	73	90	29	40	165

With such a large number of schools and school districts within the region, there are plenty of opportunities for workforce development to reach out to these high schools and create a career pathways program or information sessions such as career fairs, internships, and apprenticeships. These programs can lead to professional relationships between the young workforce and business as well as a trained workforce, ready to hit the ground running.

Top 100 Rankings

Some additional data is found at the niche.com rankings of public schools in the State. A few of the schools in the region are among Illinois’ top 100 schools ranked. “The 2017 Best School Districts ranking is based on rigorous analysis of key statistics and millions of reviews from students and parents using data from the U.S. Department of Education. Ranking factors include state test scores, college readiness, graduation rates, SAT/ACT scores, teacher quality, public school district ratings, and more.”⁴⁵

Rank	School District
96	Sterling Community Unit School District No. 5 (Whiteside)
82	Oregon Community Unit School District No. 220 (Ogle)
48	Galena Unified School District No. 120 (Jo Daviess)
31	Byron Community Unit School District No. 226 (Ogle)

⁴⁴ www.illinoisreportcard.com

⁴⁵ <https://www.niche.com/k12/rankings/public-school-districts/best-overall/s/illinois/>

Illinois School District Rankings

To gauge a deeper understanding of the school metrics, research was conducted through SchoolDigger.com. This online database encompasses thousands of schools in the U.S. and their enrollment data, test scores, real estate data and more. It uses data from the National Center for Education Statistics, U.S. Department of Education, the U.S. Census Bureau, the Illinois Department of Public Health and the Illinois State Board of Education.⁴⁶

County	School District	Highest Rank	Lowest Rank
Bureau	Princeton HSD 500	133	--
Bureau	DePue USD 103	--	706
Carroll	Eastland CUSD 308	81	--
Carroll	West Carroll CUSD 314	--	680
Jo Daviess	River Ridge CUSD	52	--
Jo Daviess	Stockton CUSD 206	--	568
LaSalle	Wallace CCSD 195	143	--
LaSalle	La Salle ESD 122	--	769
Lee	Amboy CUSD 272	402	--
Lee	Paw Paw CUSD 271	--	717
Ogle	Byron CUSD 226	65 ⁴⁷	--
Ogle	Oglesby ESD 125	--	601
Whiteside	Rock Falls Twp. HSD 301	136	--
Whiteside	Sterling CUSD 5	--	613
Putnam	Putnam County 535*	683	--

*only one school district in the county

As indicated from the chart above, the school districts' ranking throughout the 8-county region encompasses a wide range within each county. In Jo Daviess County, the highest ranking school district is 52nd (River Ridge CUSD) while the lowest ranking school district is 568th (Stockton CUSD 206). LaSalle County has the largest gap between the highest ranked school district and lowest rank school district (626).⁴⁸

Science, Technology, Engineering, and Math programs, otherwise known as STEM, has become a prevalent educational initiative over the last few years. The University of Illinois Extension hosts the 4G STEM Camp, an all-girls camp that includes 5 days of hands-on activities involving STEM subjects.⁴⁹

⁴⁶ <https://www.schooldigger.com/go/IL/districtrank.aspx> (Updated October 31, 2016, based on the 2015-16 school year test scores. Is from among the 776 school districts in Illinois)

⁴⁷ This figure is from the collective report from 2015-2016 but is updated from the niche.com report from 2017 on the previous page.

⁴⁸ Putnam County has only one school district in this study and is not comparable to other counties

⁴⁹ <http://web.extension.illinois.edu/fmpt/4gstemcamp/>

Post-Secondary Community Colleges and Training Institutions



The region has a higher percentage of residents completing some college or an Associate’s Degree than Illinois and nationally.⁵⁰ The following community college districts serve the area. Each institution offers a broad array of programs and areas of study with some significant concentrations or specializations as noted:

- **Highland Community College:** Freeport, IL (Stephenson County) The College offers over 60 degrees and certificates; Students who plan to transfer to earn a baccalaureate degree pursue an Associate of Arts, Associate of Science, or Associate of Engineering Science. The college also offers the Associate of Applied Science to lead directly to employment. Highland enrolled 1,857 students in fall 2016.⁵¹
- **Sauk Valley Community College:** Dixon, IL (Lee County). Sauk Valley has 48 academic programs that grant certificates, two-year career degrees, and 2-year transfer degrees focused as the first step toward continuing toward a bachelor’s degree at a four-year institution. Programs are in behavioral and social science, business, computer information systems, education, health and safety, humanities/communication/fine arts, manufacturing and STEM. Sauk Valley enrolled 1,904 students in fall 2016.
- **Illinois Valley Community College:** Oglesby, IL (LaSalle County) *satellite campus located in Ottawa
The college grants Associate of Arts, Associate of Science, Associate in Engineering Science degrees that are focused on preparing students for transfer to a four-year institution and the Associates in Applied Science 2-year degree. The college also has 41 certificate programs in a range of fields. The college enrolled 3,206 students in fall 2016.
- **Kishwaukee Community College:** Malta, IL in neighboring DeKalb County. “Kish” offers 5 transfer degree programs for undergraduates seeking full-time study or 70 degree and certificate programs for those seeking career preparation. Academic divisions include Arts/Communication/Social Sciences, Career Technologies, Health / Education, and Math/Science/Business. Kishwaukee enrolled 3,775 students in fall 2016.

Enrollments at all colleges are down between 10% and 23% between 2012 and 2016. This presents a significant problem to the colleges, but also of course to the communities in the medium and longer term as the pool of educated and trained residents may continue to reduce accordingly.

The colleges have large service areas, which can result in significant distances that students must travel. For instance, on a map on its website, Highland Community College shows that its region may be as much as 64 miles across, with the college on the far eastern edge of the region, and communities in western Jo Daviess or Carroll Counties being a significant distance and likely 1 to 1.5 hour drive away.⁵²

⁵⁰ Emsi Analyst 2017.1

⁵¹ Data for all colleges from Illinois Community College Board (ICCB):
https://www.iccb.org/iccb/wp-content/pdfs/reports/Fall_Enroll_2016._revised_12092016.pdf

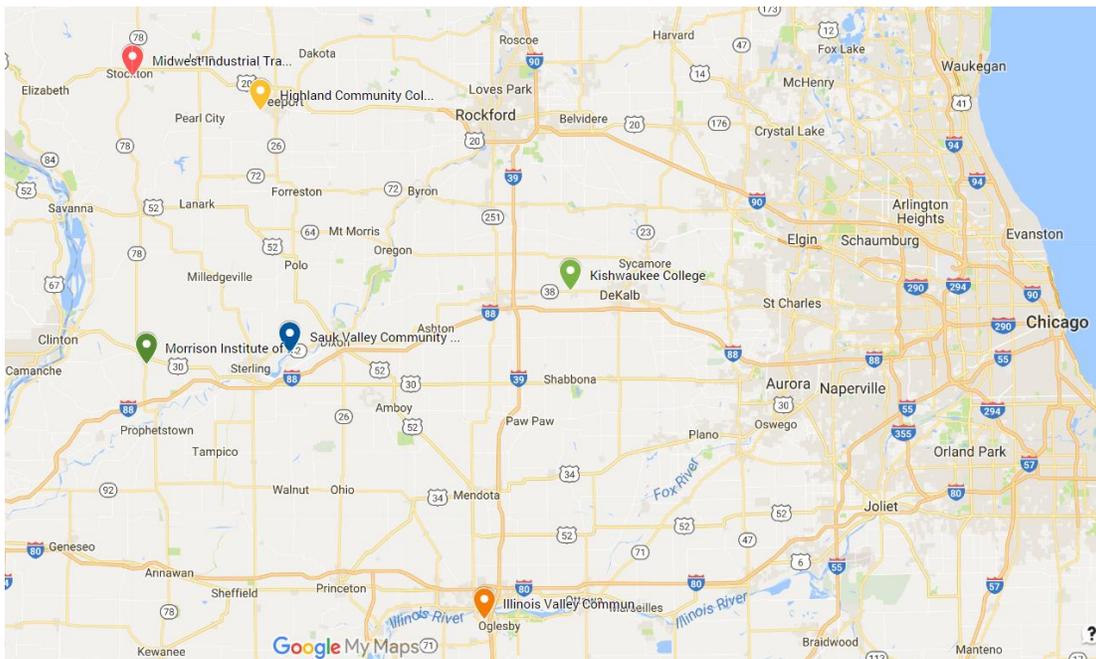
⁵² <http://www.highland.edu/contact/maps/district%20map.pdf>

The area is also contiguous with some areas on the edges of the area being within the boundaries of the community college regions of Blackhawk, Waubensee and Illinois Central Colleges and some communities have a close proximity to Rock Valley Community College in Winnebago. Students at the extreme edges of the area may have the opportunity to find a college closer to them within another community college district, though in some cases tuitions may be higher for “out of district” residents.⁵³

Two technical schools are also located in the area:

- Morrison Institute of Technology:** Morrison, IL (Whiteside County)
 The school offers degree and certificate programs in Engineering Technology and Network Administration with condensed coursework in a small classroom environment. The college grants the Associate in Applied Science degree.
- Midwest Industrial Trade School:** Stockton, IL (Jo Daviess County)
 Offers technical training in welding, pipefitting and related fields.

The map below shows the locations of the colleges within the region.



Four-Year College

There are no four-year colleges in the area. The area is, as noted elsewhere, close to the major metropolitan area of Chicago with its dozens of colleges and universities, and borders some areas that have colleges, such as Knox College in Galesburg, Augustana College in Rock Island, Rockford University in Rockford, Illinois State University in Normal, and Northern Illinois University in DeKalb. The closest 4-year college in the southern edge of the region is Eureka College in Eureka. The absence of a local four-year option that students can commute to easily, and that adults could go back to school while still living and working in their own community, is a weakness for the area and one that is not easily remedied.

⁵³ It is worth noting that most community colleges may have reciprocal agreements that allow them to charge in-district tuition if courses aren't available in a student's home districts

Support should be given to existing two-year institutions, especially the area’s four community colleges, to offer additional coursework, build virtual links and additional/expanded academic linkages to four-year institutions in order to support more area residents in securing higher education within their communities. The lack of a four-year college in the region is reflective in the number of resident who have a Bachelor’s degree or higher. While the population who has an Associates’ degree or some college is higher than state and national levels, the number with a Bachelor’s degree is drastically lower than state and national levels.⁵⁴ Additionally, efforts should be made to continue supporting linkages between the colleges and regional industry to ensure that education and training is focused toward in-demand occupations and career pathways within industries. One worth investing in is manufacturing. Since 2011, this industry has seen growth with competitive wages.

Natural Resources

A significant strength of the area is its wealth of natural resources. These assets, from farmland to rivers, to state parks and nature reserves, benefit the area both directly (through employment and businesses that depend on these assets) and indirectly (by improving the quality of life and attracting and retaining talented workers who appreciate access to nature and these resources).

Agriculture

Agriculture is a small but significant industry in the region. Our research lists at least seventy (70) major institutions including agricultural co-operatives, wheat and hay producing farms (more than 30), meat producers and slaughterhouses (13) and extensions of University of Illinois where research on crop



science and plant analysis are conducted. A prior report identified more than 6,000 farms in the area, and they appear to have a significant impact on the area’s overall economy, contributing an overall market value of more than \$169 million annually.⁵⁵ Nearly 2,000 residents work in the agriculture industry directly and many more work in related food processing, packaging, transportation and related fields.⁵⁶ Those residents may work multiple farms and the 6,000 figure could reflect numerous farms owned by the same

farmer. It is worth noting however that in 2017, Sandy Creek Lane, LLC opened its doors to a 5,600 sow breeding farm in Wenona.⁵⁷ This mega-farm is anticipated to hire 21 full-time employees once it is fully operational.

⁵⁴ Emsi Analyst 2017.1

⁵⁵ CEDS, p.38 citing the USDA National Agricultural Statistics Service

⁵⁶ Emsi Analyst 2017.1

⁵⁷ <http://www.ilpork.com/news-and-events/press-releases/profile/sow-farm-tour-attracts-over-500-visitors>

As indicated in the industry analysis, Crop Production in the region has decreased over the last five years by 318 jobs or 21%.⁵⁸ In addition, Farming, Fishing, and Forestry occupations have decreased by 2% (28 jobs) over the last year and although it is minimal, it has the potential to influence the overall industry, which has already experienced a much more significant impact.

The region's agriculture industry is supplemented by alternative energy facilities. Marquis Energy, LLC, located in Hennepin, is the largest dry-mill ethanol facility in the United States with the capacity to produce nearly a million gallons of fuel grade ethanol a day.⁵⁹

Natural Reserves, Tourism and Agritourism

The area is home to twenty-three (23) nature reserves including wetlands, tall grass prairies, forests and more. These spaces are critical to supporting the environmental diversity of the region, with thousands of animals and plant species. These preserves help protect high quality natural areas and habitats of endangered and threatened species, and help the state maintain good stewardship and protection of the kind of environments or natural areas that might otherwise disappear completely.

There are more than twenty-one (21) state parks within the area, including major destinations like Starved Rock State Park and many other smaller ones. These parks, with a total area of more than 15,000 acres, offer a range of activities including hiking, bicycling, camping, fishing, boating and other water sports. Starved Rock in particular makes a significant impact on the economy of LaSalle County and surroundings, attracting over 2 million visitors annually to enjoy its 18 canyons, numerous waterfalls, 13 miles of trails, 133 campsites and more than 2,600 acres of nature.⁶⁰ The area hospitality industry including hotels, restaurants, and other establishments makes the park a major economic engine for the surrounding communities.

The Rock River, with its 23 dams and other features is also a major destination, offering canoeing, kayaking and fishing opportunities both within the state and other parks and else where along the riverbanks of the more than 150 miles of the river that flows through the area.



The Illinois River, stretches 332 miles, making it the second longest river in the state behind the Mississippi River (581 miles).⁶¹ Sections of the Illinois River are regulated by numerous lock and dams to control the water levels flowing through it. Across the state, there are eight river pools: Lockport, Brandon, Dresden, Marseilles, Starved Rock, Peoria, LaGrange, and Alton.⁶² As part of the river, the Hennepin Canal State Trail offers numerous activities including bike trails, boating, camping, canoeing, fishing,

hunting and more. The Hennepin Canal State Trail is stretched 104.5 miles across Rock Island, Bureau,

⁵⁸ Emsi Analyst 2017.1

⁵⁹ <http://marquisenergy.com/about/>

⁶⁰ <http://www.starvedrockstatepark.org/history/>

⁶¹ <https://www.dnr.illinois.gov/education/pages/ilriversstreams.aspx>

⁶² <https://www.ifishillinois.org/profiles/Illinois.php>

Henry, Lee, and Whiteside Counties.⁶³ Connecting Lake Michigan to the Mississippi River by way of the Illinois River, the Illinois and Michigan Canal (I&M Canal) spans 96 miles and encompasses several trails, scenic views, and historical sites.⁶⁴

There are several agritourism sites in the area, but these are comparably small to other portions of Illinois (southern Illinois’ “wine country” for instance), where agritourism can make a much larger economic impact than the two or three wineries and several “u-pick” fruit and berry farms in this area.

Six water conservation districts and significant protections along the Rock River and Plum River are important to supporting both the agricultural and tourism/agritourism value of the region.

These many resources make for a particularly beautiful part of the State and ensure that residents have easy access to the respite offered by natural and open spaces. As major draws of real and tangible investment (i.e., state park’s impact on the economy of the Starved Rock region) influences the livability of much of the region, these resources can have a significant impact on the communities. While research has shown good stewardship of these resources, the county and regional economic development institutions should continue to work to leverage these resources and collaborate with them to continue to support regional development.

Other major tourist destinations, beyond the natural ones described above, include most importantly Galena, the largest city and county seat of Jo Daviess County. First settled in 1821 and a major mining community through the 19th century (the mineral “galena” is a lead ore, a major source of silver as well as important in batteries and pottery), and its historic downtown encompassing more than 581 acres is listed on the National Register of Historic Places. Home of President Ulysses S. Grant, the area is a destination for its history, architecture and resorts, and its position along the Mississippi river adds to its tourism importance. Galena claims more than one million visitors annually.

Technology Infrastructure

Broadband

Across the eight-county region, broadband access is available to most of the population. The chart below displays the percent of the population with access to different speeds of broadband.⁶⁵ The counties with the largest populations, LaSalle and Whiteside, respectively, have the most access available to its citizens. Conversely, Putnam County has both the smallest population and the most limited access to each broadband speed across the region. When it comes to having the fastest broadband speed, Bureau County tops the other counties with 29.8% of its population having access, thus having a strong broadband infrastructure. With high-speed broadband, the region has the potential to attract businesses who demand such infrastructure.

⁶³ <https://www.dnr.illinois.gov/Parks/Pages/HennepinCanal.aspx>

⁶⁴ <https://www.dnr.illinois.gov/recreation/greenwaysandtrails/Pages/IMCanal.aspx>

⁶⁵ <http://broadbandnow.com/illinois> (data is collected via the Federal Communications Commission (FCC) and the National Telecommunications and Information Administration (NTIA)).

County	25+ mbps	100+mbps	1 Gbit
Bureau	79%	74.8%	29.8%
Carroll	74%	73.4%	0%
Jo Daviess	67.9%	66.3%	0%
LaSalle	81.1%	78.7%	2.6%
Lee	73.4%	63.2%	0%
Ogle	78.8%	66.2%	0.3%
Putnam	62.2%	57.5%	0%
Whiteside	81.6%	81.6%	0%

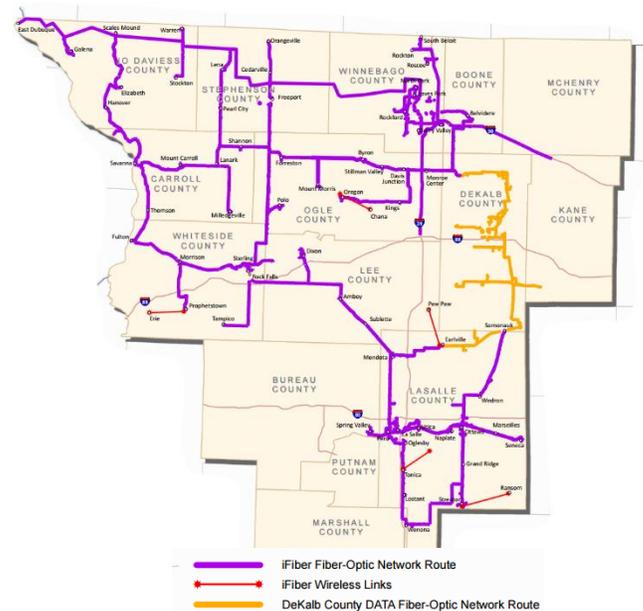
The state of Illinois has a strong technological infrastructure, especially compared to neighboring states. Iowa, which is the closest state to the NCI Works Region is ranked 33rd most connected state, compared to Illinois which is ranked 14th and provides broadband coverage to 93% of the population. However, the average internet speed in Illinois is ranked third amongst the neighboring states.

State	Broadband Coverage	State Ranking	mbps Average
Illinois	93%	14 th	31.2
Indiana	86%	22 nd	33.4
Iowa	83%	33 rd	28.9
Missouri	74%	38 th	48.5
Wisconsin	86%	23 rd	23.8

With over 250 broadband providers in the State of Illinois, the largest competing providers are AT&T U-verse vs. XFINITY; XFINITY vs. WOW; and AT&T U-verse vs. WOW.

Fiber Optic

As fiber optic technology becomes more prevalent in today's ever-changing world, the region has undergone construction to incorporate fiber optic network routes. iFiber, an established broadband network, has begun constructing fiber optic cables across the region to provide affordable and high-speed connectivity access to individuals across the region⁶⁶. The map to the side displays the fiber optic network routes and wireless links in the northwest region of the state. With much of the fiber optic route in the northwestern part of the region, Bureau County & Putnam County have very limited access to fiber optic technology. Whether it is for commercial or residential use, iFiber has aligned with multiple service providers to provide fiber optic



66 <http://ifiber.org>

technology to the population. The chart below categorizes each provider and the type of services they provide.

Source of Charts: iFiber

Service Provider	Region Served	Public Sector/ NFP	Commercial / Residential Provider	Internet Service	VoIP	Cloud Services	IT Consulting
Aero Group Inc.	Jo Daviess, Carroll	Yes	Yes	✓	✓		✓
Frontier Communications	All	Yes	No	✓	✓		✓
Illinois Century Network	All	Yes	No	✓			
ISI Communications	All	No	Yes	✓			
Sand Prairie	Jo Daviess, Carroll	Yes	No	✓			✓
MTCO	LaSalle	Yes	Yes	✓	✓	✓	✓
NIUNet	All	Yes	No	✓		✓	✓
Stratus	All	No	Yes	✓		✓	✓
Syndeo	All	Yes	Yes	✓	✓	✓	✓
WIN	All	No	Yes	✓		✓	✓

Resources

Across the State of Illinois, there are organizations and networks that provide resources and services that benefit the counties in the NCI Works Region.

- Illinois Technology Association⁶⁷**
 The Illinois Technology Association (ITA) is a collaboration of Illinois tech companies with the purpose of increasing growth, scale education, talent development and industry visibility across the state. The goal of the ITA is to build up the technology community in all industry sectors across Illinois.
- Illinois Science & Technology Coalition⁶⁸**
 The Illinois Science & Technology Coalition (ISTC) is a member-driven, non-profit, nonpartisan organization that cultivates technology-based economic development throughout the State. The ISTC drives the state’s innovation economy forward by acting as the convener to kick-start ideas and projects to improve the innovation economy across Illinois.
- Illinois Department of Innovation & Technology⁶⁹**
 The Illinois Department of Innovation & Technology (DoIT) is a newly formed state agency that delivers statewide information technology and telecommunication to state government

⁶⁷ <https://www.illinoistech.org/>

⁶⁸ <http://www.istcoalition.org/>

⁶⁹ <https://www2.illinois.gov/sites/doi/Pages/default.aspx>

agencies, boards, and commissions. DoIT manages the Illinois Century Network, which provides communication links to Illinois schools, libraries, local government agencies, and more.

- **Illinois Century Network⁷⁰**

The Illinois Century Network (ICN) is a high-speed broadband network that supports the educational network consisting of K12, higher education, public libraries, museums, state and local government, and the healthcare community. As the largest state network, the ICN provides the educational network with a host of services such as access to online learning reference sources (newspapers, journals, radios, TV news, etc.); parental access to student assignments, grades, and school bulletins; seminars and training for healthcare providers; and other services.

Transportation Infrastructure

The 2013 report “Promoting Regional Prosperity in Northwest Illinois” recognized a number of key assets in terms of the region’s transportation, under the heading *Quality, Connected Places*. These resources included regional airports, mainline access to four Class I Rail Carriers, major interstate and highway connections, and Global III Intermodal.

These continue to remain key strengths in 2017. This accessibility, with portions of the region being only 1 to 1.5 hours from the major metropolis of Chicago, is certainly a strength, but overall transportation within the area faces some challenges.

Public Transportation

According to the Illinois Department of Transportation (IDOT), “ninety-six (96) out of the state’s 102 counties offer some type of transit service to their communities.”⁷¹ However, based on a 2007 State of the Workforce report, only 0.2% of workers commute by public transit.⁷²

Research has identified only Ottawa having a city bus system, with county-based systems in Bureau, Carroll, Jo Daviess, LaSalle, Lee, Ogle, Putnam, and Whiteside. The system in Ottawa operates 8:30 am to 2:30 pm, with one route and hourly service.⁷³ Otherwise, the options in the counties are scheduled curb-to-curb arrangements that operate like subsidized taxi or ride-share services, primarily for seniors and people with disabilities. These programs are listed on the Infrastructure Review Map table under Public Transportation.

These services have some value to individuals who may be without a car for an occasional need, but because their cost is relatively high, and there is limited or inconsistent availability, these resources cannot reasonably provide regular commuting for significant numbers of residents. As a result and as noted above, the vast majority of residents commute by car. Results from the underemployed survey analysis revealed that jobseekers identified commute to work/transportation as a challenge for them to

⁷⁰ <https://www.illinois.gov/icn/Pages/default.aspx>

⁷¹ Additional information on these resources can be found at the following sites:

<http://www.idot.illinois.gov/transportation-system/Network-Overview/transit-system/index>

<http://www.idot.illinois.gov/travel-information/passenger-services/transit-services/index>

<http://www.illinoisbusnetwork.com>

<http://tranpro.utc.uic.edu/php/clickmap.php>

⁷² This is the most recent data study of transit service from the IDOT

⁷³ <http://www.cityofottawa.org/government/transportation>

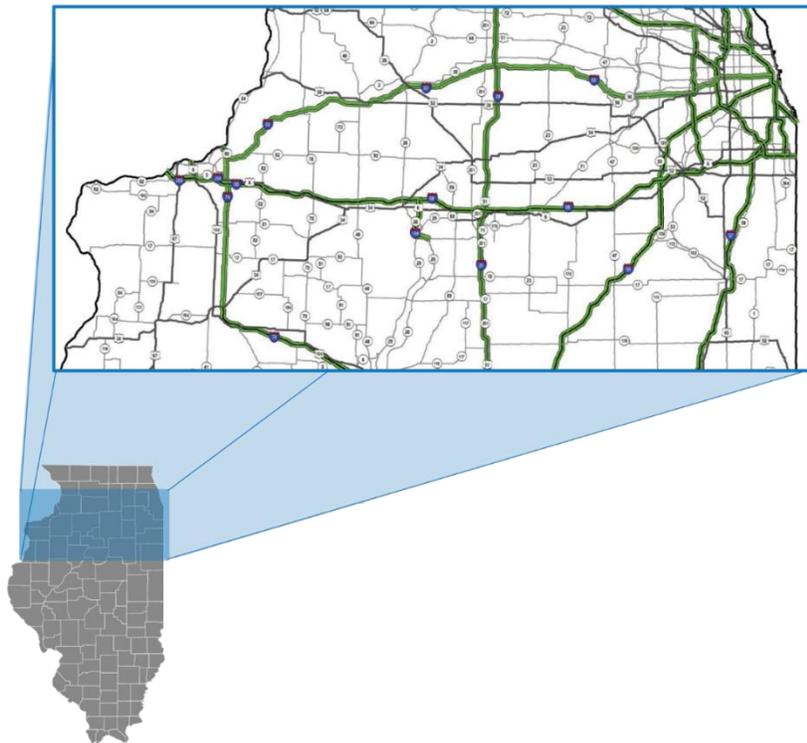
obtain employment. A cost-benefit analysis could be conducted to determine whether the investment of public transportation results in a greater return, especially if the routes are aligned with the location of the American Job Center (AJC) / Illinois workNet Center or other One Stop affiliate sites.

Roads

Centrally located within America’s heartland, the region is within a two hour drive of a total of 9 Interstate Highways including I-39, I-43, I-55, and I-57 running north to south and I-74, I-80, I-88, I-90, and I-94 running east to west across the U.S. “IDOT operates with its central headquarters in Springfield and five transportation regions across the state. Throughout each region, IDOT strives to accomplish its primary objectives through the planning and programming of road, bridge, public transportation, rail and aviation projects. These objectives include preservation and maintenance of all existing transportation systems, upgrades to existing facilities as needed, and system expansion across all modes. The five regions host a total of nine highway districts, strategically located to best assess and oversee Illinois’ transportation infrastructure.”⁷⁴ The entire LWA4 area is within IDOT’s Region 2, and Districts 2 and 3.

The Illinois Tollway’s major I-88 route traverses the central portion of the area, with more than 100 mile of its 140-mile length within the area.⁷⁵

The area is home to a large concentration of highways including major portions of I-80 and the I-88



tollway traversing the area east to west, and I-39 north to south. The region is approximately 2-3 hours from the major economic engine in Chicago, and a similar distance from St. Louis. The major intersection of I-80 and I-39 in the LaSalle area drives some of the economic activity in that area. There is not, however, major investment visible as a result of the Tollway, with much of it traversing farmland or small towns and only limited development along the highway. The map below displays the highway infrastructure of the state and a close-up display of the I-80 and I-39 intersection in LaSalle County.⁷⁶

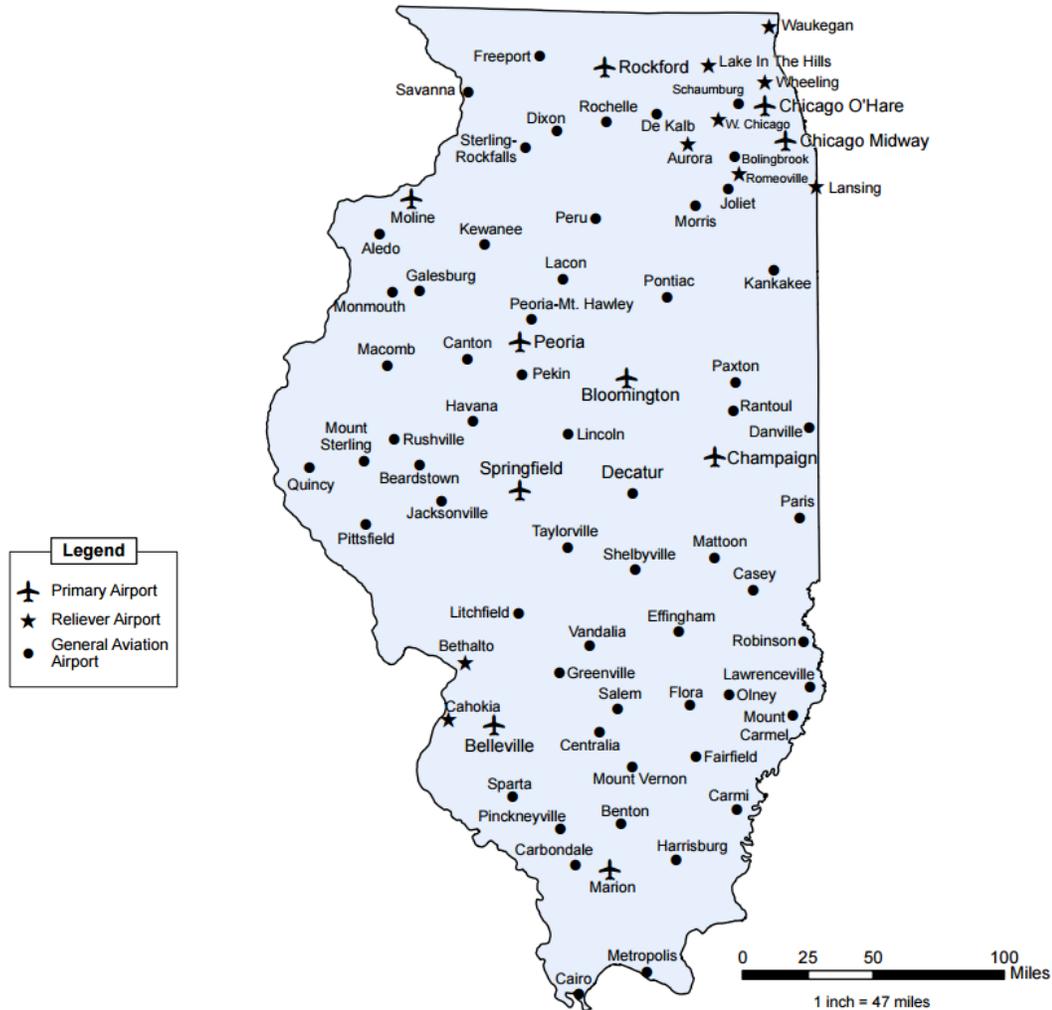
⁷⁴ <http://www.idot.illinois.gov/about-idot/idot-regions/index>

⁷⁵ <https://www.illinoistollway.com/>

⁷⁶ <http://www.idot.illinois.gov/transportation-system/Network-Overview/highway-system/index>

Airports

The closest and most relevant commercial airports serving the community are Chicago O’Hare (ORD), Chicago Midway (MDW), Chicago Rockford International Airport (RFD) and Peoria International Airport (PIA). Quad City International Airport in Moline (MLI) and Central Illinois Regional Airport in Bloomington-Normal being relatively proximate to the western and southern sections of the region, respectively. The map below displays primary, reliever, and general aviation airports within the State of Illinois⁷⁷.



Source: Illinois Department of Transportation

⁷⁷ <http://www.idot.illinois.gov/transportation-system/Network-Overview/airport-system/index>

The airports listed in the Infrastructure Map are all general aviation airports. The following data is from several sources including a major study of Illinois airports' economic impact:⁷⁸

Airport	Employment	Economic Output	Flights Daily (average) ⁷⁹	Major Users and Impacts
Dixon Municipal Charles R. Walgreen Field (Lee County)	59 jobs	\$5,492,600	110	BorgWarner, Raynar Garage, HDI, Hardee's, and Addison Automatics. Access for tourism of Ronald Reagan's childhood home and Rock River parks.
Rochelle Municipal Koritz Field (Ogle County)	86 jobs	\$7,858,700	32	South East Lumber and Illinois River Energy. Air National Guard Blackhawk helicopters out of Chicago Midway International operate at the airport. Chicagoland Skydiving Center.
Whiteside County Joseph H. Bittorf Field in Rock Falls (Whiteside)	57 jobs	\$5,466,600	90	Astec Mobile Screens, Walmart Distribution, and Borg-Warner. Agricultural spraying businesses. Civil Air Patrol base.
Illinois Valley Regional - Walter A. Duncan Field (LaSalle)	59 jobs	\$7,400,000	57	Koch Industries, Mid-America Growers, Pioneer Seed, Advanced Drainage Systems, Rural King, Archer Daniels Midland, Petsmart, and Loves Truckstop. Hub for tourist travel to Starved Rock State Park.
Tri-Township Airport (Savanna, Carroll County)	10 jobs	\$1,292,000	Average 77 flights per week (11/day average)	n/a

Besides performing as a source of transportation for residents and firms conducting business in the region, the airports have various additional uses including local flying clubs, "fly-in breakfast" events for flight enthusiasts, annual and periodic community events, and flight instruction activities.

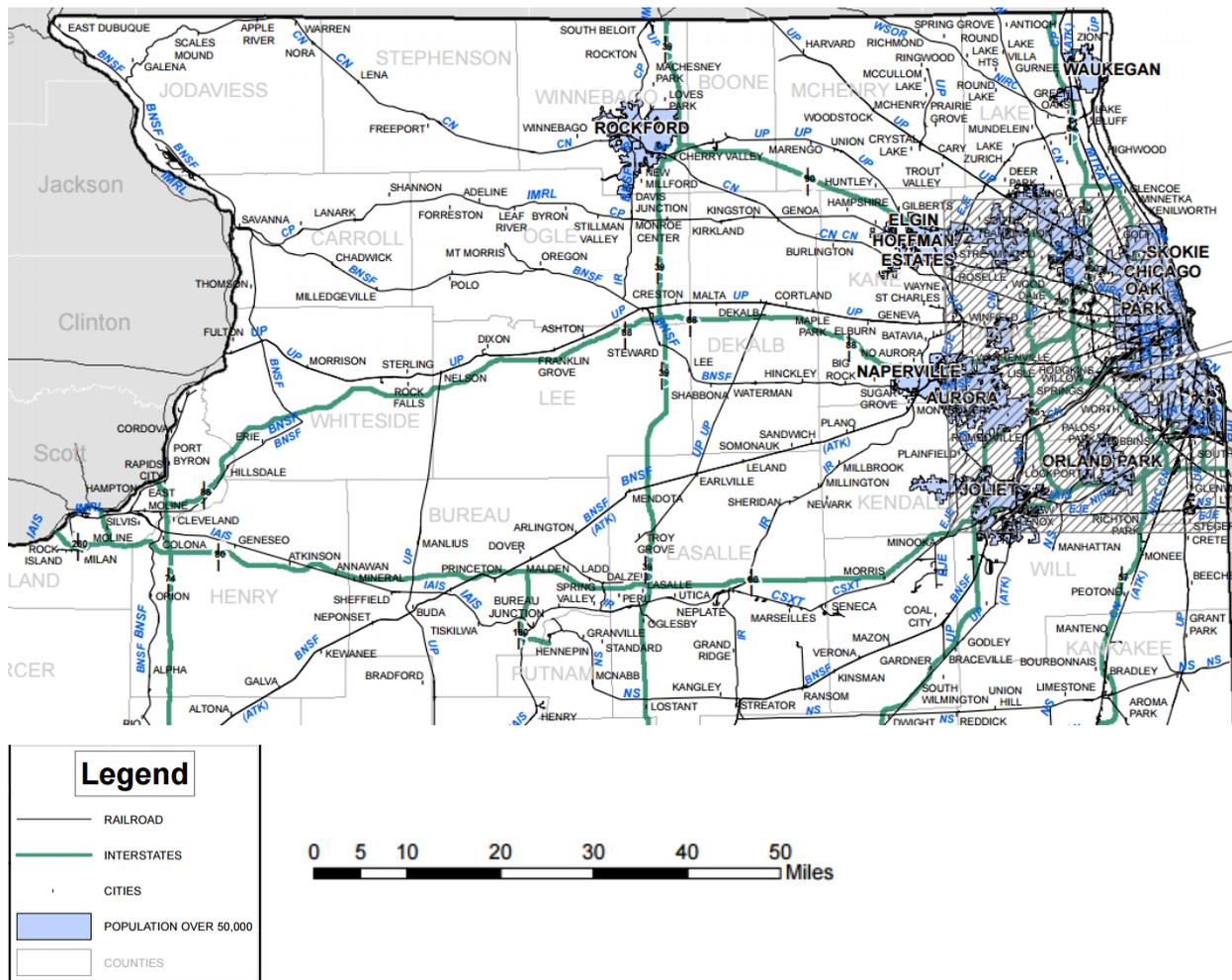
⁷⁸ <http://www.illinoisairportsmeanbusiness.com> and <http://www.saukvalley.com/2012/12/27/study-two-airports-bring-about-11-million-a-year/av0y0dp/?page=1>

Additional data can be found at: <http://www.idot.illinois.gov/Assets/uploads/files/Transportation-System/Reports/Aero/2012inventory.pdf>

⁷⁹ Several sources including airports' own sites as listed on the Infrastructure Map and

Rail

The NCI Works Region is served by four (4) Class I railroads: Burlington Northern Santa Fe, Canadian National, CSX and Union Pacific. There are more than 9,000 miles of railroad track in Illinois, with the area well served by these railroads.⁸⁰ There is significant use of these railroads by some of the agricultural producers in the region. The Union Pacific Global III rail yard in Rochelle serves more than 25 trains and 3,000 containers/trailers daily.⁸¹ In addition to the Class I railroads, the area is also served by numerous short-line railroads serving the area's agriculture, warehousing, and other industries. The Class I railroads may be an asset to the agricultural production in the area, with key access points for loading/unloading of this important regional resource. The map below displays the inter-workings on the rail system with major highway systems⁸².



Source: Illinois Department of Transportation

⁸⁰ <http://www.idot.illinois.gov/transportation-system/Network-Overview/rail-system/index>

⁸¹ <https://www.up.com/customers/intermodal/intmap/int-chi/rochelle/index.htm>

⁸² http://www.idot.illinois.gov/Assets/uploads/files/Transportation-System/Maps-&-Charts/RailRoad-Maps/2015RR_Map.pdf

There is limited access to commuter rail within the region. While the region is home to several Amtrak rail stops (in Mendota and Princeton) that connect to the once-daily Illinois Service routes and to major routes going from Chicago to St. Louis and across the US, these include only one or two trains per day, mid-day in each direction. Therefore, one could not reasonably use these to commute to one of the larger cities such as Chicago, nor are these routes useful for regular transit within the area.

Waterways

The Illinois River is an important economic resource within the area. The river connects to the Great Lakes through linkage to the Chicago River, Chicago Sanitary and Ship Canal and the Des Plaines River, flows through LaSalle and Bureau counties and links the region downriver to central Illinois, and flows into the Mississippi River at Grafton, Illinois in Jersey County. Thus, the river is a key linkage within the “Great Loop,” the major uninterrupted waterway flowing through the Eastern United States. Barge traffic along the river serves many industries along its course including significant agricultural companies. More than 30,000 barges travel the river in a given year carrying corn, soybeans and wheat from area farms and from elsewhere in the Heartland, petroleum to and from Chicago area refineries



and a range of other products. The River is critical to cooling of multiple power plants along its banks. One expert with the University of Illinois Extension believes that “The Illinois River is the most important inland water resource in the United States. The Illinois carries more tonnage and dollar value of commerce than the Mississippi north of St. Louis.”⁸³ The area should consider further ways to expand upon the Illinois River’s value, both in terms of shipping but also, as discussed above, in terms of its value as a natural resource for boating, fishing and other activities.

There are nine (9) lock & dams as part of the Illinois Waterway, two of which are within the region of this study.⁸⁴ The Starved Rock Lock & Dam, located in Ottawa, is 231 miles above the confluence of the Illinois River with the Mississippi River.⁸⁵ As indicated in the chart below, the top commodities that were transported through the dam make up some of the natural resources derived from the region. Food and Farm Products accounted for 3.1 million tons through the Starved Rock Lock & Dam in 2016. However, at the Marseilles Lock & Dam, the transportation of Food and Farm Products is nearly half. The Marseilles Lock is 244.6 miles above the confluence of the Illinois River with the Mississippi River at the foot of Bells Island.⁸⁶

⁸³ <https://web.extension.illinois.edu/illinoissteward/openarticle.cfm?ArticleID=137>

⁸⁴ <http://www.mvr.usace.army.mil/Missions/Navigation.aspx>

⁸⁵ <http://www.mvr.usace.army.mil/LinkClick.aspx?fileticket=3JCdsKr2l8o%3d&portalid=48>

⁸⁶ <http://www.mvr.usace.army.mil/LinkClick.aspx?fileticket=7BUgbF76ghA%3d&portalid=48>

Commodity (2016)	Starved Rock Tonnage	Marseilles Tonnage
Coal, Lignite, and Coal Coke	1,121,874	1,106,274
Petroleum and Petroleum Products	4,287,060	4,406,760
Chemicals and Related Products	3,436,083	3,229,472
Crude Materials, Inedible, Except Fuels	4,087,127	4,001,230
Primary Manufactured Goods	2,338,678	2,350,652
Food and Farm Products	3,105,424	1,826,923
Manufactured Equipment & Machinery	79,225	117,375
Waste Material	7,900	9,400
Unknown or Not Elsewhere Classified	25,000	42,500
TOTAL	18,488,371	17,090,586

The region also shares barge traffic along the Mississippi River with Iowa and the four most relevant lock-and-dams to this region are located in Fulton, IL, Dubuque, IA, Bellevue, IA, and Pleasant Valley, IA. All four of these dams transport more tonnage than Starved Rock and Marseilles, as indicated in the chart below from 2016 statistics. What is most significant in the lock-and-dams is the difference in amount of tonnage transported for Food and Farm Products. Dams along the Mississippi River transport nearly four-times the amount at the Starved Rock Lock & Dam and five-times that at Marseilles. As indicated earlier, the region is highly concentrated in agriculture and it is reflective in these statistics.

Commodity (2016)	Lock & Dam 11 (Dubuque, IA) ⁸⁷	Lock & Dam 12 (Bellevue, IA) ⁸⁸	Lock & Dam 13 (Fulton, IL) ⁸⁹	Lock & Dam 14 (Pleasant Valley, IA) ⁹⁰
Coal, Lignite, and Coal Coke	1,466,800	1,469,800	1,473,000	1,464,500
Petroleum and Petroleum Products	197,207	165,807	165,807	145,907
Chemicals and Related Products	2,801,982	3,291,837	3,290,237	3,952,992
Crude Materials, Inedible, Except Fuels	1,706,700	1,800,800	1,809,900	2,298,936
Primary Manufactured Goods	1,317,100	1,365,200	1,356,300	1,373,500
Food and Farm Products	11,388,747	12,641,747	12,933,347	14,066,470
Manufactured Equipment & Machinery	21,630	126,580	134,450	145,150
Waste Material	N/A	N/A	N/A	1,800
Unknown or Not Elsewhere Classified	3,200	3,200	3,200	3,800
TOTAL	18,903,366	20,864,971	21,166,241	23,453,055

⁸⁷ <http://www.mvr.usace.army.mil/LinkClick.aspx?fileticket=wiNpfKZBp8s%3d&portalid=48>

⁸⁸ <http://www.mvr.usace.army.mil/LinkClick.aspx?fileticket=tFSWA6cAzWA%3d&portalid=48>

⁸⁹ <http://www.mvr.usace.army.mil/LinkClick.aspx?fileticket=PmZEIkcgQU%3d&portalid=48>

⁹⁰ <http://www.mvr.usace.army.mil/LinkClick.aspx?fileticket=W-lajhG5qB4%3d&portalid=48>

Workforce Development

The workforce development system in the eight-county region is supported by NCI Works and the Workforce Innovation and Opportunity Act (WIOA) delivery entity BEST, Inc. along with partners including the State of Illinois Department of Employment Security (IDES), Department of Human Services and Department of Rehabilitation Services, Illinois Valley Community College, Sauk Valley Community College, Carroll County Housing Authority, National Able Network, and the Tri-County Opportunity Council. The NCI Works region has one comprehensive American Job Center (also known in Illinois as the Illinois workNet Centers) in Ottawa, IL, one Affiliate AJC in Sterling, IL, additional branch locations in Bureau, Carroll, Jo Daviess, Lee, and Ogle counties, and additional service sites at Sauk Valley and Illinois Valley Community College. It is critical for residents in the region to have access to job search/job training services and institutions that provide training opportunities are spread out amongst the region in places like Illinois Valley Community College, Sauk Valley Community College, Whiteside Area Career Center and other local community colleges. Area youth receive workforce services at these locations and at Area Career Centers at LaSalle Peru Township High School (covering several schools in Bureau and Putnam Counties), in Elizabeth (covering Jo Daviess and Carroll Counties), and in Ogle County in a coordinated partnership with neighboring DeKalb County. Support is also provided to the region through local chambers of commerce, economic development organizations, and local/regional government institutions.

These centers provide a range of career services including job counseling, job search assistance, resume/interview skills, career exploration, social and human service referrals/linkages and supports such as childcare and transportation. The centers also make referrals and provide funding for training at any education/training institution on the State of Illinois approved list of vendors. Key training institutions in the region that receive referrals through this program include the area's four community colleges and other training institutions. In addition, the centers are the source of a multitude of business services, including such work-based opportunities as on-the-job training, work experience/internship programs and Incumbent Worker Training Programs. The area's Business Services Team offers these services through a coordinated effort of state and local partners.

The other major force for support of the workforce and services to businesses and job seekers are the local economic development entities, chambers of commerce and related entities. There are at least fifteen distinct economic development entities, with several at the city or county level, usually housed within the local government, and a few other regional institutions focusing on several counties. These, including most notably the Blackhawk Hills Regional Council, North Central Illinois Council of Governments (NCICG), Tri-County Economic Development Alliance (TCEDA) and the Economic Development Corporation of North Central Illinois (EDC of NCI), work to advance the economic vitality of larger regions collectively as a whole. This is inclusive of the EDC of NCI and NCICG, both which serve Bureau, LaSalle, and Putnam Counties; Blackhawk Hills Regional Council which serves Carroll, Jo Daviess, Lee, Ogle, and Whiteside counties, and TCEDA which serves Carroll, Jo Daviess and Whiteside Counties.

Infrastructure Review Conclusion

As a geographically large, rural region, the area cannot be described as one coherent space. Some areas such as LaSalle County are relatively close to the major metropolitan area of Chicago, and may be able to leverage that metro area for economic development, while other portions (particularly the far northwest counties of Jo Daviess and Carroll Counties) are much more rural and cannot depend on any large metro area for their development.

The area has significant infrastructure, particularly in terms of rail and road, which are not always resources that serve the area, but rather pass through it. The area's rail, river and road access is important to the agricultural industry in the region. Further investigation into how that access is utilized for transporting crops and other agricultural products from the area's farms to markets in the surrounding region like Chicago metro area, and across the US, would be a valuable activity. The area should definitely work to capitalize on its transportation resources by leveraging them for development such as intermodal, warehousing/logistics and some of the retail/hospitality and tourism that can result from proximity to major transportation routes. As indicated in the labor market report, the Transportation and Warehousing industry is projected to grow over the next five years by nearly 1,100 jobs or 15%. Additionally, commuting data could inform needs for expansion of public transit options, especially geared towards jobseekers who have expressed concern with transportation/commute to work as an obstacle to employment.

The area has a comparably low cost of living compared to most of Illinois and certainly to the urban areas to the east. Other key resources as outlined in the narrative and CEDS plan include a strong tourism industry anchored to the east with Starved Rock State Park and to the west in the major tourist destination in Galena. Other major assets of the region include their abundant amount of natural resources. The region could make additional efforts to capitalize on its natural resources by coherent, collaborative marketing of these resources together, and expanding the accommodations (i.e., hospitality and other businesses) that can grow up around those major assets. The CEDS plan concurs with this in identifying "Failure to Recognize/Promote Opportunities for Eco-Tourism" and "Lack of Vision for outdoor recreational industry in the region" among regional weaknesses.⁹¹

The communities have significant resources in terms of social service, human service, and related services. One cannot know if these resources are "enough" to meet community needs, however, without further investigation including interviews or surveys of community leaders. There *are* a number of strong not-for-profit organizations and faith-based organizations that operate community-based services for a range of individual and family needs. These should be leveraged, and when gaps exist in services to address particular needs or the needs of specific populations, should be engaged to consider methods to respond.

This data, in conjunction with the data from the Underemployed Survey and wider Labor Market study, can help the area in continuing to identify key resources and create future plans. Taken in concert with the CEDS plans for the region and in collaboration with the economic development and community institutions, NCI Works can take the data presented, make further analyses to integrate the data with other sources of insight, and utilize this data as part of their wider economic development efforts.

⁹¹ CEDS, p.53.

Underemployed Workforce Survey Analysis

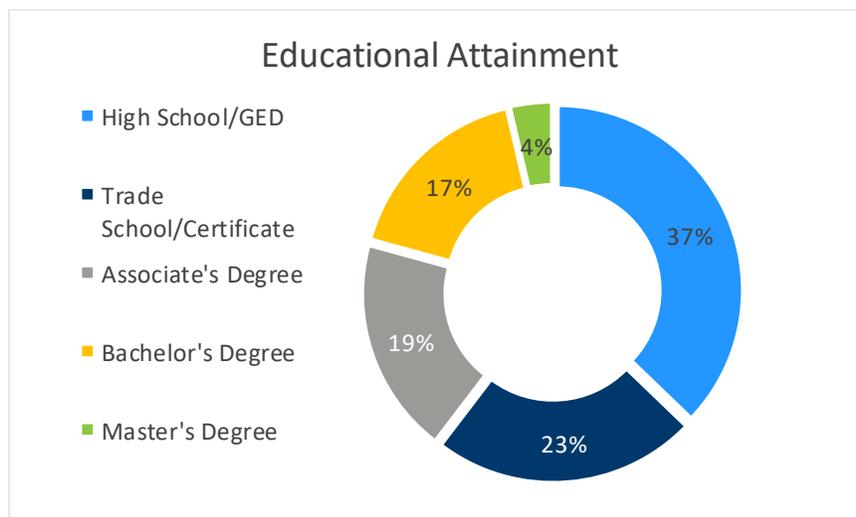
Two surveys were developed in partnership with NCI Works in order to determine the workforce talent needs of businesses in the eight-county region: the Individual Workforce Survey and the Business Workforce Survey. The Individual Survey was released on March 12, 2017 and closed on April 19, 2017. The Business Survey was released on March 20, 2017 and closed on April 19, 2017.

Individual Workforce Survey

This survey was provided to individuals seeking employment within the region. Surveys were administered by workforce professional staff to jobseekers who visited the American Job Centers in the region. Respondents were asked basic questions about worker’s age, location, educational achievement, employment status, income, and employment challenges. This survey was completed by 164 employees in the region who reside in the following counties:

County	Percentage of Survey Respondents
Bureau	10%
Carroll	4%
Jo Daviess	12%
LaSalle	27%
Lee	15%
Ogle	14%
Putnam	1%
Whiteside	12%
Other	5%

Nearly two-thirds of respondents were female (65.2%), and the majority were older than 45 years of age (58%). Another 36% were ages 26 to 45, and 7% were ages 19-25. Of respondents, just over a fifth (21%) earned a bachelor’s degree or higher.

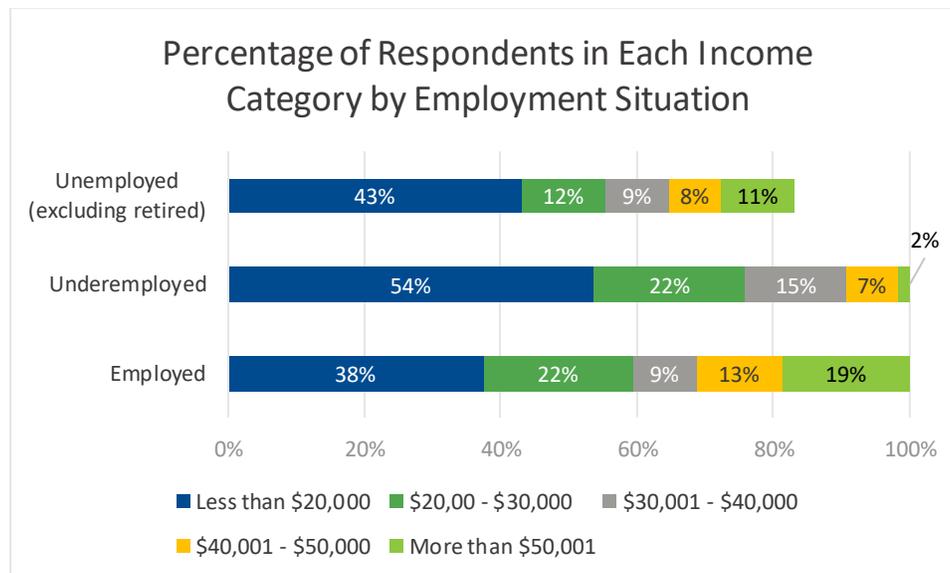


Employment Status and Challenges

About half of respondents to the survey reported being unemployed (about 48%). The other half of respondents reported their status as shown in the table below:

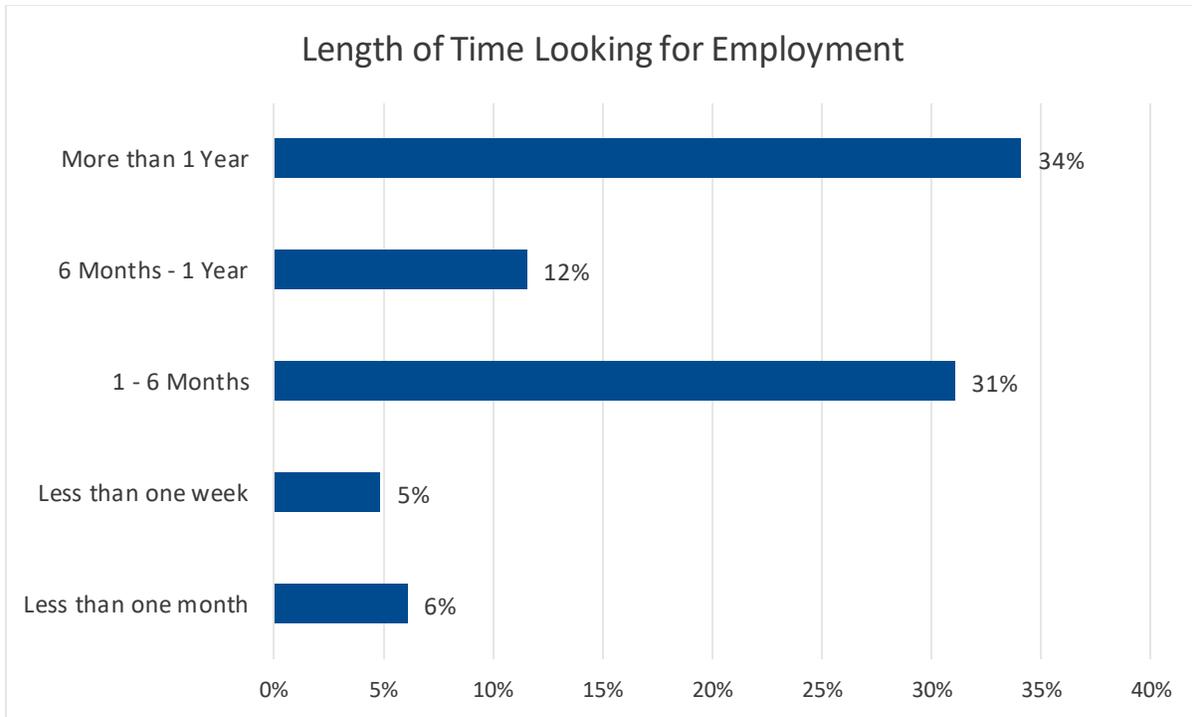
Employment Status	Percentage
I am currently working in a job/career that is commensurate with my skills, credentials and/or experience.	20%
I am currently working but my job is not commensurate with my skills, credentials, and/or experience.	13%
I am working part-time but I am in search for a full-time position.	11%
I am working full-time but unable to meet my family's financial needs.	6%
I am working at more than one job in order to meet my family's financial needs.	2%

Of all respondents, the largest proportion reported earning less than \$20,000 per year (43%). Another 35% of respondents earned between \$20,000 and \$50,000, and only 9% reported earning more than \$50,000 annually. However, individuals who reported being underemployed⁹² are more likely to report earning less than \$20,000 per year than those who believe their job is commensurate with their skills, credentials and experience (54% of underemployed respondents compared to 38% of employed).

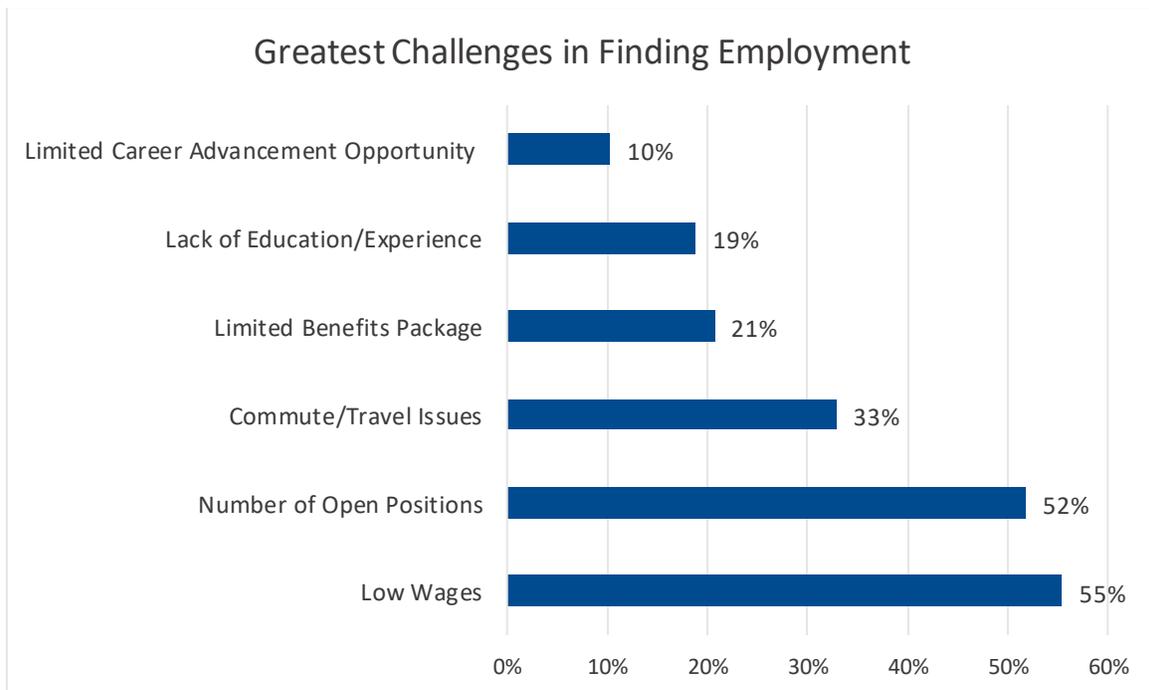


One-third of respondents reported that they have been looking for employment that meets their expectations for longer than a year (34%). Another 12% have been looking for employment for at least 6 months, but for less than a year.

⁹² Working in a job that is not commensurate with their skills; working more than one job; working part time, but seeking full-time work; working full time but unable to meet their family's needs.



Respondents reported that their greatest challenges in finding employment that meets their expectations are low wages and the limited/low number of open positions available. Open-ended responses revealed that age also is a large challenge to being hired, with many respondents commenting that companies often do not want to hire employees who are close to retirement.



Business Workforce Survey

This survey was provided to a variety of businesses located in the eight-county region. It included questions about employment numbers and projections, skills needs and gaps, education and training needs, training challenges, and desired industry recognized credentials.

The survey was initially emailed to a list, collected through infoUSA, of 4,358 individuals in leadership or human resources (HR) in businesses in the region; each company had between one and twenty contacts provided on the list. Information about the survey also was distributed by NCI Works to businesses from a list of the workforce system’s employers to answer the survey questions.

Responses from individuals at 89 companies were analyzed as part of this study.⁹³ Examples of the job titles of the individuals who responded include 12 presidents, 7 owners, 5 general managers, 5 human resources managers, 5 principals, 4 executive directors, and 4 CEOs. The companies represented by survey respondents are located in the following counties and conducted business in the following fields.

Counties	
LaSalle	28%
Whiteside	21%
Bureau	13%
Lee	11%
Jo Daviess	10%
Ogle	9%
Carroll	3%
Putnam	3%

Industries	
Manufacturing	18%
Health Care and Social Assistance	12%
Educational Services	11%
Agriculture, Forestry, Fishing and Hunting	7%
Finance and Insurance	6%
Transportation and Warehousing	4%
Wholesale or Retail Trade	4%
Accommodation and Hospitality	4%
None of the Above	33%

Employment Size and Growth

Most of the companies that responded with full-time employees have fewer than 50 full-time employees (60%), 34% have between 50 and 499 employees, and the last 6% have 500 employees or more. Additionally, the majority of companies that responded with part-time employees employ fewer than 10 part-time employees (60%), and only 9% of companies employ 50 or more.

Companies in the Manufacturing and Health Care/Social Assistance were the most likely to report having more than 100 employees as well as most likely to report having 10 to 49 employees. Other industries tend to report smaller numbers of employees. The industries most likely to report that they anticipate hiring more employees over the next 10 years due to company growth are reported in the table on the next page.

⁹³ Survey responses were not analyzed if the business was located outside of the NCI Works region, the individual taking it did not have a role in hiring, or if the respondent failed to answer more than three quarters of the survey questions.

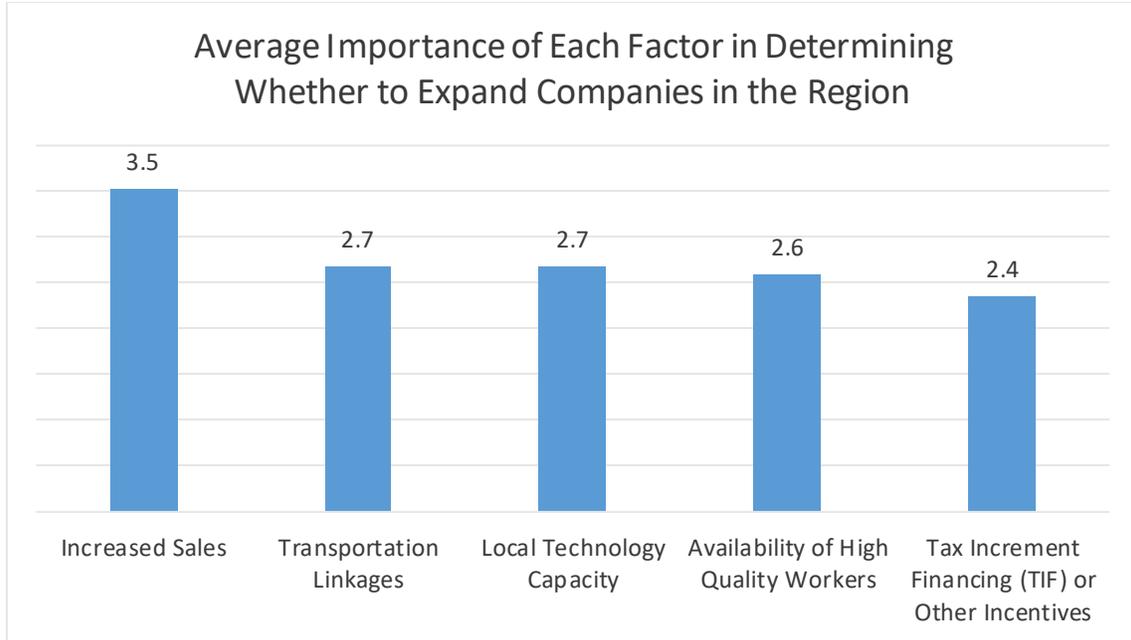
Percentage of Companies by Industry Anticipating Increased Hiring due to Growth	
Information Technology	100%
Utilities	100%
Professional, Scientific, and Technical Services	100%
Accommodation and Hospitality	100%
Agriculture, Forestry, Fishing and Hunting	83%
Manufacturing	75%
Transportation	75%
Construction	67%
Health Care and Social Assistance	64%
Finance and Insurance	60%
Wholesale or Retail Trade	50%
Arts Entertainment and Recreation	50%
None of these	50%
Educational Services	30%

More than half of responding companies are likely to add new employees in the next 10 years due to growth (57%). Survey respondents were provided five categories to select to describe the number of employees they planned to hire: 0-9; 10-24; 25-49; 50-99; and 100 or more. On average, those companies plan to add eight (8) new employees over the next five years and 13 over the next ten years. Overall, companies report the greatest percentage of available new jobs will be entry-level positions, followed by professional and skilled trade positions. The lowest reported percentage of new jobs were technical positions.

Arts/Entertainment/Recreation and Wholesale/Retail Trade are the industries that anticipate hiring the highest percentage of entry level jobs and Education and Finance/Insurance report the highest percentages of professional jobs.

Top 3 Industries Looking to Add Employees of Each Level			
Professional	Technical	Skilled Trade	Entry Level/Support
Educational Services	Information Technology	Public Administration	Arts/ Entertainment/ Recreation
Finance/ Insurance	Professional/ Scientific/ Technical	Construction	Wholesale/ Retail Trade
Health Care/ Social Assistance	Utilities	Transportation	Transportation

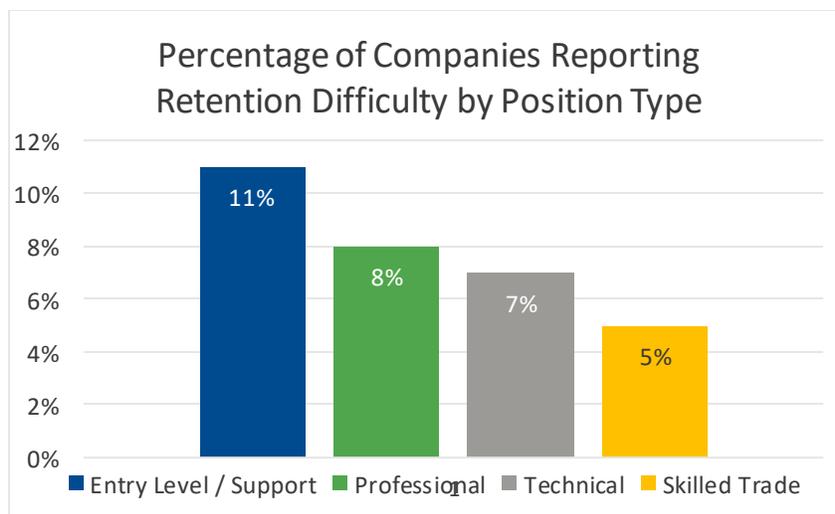
When determining whether to expand in the Northwest region of Illinois, the most important decision making factor that companies consider is increased sales (3.5 on a 5 point scale of very unimportant to very important), followed by local transportation and technology capacity.



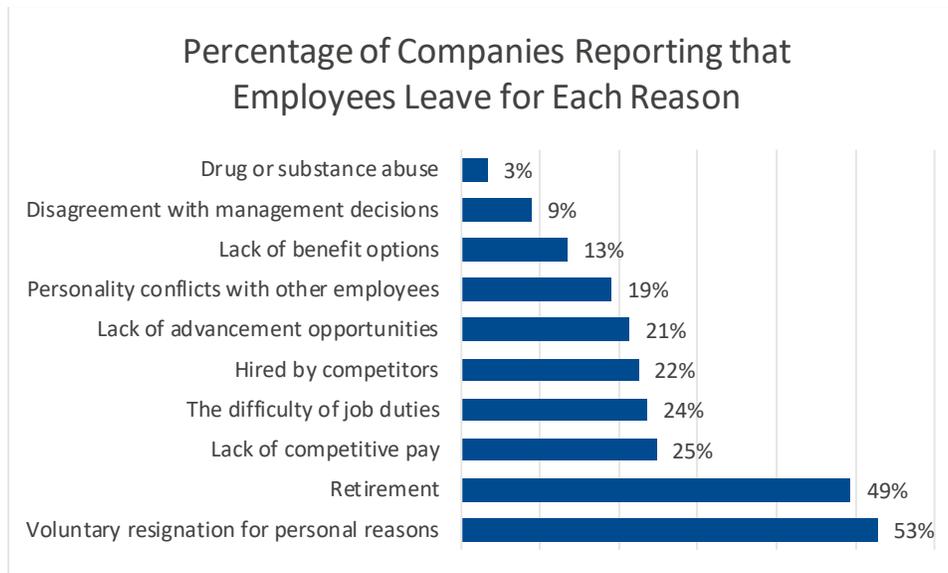
Employee Retention

Most companies anticipate losing fewer than 10 employees each year due to retirement, recession, or job replacement (81%). However, given that 60% of companies responding have fewer than 50 employees overall, a small job loss each year could have a significant effect on the company. An additional 16% of companies report losing 10-24 employees a year, and another 4% report 25 to 29 employees.

Overall, small percentages of respondents stated that their company had difficulty retaining employees in professional technical, skilled trade, and entry-level positions. The position type that was rated as difficult to fill by the most companies was entry-level or support positions (11%), followed by professional positions (8%). The position least reported as difficult to fill was skilled trade positions (5%).



Respondents reported that the top two reasons employees left their company were voluntary resignation and retirement. Other important factors include lack of competitive pay, difficulty of job duties, hiring by competitors, and lack of advancement opportunities. While some of these may be difficult for firms to mitigate (retirements and voluntary resignations), others like “lack of competitive pay” and “lack of advancement opportunities” can be addressed by businesses and the wider economic development community. Intermediaries should work with firms to support advancement and career pathway development, and firms should be encouraged to look at their wages in comparison to their peers’ firms and to consider how to either increase wages or find other ways to retain workers.

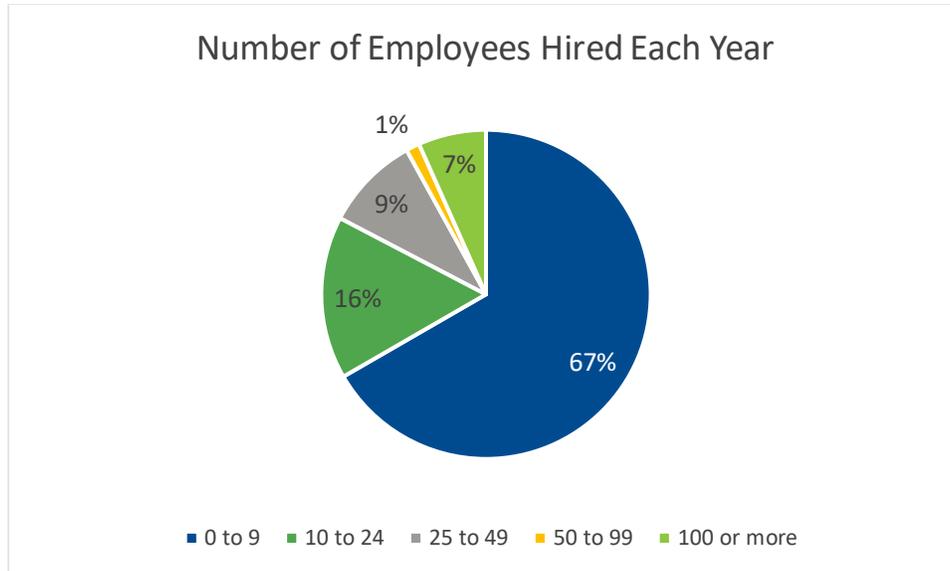


In total, 44 percent of companies reported having a succession plan in place for at least some of their positions. Open-ended responses about types of succession plans vary. The examples below provide a snapshot of the variety of open-ended responses companies provided about the depth and breadth of their succession plans.

- “We have a road map for all positions”
- “CEO, but needs updated”
- “We will replace the retiring [employees] with less experienced ones in order to cut expenses”
- “Key employees have succession plans”
- “As a job vacates, it is then posted if needed”
- “We identify potential leaders and pay for education and training”
- “Professional positions and skilled trade and craft positions are filled ahead of retirements to give opportunity for training”

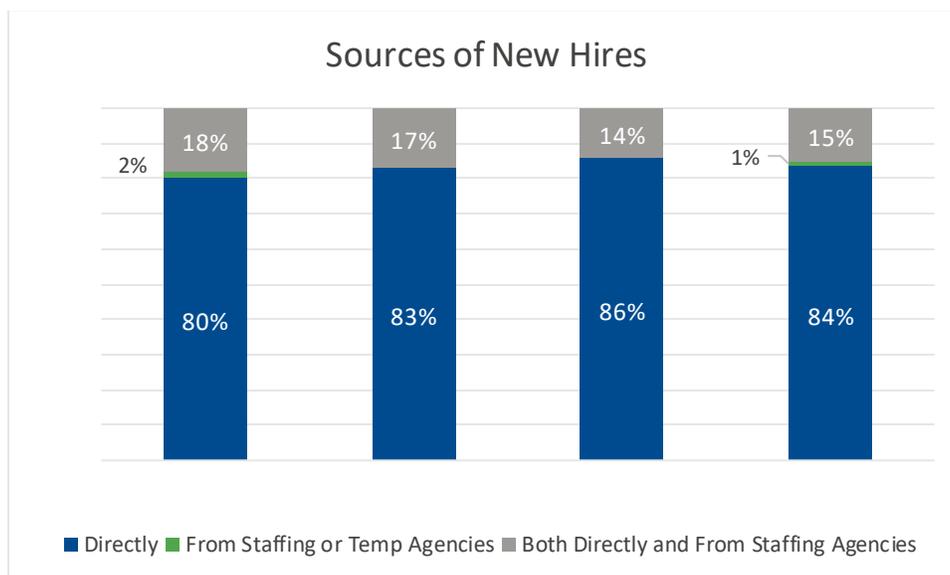
Hiring

The majority of companies that responded to the survey reported hiring an average of 0-9 employees per year (67%), a quarter reported hiring 10 to 49 employees each year, and another 8% reported hiring 50 or more employees annually.

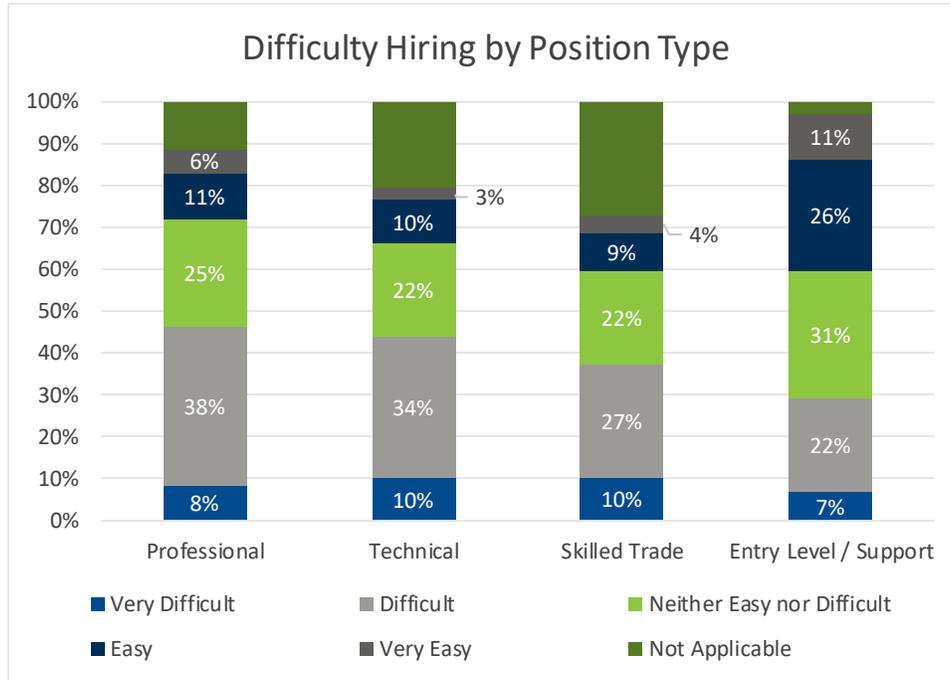


The majority of individuals currently employed by companies who completed the survey were ages 25 to 54 (67%), and only 14% were ages 16 to 24. However more than a third of job applications come from the younger age group (34%), compared to 55% from those ages 25 to 54. Additionally, 57% of respondents reported that they actively recruit individuals ages 16 to 24 to work for their companies.

Regardless of whether companies were hiring for professional, technical, skilled trade, or entry-level positions, new hires were most commonly sourced directly from the company themselves, and only a few companies utilized staffing or temp agencies.

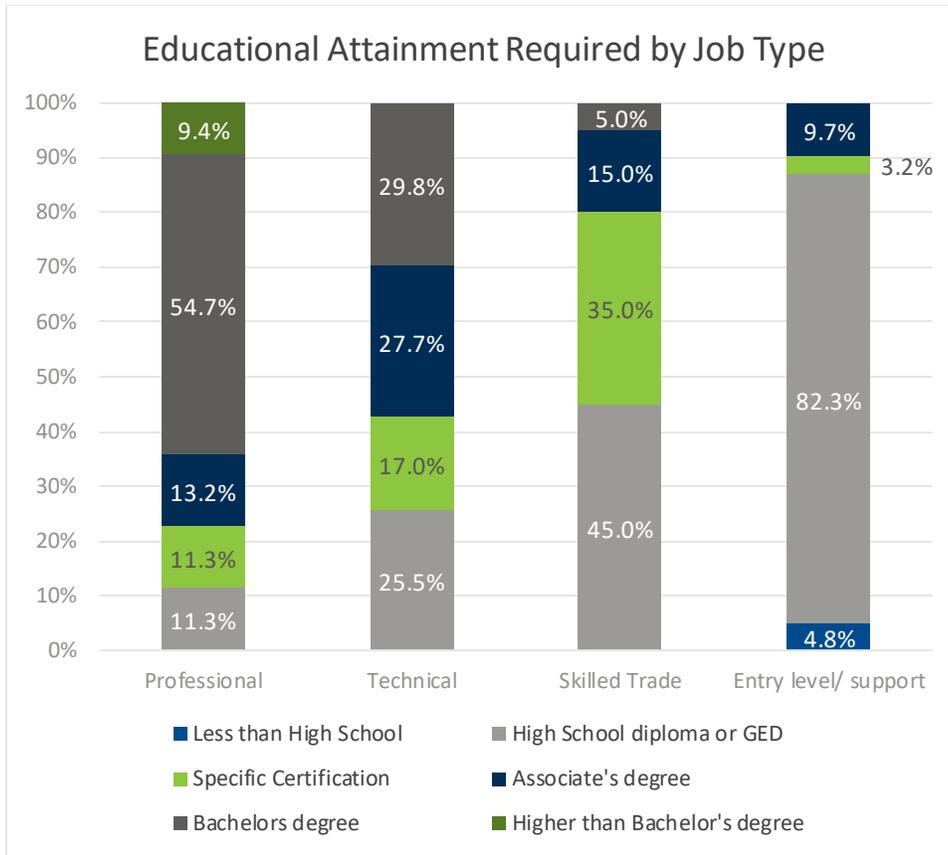


Companies reported that the greatest difficulty with hiring employees is at the professional level, with 46% of companies indicating that hiring for these positions is either difficult or very difficult. On the other hand, while companies reported the most difficulty in retaining individuals in entry-level jobs, they also reported the most ease at filling positions of this level (38% reporting these positions as easy or very easy to fill).



More than half of respondents stated that they do not believe that the applicant pool in their area is large enough to fill the jobs that companies provide (56%). While about a fifth of respondents (19%) said that individuals in the applicant pool in their area have the skills necessary to perform the open jobs, only 11% believed that those individuals were available for hire.

Overall, the majority of open jobs in the region require a high school diploma, special certification or associates degree. As expected, professional jobs had the highest educational attainment requirements and entry level/support jobs had the lowest requirements.



Open ended survey responses showed that the skills or credentials most difficult to find when hiring were communication, comprehension, customer service, critical thinking, technology, maintenance, management/supervisory and reliability.

The survey also asked respondents what hard and soft skills were most important for potential hires and which were most difficult to find among new hires. The list of skills was ranked by respondents on a Likert-type scale that ranged from “1” being very easy or very unimportant to “5” being very difficult or very important. Responses were then averaged to show overall ratings of importance or difficulty.

For soft skills, the items rated with the highest importance were being drug free, reliability, and integrity. Two of these, being drug free and integrity, also were rated in the top three easiest skills to find in the hiring pool.⁹⁴ However, reliability was ranked as the third most difficult to find, along with critical thinking and problem solving.

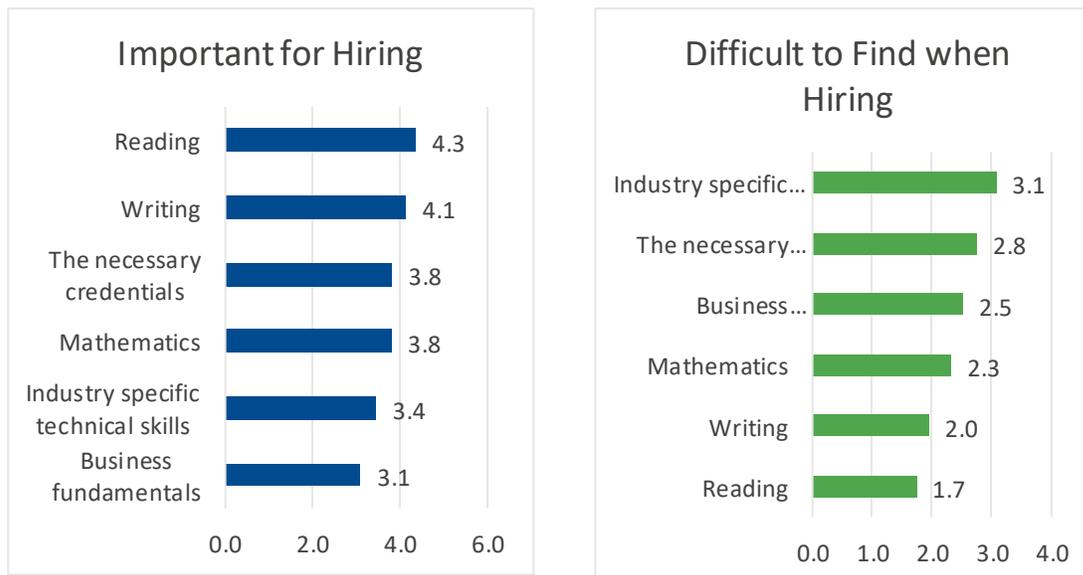
Other interesting takeaways from this table include that the important items of respect and teamwork were comparatively easy to find, but communication and professionalism were comparatively difficult to find when hiring. This matrix lends itself to a clear value of soft skills preparation among workers and

⁹⁴ Contrary to this survey finding, the BEST, Inc. team noted that their employer partners regularly report that applicants’ inability to pass drug screens is one of their biggest obstacles to hiring. The survey was of course not a complete representation of the region, so other real-time or direct data should always also be considered. The workforce system and other institutions should keep this in mind in developing worker preparation activities and human service initiatives to address drug use, particularly in helping workers understand that even limited or periodic use can still result in a failed drug screen.

potential workers in the community with that skill. The data from these graphics below may be valuable as a guide for education training programs seeking to work with students on the soft skills that are most valued by businesses in the region.

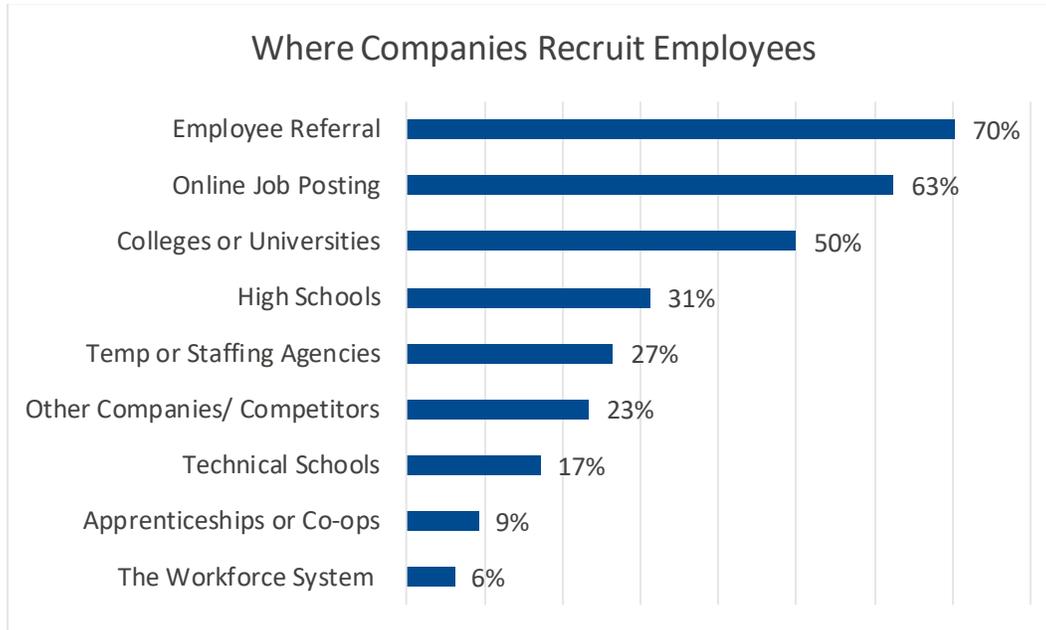


Hard skills are often unique to a specific field or business type, so for the purposes of this analysis, a focus was placed on general hard skills that are applicable across company type. The most important hard skills were reading and writing; however, these skills also ranked as some of the easiest to find in the applicant pool. Industry specific technical skills was the only item that scored above “neutral” (a score of 3) in difficulty to find. Industry-specific technical skills were so difficult to find, and still important (though less important) to hiring. This presents a real and tangible area where education and training institutions can work more closely with employers to listen and identify the real skills needed and integrate these skills more deeply into training and curricula.



Recruiting Employees

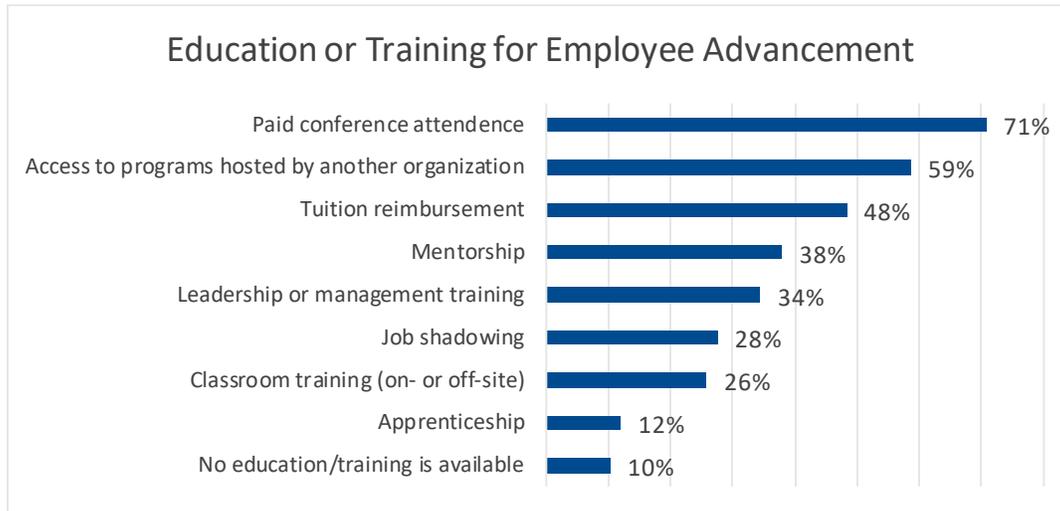
The majority of companies report hiring individuals who are referred to them by a current employee (70%) and 63% report posting jobs online using resources such as Career Builder, LinkedIn or Indeed. A smaller proportion of companies use the local workforce system, including resources like Illinois JobLink, NCI Works, BEST, Inc, etc. to recruit new hires. This data point suggests a lack of awareness among local businesses about the programs and services the workforce system offers in the region. It may be beneficial for the workforce system to increase marketing or other efforts to improve the visibility of their programs among employers.



Two-fifths of respondents believe that local education and training programs provide graduates with the skills necessary to be hired by their company (39%) and 28% believe that local education and training programs graduate enough people to fill their company's needs. Only about 9% of respondents reported that local education and training programs provide graduates with the necessary skills, yet do not believe those programs graduate enough students to fill their company's needs.

Employee Training

Nearly all companies offer some sort of education or training for employee advancement; 96% reported offering education or training for full-time and 62% for part-time employees. Most companies pay for employees to attend conferences in their field (70%) or access training or education programs that are pertinent to their jobs (59%). However, very few companies (10%) reported that no education or training is available to employees.



Based upon the open-ended responses, a wide array of responses were provided about the training or education programs companies need, but not currently available. Some answers to this question include conflict management, leadership training, business development, assistive technology, maintenance mechanic, and technician.

Underemployed Survey Conclusion

Many companies in the eight-county region anticipate hiring new employees over the next 10 years due to company growth. The majority of both newly opening jobs and jobs due to position turnover are likely to be entry-level positions which are the easiest for companies to fill because the levels of education and skill needed to qualify for those jobs is low. However, professional, technical and skilled trade jobs also will become available in a variety of industries over the next decade, especially as the aging population retires, and companies have more difficulty finding qualified employees for non-entry level jobs.

Companies tend to recruit new employees through employee referral and online job posting rather than directly from education and training programs. Additionally, most companies provide funding or other opportunities for their employees to pursue career advancement, and many of those opportunities are hosted by other organizations rather than directly through the employer.

Overall, while other skills may be more important or integral to the jobs that will be open over the next decade, the most coveted skills cross boundaries of industry or job type. Those much-needed include basic reading and math, and difficult-to-find include critical thinking, problem solving, reliability and decision-making. The need for these skills is seen both directly in survey responses as well as in open-ended responses regarding the need for training in areas like leadership and management.

State of the Workforce Final Recommendations

The NCI Works region is unique for myriad reasons. First, it produces a higher percentage of individuals who have a high school diploma/GED compared statewide and nationally. In addition, many of the top industry sectors provide competitive yearly earnings, especially within the Manufacturing and Health Care and Social Assistance sectors. With that said, there are a number of opportunities for improvement and this comprehensive report identifies four (4) recommendations the region should invest in for the future:

1. **Establish and Support Sector Partnerships**
2. **Develop Competency-Based Career Pathways**
3. **Promote the Public Workforce System**
4. **Capitalize on Natural Resources and Tourism Opportunities**

Establish and Support Sector Partnerships

The region has the ability to invest in sector partnerships locally and become competitive in a world economy. Take healthcare for example. As mentioned earlier, the region is served by eleven comprehensive hospitals and several other urgent care facilities. With the number of community colleges available, there is a real opportunity for the healthcare industry to collaborate with these institutions to produce a higher quality workforce. Registered nurse occupations are projected to grow over the next five years, filling 103 jobs that pay a high hourly wage of \$25.05. As the baby boomer generation continues to age, occupations within the healthcare industry are projected to increase and having that workforce readily available is critical. With the help of this report and further exploration/investigation with healthcare industry stakeholders, the region can utilize a wealth of data to plan for the needs of the future. Regardless of the industry, businesses all have similar concerns when it comes to hiring and collaborating to address those concerns benefit everyone. By assisting in establishing and supporting industry-led sector partnerships, the region can work collaboratively in solving many of their challenges.

Develop Competency-Based Career Pathways

Harnessing the collective input from the Sector Partnerships, the region can work on the development of Career Pathways that are based on the competencies and skill needed by local industry. Preparing for the future, the industries that are projected to grow most markedly over the next five years include Manufacturing and Transportation and Warehousing. The region is home to two community colleges, two technical trade schools, seventy-three school districts, and over one hundred and fifty schools which, when combined together, creates the perfect opportunity for preparing the workforce to fill these in-demand jobs. In addition, the Agriculture industry is one that makes the region unique. With a location quotient of 7.41, the industry has experienced an increase of nearly 100 jobs over the last five years. Local school districts can work with their neighboring community colleges and trade schools to

develop curricula for students interested in these targeted sectors. In order to create a talent pipeline that is primed with skilled workers necessary to fill the in-demand occupations, educational institutions should collaborate with businesses to create latticed, articulated training programs. As a result, business needs will be taught in courses that may not be part of a traditional curriculum. These partnerships can extend to work-based learning opportunities with local employers to educate and inform students of the career opportunities within the region. The number of students with an Associate’s Degree or higher can also increase within the region as this workforce continually advances their skills and training. As noted earlier, LaSalle County is geographically located near major highway intersections so it comes to no surprise that Transportation and Warehousing is rising to become in-demand industry sectors. In counties near major highways, like LaSalle County, a focus could be placed on training for warehouse and logistics to best meet the needs of that local workforce.

Promote the Public Workforce System

In order to have a strong and sustainable workforce system, it is critical that the public have an understanding of its purpose. The findings from the surveys suggest that the region may be able to achieve additional success by focusing on an outlook promotion of its workforce system in the community. The AJC/Illinois workNet Centers, Affiliates and branch sites provide a wide range of services to the public including resume writing, career coaching, interview preparation, job search, and more and the region should promote a marketing campaign to highlight all of the services available. As mentioned earlier, BEST, Inc. completed a resource-mapping guide in 2016 that can be a utilized in a number of ways. For example, as indicated in the underemployed survey and infrastructure review, there are significant limitations in affordable multi-family housing developments and in transportation services across the region. These challenges may continue to both limit access for younger workers and reduce the attractiveness of the region to them. Workforce programs should focus on partnerships to develop ride-share programs and other transportation services and collaborate with economic developers to broaden housing options to help expand access. For jobseekers who do not know about the workforce system, the system’s resources serve a limited purpose. Another marketing campaign the workforce system can implement is an “In-Demand Industry Info Session” hosted at the AJC’s where jobseekers can learn about careers that are and will be in-demand within the region. In these sessions, the workforce system can provide jobseekers with current information on how to access opportunities in the region’s growing industries and in-demand occupations, such as required training, experience, expectations, etc. so they are better prepared to pursue career paths in those industries. The workforce system should focus on building relationships with local employers for job shadowing, internships, and other work-based learning opportunities to provide jobseekers a 360-degree insight into the most lucrative occupations.

Capitalize on Natural Resources and Tourism Opportunities

As noted in the Infrastructure Review, Starved Rock State Park is at the center of an impressive array of natural sites and other tourist attractions across the region. While research has shown good stewardship of these resources, the county and regional economic development institutions should continue to work to leverage these resources and collaborate with them to continue to support regional development. The region’s cultural, natural and other tourism assets are not as coordinated as the resources in some other regions, so it is recommended that the workforce, economic development and



tourism agencies work in coordination to build on these resources in a coherent aggressive marketing effort and the expansion of some of the supportive institutions that can support these regional assets. Expanding agritourism, expanding the hospitality offerings in proximity to the parks and other tourist destinations, and conducting further research to identify opportunities to make the region a destination for longer stays should all be considered, both as economic ends unto themselves but also as key opportunities for workforce development in the region. Thus, it will be critical to strengthen linkages with the area colleges to prepare workers for some of the higher-skilled opportunities that can result from these economic investments.