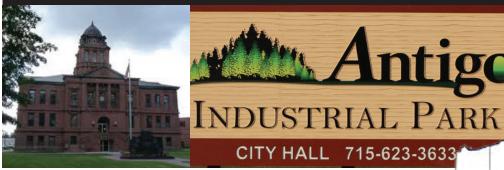
Langlade County • Report











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PREFACE

In the wake of the recent Recession, and in the midst of a stagnant recovery, the primary, essential question that is facing policy makers across the globe is the same: "What drives economic growth?"

The answer is fairly simple, and is addressed in any rudimentary Economics class:

To grow an economy, there must be an increase in the Demand for the products and/or services produced within that economy. As a result in the increased Demand, businesses will respond by increasing the Supply of that product or service - resulting, hopefully, in new hires and increased volume of monetary flow in the area.

As national policy makers grapple with how to best bolster Demand, it falls to local policy makers and businesses to ensure that the Supply side of the equation is ready to meet tomorrow's needs. For businesses, this means continually offering goods and services that create value for the local, regional, national, and global consumer. For policy makers, it means establishing a friendly business environment and ensuring that a steady flow of workers is available to work, producing the goods and services that consumers demand.

For many Wisconsin counties, particularly those in the Northern areas, the perennial challenge of the next 30 years will be providing a steady flow of workers to businesses that choose to locate here. It is particularly imperative for Wisconsin's northern Counties to mobilize on this issue. From championing reform in current broadband connectivity policies at the State level, to building coalitions with existing businesses to attract talent — workforce development, attraction and retention will be the lynchpins to Wisconsin's economic prosperity, particularly the northern Counties' service area.

Continuous improvements and innovations in technology may offset demand for labor; however, these offsets would require overhauls in the economic fabric as we know it today. While it is impossible to predict the future, it is imperative that the programs and policies implemented actively work to shape it into one that could provide an opportunity for prosperity to area residents and businesses.

To achieve this, new partnerships which mingle public and private initiatives and dollars in a targeted manner will be required. Active coalitions aimed at addressing both the pressing issues of today, as well as the structural challenges impending growth tomorrow, will be required. Creative thinking will not be enough; creative action will be required.

While the aging workforce and associated challenges are not the main topics of this report, it is important for takeholders of the Langlade County Economic Corporation to read the brief provided herein, as well as further research this well-documented and pervasive issue.

LOCAL CLUSTER AND TARGETED INDUSTRY ANALYSIS, LANGLADE COUNTY, WISCONSIN

Overview

Cluster analysis reports enable users to develop a targeted, market-aware and data-driven approach to business or industry cluster development. This report was developed for the Langlade County Economic Development Corporation (LCEDC) and combines local, regional and national information and datasets in its function and analysis. The purpose of this report is to drive a proactive and asset-based approach to economic development for the LCEDC territory.

In order to provide context and comparability, LCEDC was asked to provide a self-defined region by which Langlade County data would be compared throughout this report (henceforth referred to as the 'Defined Region'). By design, the identification of this region is an informal 'process,' and based on the perceptions of LCEDC stakeholders. This practice is intended to address perception-based questions of regional prosperity, linkages, and overall market conditions that often invade data-driven studies and approaches. By factoring for perceptions, the data sets can break through these often personal nuances and inform data-driven strategies for future growth.

Definitions¹

Industry clusters are rooted by existing, complimentary and competitive firms that operate within the same or a related market space. Developing clusters around existing firms which are ripe for expansion ensures the organizational goals of economic development entities are best positioned for success.

Key to cluster development is the ability to both understand and leverage the unique strengths and attributes of a region that: a) organically fostered the development of the cluster to-date, and b) will aid in the enhanced development of the cluster by employing a cluster-based development strategy.

Once the foundation for the cluster has been identified, development organizations must engage in dialogue with cluster members in order to gain an awareness of the key area industries' national and global market environment. This awareness enables local officials to effectively develop and enhance infrastructure and competencies aimed at key cluster and industry retention and expansion. In addition, these partnerships with C-Suite executives for the local cluster drivers act as a reliable, direct resource for industry information, supply chain needs and development, as well as targeted attraction contacts.

Each cluster identified within a region has different needs and is leveraging different area assets. As a result, utilizing the same core principles, but engaging in separate, unique strategies and action plans as defined by industry needs, is imperative to developing multiple clusters within a region.

That said, the most important driver for long-term cluster development is the fostering of an environment which helps new clusters emerge organically. While it is possible to leverage assets in an attempt to develop new clusters from scratch, it is difficult and often not cost-effective. Supporting organic cluster development may include programs designed to support research and knowledge creation, providing or enhancing the pipeline for new venture as well as gap financing, or simply the establishment of information and referral programs that works to support both entrepreneurship as well as small business growth.

Methodology

Establish Baseline of existing industry mix and concentration

As cluster development is rooted in existing industries and firms, an inventory of key area industries was developed utilizing a combination of locally-provided datasets and national providers. In addition, a review of associated supporting assets was conducted. This Industry and asset overview can be found in Appendix A.

Cataloging place-based industry drivers and support mechanisms is critical to understanding the established patterns, relationships, and motivations for operations for co-location in Langlade County. Most of these critical connections have been identified by LCEDC, and are highlighted, by industry, on the LCEDC website. This is evidence of a well-established understanding of the local business landscape, climate, and networks; a key competency when providing business assistance, developing policy, and when implementing retention, expansion and attraction strategies.

Review both preceding and projected industry trends

The Cluster Analysis product is predicated on the concept of developing place-based and data-driven strategies for fostering the growth of local business networks. Key to this process is the collection of essential datasets for the LCEDC service area as well as for the Defined Region. These datasets serve to illustrate the industrial landscape as well as outline workforce assets in the area.

Baseline reports for both Langlade County as well as the Defined Region were collected, reviewed, and outlined in the following pages. Key Takeaways from each report serve to inform the development of recommendations for areas of focus for future strategy and tactic development.

Compare and analyze local data with Regional and Statewide data

By comparing local data with Regional and Statewide data (through the use of a Location Quotient² analysis and Gap Analysis reports) existing area clusters, at various stages of development, are identified and categorized

Generally speaking, Location Quotients measure the overall density of an industry or set of industries in a given area vs. a larger area (i.e. County vs. State). While useful, Location Quotients do have nuances that can be deceptive (for full description, see 'Introduction to Location Quotients,' page 15).

Gap Analyses move beyond Location Quotients to identify specific industries' target areas that may be ripe for development, based on leakage in the current supply network for various industries. For the purposes of this report, the Gap Analyses provided are only for targeted industries, based on a synthesis of Location Quotient datasets, local industry awareness, documented local trends and documented macro industry trends.

Provide detailed profile of clusters, including market gaps and areas of growth potential

Recommendations for areas of focus in both policy and practice for Langlade County Economic Development Corporation's service area can be found beginning on page 75 of this report. Every effort has been made to provide recommendations that are implementation ready as well as data- and market-driven.

Key takeaways from each dataset have been incorporated, in whole or in part, into the recommendations provided in this section; therefore, rationale and data linkages should be readily accessible to laymen and stakeholder report users.

Develop recommendations for areas of business recruitment, programming and focus

Report users will be able to leverage the data found in this report when developing economic growth policies for the LCEDC service territory. Examples of common questions or dilemmas that this report either addresses specifically, or provides salient data points as a baseline for discussion and investigation, are outlined below:

Determine development targets – Which industries should we pursue, and what will the impact be? What are the target occupations? How much do the jobs pay? This approach is not only great for planning, but it also creates credibility and support for communication and marketing.

Make better planning decisions – What infrastructure is lacking for targeted industries? Does sufficient infrastructure exist – both traditional and life-style based – to attract target industries' desired workforce?

Support jobseeker and/or student success, retention – Are current education and training programs sufficiently serving targeted industries? Where are the education and training gaps? What are the industry trends of the future – and are necessary programs being provided to fill those future positions?

Streamline operations via a focused approach – Agencies that are tasked with supporting both workforce and economic development efforts can suffer a lack of focus. Engaging in a data- and local market- based approach enables administrators to explain and justify policies that bridge the gaps in services, streamline operations and build communication and collaboration for the organization.

- 1. Gain broader support As with most efforts, the approach outlined in this report is most effective, and best serves area businesses and jobseekers, when implemented in a manner that invites similarly-tasked organizations into a coordinated effort with shared goals. This report provides data linked with local market information the driving force behind effective goal development.
- 2. Align workforce development with local market conditions Program placement rates are marketing tools for both universities and training programs. Working to enhance local placement of program graduates is a win-win for both businesses and education / training institutions that serve the LCEDC service territory. Data found within this report can be utilized as a baseline for further investigation when working with education / training institutions in program development for targeted industries.
- 3. Pursue dollars for sustainable programs When pursuing public, private, grant and/or foundation dollars, demonstrating ROI both in terms of dollars and community impact is essential. Data sets within this report can both serve to "tell the story" of the service territory, as well as provide a baseline for measuring program success.

DATA PRESENTATION AND ANALYSIS

Introduction to the Data

The Data that is presented throughout this report builds on a series of Economic Baselines intended to serve as an inventory of current conditions. These baselines include information such as percentages of jobs and associated earnings per industry, poverty rates, and cost of living analysis, which are profiled for both Langlade County as well as the Defined Region (Langlade, Lincoln, Forest, Oconto and Oneida Counties).

Once Baselines have been established, Industry Trends are outlined, including both a historical perspective as well as 10-year projections for both the County and the Defined Region. The historical perspective (beginning in 2007) provides a context for the local business environment as a whole. While the data falls short of providing causation, one attempts to infer how global, national, and regional business environment shifts may have affected local growth to-date.

In an effort to further qualify and benchmark area industries, Location Quotients for both Langlade County and the Defined Region are examined. This information is further supplemented by the identification of local and regional export industries as well as a regional Gap Analysis.

Finally, this report will feature a brief discussion regarding Workforce Trends and Topics as a key driver for Langlade County's economic success.

Each dataset is the result of Input-Output Modeling through extrapolations from over 90 datasets utilized by the EMSI Analyst data product (EMSI Complete Employment – 2013.4). As a result, some sector definitions and data may not follow NAICS classifications or resultant datasets found through providers such as the US Census Bureau. That said, the data provided is the result of a diversified approach that allows for area nuance with results unconstrained by federal collection and dissemination timelines. An example of such datasets is the Langlade County Economic Baseline. A briefing on EMSI data sources, where applicable, can be found in the endnotes and/or the appendix for this report³.

I. Local and Regional Baselines

Defining a Living Wage

Overview

While industry concentrations and earnings ratios are informative tools when describing the economic landscape, implications for the data - such as poverty rates and cost of living effects - translate data points into salient financial health measures for area residents.

Poverty rates and cost of living considerations were collected for both Langlade County as well as the Defined Region. Applicable data was then compared against Average Wage per Worker information per industry.

Poverty rate information was collected from the U.S. Census Bureau⁴, as updated December 2013. Cost of living / living wage information was extracted from the MIT Living Wage Calculator, as publicly presented January 2014.

In addition to Living Wage information and Poverty Rates, worker commuter patterns were also considered, and gathered from the May 2013 "County-to-County Worker Flow in Wisconsin" report, provided by the State of Wisconsin Department of Workforce Development Office of Economic Advisors.

Introduction: MIT Living Wage Calculator

In order to establish a baseline measurement for living wage, this report references the MIT Living Wage Calculator⁵ tool, which calculates minimum earnings required to support core activities (food, housing, childcare, medical expenses, etc.) for various family structures. It was first developed in 2004, and has been updated with various data iterations since. For more information about this calculator, see endnote (v) or visit www.livingwage.mit.edu.

MIT Living Wage Calculator per Region/Area

	1 Adult 1 Child	1 Adult 2 Children	1 Adult 3 Children	2 Adults 1 Child	2 Adults 2 Children	2 Adults 3 Children
Langlade Co	\$18.79	\$25.48	\$33.21	\$16.16	\$17.61	\$20.56
Defined Region*	\$18.87	\$25.57	\$33.36	\$16.24	\$17.91	\$20.76
Wisconsin	\$19.95	\$26.64	\$34.60	\$17.31	\$18.74	\$21.94

^{*}Figures are the average value per category for all counties in the region.

Income Estimates and Poverty Rates per Region/Area

	Per Capita Money Income Past 12 months, 2012 dollars	Median Household Income	Persons below poverty level, (%, 2008-2012)
Langlade Co	\$23,064	\$42,958	13.2
Defined Region*	\$24,096	\$45,282	14.78
Wisconsin	\$27,426	\$52,627	12.5

^{*}Figures are the average value per category for all counties in the region.

Data Summary

In a 'traditional' household comprised of 2 adults and 2 children, the minimum annual wage required to sustain core life activities/expenditures in Langlade County is \$36,629 (\$17.61 x 2080hrs / year); well below the Median Household Income of \$42,958 / year.

Eight industries which are located within the County pay wages that meet or exceed this standard. These eight industries account for 35.4% of all private sector jobs in the area; 45% of area jobs overall.

Within the Defined Region, the minimum annual wage required (under the same parameters) is \$37,253 (\$17.91 x 2080hrs / year), also below the averaged Median Household Income of \$45,282 /year. Coincidentally, the same eight industries meet or exceed this standard, and represent 32.9% of all private sector jobs, 45.9% of area jobs overall.

Current 'living wage' Industries are: Utilities (0.2% All Area Jobs [AAJ] / 0.2% All Regional Jobs [ARJ]); Manufacturing (14.4% AAJ / 11.8% ARJ); Wholesale Trade (2.6% AAJ / 2.0% ARJ); Transportation & Warehousing (4.2% AAJ / 3.3% ARJ); Finance & Insurance (3.9% AAJ / 4.7% ARJ); Management of Companies and Enterprises (0.2% AAJ / 0.5% ARJ); Health Care and Social Assistance (9.9% AAJ / 10.4% ARJ); Government (9.6% AAJ; 13% ARJ).

Comparatively, in the State of Wisconsin (in 'traditional' households comprised of 2 adults and 2 children) the annual minimum wage required is \$38,980; well below the Median Household Income of \$52,627 per year.

Industries that pay an average annual wage (AAW) above the MIT Living Wage standard are: Mining, Quarrying; Oil and Gas Extraction (0.1% Jobs, \$58,900 AAW); Utilities (0.4% Jobs, \$98,082 AAW); Construction (4.6% Jobs, \$44,951 AAW); Manufacturing (15.2% Jobs, \$52,968); Wholesale Trade (4.0% Jobs, \$57,007); Transportation and Warehousing (10.1% Jobs, \$40,164 AAW); Information (1.6% Jobs, \$56,648 AAW); Finance and Insurance (4.5% Jobs, \$63,428 AAW); Professional, Scientific and Technical Service (3.9% Jobs, \$59,469 AAW); Management of Companies and Enterprises (1.8% Jobs, \$86,028 AAW); Health Care and Social Assistance (12.6% Jobs, \$43,084 AAW); Government (13.8% Jobs, \$40,919 AAW).

Key Takeaway:

The Living Wage for Langlade County is \$36,629. Eight industries that are located within the County pay wages that meet or exceed this standard. These eight industries account for 35.4% of all private sector jobs in the area; 45% of area jobs overall.

The Living Wage for the Defined Region is \$37,253. The same eight industries that meet or exceed this standard in Langlade County are represented in the data for the Defined Region. These industries represent 32.9% of all private sector jobs, 45.9% of the Region's jobs overall.

Local & Regional Baselines Jobs and Earnings in Langlade County

Langlade County - Jobs per Industry

INDUSTRIES MEASURING LESS THAN 3% OF JOBS:

Private Educational Services 14 (0.1%)

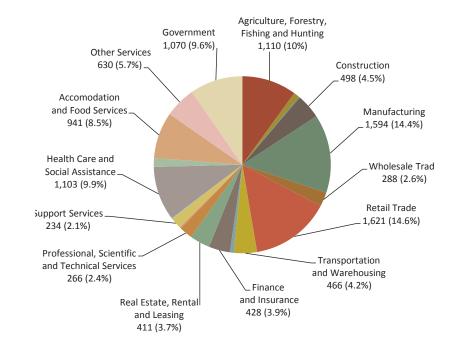
Management of Companies and Enterprises 25 (0.2%)

Utilities 20 (0.2%)

Information 82 (0.7%)

Mining, Quarrying, Oil and Gas Extraction 121 (1.1%)

Arts, Entertainment and Recreation 177 (1.6%)



Langlade County - Earnings per Industry

INDUSTRIES MEASURING 1% OR LESS OF ALL AREA EARNINGS

Mining, Quarrying; Oil and Natural Gas Extraction

AAWW: \$30,573 % AAE: 1.0

Management of Companies and Enterprises

AAWW: \$86,315 % AAE: 0.6 Information AAWW: \$24,324 % AAE: 0.5

Arts, Entertainment, and Recreation

AAWW: \$10,921 % AE: 0.5 Utilities

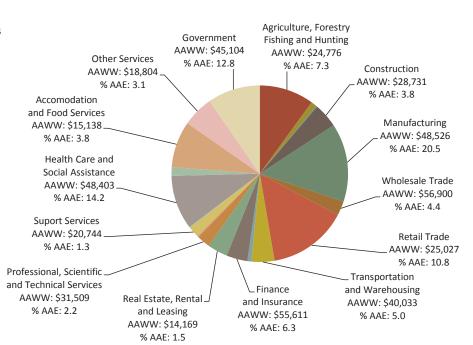
AAWW: \$66,571 % AAE: 0.4

Educational Services (Private)

AAWW: \$8,005 % AE: 0.03

AAWW: Average Annual Wage per Worker

AAE: All Area Earnings



Jobs, Earnings per Industry

Industry	Jobs	% AAJ	Wages per Industry	% AAE	Ave. Wage per Worker
Agriculture, Forestry, Fishing and Hunting	1,110	10.0	\$27,500,959	7.3	\$24,776
Mining, Quarrying; Oil and Gas Extraction	121	1.1	\$3,699,319	1.0	\$30,573
Utilities	20	0.2	\$1,331,423	0.4	\$66,571
Construction	498	4.5	\$14,308,106	3.8	\$28,731
Manufacturing	1,594	14.4	\$77,350,089	20.5	\$48,526
Wholesale Trade	288	2.6	\$16,387,232	4.4	\$56,900
Retail Trade	1,621	14.6	\$40,568,193	10.8	\$25,027
Transportation and Warehousing	466	4.2	\$18,655,569	5.0	\$40,033
Information	82	0.7	\$1,994,586	0.5	\$24,324
Finance and Insurance	428	3.9	\$23,801,711	6.3	\$55,611
Real Estate and Rental and Leasing	411	3.7	\$5,823,367	1.5	\$14,169
Professional, Scientific, and Technical Services	266	2.4	\$8,381,424	2.2	\$31,509
Management of Companies and Enterprises	25	0.2	\$2,157,873	0.6	\$86,315
Support Services	234	2.1	\$4,854,051	1.3	\$20,744
Educational Services (Private)	14	0.1	\$112,065	0.03	\$8,005
Health Care and Social Assistance	1,103	9.9	\$53,388,489	14.2	\$48,403
Arts, Entertainment, and Recreation	177	1.6	\$1,932,960	0.5	\$10,921
Accommodation and Food Services	941	8.5	\$14,245,087	3.8	\$15,138
Other Services (except Public Administration)	630	5.7	\$11,846,567	3.1	\$18,804
Government	1,070	9.6	\$48,261,353	12.8	\$45,104
Totals	11,099	100.0	\$376,600,423	100.0	\$35,009

% AAJ: Percentage of All Area Jobs per Industry %AAE: Percentage of All Area Earnings per Industry

Data Summary

In terms of direct employment/jobs numbers, Langlade County is well-diversified, with six sectors sharing 67% of all jobs. The Manufacturing and Retail sectors represent 14.4% and 14.6% of jobs, while the remaining four sectors are fairly evenly split, ie: Agriculture, etc. (10%), Health Care and Social Assistance (9.9%), Government (9.6%) and Accommodation and Food Services (8.5%).

Notably, while the Retail and Manufacturing essentially split the title of largest employment sector, Retail earnings account for only 10.8% of All Area Earnings (AAE), while Manufacturing positions represent 20.5% of AAE. Earnings via the Manufacturing sector outpace the earnings of the next closest industry – Health Care and Social Assistance—by more than six percentage points. This underscores the importance of Manufacturing to the economic health of Langlade County, as well as highlights the challenges that recent losses in this sector presents for the health of the economy as a whole.

Jobs and Earnings in the Defined Region

Defined Region - Jobs per Industry

INDUSTRIES MEASURING LESS THAN 2% OF ALL REGIONAL JOBS:

Arts, Entertainment and Recreation 1,271 (1.8%)

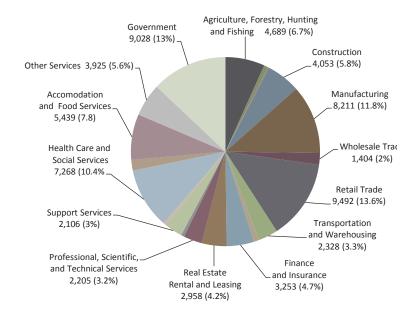
Information 643 (0.9%)

Mining, Quarrying; Oil and Gas Extraction 465 (0.7)

Private Educational Services 393 (0.6%)

Management of Companies and Enterprises 381 (0.5%)

Utilities 165 (0.2%)



Jobs, Earnings per Industry

Defined Region - Earnings per Industry

INDUSTRIES MEASURING 1% OR LESS OF ALL REGIONAL EARNINGS:

Management of Companies and Enterprises

AAWW: \$62,198 % ARE: 1.0 Information AAWW: \$36,892 % ARE: 1.0 Utilities

AAWW: \$101,188 % ARE: 0.7

Arts, Entertainment and Recreation

AAWW: \$12,234 % ARE: 0.7

Mining, Quarrying; Oil and Gas Extraction

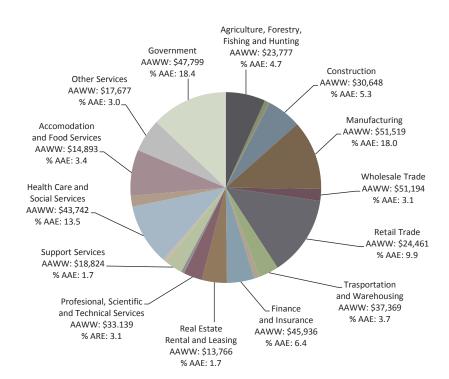
AAWW: \$30,464 % ARE: 0.6

Private Educational Services

AAWW: \$9,521 % ARE: 0.2

AAWW: Average Annual Worker Wages

AAE: All Area Earnings



Industry	Jobs	% ARJ	Wages per Industry	% ARE	Ave. Wage per Worker
Agriculture, Forestry, Fishing and Hunting	4,689	6.7	\$111,489,606	4.7	\$23,777
Mining, Quarrying; Oil and Gas Extraction	465	0.7	\$14,165,817	0.6	\$30,464
Utilities	165	0.2	\$16,696,043	0.7	\$101,188
Construction	4,053	5.8	\$124,217,624	5.3	\$30,648
Manufacturing	8,211	11.8	\$443,026,221	18.0	\$51,519
Wholesale Trade	1,404	2.0	\$71,875,718	3.1	\$51,194
Retail Trade	9,492	13.6	\$232,180,023	9.9	\$24,461
Transportation and Warehousing	2,328	3.3	\$86,994,223	3.7	\$37,369
Information	643	0.9	\$23,721,415	1.0	\$36,892
Finance and Insurance	3,253	4.7	\$149,430,970	6.4	\$45,936
Real Estate and Rental and Leasing	2,958	4.2	\$40,720,133	1.7	\$13,766
Professional, Scientific, and Technical Services	2,205	3.2	\$73,071,010	3.1	\$33,139
Management of Companies and Enterprises	381	0.5	\$23,697,477	1.0	\$62,198
Support Services	2,106	3.0	\$39,642,879	1.7	\$18,824
Educational Services (Private)	393	0.6	\$3,741,611	0.2	\$9,521
Health Care and Social Assistance	7,268	10.4	\$317,917,696	13.5	\$43,742
Arts, Entertainment, and Recreation	1,271	1.8	\$15,549,476	0.7	\$12,234
Accommodation and Food Services	5,439	7.8	\$81,001,814	3.4	\$14,893
Other Services (except Public Administration)	3,925	5.6	\$69,382,000	3.0	\$17,677
Government	9,028	13.0	\$431,526,765	18.4	\$47,799
Totals	67,677	100.0	\$2,350,048,521	100.0	\$35,362

% ARJ: Percentage of All Regional Jobs per Industry % ARE: Percentage of All Regional Earnings per Industry

Data Summary

Similar to Langlade County, the Defined Region is well-diversified, with no single sector dominating jobs percentages. Three private sectors boast double-digit percentages Retail (13.6%), Manufacturing (11.8%) and Health Care and Social Assistance (10.4%). Government accounts for 13% of all area jobs within the Defined Region.

Taken together, the four leading sectors in terms of jobs generate 59.8% of all area earnings for the Defined Region. Retail Trade, however, represents only 9.9% of those earnings, with the average annual income per worker earning \$24,461 – a figure that is just above poverty level.

Key Takeaway

To-date, tourism and wood-related industries have been a key focus and investment driver (in terms of both time and direct program spending) for the purpose of economic development.

Super-Sector data shows that these industries, while comprising of 20.1% of All Area Jobs [AAJ] (Forestry, Fishing, Hunting and Agriculture = 10%; Tourism, when approximated via Arts, Entertainment and Recreation, coupled with Accommodation and Food Services = 10.1%), they are responsible for only 11.6% of All Area Earnings [AAE].

While the Forestry, Fishing, Hunting and Agriculture industry leads these categories in terms of earnings, the Average Annual Worker Wage [AAWW] in this sector is \$24,776; well below the \$36,629 Living Wage established via the MIT Living Wage Calculator.

II. Industry Trend Data

Overview

While Baseline datasets provide a snapshot of current economic conditions, the Industry Trend Data tracks economic activity over time. By examining past activity, followed by tracking projections of future activity, one can begin to infer industry clusters that are existing, as well as in development.

Industries considered for cluster development will be qualified by average worker earnings, and must meet the minimum required for a family of four (2 Adults, 2 Children) as defined by the MIT Living Wage Calculator. All recommendations stemming from industry data throughout this report will meet this threshold, or, at minimum, will be cited as falling below this threshold.

Industry Trend Data has been presented in three separate formats: A bubble graph depicting jobs numbers, growth/decline over time, and location quotient; a table detailing jobs numbers over time and the associated location quotient shifts per industry; and a second table that compares jobs numbers to average annual earnings per industry. Taken together, these graphics serve to map industry trend lines over time, and lay a roadmap for future jobs and earnings expectations for the area. All figures are attributable to the EMSI Complete Employment - 2013.4 tool.

Introduction to Location Quotients

The Location Quotient analysis is a means by which concentrations of groups (such as industries) in a selected geographical area are illustrated. In the case of industry-based analyses, measurements rely on employment numbers per industry in a given geography, and then compared against employment numbers per industry in a broader geographical range.

When applied to an economic framework, Location Quotients are commonly utilized for determining: 1) which industries are uniquely adapted to the area, 2) which industries are currently most responsible for export-driven incomes, 3) identifying emerging export industries, as well as declining or endangered industries that may erode the region's economic health.

Generally speaking, industries that are calculated to have a 'high' Location Quotient (1.0+), coupled with high levels of industry employment (as well as meeting Living Wage standards), should be considered vital to local/regional economy.

Alternatively, industries with 'low' Location Quotients coupled with increasing levels of industry employment (with Living Wage potential) may indicate an emerging industry which could become vital to local/regional economy over time.

Finally, industries that have either high or low Location Quotients, coupled with trends for decreasing employment (no matter the pay standard for the industry) is considered to be either: 1) a mature or declining industry that may erode the economic base of the local/regional economy over time (high LQ + declining employment) or 2) an industry that is not vital to the regional economy (low LQ + declining employment).

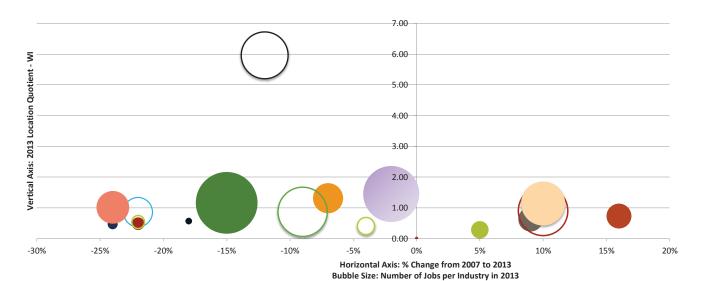
While useful, Location Quotients are not an infallible metric for determining the long-term vitality of industry. For example, Location Quotients can be skewed 'high' for industries that are declining on a macro scale, yet are able to yet maintain a local presence in the near-term; alternatively, industries may be growing faster on the macro scale vs. the comparative local presence – indicating a relative loss in growth. Because of the nuances, an understanding of global, national and regional trends, coupled with on-the-ground knowledge of local industries, is central to utilizing the Location Quotient data tool effectively for economic development in a locality or region.

While not perfect, Location Quotient datasets can useful sources as indicators for industry development, facilitating a more efficient, market-driven approach to Cluster development. By allowing Location Quotient data to illustrate where the market has 'chosen' strong industry candidates for development, organizations and municipalities are taken out of the business of 'choosing' winners and losers – instead, they are able to synthesize statistical data with local insights in order to identify prime targets in strategy development. Thus, in addition to identifying attraction targets, organizations are better equipped to encourage the continued investment of established, growing industries.

Arguably, using this data in retaining and assisting in the continued expansion of these industries in a region is the most efficient way of utilizing resources - as any business owner knows, retaining and cultivating a strong existing customer is much easier and less expensive than attempting to attract a new one.

Langlade County

Size, Growth per Industry 2007-2013



- O-12% Agriculture, Forestry, Fishing and Hunting
- -18% Utilities
- O-22% Construction
- -15% Manufacturing
- 16% Wholesale Trade
- -2% Retail Trade
- -7% Transporation and Warehousing
- -22% Information
- 9% Finance and Insurance

- -24% Real Estate; Rental and Leasing
- O-4% Professional, Scientific and Technical Services
- 5% Support Services
- 0% Educational Services (Private)
- 10% Health Care and Social Assistance
- ○-22% Arts, Entertainment and Recreation
- 10% Accomodation and Food Services
- -24% Other Services
- O-9% Government

Outliers: Management of Companies and Enterprises (117%) Mining, Quarrying; Oil and Gas Extraction (-51%)

Sector Size and Growth, 2007-2013

Industry	2007 Jobs	2013 Jobs	Change	% Change	2007 LQ*	2013 LO*
Ag, Forestry, Fishing and Hunting	1,105	969	-136	-12%	6.53	5.96
Mining, Quarrying; Oil & Gas Extraction	55	27	-28	-51%	6.20	3.25
Retail Trade	1,339	1,310	-29	-2%	1.30	1.45
Transportation and Warehousing	409	380	-29	-7%	1.23	1.31
Manufacturing	1,862	1,579	-283	-15%	1.18	1.16
Accommodation and Food Services	734	807	73	10%	1.02	1.14
Other Services	590	449	-141	-24%	1.31	1.02
Health Care and Social Assistance	919	1,015	96	10%	0.82	0.90
Government	1,169	1,067	-102	-9%	0.91	0.87
Construction	454	352	-102	-22%	0.87	0.86
Wholesale Trade	224	260	36	16%	0.57	0.73
Finance and Insurance	232	252	20	9%	0.53	0.63
Utilities	22	18	-4	-18%	0.64	0.57
Arts, Entertainment, and Recreation	87	68	-19	-22%	0.67	0.54
Information	86	67	-19	-22%	0.53	0.48
Real Estate and Rental and Leasing	55	42	-13	-24%	0.48	0.47
Professional, Scientific, & Technical Svcs	148	142	-6	-4%	0.41	0.41
Support Services	122	128	6	5%	0.26	0.28
Mgmt of Companies & Enterprises	12	26	14	117%	0.09	0.16
Educational Services (Private)	<10	<10				
Totals	3,499	3,406	-170			

*Location Quotients cited are measured against the State of Wisconsin.

Data Summary

Not surprisingly, an era marked by the Recession resulted in a net loss in jobs across all industries. Gains in Wholesale Trade, Finance and Insurance, Management of Companies and Enterprises, Support Services, Health Care and Social Assistance, as well as Accommodation and Food Services were out paced by triple-digit losses in five of twenty sectors. Leading the losses were Manufacturing (283 lost); Other Services (141 lost); and Ag, Forestry, Fishing and Hunting (136 lost).

Despite these losses, relative concentrations remained high (above 1.0) in three of the five industries that experienced triple-digit losses.

Jobs and Wages, 2007-2013

Industry	% Change in Jobs	Ave. Wage per Worker	Criteria	
maustry	2007-2013	(2013)	Jobs	\$
Agriculture, Forestry, Fishing and Hunting	-12%	\$24,776	N	Ν
Mining, Quarrying; Oil and Gas Extraction	-51%	\$30,573	N	N
Utilities	-18%	\$66,571	N	Υ
Construction	-22%	\$28,731	N	Ν
Manufacturing	-15%	\$48,526	N	Υ
Wholesale Trade	16%	\$56,900	Υ	Υ
Retail Trade	-2%	\$25,027	N	Ν
Transportation and Warehousing	-7%	\$40,033	N	Υ
Information	-22%	\$24,324	N	Ν
Finance and Insurance	9%	\$55,611	Υ	Υ
Real Estate and Rental and Leasing	-24%	\$14,169	N	Ν
Professional, Scientific, Technical Services	-4%	\$31,509	N	Ν
Mgmt of Companies and Enterprises	117%	\$86,315	Υ	Υ
Support Services	5%	\$20,744	Υ	Ν
Educational Services (Private)		\$8,005	N	Ν
Health Care and Social Assistance	10%	\$48,403	Υ	Υ
Arts, Entertainment, and Recreation	-22%	\$10,921	N	Ν
Accommodation and Food Services	10%	\$15,138	Υ	N
Other Services (not Public Administration)	-24%	\$18,804	N	Ν
Government	-9%	\$45,104	N	Υ

Data Summary

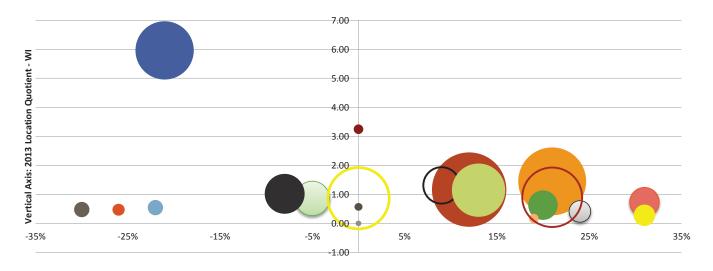
Sectors that experienced growth or no change and on average paid the MIT Living Wage include: Wholesale Trade (16% paying \$56,900); Finance and Insurance (9% paying \$55,611); Management of Companies and Enterprises (117% paying \$86,315); Health Care and Social Assistance (10% paying \$48,403).

Stagnation or decline was experienced in a number of industries that paid the MIT Living Wage, including: Utilities (-18% paying \$66,571); Manufacturing (-15% paying \$48,526); Transportation and Warehousing (-7% paying \$40,033) and Government (-9% paying \$45,104).

All other industries experienced both loss in jobs, as well as wages falling below the Living Wage standard.

Langlade County

Projected Size, Growth per Industry 2013-2023



Horizontal Axis - % Change from 2013 to 2023 Bubble Size: Number of Jobs per Industry in 2013

- -21% Agriculture, Forestry, Fishing and Hunting
- 0% Mining, Quarrying; Oil and Natural Gas Extraction
- 0% Utilities
- ○-5% Construction
- 12% Manufacturing
- 31% Wholesale Trade
- 21% Retail Trade
- ●9% Transportation and Warehousing
- -30% Information
- 20% Finance and Insurance

- -26% Real Estate; Rental and Leasing
- O 24% Professional, Scientific and Technical Services
- 19% Management of Companies and Enterprieses
- 31% Support Services
- 0% Educational Services (Private)
- ○21% Health Care and Social Assistance
- -22% Arts, Entertainment and Recreation
- 13% Accomodation and Food Services
- -8% Other Services
- 00% Government

Projected Sector Size and Growth, 2013-2023

Industry	2013 Jobs	2023 Jobs	Change	% Change	2013 LQ*	2023 LO*
Ag, Forestry, Fishing and Hunting	969	767	-202	-21	5.96	4.94
Mining, Quarrying; Oil & Gas Extraction	27	<10			3.25	
Retail Trade	1,310	1,586	276	21	1.45	1.73
Transportation and Warehousing	380	413	33	9	1.31	1.27
Manufacturing	1,579	1,775	196	12	1.16	1.30
Accommodation and Food Services	807	914	107	13%	1.14	1.14
Other Services	449	415	-34	-8	1.02	0.87
Health Care and Social Assistance	1,015	1,226	211	21	0.90	0.93
Government	1,067	1,070	3	0	0.87	0.87
Construction	352	334	-18	-5	0.86	0.72
Wholesale Trade	260	340	80	31	0.73	0.88
Finance and Insurance	252	302	50	20	0.63	0.68
Utilities	18	<10			0.57	
Arts, Entertainment, and Recreation	68	53	-15	-22	0.54	0.38
Information	67	47	-20	-30	0.48	0.32
Real Estate and Rental and Leasing	42	31	-11	-26	0.47	0.34
Professional, Scientific, & Technical Svcs	142	176	34	24	0.41	0.44
Support Services	128	168	40	31	0.28	0.30
Mgmt of Companies & Enterprises	26	31	5	19	0.16	0.17
Educational Services (Private)	<10	<10				
Totals	8,958	9,648	735			

*Location Quotients cited are measured against the State of Wisconsin.

Data Summary

Net gains in jobs across all industries are projected for the study period. While a number of Location Quotients are expected to experience continued decline (See: Ag, Forestry, Fishing and Hunting LQ 2007=6.53; 2013=5.96; 2023=4.94), some industries are projected to regain growth (See: Manufacturing LQ 2007=1.18; 2013=1.16; 2023=1.30).

With the exception of Mining, Quarrying; Oil & Gas Extraction, industries that have historically ranked as more concentrated than the rest of the State (above 1.0) will retain their relatively high concentrations.

Projected Jobs and Wages, 2013-2023

Industry	% Change in Jobs	Ave. Wage per Worker	Crit	eria
industry	2013-2023	(2013)	Jobs	\$
Agriculture, Forestry, Fishing and Hunting	-21	\$24,776	N	Ν
Mining, Quarrying; Oil and Gas Extraction	0	\$30,573	N	Ν
Utilities	0	\$66,571	N	Υ
Construction	-5	\$28,731	N	Ν
Manufacturing	12	\$48,526	Υ	Υ
Wholesale Trade	31	\$56,900	Υ	Υ
Retail Trade	21	\$25,027	Υ	Ν
Transportation and Warehousing	9	\$40,033	Υ	Υ
Information	-30	\$24,324	N	Ν
Finance and Insurance	20	\$55,611	Υ	Υ
Real Estate and Rental and Leasing	-26	\$14,169	N	Ν
Professional, Scientific, Technical Services	24	\$31,509	Υ	N*
Mgmt of Companies and Enterprises	19	\$86,315	Υ	Υ
Support Services	31	\$20,744	Υ	Ν
Educational Services (Private)	0	\$8,005	N	Ν
Health Care and Social Assistance	21	\$48,403	Υ	Υ
Arts, Entertainment, and Recreation	-22	\$10,921	N	Ν
Accommodation and Food Services	13	\$15,138	Υ	N
Other Services (not Public Administration)	-8	\$18,804	N	Ν
Government	0	\$45,104	N	Υ

*see paragraph 2 of Projected Size & Growth, 2013-2023 Data Summary

Data Summary

Sectors that are projected to experience growth or no change and on average pay the MIT Living Wage (2013 dollars) include: Manufacturing (12% paying \$48,526); Wholesale Trade (31% paying \$56,900); Transportation and Warehousing (9% paying \$40,033); Finance and Insurance (20% paying \$55,611); Management of Companies and Enterprises (19% paying \$86,315); Health Care and Social Assistance (21% paying \$48,403); Utilities (0% paying \$66,571); and Government (0% paying \$45,104).

Of additional note, the Professional, Scientific, and Technical Services sector is projected to grow at a rate of 24% over the years of 2013-2023. While the overall industry wages land below the MIT Living Wage of \$36,629 (by paying an average annual wage of \$31,509), individual services within the sector that pay above this threshold are projected to make marked gains, specifically Certified Public Accountants (growing as a jobs category by 10% between 2013-2023, paying \$68,285); and Custom Computer Programming Services (growing as a jobs category by 177% between 2013-2023, paying \$52,937).

Growth is also expected in a number of industries that, on average, pay less than the MIT Living Wage. These industries include: Retail Trade (21% paying \$25,027); Support Services (31% paying \$20,744); and Accommodation and Food Services (13% paying \$15,138).

Stagnation or decline is expected in a number of industries that do not pay the MIT Living Wage, including: Agriculture, Forestry, Fishing and Hunting (-21% paying \$24,776); Mining, Quarrying; Oil and Natural Gas Extraction (0% paying \$30,573); Construction (-5% paying \$28,731); Information (-30% paying \$24,324); Real Estate, Rental and Leasing (-26% paying \$14,169); Educational Services (Private) (0% paying \$8,005); Arts, Entertainment and Recreation (-22% paying \$10,921) and Other Services (-8% paying \$18,804).

Overall, a net gain of 735 jobs, a gain of 8.2%, is projected across all industries.

Key Takeaway

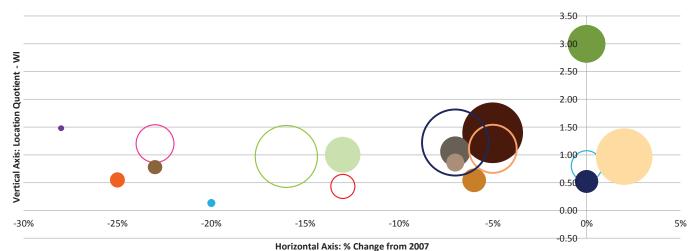
Despite the recession, a number of industries operating in Langlade County experienced significant growth while paying, on average, wages that met or exceeded the MIT Living Wage Standard. In addition, a number of these industries are projected to grow significantly over the next ten years.

These industries are:

Industry	% Change 2007-13	% Change 2013-23	AAWW (2012)
Wholesale Trade	16%	31%	\$56,900
Finance and Insurance	9%	20%	\$55,611
Management of Companies	117%	19%	\$86,315
Health Care and Social Assistance	10%	21%	\$48,403

Defined Region

Size, Growth per Industry 2007-2013



Bubble Size: Number of Jobs per Industry in 2013

- 0% Agriculture, Forestry, Fishing and Hunting
- -28% Mining, Quarrying; Oil and Natural Gas
- 96% Extraction
- O-23% Utilities*
- O-16% Construction
- -6% Manufacturing
- -5% Wholesale Trade
- -7% Retail Trade
- -25% Transportation and Warehousing
- 00% Information

- -23% Finanance and Insurance
- 0% Real Estate; Rental and Leasing
- 96% Professional, Scientific and Technical
- O-13% Services
- -20% Management of Companies and Enterprises*
- 2% Support Services
- -7% Educational Services (Private)
- ○-5% Health Care and Social Assistance
- -13% Arts, Entertainment and Recreation
- ○-7% Accomodation and Food Services

Size, Growth per Industry 2007-2013

Industry	2007 Jobs	2013 Jobs	Change	% Change	2007 LQ*	2013 LO*
Ag, Forestry, Fishing and Hunting	2,907	2,908	1	0	2.85	3.00
Mining, Quarrying; Oil & Gas Extraction	104	75	-29	-28	1.95	1.48
Retail Trade	7,936	7,532	-404	-5	1.28	1.40
Government	9,606	8,950	-656	-7	1.24	1.22
Construction	3,799	2,930	-869	-23	1.21	1.20
Accommodation and Food Services	4,966	4,711	-255	-5	1.14	1.11
Transportation and Warehousing	1,969	1,832	-137	-7	0.99	1.06
Other Services	3,017	2,623	-394	-13	1.11	1.00
Manufacturing	9,438	7,881	-1,557	-16	0.99	0.97
Health Care and Social Assistance	6,385	6,511	126	2	0.95	0.97
Arts, Entertainment, and Recreation	695	646	-49	-7	0.89	0.86
Utilities	77	151	74	96	0.37	0.81
Finance and Insurance	1,898	1,893	-5	0	0.73	0.80
Real Estate and Rental and Leasing	540	417	-123	-23	0.78	0.78
Information	619	465	-154	-25	0.63	0.55
Wholesale Trade	1,211	1,142	-69	-6	0.52	0.54
Professional, Scientific, & Technical Svcs	1,083	1,087	4	0	0.50	0.52
Support Services	1,361	1,190	-171	-13	0.49	0.43
Mgmt of Companies & Enterprises	201	394	193	96	0.25	0.41
Educational Services (Private)	168	135	-33	-20	0.17	0.13
Totals	57,980	53,473	(4,507)			

^{*}Location Quotients cited are measured against the State of Wisconsin.

Data Summary

Again, the Recession resulted in a net loss in jobs across all industries. Piecemeal gains were overshadowed by deep losses in 15 of 20 industry sectors.

Despite losses, relative concentrations remained high (above 1.0) – and in some cases, grew – relative to the state. Industries that experienced growth were: Ag, Forestry, Fishing and Hunting (LQ 2007=2.85; LQ 2013=3.00); Retail Trade (LQ 2007=1.28; LQ 2013=1.40); and Transportation and Warehousing (LQ 2007=0.99; LQ 2013=1.06).

Jobs and Wages, 2007-2013

In direction	% Change in Jobs	Ave. Wage per Worker	Crite	eria
Industry	2007-2013	(2013)	Jobs	\$
Ag, Forestry, Fishing and Hunting	0	\$27,059	N	N
Mining, Quarrying; Oil, Gas Extraction	-28	\$66,728	N	Υ
Utilities	96	\$106,214	Υ	Υ
Construction	-23	\$35,093	N	Ν
Manufacturing	-16	\$53,848	N	Υ
Wholesale Trade	-6	\$51,830	N	Υ
Retail Trade	-5	\$27,207	N	Ν
Transportation and Warehousing	-7	\$41,041	N	Υ
Information	-25	\$45,427	N	Υ
Finance and Insurance	0	\$55,763	N	Υ
Real Estate and Rental and Leasing	-23	\$23,541	N	Ν
Professional, Scientific, Technical Svcs	0	\$41,671	N	Υ
Mgmt of Companies and Enterprises	96	\$59,303	Υ	Υ
Support Services	-13	\$24,011	N	N
Educational Services (Private)	-20	\$20,442	N	Ν
Health Care and Social Assistance	2	\$46,554	Υ	Υ
Arts, Entertainment, and Recreation	-7	\$17,264	N	Ν
Accommodation and Food Services	-5	\$13,536	N	Ν
Other Services (not Public Admin)	-13	\$19,682	N	Ν
Government	-7	\$47,827	N	Υ

*Location Quotients cited are measured against the State of Wisconsin.

Data Summary

Figures included in the Previous Size and Growth data encompasses the full timeline of the Recession as well as the subsequent recovery. While most industries within the Defined Region remain below pre-recession employment levels, there are some industries that have rebuilt to pre-recession levels, or far exceeded them. That said, it is important to take into context the percentage of overall employment each industry represents. While the Utilities and Management of Companies and Enterprises industries have experienced record growth from 2007-2013, their overall levels of employment within the region are low – 0.2% and 0.5%, respectively – which indicates the establishment of a new office, rather than a boon in the industry.

Sectors that have experienced growth or no change, and on average pay the MIT Living Wage (2013 dollars) include: Health Care and Social Assistance (2% paying \$46,554); Finance and Insurance (0% paying \$55,763); and Professional, Scientific, and Technical Services (0% paying \$41,671).

While Agriculture, Forestry, Fishing, and Hunting has recovered all job losses to-date, the average annual earnings do not meet the standard set by the MIT Living Wage calculator for the Defined Region (\$37,253).

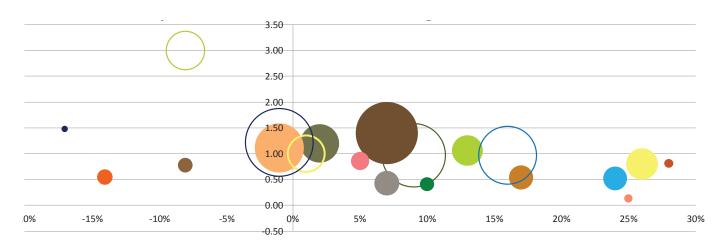
All other sectors remain below pre-recession employment levels. Those that have not fully recovered and meet the MIT Living Wage standard are: Mining, Quarrying; Oil and Gas Extraction (-28% paying \$66,728); Manufacturing (-16% paying \$53,848); Wholesale Trade (-6% paying \$51,830); Transportation and Warehousing (-7% paying \$41,041); Information (-25% paying \$45,427); and Government (-7% paying \$47,827).

Additional notable losses include Real Estate, Rental and Leasing (-23% paying \$23,541); Support Services (-13% paying \$24,011); Educational Services (Private) (-20% paying \$20,442); and Other Services (-13% paying \$19,682).

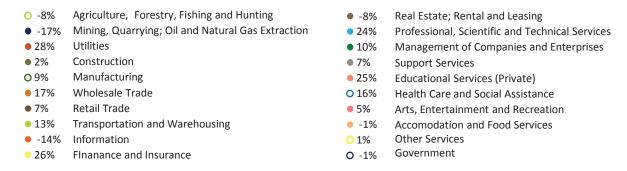
Overall, a net loss of 4,507 jobs was experienced over the time period, representing 7.8% of all jobs.

Defined Region

Projected Size, Growth per Industry 2013-2023



Horizontal Axis: % Change from 2013 to 2023 Bubble Size: Number of Jobs per Industry in 2013



Projected Sector Size, Growth per Industry 2013-2023

Industry	2013 Jobs	2023 Jobs	Change	% Change	2013 LQ*	2023 LQ*
Ag, Forestry, Fishing and Hunting	2,908	2,674	-234	-8	3.00	2.93
Mining, Quarrying; Oil & Gas Extraction	75	62	-13	-17	1.48	1.12
Retail Trade	7,532	8,095	563	7	1.40	1.50
Government	8,950	8871	-79	-1	1.22	1.23
Construction	2,930	2,985	55	2	1.20	1.09
Accommodation and Food Services	4,711	4,665	-46	-1	1.11	0.99
Transportation and Warehousing	1,832	2,069	237	13	1.06	1.09
Other Services	2,623	2,650	27	1	1.00	0.94
Manufacturing	7,881	8,562	681	9	0.97	1.07
Health Care and Social Assistance	6,511	7,539	1,028	16	0.97	0.97
Arts, Entertainment, and Recreation	646	677	31	5	0.86	0.84
Utilities	151	194	43	28	0.81	1.19
Finance and Insurance	1,893	2,380	487	26	0.80	0.91
Real Estate and Rental and Leasing	417	385	-32	-8	0.78	0.72
Information	465	401	-64	-14	0.55	0.46
Wholesale Trade	1,142	1,334	192	17	0.54	0.59
Professional, Scientific, & Technical Svcs	1,087	1,345	258	24	0.52	0.57
Support Services	1,190	1,279	-89	7	0.43	0.93
Mgmt of Companies & Enterprises	394	433	-39	10	0.41	0.40
Educational Services (Private)	135	169	34	25	0.13	0.14
Totals	53,473	56,769	3,040			

*Location Quotients cited are measured against the State of Wisconsin.

Data Summary

Projections for an ongoing recovery are optimistic for the study period, with an overall net gain of 3,040 jobs across all industries. Leading this gain is Health Care and Social Assistance (1,028 projected jobs), Manufacturing (681 projected jobs), and Retail Trade (563 projected jobs).

Significant increases in Location Quotient is expected for Support Services (LQ 2013=0.43; LQ 2023=0.93) and Utilities (LQ 2013=0.81; LQ 2023=1.19) are offset by expected lapses in relative concentration in legacy industries such as Ag, Forestry, Fishing and Hunting (LQ 2007=2.85; LQ 2013=3.00 LQ 2023=2.93).

Jobs and Wages, 2013-2023

In december	% Change in Jobs	Ave. Wage per Worker	Crite	eria
Industry	2013-2023	(2013)	Jobs	\$
Agriculture, Forestry, Fishing and Hunting	-8	\$27,059	N	N
Mining, Quarrying; Oil and Gas Extraction	-17	\$66,728	N	Υ
Utilities	28	\$106,214	Υ	Υ
Construction	2	\$35,093	Υ	Ν
Manufacturing	9	\$53,848	Υ	Υ
Wholesale Trade	17	\$51,830	Υ	Υ
Retail Trade	7	\$27,207	Υ	Ν
Transportation and Warehousing	13	\$41,041	Υ	Υ
Information	-14	\$45,427	N	Υ
Finance and Insurance	26	\$55,763	Υ	Υ
Real Estate and Rental and Leasing	-8	\$23,541	N	Ν
Professional, Scientific, Technical Services	24	\$41,671	Υ	Υ
Mgmt of Companies and Enterprises	10	\$59,303	Υ	Υ
Support Services	7	\$24,011	Υ	Ν
Educational Services (Private)	25	\$20,442	Υ	Ν
Health Care and Social Assistance	1	\$46,554	Υ	Υ
Arts, Entertainment, and Recreation	5	\$17,264	N	Ν
Accommodation and Food Services	-1	\$13,536	N	Ν
Other Services (not Public Administration)	1	\$19,682	N	Ν
Government	-1	\$47,827	N	Υ

Data Summary

A number of sectors are projected to experience growth or no change over the next decade. Those that are, and on average pay the MIT Living Wage (2013 dollars), include: Utilities (28% paying \$106,214); Manufacturing (9% paying \$53,848); Wholesale Trade (17% paying \$51,830); Transportation and Warehousing (13% paying \$41,041); Finance and Insurance (26% paying \$55,763); Professional, Scientific, and Technical Services (24% paying \$41,671); Management of Companies and Enterprises (10% paying \$59,303); and Health Care and Social Assistance (1% paying \$46,554).

Decline is expected in some industry sectors that pay above the MIT Living Wage. These sectors include: Mining, Quarrying; Oil and Gas Extraction (-17% paying \$66,728); Information (-14% paying \$45,427); and Government (-1% paying \$47,827).

Sectors that pay less than the MIT Living Wage standard and are expected to grow are: Construction (2% paying \$35,093); Retail Trade (7% paying \$27,207); Support Services (7% paying \$24,011); Educational Services (Private) (25% paying \$20,442); Arts, Entertainment, and Recreation (5% paying \$17,264); and Other Services (1% paying \$19,682).

Decline is expected in a number of industries that do not pay the MIT Living Wage, including: Agriculture, Forestry, Fishing and Hunting (-8% paying \$27,059); Real Estate, Rental and Leasing (-8% paying \$23,541); and Accommodation and Food Services (-1% paying \$13,536).

Overall, the Defined region is expected to experience a net gain of 3,296 jobs, representing a 6.2% increase for the Defined Region over the coming decade.

Key Takeaway

From 2007 – 2023, the Defined Region will retain a net job loss of 1,211 sourced from across its various industries. Data at the Super Sector level (NAICS level 2) indicates an overall trend in job losses and sub-living wage pay in key industry sectors such as Agriculture, Forestry, Fishing and Hunting.

It is important to note that while some industries experienced gains in Location Quotient or are projected to experience LQ gains, this is not necessarily an indicator of direct net gains in local area jobs – it may instead be a signal that the industry is contracting at a slower rate as compared to State or National levels.

Location Quotients for Cluster Development

Overview

As stated in the preceding section, Location Quotients, when tempered with additional data sets, can be useful in identifying bourgeoning clusters in an area. Location Quotient data presented in the previous section catalogued figures for Super Sectors (NAICS level 1). It is important to note that while Super Sector Data provides context, it is less directly applicable to the development of cluster strategy because of its broad nature. As is illuminated in the following datasets, broad industry categories, as an aggregate of various sub-sectors, contains both growth and declining sub-sectors; as a result, broad trends are skewed by weight of growth vs. decline.

Location Quotient datasets provided in this report are organized into four main categories: Established Growth Industries, Mature or Declining Industries, Possible Future Growth Industries, and Non-vital Industries. This categorization is based on each Super- or Sub-Sector's 2013 State Location Quotients, as compared with the State and National growth rates over the study period.

Sub Sectors that may have potential as cluster development targets are categorized as such by virtue of both organic growth to-date, and their average annual pay rates. As a result, Sub Sectors included in the following data sets meet the minimum requirements of (a) registering a Location Quotient measurement relative to both the State and Nation and (b) meeting the defined Living Wage standard set forth in this report. For reference, average annual earnings were included in the subsector datasets.

Information for both Langlade County as well as the Defined Region is included in this data series, as individual companies often focus less on the virtues of specific municipalities as the prime drivers for clustered co-location. Overall proximity and strength of the industry network within the area hold greater weight in decision making process. Therefore, by emphasizing not only local industry assets but also those found in the overall area, development organizations can foster broader industry clusters as companies seek to develop symbiotic relationships within their respective and related industries.

Langlade County: Super Sector Growth/Decline 2007-2013

Source: EMSI Complete Employment - 2013.4

Super Sector (NAICS Level I)

Established Growth Industries

Super Sectors located within Langlade County, with State-level 2013 Location Quotients at or above 1.0, and experiencing stability or growth over the study period relative to 2007 State levels.

Super Sector	State LQ	Change	National LQ	Change
Retail Trade	1.45	0.15	1.39	0.09
Transportation and Warehousing	1.31	0.08	1.32	0.01
Accommodation and Food Services	1.14	0.12	1.10	0.10

Mature or Declining Industries

Super Sectors located within Langlade County, with State-level 2013 Location Quotients at or above 1.0 that may be experiencing decline relative to State and/or National levels.

Super Sector	State LQ	Change	National LQ	Change
Agriculture, Forestry, Fishing and Hunting	5.96	-0.57	8.75	-0.36
Mining, Quarrying; Oil and Gas Extraction	3.25	-2.95	0.55	-0.74
Manufacturing	1.16	-0.02	2.19	0.10
Other Services	1.02	-0.29	1.00	-0.25

Possible Future Growth Industries

Super Sectors located within Langlade County, with State-level 2013 Location Quotients below 1.0, and experiencing stability or growth over the study period relative to 2007 State levels.

Super Sector	State LQ	Change	National LQ	Change
Wholesale Trade	0.73	0.16	0.74	0.17
Finance and Insurance	0.63	0.10	0.69	0.12
Management of Companies and Enterprises	0.16	0.07	0.21	0.11
Support Services	0.28	0.02	0.23	0.02
Health Care and Social Assistance	0.90	0.08	0.94	0.05

Non-vital Industries

Super Sectors located within Langlade County, with State-level 2013 Location Quotients below 1.0, and experiencing no growth or decline over the study period relative to 2007 State levels.

Super Sector	State LQ	Change	National LQ	Change
Utilities	0.57	-0.07	0.54	-0.10
Construction	0.86	-0.01	0.75	0.03
Information	0.48	-0.05	0.40	-0.03
Real Estate and Rental and Leasing	0.47	-0.01	0.28	-0.03
Professional, Scientific; Technical Services	0.41	0.00	0.25	-0.01
Arts, Entertainment, and Recreation	0.54	-0.13	0.47	-0.11

Langlade County: Sub Sector Growth / Decline 2007-2013

Source: EMSI Complete Employment - 2013.4

Sub Sector (NAICS Level III)

Established Growth Industries

Sub Sectors located within Langlade County, with State-level 2013 Location Quotients at or above 1.0, and experiencing stability or growth over the study period relative to 2007 State levels.

Industries that meet the MIT Living Wage Standard					
Sub Sector	State LQ	Change	National LQ	Change	Earnings
Engine, Turbine; Power Transmission Equipment Mfg	11.87	3.73	59.38	17.22	\$58,316
Facilities Support Services	7.94	7.94	1.66	1.66	\$81,932
Paper and Paper Product Merchant Wholesalers	7.41	5.32	9.46	7.08	\$59,467
Direct Selling Establishments	5.44	1.22	5.04	0.43	\$36,957
Activities Related to Credit Intermediation	2.04	N/A	1.03	N/A	\$38,863
General Freight Trucking	2.02	0.15	3.27	0.24	\$38,445
Automobile Dealers	1.77	0.05	1.83	0.13	\$36,712
Other Residential Care Facilities	1.57	N/A	1.16	N/A	\$44,437
General Medical and Surgical Hospitals (Private)	1.48	0.31	1.73	0.29	\$42,400
Specialized Freight Trucking	1.43	0.26	1.79	0.01	\$39,736
Depository Credit Intermediation	1.42	0.20	1.65	0.25	\$38,216
Misc. Nondurable Goods Merchant Wholesalers	1.29	0.53	1.72	0.82	\$44,887
Machinery, Equipment, and Supplies Wholesalers	1.22	0.32	1.63	0.43	\$52,451
Motor Vehicle Parts Manufacturing	1.12	N/A	0.88	N/A	\$48,852
Education and Hospitals (Local Government)	1.04	0.03	0.95	0.06	\$37,017

Mature or Declining Industries

Sub Sectors located within Langlade County, with State-level 2013 Location Quotients at or above 1.0 that may be experiencing stagnation or decline relative to 2007 State levels.

Industries that meet the MIT Living Wage Standard							
Sub Sector	State LQ	Change	National LQ	Change	Earnings		
Natural Gas Distribution	8.56	-0.15	2.54	-0.75	\$55,663		
Petroleum, Petroleum Products Merchant Wholesalers	3.86	-0.19	3.29	-0.18	\$36,098		
Nonmetallic Mineral Mining and Quarrying	3.37	-2.90	5.22	-2.78	\$71,922		
Electrical Equipment Manufacturing	2.38	-1.03	11.86	-4.17	\$36,424		
Death Care Services	2.14	-0.65	1.77	-0.67	\$38,072		
Highway, Street, and Bridge Construction	1.93	-0.18	1.43	-0.02	\$67,585		
Dairy Product Manufacturing	1.28	-0.66	7.66	-4.22	\$56,524		

Possible Future Growth Industries

Sub Sectors located within Langlade County, with State-level 2013 Location Quotients below 1.0, and experiencing stability or growth over the study period relative to 2007 State levels.

Industries that meet the MIT Living Wage Standard					
Sub Sector	State LQ	Change	National LQ	Change	Earnings
Offices of Dentists	0.92	0.00	0.88	-0.07	\$218,640
Other Ambulatory Health Care Services	0.70	0.03	0.58	-0.08	\$44,791
Offices of Physicians	0.70	0.51	0.67	0.49	\$37,822
Lumber, Other Construction Materials Wholesalers	0.67	N/A	1.00	N/A	\$47,515
Federal Government, Civilian	0.53	0.02	0.27	0.00	\$49,515
Animal Slaughtering and Processing	0.43	0.15	0.73	0.24	\$44,487
Computer Systems Design and Related Services	0.22	N/A	0.12	N/A	\$45,481
Management of Companies and Enterprises	0.16	0.07	0.21	0.11	\$60,473

Non-vital Industries

Sub Sectors located within Langlade County, with State-level 2013 Location Quotients below 1.0, and experiencing no growth or decline over the study period relative to 2007 State levels.

Industries that meet the MIT Living Wage Standard						
Sub Sector	State LQ	Change	National LQ	Change	Earnings	
Other General Purpose Machinery Manufacturing	0.85	-1.04	2.56	-2.70	\$48,583	
Department Stores	0.83	-0.82	0.90	-1.65	\$49,925	
Miscellaneous Durable Goods Merchant Wholesalers	0.77	-0.67	0.70	-0.53	\$39,958	
Agencies, Brokerages, and Other Insurance Activities	0.72	-0.13	0.74	-0.07	\$44,775	
Legal Services	0.43	-0.14	0.26	-0.12	\$52,730	
Wired Telecommunications Carriers	0.39	-0.12	0.30	-0.10	\$49,350	
State Government, Excluding Education and Hospitals	0.29	-0.06	0.23	-0.01	\$51,895	

Defined Region: Super Sector Growth/Decline 2007-2013

Source: EMSI Complete Employment - 2013.4

Super Sector (NAICS Level I)

Established Growth Industries

Super Sectors located within the Defined Region, with State-level 2013 Location Quotients at or above 1.0, and experiencing stability or growth over the study period relative to 2007 State levels.

Super Sector	State LQ	Change	National LQ	Change	Earnings
Agriculture, Forestry, Fishing, Hunting	3.00	0.15	4.40	-0.42	\$24,413
Mining, Quarrying; Oil, Gas Extraction	1.48	-0.47	0.25	0.16	\$54,412
Retail Trade	1.40	0.12	1.34	-0.06	\$22,390
Transportation and Warehousing	1.06	0.07	1.07	-0.02	\$33,706
Accommodation and Food Services	1.11	-0.03	1.07	0.06	\$11,666
Other Services	1.00	-0.11	0.98	0.08	\$17,722

Mature or Declining Industries

Super Sectors located within the Defined Region, with State-level 2013 Location Quotients at or above 1.0 that may be experiencing decline relative to 2007 State levels.

Super Sector	State LQ	Change	National LQ	Change	Earnings
Government	1.22	-0.02	1.05	0.00	\$35,306
Construction	1.20	-0.01	1.05	-0.05	\$30,109

Possible Future Growth Industries

Super Sectors located within the Defined Region, with State-level 2013 Location Quotients below 1.0, and experiencing stability or growth over the study period relative to 2007 State levels.

Super Sector	State LQ	Change	National LQ	Change	Earnings
Health Care and Social Assistance	0.97	0.02	1.01	0.02	\$38,401
Real Estate and Rental and Leasing	0.78	0.00	0.47	0.04	\$20,451
Professional, Scientific, Technical Services	0.52	0.02	0.32	0.00	\$36,414

Non-vital Industries

Super Sectors located within the Defined Region, with State-level 2013 Location Quotients below 1.0, and experiencing no growth or decline over the study period relative to 2007 State levels.

Super Sector	State LQ	Change	National LQ	Change	Earnings
Manufacturing	0.97	-0.02	1.83	-0.07	\$42,270
Arts, Entertainment, and Recreation	0.86	-0.03	0.74	0.03	\$14,976
Utilities	0.81	0.44	0.77	-0.40	\$75,766
Finance and Insurance	0.80	0.07	0.86	-0.09	\$46,996
Information	0.55	-0.08	0.47	0.04	\$36,846
Wholesale Trade	0.54	0.02	0.55	-0.03	\$44,536
Support Services	0.43	-0.06	0.36	0.03	\$20,477
Mngmt of Companies and Enterprises	0.41	0.16	0.54	-0.25	\$49,583
Educational Services (Private)	0.13	-0.04	0.10	0.03	\$19,108

Region: Sub Sector Growth / Decline 2007-2013

Source: EMSI Complete Employment - 2013.4

Sub Sector (NAICS Level III)

Established Growth Industries

Sub Sectors located within the Defined Region, with State-level 2013 Location Quotients at or above 1.0, and experiencing stability or growth over the study period relative to 2007 State levels.

Industries that meet the MIT Living Wage Standard						
State LQ	Change	National LQ	Change	Earnings		
5.21	1.51	31.87	-1.87	\$88,707		
4.43	0.12	7.88	-0.94	\$46,527		
4.01	2.20	23.86	-13.41	\$63,385		
2.32	0.16	1.72	-0.24	\$68,770		
1.99	0.64	9.95	-2.95	\$58,316		
1.57	1.21	1.99	-1.54	\$42,459		
1.54	0.27	4.78	-1.01	\$40,070		
1.47	1.47	0.31	-0.31	\$77,393		
1.24	0.82	1.59	-1.11	\$59,487		
1.22	0.23	1.24	-0.17	\$38,130		
1.20	0.23	0.81	-0.10	\$94,741		
1.19	0.03	1.40	0.03	\$42,274		
	5.21 4.43 4.01 2.32 1.99 1.57 1.54 1.47 1.24 1.22	5.21 1.51 4.43 0.12 4.01 2.20 2.32 0.16 1.99 0.64 1.57 1.21 1.54 0.27 1.47 1.47 1.24 0.82 1.22 0.23 1.20 0.23	5.21 1.51 31.87 4.43 0.12 7.88 4.01 2.20 23.86 2.32 0.16 1.72 1.99 0.64 9.95 1.57 1.21 1.99 1.54 0.27 4.78 1.47 1.47 0.31 1.24 0.82 1.59 1.22 0.23 1.24 1.20 0.23 0.81	5.21 1.51 31.87 -1.87 4.43 0.12 7.88 -0.94 4.01 2.20 23.86 -13.41 2.32 0.16 1.72 -0.24 1.99 0.64 9.95 -2.95 1.57 1.21 1.99 -1.54 1.54 0.27 4.78 -1.01 1.47 1.47 0.31 -0.31 1.24 0.82 1.59 -1.11 1.22 0.23 1.24 -0.17 1.20 0.23 0.81 -0.10		

Mature or Declining Industries

Sub Sectors located within the Defined Region, with State-level 2013 Location Quotients at or above 1.0 that may be experiencing stagnation or decline relative to 2007 State levels.

Industries that meet the MIT Living Wage Standard						
Sub Sector	State LQ	Change	National LQ	Change	Earnings	
Commercial and Service Industry Machinery Mfg	1.58	-1.73	3.98	2.68	\$38,948	
Social Advocacy Organizations	1.57	-0.42	1.67	0.49	\$41,033	
Nonmetallic Mineral Mining and Quarrying	1.54	-0.43	2.38	0.13	\$54,412	
Architectural and Structural Metals Manufacturing	1.48	-0.34	2.67	0.27	\$41,368	
Natural Gas Distribution	1.44	-0.01	0.43	0.12	\$55,663	
Petroleum, Petroleum Products Merchant Wholesalers	1.32	-0.19	1.13	0.17	\$43,055	
Education and Hospitals (Local Government)	1.16	0.00	1.06	0.04	\$37,430	
Depository Credit Intermediation	1.06	0.09	1.24	-0.12	\$36,636	
Vending Machine Operators	1.05	0.47	1.26	-0.45	\$39,337	
Federal Government, Civilian	1.02	0.00	0.51	0.02	\$51,239	

Possible Future Growth Industries

Sub Sectors located within the Defined Region, with State-level 2013 Location Quotients below 1.0, and experiencing stability or growth over the study period relative to 2007 State levels.

Industries that meet the MIT Living Wage Standard						
Sub Sector	State LQ	Change	National LQ	Change	Earnings	
Wireless Telecommunications Carriers (not Satellite)	0.98	0.33	0.46	-0.21	\$43,086	
Plastics Product Manufacturing	0.90	0.13	2.30	-0.44	\$37,489	
Insurance Carriers	0.89	0.22	1.60	-0.37	\$56,968	
Offices of Physicians	0.88	0.22	0.84	-0.23	\$85,276	
Couriers and Express Delivery Services	0.82	0.15	0.63	-0.10	\$44,650	
Electric Power Generation, Transmission, Distribution	0.77	0.53	0.92	-0.62	\$77,997	
Machinery, Equip., and Supplies Merch. Wholesalers	0.77	0.23	1.03	-0.30	\$60,651	
Other General Purpose Machinery Manufacturing	0.70	0.24	2.11	-0.83	\$40,435	
Printing and Related Support Activities	0.67	0.13	2.04	-0.66	\$40,524	
Nonresidential Building Construction	0.55	0.18	0.51	-0.15	\$42,999	
Activities Related to Credit Intermediation	0.54	0.05	0.27	0.07	\$43,374	
Other Food Manufacturing	0.51	0.14	0.87	-0.28	\$50,347	
Grocery and Related Product Merchant Wholesalers	0.51	0.03	0.60	0.02	\$40,095	
Computer Systems Design and Related Services	0.48	0.30	0.26	-0.16	\$56,291	
Management of Companies and Enterprises	0.41	0.16	0.54	-0.25	\$49,583	
Wholesale Electronic Markets & Agents & Brokers	0.40	0.15	0.16	-0.05	\$45,522	
Soap, Cleaning Compound, and Toilet Prep Mfg	0.35	0.02	0.88	-0.21	\$50,048	
Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	0.30	0.01	0.39	-0.02	\$37,500	
Other Financial Investment Activities	0.28	0.09	0.19	-0.05	\$71,500	
Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing	0.24	0.06	0.72	-0.25	\$46,345	
Industrial Machinery Manufacturing	0.11	0.03	0.46	-0.17	\$45,076	

Non-vital Industries

Sub Sectors located within the Defined Region, with State-level 2013 Location Quotients below 1.0, and experiencing no growth or decline over the study period relative to 2007 State levels.

Industries that meet the MIT Living Wage Standard					
Sub Sector	State LQ	Change	National LQ	Change	Earnings
State Government, Excluding Education & Hospitals	0.92	-0.35	0.72	0.17	\$49,172
Offices of Dentists	0.91	-0.23	0.88	0.29	\$69,098
Agencies, Brokerages, & Other Insurance Related Activities	0.66	-0.22	0.67	0.17	\$38,690
Legal Services	0.64	-0.08	0.40	0.07	\$40,164
Electrical Equipment Manufacturing	0.54	-0.03	2.71	-0.03	\$40,033
Miscellaneous Durable Goods Merchant Wholesalers	0.53	-0.30	0.49	0.22	\$51,783
Securities and Commodity Contracts Intermediation and Brokerage	0.48	-0.03	0.28	-0.01	\$102,884
Freight Transportation Arrangement	0.46	-0.03	0.28	-0.03	\$37,213
Metalworking Machinery Manufacturing	0.44	-0.06	1.08	0.02	\$42,683
Ag, Construction, and Mining Machinery Mfg	0.38	-0.43	1.10	1.13	\$46,722
Wired Telecommunications Carriers	0.37	-0.16	0.29	0.13	\$58,706
Travel Arrangement and Reservation Services	0.36	-0.24	0.26	0.20	\$72,193
Utility System Construction	0.33	-0.16	0.26	0.16	\$43,625
Architectural, Engineering, and Related Services	0.33	-0.07	0.23	0.07	\$39,996
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	0.31	-0.23	0.37	0.32	\$47,841
Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	0.31	-0.40	0.42	0.51	\$38,269
Lumber and Other Construction Materials Merchant Wholesalers	0.27	-0.40	0.41	0.36	\$45,092
Other Residential Care Facilities	0.26	-0.01	0.19	-0.02	\$44,437
Semiconductor and Other Electronic Component Manufacturing	0.18	-0.10	0.16	0.07	\$70,778
Electrical and Electronic Goods Merchant Wholesalers	0.15	-0.08	0.14	0.06	\$53,397
Non-depository Credit Intermediation	0.12	-0.02	0.07	0.01	\$52,784
Medical Equipment and Supplies Manufacturing	0.12	-0.23	0.10	0.17	\$41,685
Warehousing and Storage	0.05	-0.01	0.05	0.02	\$46,436
Converted Paper Product Manufacturing	0.04	-1.10	0.12	3.36	\$42,087

Convergent Location Quotient Data: Potential Cluster Development Targets

Data Summary

In the following tables, the data sets for 'Established Growth,' 'Mature or Declining' and 'Possible Future Growth' industries both Langlade County and the Defined Region were scanned for convergence within the various industry categories. The convergent activity is reflected in the tables below.

"Vital" industries are those that are well-established in the Langlade County and/or the Comparable Region, with a history and trajectory for growth. "Growth" industries are those that are not yet fully established in Langlade County, but show a history of growth either in the local area and/or in the Defined Region.

It is important to note once again that Location Quotient Data is based on employment numbers per industry in a specific geography, as compared to employment numbers per industry in broader geographical area. As a result, they can be somewhat limited in scope. Therefore, when utilizing Location Quotient data for strategy development, it is imperative that the data is tempered by micro and macro business and economic environments per industry when developing policies.

Vital Industries

Sub Sector	2013 State LQ	2023 State LQ
Engine, Turbine, and Power Transmission Equipment Manufacturing	11.87	17.62
Facilities Support Services	7.94	15.45
Paper and Paper Product Merchant Wholesalers	7.41	12.82
Petroleum and Petroleum Products Merchant Wholesalers	3.86	5.74
Electrical Equipment Manufacturing	2.38	2.40
Activities Related to Credit Intermediation	2.04	2.73
General Freight Trucking	2.02	2.05
Highway, Street, and Bridge Construction	1.93	2.43
General Medical and Surgical Hospitals (Private)	1.48	1.56
Depository Credit Intermediation	1.42	1.68
Machinery, Equipment, and Supplies Merchant Wholesalers	1.22	1.78

Growth Industries

	2013	2023
Sub Sector	State LQ	State LQ
Miscellaneous Durable Goods Merchant Wholesalers	0.77	0.95
Offices of Physicians	0.70	1.11
Lumber and Other Construction Materials Merchant Wholesalers	0.67	0.79
Animal Slaughtering and Processing	0.43	0.60
Wired Telecommunications Carriers	0.39	0.42
Computer Systems Design and Related Services	0.22	0.47

Key Takeaway

Data convergence was achieved in areas of strength and growth for Langlade County and the Defined Region – a good sign for ongoing growth, retention and attraction efforts. The data convergence in these categories speaks to a natural growth of companies that operate within similar market spaces, which is the foundation for effective cluster development implementation.

Of the convergent industries, 29% are Wholesalers, 18% are Manufacturers, with all others split across Transportation/Logistics, Health Care, Financial, Professional, and Support Services. This diversity is reflective of the highly diversified economy that the County is home to today.

III. Export Industries

Introduction

Recently, export industries have been increasingly considered a primary driver for economic growth in a given region. While it is true that exports inject non-local dollars into the local economy, providing capacity for local growth, there are a variety of cost and regulatory considerations that often act as a barrier for many businesses. These barriers are especially challenging for small to mid-size firms.

Many smaller firms find that operating on a National scale is of sufficient challenge, and for the community, has the same net effect – importing of non-local dollars—as traditional exports do. While the following datasets will only serve to highlight traditional export activities, gaining a comprehensive understanding of value chains for local businesses – from raw materials to core customer bases – can be instrumental in fostering high-level business assistance and co-location programs. Industry components of these value chains are outlined in Section IV.

Overview

EMSI utilizes an input-output model (MR-SAM) to estimate export data at the County level. The MR-SAM model is based on data from the Census Bureau's Current Population Survey and American Community Survey; as well as the Bureau of Economic Analysis' National Income and Product Accounts, Input-Output Make and Use Tables, and Gross State Product data. In addition, to these datasets, several of EMSIs' proprietary data sets are used, as well as data from Oak Ridge National Labs on the cost of transportation between counties.

While economic modelling of this type seeks to reflect industry activity, it should not be interpreted as a direct representation of actual economic activity by end users.

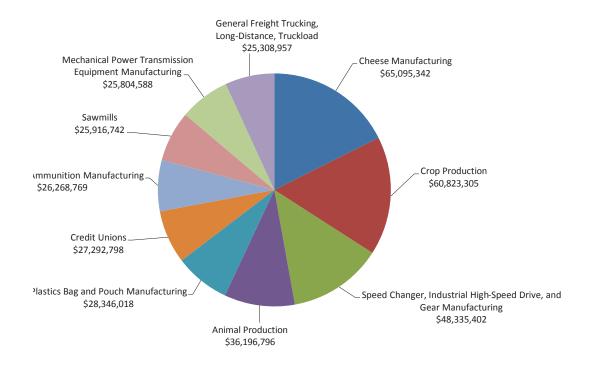
The initial dataset includes the Export and Import activity for Langlade County and the Defined Region. This broad overview is then followed by the top 10 export industries per area in pie chart form, followed by top 30 export industries in a table format. The Data Summary section includes the convergent data for the local area and broader region.

Langlade County Export Industries

Exports (2012) \$843,728,641 **Imports (2012)** \$1,048,220,036

Top 10 Export Industries, per Economic Contribution

Excludes Local, State and Federal Government cash inflows.



- Cheese Manufacturing
- Crop Production
- Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing
- Animal Production
- Plastics Bag and Pouch Manufacturing
- Credit Unions
- Small Arms Ammunition Manufacturing
- Sawmills
- Mechanical Power Transmission Equipment Manufacturing
- \blacksquare General Freight Trucking, Long-Distance, Truckload

Top 30 Export Industries, Langlade County

NAICS	Industry	Exports
311513	Cheese Manufacturing	\$65,095,342
111000	Crop Production	\$60,823,305
333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	\$48,335,402
112000	Animal Production	\$36,196,796
326111	Plastics Bag and Pouch Manufacturing	\$28,346,018
522130	Credit Unions	\$27,292,798
332992	Small Arms Ammunition Manufacturing	\$26,268,769
321113	Sawmills	\$25,916,742
333613	Mechanical Power Transmission Equipment Manufacturing	\$25,804,588
484121	General Freight Trucking, Long-Distance, Truckload	\$25,308,957
321918	Other Millwork (including Flooring)	\$18,675,407
622110	General Medical and Surgical Hospitals (Private)	\$15,868,656
339920	Sporting and Athletic Goods Manufacturing	\$14,864,526
335311	Power, Distribution, and Specialty Transformer Manufacturing	\$14,620,000
424130	Industrial and Personal Service Paper Merchant Wholesalers	\$12,877,676
722410	Drinking Places (Alcoholic Beverages)	\$12,419,905
452990	All Other General Merchandise Stores	\$11,558,180
621210	Offices of Dentists	\$11,471,703
311612	Meat Processed from Carcasses	\$11,024,833
452112	Discount Department Stores	\$10,994,173
212321	Construction Sand and Gravel Mining	\$10,384,486
336399	All Other Motor Vehicle Parts Manufacturing	\$9,025,644
523120	Securities Brokerage	\$8,464,200
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	\$8,314,706
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers	\$8,070,489
523140	Commodity Contracts Brokerage	\$7,843,338
524210	Insurance Agencies and Brokerages	\$6,570,595
484220	Specialized Freight (except Used Goods) Trucking, Local	\$6,496,472
441110	New Car Dealers	\$6,148,806
113310	Logging	\$5,680,836

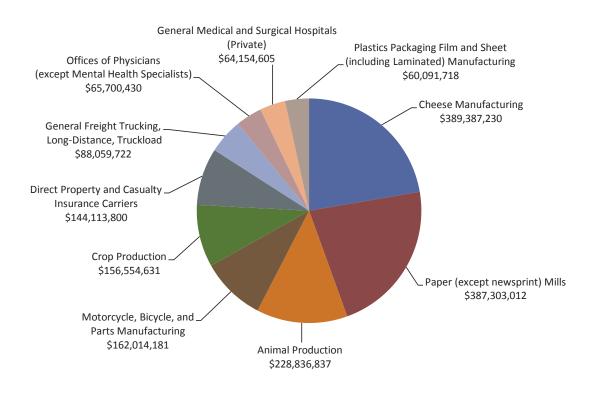
*Excludes Local, State and Federal Government cash inflows.

Defined Region Export Industries

Exports (2012) \$5,523,695,876 Imports (2012) \$7,150,747,619

Top 10 Export Industries, per Economic Contribution

Excludes Local, State and Federal Government cash inflows.





■ Paper (except Newsprint) Mills

Animal Production

■ Motorcycle, Bicycle, and Parts Manufacturing

■ Crop Production

■ Direct Property and Casualty Insurance Carriers

■ General Freight Trucking, Long-Distance, Truckload

■ Offices of Physicians (except Mental Health Specialists)

■ General Medical and Surgical Hospitals (Private)

■ Plastics Packaging Film and Sheet (including Laminated) Manufacturing

Top 30 Export Industries, Defined Region

NAICS	Industry	Exports
311513	Cheese Manufacturing	\$389,387,230
322121	Paper (except Newsprint) Mills	\$387,303,012
112000	Animal Production	\$228,836,837
336991	Motorcycle, Bicycle, and Parts Manufacturing	\$162,014,181
111000	Crop Production	\$156,554,631
524126	Direct Property and Casualty Insurance Carriers	\$144,113,800
484121	General Freight Trucking, Long-Distance, Truckload	\$88,059,722
621111	Offices of Physicians (except Mental Health Specialists)	\$65,700,430
622110	General Medical and Surgical Hospitals (Private)	\$64,154,605
326112	Plastics Packaging Film and Sheet (including Laminated) Manufacturing	\$60,091,718
454113	Mail-Order Houses	\$59,574,683
722410	Drinking Places (Alcoholic Beverages)	\$54,391,121
333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	\$48,222,662
522130	Credit Unions	\$46,553,386
336612	Boat Building	\$46,436,560
221122	Electric Power Distribution	\$43,010,927
321113	Sawmills	\$42,312,296
113310	Logging	\$40,784,853
522110	Commercial Banking	\$39,574,405
551114	Corporate, Subsidiary, and Regional Managing Offices	\$39,168,437
321219	Reconstituted Wood Product Manufacturing	\$38,199,707
321911	Wood Window and Door Manufacturing	\$37,069,431
326199	All Other Plastics Product Manufacturing	\$36,483,939
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Mfg	\$34,905,766
333319	Other Commercial and Service Industry Machinery Manufacturing	\$32,977,702
326111	Plastics Bag and Pouch Manufacturing	\$30,016,022
484220	Specialized Freight (except Used Goods) Trucking, Local	\$29,937,784
321918	Other Millwork (including Flooring)	\$29,917,043
332420	Metal Tank (Heavy Gauge) Manufacturing	\$29,541,129
332618	Other Fabricated Wire Product Manufacturing	\$29,090,344

Excludes Local, State and Federal Government cash inflows.

Data Summary

EMSI's export modelling tool resulted in 13 private sector intra-industry parings for export activities in Langlade County and the Defined Region. As an indicator of economic activity drivers, this tool is useful in gauging Langlade County's top export industry contributions within the broader regional context. Again, while the numbers are not directly relatable to sales points, they do serve to illustrate the importance of various industries to the export landscape in the area.

Industry	Defined Region Export Activity	Langlade County Export Activity	Langlade County as % of Defined Region
Cheese Manufacturing	\$389,387,230	\$65,095,342	16.72%
Animal Production	\$228,836,837	\$36,196,796	15.82%
Crop Production	\$156,554,631	\$60,823,305	38.85%
General Freight Trucking, Long-Distance, Truckload	\$88,059,722	\$25,308,957	28.74%
General Medical, Surgical Hospitals* (Private)	\$64,154,605	\$15,868,656	24.74%
Drinking Places** (Alcoholic Beverages)	\$54,391,121	\$12,419,905	22.83%
Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	\$48,335,402	\$48,335,402	100.00%
Credit Unions	\$46,553,386	\$27,292,798	58.63%
Sawmills	\$42,312,296	\$25,916,742	61.25%
Logging	\$40,784,853	\$5,680,836	13.93%
Plastics Bag and Pouch Mfg	\$30,016,022	\$28,346,018	94.44%
Specialized Freight Trucking, Local (not used goods)	\$29,917,043	\$6,496,472	21.71%
Other Millwork (including Flooring)	\$29,917,043	\$18,675,407	62.42%

*Local hospital activity is driven by out-of-area insurance payments **Drinking Places activity is driven by a high LQ relative to state, as well as tourism activity.

Key Takeaway

Most of the intra-industry export parings included sub-sectors from the Forestry, Fishing, Hunting and Agriculture industry, Transportation and Warehousing industry, and Manufacturing industry Super-sectors. Additionally, activity in the Financial Sector is significant in terms of both volume of activity and percentage of local activity vs. the Defined Region.

IV. Gap Analysis Reports

Introduction to Gap Analysis Reports

In an Economic Development framework, a Gap Analysis, (also called a needs analysis or needs assessment) works to identify "gaps" and/or "disconnects" that exist within various industrial supply chains and/or retail network within a targeted market area. It can be an effective way to identify and prioritize business climate improvements that will have the highest impact in order to ensure long-term success of companies or communities.

It is important to note that not all "gaps" can be filled, just as not all "disconnects" can be re-connected. Gaps exists where there is insufficient local / regional supply of the required inputs. They may exist for a number of reasons, including insufficient size (i.e. the size of the gap may not be robust enough to attract one or more firms, and/or encourage a local firm to expand, and/or encourage entrepreneurial activity to fill the gap), or an undesirable supplier candidate for the community. That said, not all gaps exist under negative conditions – and industries that have potential locally should be targeted for cluster development.

Where "gaps" are a vacancy of a supply industry, "disconnects" exist where a local input supply industry does exist but is under-utilized. "Disconnects" are the result of a number of factors, including a lack of knowledge between the purchasing and selling firms, or even the size of the targeted region under analysis.

In the case of a lack of knowledge, the implication for action is clear: implement strategies to build bridges across firms within respective industries, for example, through networking such as trade shows or networking workshops. Industries that appear to be "disconnected" may be potential targets for focused attention or further action. Primarily, such action would include enhancing the relationships within the regional clusters by strengthening inter-industry linkages via import substitution strategies.

When the region of analysis is too small in a spatial sense, industries responsible for importing of goods may define their purchasing territory differently; they may even perceive their purchases as local. For example, an industry in Milwaukee may be importing large levels of a particular input from the Chicago region. From a Milwaukee and/or Wisconsin perspective, this level of importing may not appear to be "optimal," but from the industrial perspective the relevant region does not stop or start at the Wisconsin-Illinois state line. By further exploring where inputs, (as well as exports) are flowing, a larger regional approach may become apparent.

Additionally, there may be market, business climate, or legal explanations as to why disconnects exist, which may include anything from the custom nature of required inputs to the inability to come to contractual terms.

When utilizing Gap Analysis reports for the purpose of identifying target firms or industries, it is important to look for a combination of established demand, regional capacity, and cross-industry correlations. By targeting businesses that fit these criteria, the targeted attraction process built from the data will have higher rates of success.

Overview

The Gap Analysis reports are presented for four target sectors, identified both by preceding data and existing programming: 1) Agribusiness and Food Processing (Value-Added Ag Products); 2) Wood Product Manufacturing (includes Paper & Printing Products); 3) Transportation and Logistics, and 4) the Metal Manufacturing Sub-Sector. A full listing of the Gap Analysis report for Langlade County is found in Appendix B of this report.

Industry "Requirements" figures include not only direct support industries operating within the target sectors, but also a number in-direct or support industries (such as financial services, legal services and insurance) as well.

In reviewing the tables which follow, opportunities to fill gaps in the county can be seen by reviewing low percentages of requirements satisfied in the region, or higher percentage of requirements satisfied outside the region. However, existing capacity for fulfilling industry requirements should be established before setting out to develop a gap-identified target, as this refers to existing skills and business climate requirements being in-place before target development.

Following the individual Gap Analysis reports per targeted industries, a third set of data works to align both local (Langlade County) and regional (Defined Region) gaps within each targeted industry. This dataset will include only the convergent datasets that also indicate no less than approximately 10% of existing capacity (indicated by "% Satisfied in Region") within the area.

Langlade County 2012 Gap Analysis Report: Agribusiness and Food Processing (Value-Added Ag Products)

Industry	Total	% Satisfied	# Jobs	AAWW
	Requirements	in Region		
Animal Production	\$42,306,826	3.09%	214	\$29,399
Cheese Manufacturing	\$16,519,228	32.73%	60	\$70,998
Crop Production	\$9,938,552	21.71%	631	\$22,679
Other Animal Food Manufacturing	\$4,289,647	0.00%	0	\$0
Animal (except Poultry) Slaughtering	\$3,334,230	4.05%	<10	\$35,962
Fluid Milk Manufacturing	\$3,329,622	0.00%	0	\$0
Meat Processed from Carcasses	\$2,953,011	15.34%	18	\$58,965
Pesticide and Other Ag Chemical Manufacturing	\$2,460,488	0.00%	0	\$0
Poultry Processing	\$2,423,913	0.00%	0	\$0
Soft Drink Manufacturing	\$2,103,497	0.00%	0	\$0
Dry, Condensed, Evaporated Dairy Product Mfg	\$1,921,393	0.00%	0	\$0
Farm Labor Contractors and Crew Leaders	\$1,851,607	33.40%	27	\$25,494
Breweries	\$1,571,913	0.00%	0	\$0
Commercial Bakeries	\$1,501,589	0.00%	0	\$0
Fruit and Vegetable Canning	\$1,421,818	0.00%	0	\$0
Wineries	\$1,065,496	0.00%	0	\$0
Other Snack Food Manufacturing	\$1,047,647	0.00%	0	\$0
Nitrogenous Fertilizer Manufacturing	\$989,362	0.00%	0	\$0
Phosphatic Fertilizer Manufacturing	\$966,051	0.00%	0	\$0
Frozen Specialty Food Manufacturing	\$931,306	0.00%	0	\$0
Postharvest Crop Activities (not Cotton Ginning)	\$921,811	8.05%	0	\$0
Spice and Extract Manufacturing	\$908,809	0.00%	0	\$0
Dog and Cat Food Manufacturing	\$890,094	0.00%	0	\$0
Support Activities for Animal Production	\$798,445	13.50%	<10	\$6,940
Distilleries	\$775,100	0.00%	0	\$0
Fertilizer (Mixing Only) Manufacturing	\$695,223	41.60%	11	\$29,344
Cookie and Cracker Manufacturing	\$673,209	0.00%	0	\$0
Breakfast Cereal Manufacturing	\$611,083	0.00%	0	\$0
Fresh and Frozen Seafood Processing	\$585,561	0.00%	0	\$0
Soil Preparation, Planting, and Cultivating	\$583,033	29.78%	<10	\$27,058
Confectionery Mfg from Purchased Chocolate	\$553,222	0.00%	0	\$0
All Other Miscellaneous Food Manufacturing	\$537,530	0.00%	0	\$0
Frozen Fruit, Juice, and Vegetable Manufacturing	\$535,492	0.00%	0	\$0
Ice Cream and Frozen Dessert Manufacturing	\$534,464	0.00%	0	\$0
Coffee and Tea Manufacturing	\$488,814	0.00%	0	\$0
Wet Corn Milling	\$475,320	0.00%	0	\$0
Mayo, Dressing, Other Prepared Sauce Mfg	\$471,295	0.00%	0	\$0
Perishable Prepared Food Manufacturing	\$460,697	0.00%	0	\$0
Retail Bakeries	\$436,465	13.20%	11	\$14,931

Fats and Oils Refining and Blending	\$428,226	0.00%	0	\$0
Soybean Processing	\$417,586	0.00%	0	\$0
Roasted Nuts and Peanut Butter Mfg	\$366,496	0.00%	0	\$0
Bottled Water Manufacturing	\$356,362	0.00%	0	\$0
Flavoring Syrup and Concentrate Mfg	\$339,669	0.00%	0	\$0
Nonchocolate Confectionery Manufacturing	\$337,375	0.00%	0	\$0
Flour Mixes, Dough Mfg from Purchased Flour	\$297,041	0.00%	0	\$0
Farm Management Services	\$296,943	99.75%	29	\$47,550
Flour Milling	\$289,264	0.00%	0	\$0
Specialty Canning	\$280,381	0.00%	0	\$0
Rendering and Meat Byproduct Processing	\$277,059	0.00%	0	\$0
Chocolate, Confectionery Mfg from Cacao Beans	\$222,744	0.00%	0	\$0
Dried and Dehydrated Food Manufacturing	\$216,614	0.00%	0	\$0
Dry Pasta Manufacturing	\$162,528	0.00%	0	\$0
Tortilla Manufacturing	\$151,498	0.00%	0	\$0
Noncellulosic Organic Fiber Manufacturing	\$150,061	0.00%	0	\$0
Crop Harvesting, Primarily by Machine	\$145,767	99.13%	0	\$0
Ice Manufacturing	\$141,188	0.00%	0	\$0
Creamery Butter Manufacturing	\$127,953	0.00%	0	\$0
Frozen Cakes, Pies, and Other Pastries Mfg	\$117,323	0.00%	0	\$0
Other Oilseed Processing	\$115,518	0.00%	0	\$0
Cellulosic Organic Fiber Manufacturing	\$108,532	0.00%	0	\$0
Rice Milling	\$81,141	0.00%	0	\$0
Cane Sugar Refining	\$78,712	0.00%	0	\$0
Beet Sugar Manufacturing	\$70,725	0.00%	0	\$0
Sugarcane Mills	\$54,623	0.00%	0	\$0
Seafood Canning	\$49,416	0.00%	0	\$0
Malt Manufacturing	\$24,031	0.00%	0	\$0

Langlade County 2012 Gap Analysis Report: Wood Product Manufacturing (includes Paper & Printing Products)

Industry	Total Requirements	% Satisfied in Region	# Jobs	AAWW
Logging	\$6,695,674	40.78%	64	\$30,897
Sawmills	\$5,679,508	36.98%	113	\$46,213
Wood Window and Door Manufacturing	\$791,833	0.00%	0	\$0
Wood Preservation	\$635,645	0.00%	0	\$0
Other Millwork (including Flooring)	\$624,038	63.54%	134	\$40,195
Wood Container and Pallet Manufacturing	\$381,599	36.24%	19	\$36,792
Reconstituted Wood Product Manufacturing	\$365,424	0.00%	0	\$0
Support Activities for Forestry	\$341,065	48.66%	<10	\$11,447
Softwood Veneer and Plywood Mfg	\$312,397	0.00%	0	\$0
Hardwood Veneer and Plywood Manufacturing	\$289,822	71.46%	<10	\$39,638
All Other Miscellaneous Wood Product Mfg	\$232,369	52.93%	16	\$32,795
Timber Tract Operations	\$203,253	87.56%	<10	\$42,120
Cut Stock, Resawing Lumber, and Planing	\$188,588	0.00%	0	\$0
Manufactured Home (Mobile Home) Mfg	\$144,657	0.00%	0	\$0
Truss Manufacturing	\$109,469	0.00%	0	\$0
Prefabricated Wood Building Manufacturing	\$84,488	0.00%	0	\$0
Forest Nurseries, Gathering of Forest Prdcts	\$68,987	95.85%	<10	\$61,912
Engineered Wood Member (not Truss) Mfg	\$37,129	0.00%	0	\$0
Corrugated and Solid Fiber Box Mfg	\$1,582,657	0.00%	0	\$0
Paper (except Newsprint) Mills	\$1,048,565	0.00%	0	\$0
Commercial Lithographic Printing	\$940,207	0.00%	0	\$0
Sanitary Paper Product Manufacturing	\$528,195	0.00%	0	\$0
Paperboard Mills	\$484,691	0.00%	0	\$0
Folding Paperboard Box Manufacturing	\$453,590	0.00%	0	\$0
Coated and Laminated Paper Manufacturing	\$341,082	0.00%	0	\$0
Commercial Screen Printing	\$269,252	0.00%	0	\$0
Quick Printing	\$256,864	5.83%	\$0	\$0
All Other Converted Paper Product Mfg	\$250,347	0.00%	0	\$0
Other Commercial Printing	\$212,316	23.57%	11	\$31,510
Nonfolding Sanitary Food Container Mfg	\$192,380	0.00%	0	\$0
Coated and Laminated Packaging Paper Mfg	\$163,560	0.00%	0	\$0
Commercial Flexographic Printing	\$163,557	0.00%	0	\$0
Fiber Can, Tube, Drum, and Similar Products Mfg	\$148,688	0.00%	0	\$0
Digital Printing	\$135,875	0.00%	0	\$0
Newsprint Mills	\$127,492	0.00%	0	\$0
Manifold Business Forms Printing	\$119,663	0.00%	0	\$0
Books Printing	\$110,873	0.00%	0	\$0
Uncoated Paper and Multiwall Bag Mfg	\$95,349	0.00%	0	\$0
Envelope Manufacturing	\$94,174	0.00%	0	\$0

Coated Paper Bag and Pouch Manufacturing	\$75,136	0.00%	0	\$0
Die-Cut Paper, Paperboard Office Supplies Mfg	\$69,914	0.00%	0	\$0
Commercial Gravure Printing	\$56,513	0.00%	0	\$0
Setup Paperboard Box Manufacturing	\$53,859	0.00%	0	\$0
Prepress Services	\$42,655	0.00%	0	\$0
Tradebinding and Related Work	\$33,126	0.00%	0	\$0
Blankbook, Looseleaf Binders, Devices Mfg	\$29,351	0.00%	0	\$0
Stationery, Tablet, Related Product Mfg	\$29,280	0.00%	0	\$0
Surface-Coated Paperboard Manufacturing	\$19,880	0.00%	0	\$0
Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses	\$19,166	0.00%	0	\$0
Pulp Mills	\$947	0.00%	0	\$0

Langlade County 2012 Gap Analysis Report: Transportation & Logistics

Industry	Total Requirements	% Satisfied in Region	# Jobs	AAWW
General Freight Trucking, Long-Distance (LD), Truckload	\$6,548,786	54.67%	187	\$48,688
Scheduled Passenger Air Transportation	\$5,068,920	0.00%	0	\$0
Rail Transportation	\$4,012,996	16.55%	0	\$0
Couriers and Express Delivery Services	\$3,080,277	1.68%	0	\$0
General Warehousing and Storage	\$3,043,048	0.00%	0	\$0
General Freight Trucking, Local	\$3,032,443	37.13%	26	\$48,402
General Freight Trucking, LD, Less Than Truckload	\$2,836,144	18.04%	<10	\$39,371
Specialized Freight (not Used Goods) Trucking, Local	\$2,264,314	87.82%	46	\$48,338
Specialized Freight (not Used Goods) Trucking, LD	\$1,371,323	20.26%	<10	\$63,401
Freight Transportation Arrangement	\$1,299,606	31.05%	<10	\$76,040
Used Household and Office Goods Moving	\$723,521	0.00%	0	\$0
Other Support Activities for Air Transportation	\$615,085	0.00%	0	\$0
Nonscheduled Chartered Passenger Air Transport	\$486,630	0.00%	0	\$0
Pipeline Transportation of Natural Gas	\$376,529	0.00%	0	\$0
School and Employee Bus Transportation	\$323,485	64.04%	72	\$20,996
Other Warehousing and Storage	\$314,664	0.00%	0	\$0
Refrigerated Warehousing and Storage	\$292,378	0.00%	0	\$0
Inland Water Freight Transportation	\$288,240	0.00%	0	\$0
Marine Cargo Handling	\$277,422	0.00%	0	\$0
Local Messengers and Local Delivery	\$265,903	30.99%	<10	\$13,010
Limousine Service	\$250,724	0.00%	0	\$0
Deep Sea Freight Transportation	\$231,284	0.00%	0	\$0
Motor Vehicle Towing	\$229,520	2.68%	<10	\$4,680
Other Airport Operations	\$195,548	20.29%	<10	\$7,019
Coastal and Great Lakes Freight Transportation	\$185,382	0.00%	0	\$0
Port and Harbor Operations	\$172,486	0.00%	0	\$0
Scheduled Freight Air Transportation	\$165,454	0.00%	0	\$0
Taxi Service	\$162,621	0.00%	0	\$0
Navigational Services to Shipping	\$156,436	0.00%	0	\$0
Special Needs Transportation	\$142,132	99.36%	22	\$14,706
Support Activities for Rail Transportation	\$140,630	0.00%	0	\$0
Other Support Activities for Road Transportation	\$137,140	0.00%	0	\$0
Bus and Other Motor Vehicle Transit Systems	\$113,700	0.00%	0	\$0
Pipeline Transportation of Crude Oil	\$112,765	0.00%	0	\$0
Nonscheduled Chartered Freight Air Transportation	\$109,163	0.00%	0	\$0
Deep Sea Passenger Transportation	\$102,880	0.00%	0	\$0
All Other Transit and Ground Passenger Transport	\$81,956	69.17%	<10	\$84,663
Coastal and Great Lakes Passenger Transportation	\$77,725	0.00%	0	\$0
Charter Bus Industry	\$76,688	14.72%	0	\$0

Packing and Crating	\$75,952	0.00%	0	\$0
Other Nonscheduled Air Transportation	\$75,154	0.00%	0	\$0
Pipeline Transport of Refined Petroleum Products	\$70,228	0.00%	0	\$0
Other Support Activities for Water Transportation	\$64,843	0.00%	0	\$0
Farm Product Warehousing and Storage	\$62,343	0.00%	0	\$0
Scenic and Sightseeing Transportation, Water	\$59,113	0.00%	0	\$0
Interurban and Rural Bus Transportation	\$57,196	0.00%	0	\$0
Inland Water Passenger Transportation	\$53,430	0.00%	0	\$0
Scenic and Sightseeing Transportation, Land	\$44,757	0.00%	0	\$0
All Other Support Activities for Transportation	\$43,483	0.00%	0	\$0
Air Traffic Control	\$20,324	0.00%	0	\$0
Mixed Mode Transit Systems	\$20,164	0.00%	0	\$0
Scenic and Sightseeing Transportation, Other	\$16,120	0.00%	0	\$0
Postal Service (Private Sector)	\$14,359	0.00%	0	\$0
Commuter Rail Systems	\$5,949	0.00%	0	\$0
All Other Pipeline Transportation	\$2,870	0.00%	0	\$0
Other Urban Transit Systems	\$1,779	0.00%	0	\$0

Langlade County 2012 Gap Analysis Report: Metal Product Manufacturing

Industry	Total	% Satisfied in	# Jobs	AAWW
Mechanical Power Transmission Equip. Mfg	Requirements \$1,500,407	Region 56.88%	135	\$81,725
Speed Changer, Industrial High-Speed Drive, and Gear	\$282,893	74.96%	220	\$68,128
Manufacturing				
Machine Shops	\$3,524,471	3.28%	<10	\$41,776
Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	\$251,150	41.56%	36	\$60,504
Metal Heat Treating	\$280,878	28.34%	14	\$39,984
Small Arms Ammunition Manufacturing	\$71,800	99.99%	311	\$40,196
Farm Machinery and Equipment Mfg	\$1,428,851	3.00%	<10	\$83,752
Other Metal Valve and Pipe Fitting Mfg	\$124,051	27.83%	<10	\$30,586
Conveyor and Conveying Equipment Mfg	\$389,825	7.63%	<10	\$66,165
All Other Misc. Fabricated Metal Product Mfg	\$592,554	3.59%	<10	\$42,276
Special Die and Tool, Die Set, Jig, and Fixture Mfg	\$432,389	1.99%	0	\$0
Construction Machinery Manufacturing	\$1,130,810	0.72%	<10	\$85,823
Ball and Roller Bearing Manufacturing	\$1,870,939	0.00%	0	\$0
Other Engine Equipment Manufacturing	\$1,295,748	0.00%	0	\$0
Air-Conditioning and Warm Air Heating Equipment and	<i>ϕ 1/235/7 10</i>	0.0070		40
Commercial and Industrial Refrigeration Equipment	\$732,053	0.00%	0	\$0
Manufacturing				
Turbine and Turbine Generator Set Units Mfg	\$728,771	0.00%	0	\$0
Bolt, Nut, Screw, Rivet, and Washer Mfg	\$717,207	0.00%	0	\$0
Electroplating, Plating, Polishing, Anodizing, and Coloring	\$711,488	0.00%	0	\$0
Precision Turned Product Manufacturing	\$633,696	0.00%	0	\$0
Metal Coating, Engraving (except Jewelry and	\$627,252	0.00%	0	\$0
Silverware), and Allied Services to Manufacturers Cutting Tool and Machine Tool Accessory Mfg	\$418,441	0.00%	0	\$0
Hardware Manufacturing	\$406,841	0.00%	0	\$0
Metal Tank (Heavy Gauge) Manufacturing Lawn and Garden Tractor and Home Lawn and Garden	\$346,097	0.00%	0	\$0
Equipment Manufacturing	\$341,717	0.00%	0	\$0
Fluid Power Valve and Hose Fitting Mfg	\$322,187	0.00%	0	\$0
Pump and Pumping Equipment Mfg	\$309,101	0.00%	0	\$0
Semiconductor Machinery Manufacturing	\$299,849	0.00%	0	\$0
Oil and Gas Field Machinery and Equip. Mfg	\$288,049	0.00%	0	\$0
All Other Industrial Machinery Mfg	\$279,056	0.00%	0	\$0
Fluid Power Pump and Motor Manufacturing	\$254,520	0.00%	0	\$0
Metal Can Manufacturing	\$249,828	0.00%	0	\$0
All Other Miscellaneous General Purpose Machinery	\$247,438	0.00%	0	\$0
Manufacturing Industrial Valve Manufacturing	\$234,329	0.00%	0	\$0
Power Boiler and Heat Exchanger Mfg	\$232,632	0.00%	0	\$0
Industrial Mold Manufacturing	\$231,212	0.00%	0	\$0
Air and Gas Compressor Manufacturing	\$227,790	0.00%	0	\$0
All and das compressor Manufacturing	3227,790	0.00%	U	ŞÜ

Fahricated Ding and Ding Fitting Mfg	\$190,100	0.00%	0	\$0
Fabricated Pipe and Pipe Fitting Mfg Fluid Power Cylinder and Actuator Mfg	\$181,118	0.00%	0	\$0
Overhead Traveling Crane, Hoist, and Monorail System				
Manufacturing	\$178,785	0.00%	0	\$0
Heating Equipment (except Warm Air Furnaces)	\$173,363	0.00%	0	\$0
Manufacturing Machine Tool (Metal Cutting Types) Mfg	\$171,051	0.00%	0	\$0
Packaging Machinery Manufacturing	\$168,750	0.00%	0	\$0
Other Fabricated Wire Product Mfg	\$165,631	0.00%	0	\$0
Ammunition (except Small Arms) Mfg	\$151,320	0.00%	0	\$0
Food Product Machinery Manufacturing	\$146,391	0.00%	0	\$0
Other Metal Container Manufacturing	\$135,692	0.00%	0	\$0
Power-Driven Handtool Manufacturing	\$135,481	0.00%	0	\$0
Enameled Iron and Metal Sanitary Ware Mfg	\$129,863	0.00%	0	\$0
Plastics and Rubber Industry Machinery Mfg	\$127,995	0.00%	0	\$0
Other Metalworking Machinery Mfg	\$109,324	0.00%		\$0
Elevator and Moving Stairway Manufacturing	\$109,324	0.00%	0	\$0
		0.00%		\$0 \$0
Small Arms Manufacturing	\$106,545		0	
Air Purification Equipment Manufacturing	\$101,488	0.00%	0	\$0
Welding and Soldering Equipment Mfg	\$100,919	0.00%	0	\$0 \$0
Plumbing Fixture Fitting and Trim Mfg	\$83,932	0.00%	0	\$0
Machine Tool (Metal Forming Types) Mfg	\$80,071	0.00%	0	\$0
Paper Industry Machinery Manufacturing	\$77,434	0.00%	0	\$0
Printing Machinery and Equipment Mfg	\$76,693	0.00%	0	\$0
Spring (Light Gauge) Manufacturing	\$73,412	0.00%	0	\$0
Industrial and Commercial Fan and Blower Mfg	\$70,823	0.00%	0	\$0
Other Ordnance and Accessories Mfg	\$65,950	0.00%	0	\$0
Photographic and Photocopying Equipment Mfg	\$55,550	0.00%	0	\$0
Rolling Mill Machinery and Equipment Mfg	\$55,136	0.00%	0	\$0
Industrial Process Furnace and Oven Mfg	\$46,094	0.00%	0	\$0
Industrial Pattern Manufacturing	\$44,812	0.00%	0	\$0
Mining Machinery and Equipment Mfg	\$40,968	0.00%	0	\$0
Textile Machinery Manufacturing	\$40,754	0.00%	0	\$0
Sawmill and Woodworking Machinery Mfg	\$33,464	0.00%	0	\$0
Measuring and Dispensing Pump Mfg	\$30,521	0.00%	0	\$0
Spring (Heavy Gauge) Manufacturing	\$28,484	0.00%	0	\$0
Scale and Balance Manufacturing	\$24,614	0.00%	0	\$0
Optical Instrument and Lens Manufacturing	\$19,208	0.00%	0	\$0

Defined Region 2012 Gap Analysis Report: Agribusiness and Food Processing (Value-Added Ag Products)

Industry	Total	% Satisfied in	# Jobs	AAWW
· · · · · · · · · · · · · · · · · · ·	Requirements	Region		
Cheese Manufacturing	\$104,832,279	55.44%	602	\$44,387
Other Animal Food Manufacturing	\$28,147,895	1.43%	<10	\$75,295
Fluid Milk Manufacturing	\$22,334,365	0.00%	0	\$0
Animal (except Poultry) Slaughtering	\$17,714,655	1.83%	<10	\$42,677
Meat Processed from Carcasses	\$15,689,347	8.85%	56	\$44,718
Poultry Processing	\$15,369,656	0.00%	0	\$0
Soft Drink Manufacturing	\$14,238,311	0.00%	0	\$0
Dry, Condensed, and Evaporated Dairy Product	\$12,589,263	0.00%	0	\$0
Manufacturing Breweries	\$10,877,689	2.46%	0	\$0
Fruit and Vegetable Canning	\$10,507,439	3.62%	40	\$37,408
Commercial Bakeries	\$10,240,168	2.10%	45	\$21,99
Wineries	\$8,301,348	34.18%	27	\$30,620
Wet Corn Milling	\$8,002,328	0.00%	0	\$30,020
Spice and Extract Manufacturing	\$7,197,483	15.85%	44	\$68,180
Other Snack Food Manufacturing	\$7,197,463	0.00%	0	\$00,100
9			_	
Frozen Specialty Food Manufacturing Dog and Cat Food Manufacturing	\$6,461,040	0.28%	0	\$0 \$0
3	\$6,283,351	0.00%		
Flavoring Syrup and Concentrate Mfg	\$4,990,072	0.00%	0	\$0
Distilleries	\$4,977,325	0.00%	0	\$0
Cookie and Cracker Manufacturing	\$4,623,619	0.00%	0	\$0
Breakfast Cereal Manufacturing	\$4,251,978	0.00%	0	\$0
Fats and Oils Refining and Blending Confectionery Manufacturing from Purchased	\$3,819,727	0.00%	0	\$0
Chocolate	\$3,816,546	11.76%	<10	\$45,895
All Other Miscellaneous Food Manufacturing	\$3,801,090	2.96%	<10	\$41,191
Mayonnaise, Dressing, and Other Prepared Sauce	\$3,730,399	0.00%	0	\$0
Manufacturing				
Frozen Fruit, Juice, and Vegetable Mfg	\$3,715,087	0.00%	0	\$0
Fresh and Frozen Seafood Processing	\$3,594,857	0.00%	0	\$0
Coffee and Tea Manufacturing	\$3,456,892	0.00%	0	\$0
Perishable Prepared Food Manufacturing	\$3,258,672	0.00%	0	\$0
Ice Cream and Frozen Dessert Mfg	\$3,256,605	0.00%	0	\$0
Soybean Processing	\$3,154,104	0.00%	0	\$0
Retail Bakeries	\$2,976,364	9.50%	42	\$12,211
Roasted Nuts and Peanut Butter Mfg	\$2,488,478	0.00%	0	\$0
Bottled Water Manufacturing	\$2,417,302	11.04%	<10	\$38,932
Nonchocolate Confectionery Manufacturing	\$2,310,139	0.00%	0	\$0
Flour Milling	\$2,193,451	0.00%	0	\$0
Specialty Canning	\$2,073,103	0.00%	0	\$0
Flour Mixes and Dough Manufacturing from Purchased	\$2,048,610	0.00%	0	\$0
Flour Chocolate and Confectionery Manufacturing from	\$1,652,916	0.00%	0	\$0
Cacao Beans Dried and Dehydrated Food Manufacturing	\$1,599,918	1.38%	0	\$0

Rendering and Meat Byproduct Processing	\$1,474,073	0.00%	0	\$0
Dry Pasta Manufacturing	\$1,117,278	0.00%	0	\$0
Tortilla Manufacturing	\$1,056,723	0.00%	0	\$0
Ice Manufacturing	\$957,577	24.21%	11	\$33,996
Other Oilseed Processing	\$872,270	0.00%	0	\$0
Creamery Butter Manufacturing	\$858,534	0.00%	0	\$0
Noncellulosic Organic Fiber Manufacturing	\$848,215	0.00%	0	\$0
Frozen Cakes, Pies, and Other Pastries Mfg	\$803,653	0.00%	0	\$0
Cane Sugar Refining	\$687,635	0.00%	0	\$0
Beet Sugar Manufacturing	\$618,111	0.00%	0	\$0
Cellulosic Organic Fiber Manufacturing	\$616,514	0.00%	0	\$0
Rice Milling	\$614,917	0.00%	0	\$0
Crop Harvesting, Primarily by Machine	\$586,673	64.56%	33	\$46,429
Sugarcane Mills	\$477,306	0.00%	0	\$0
Seafood Canning	\$303,397	0.00%	0	\$0
Animal Production	\$242,529	7.68%	1,048	\$26,946
Malt Manufacturing	\$182,136	0.00%	0	\$0
Crop Production	\$57,179	12.05%	1,286	\$24,330
Pesticide and Other Agricultural Chemical Manufacturing	\$7,826	0.00%	0	\$0
Farm Labor Contractors and Crew Leaders	\$7,445	20.48%	74	\$24,013
Postharvest Crop Activities (except Cotton Ginning)	\$3,707	4.56%	<10	\$12,829
Support Activities for Animal Production	\$3,209	22.69%	<10	\$24,677
Nitrogenous Fertilizer Manufacturing	\$2,620	0.00%	0	\$0
Phosphatic Fertilizer Manufacturing	\$2,564	0.00%	0	\$0
Soil Preparation, Planting, and Cultivating	\$2,345	34.58%	20	\$25,294
Fertilizer (Mixing Only) Manufacturing	\$1,848	18.18%	11	\$29,344
Farm Management Services	\$1,195	62.76%	30	\$47,123

Defined Region

2012 Gap Analysis Report: Wood Product Manufacturing (includes Paper & Printing Products)

Industry	Total Requirements	% Satisfied in Region	# Jobs	AAWW
Sawmills	\$28,712,406	16.79%	189	\$43,950
Logging	\$26,303,854	46.72%	367	\$31,332
Paper (except Newsprint) Mills	\$13,878,174	50.80%	909	\$80,641
Corrugated and Solid Fiber Box Manufacturing	\$13,121,462	1.44%	12	\$53,536
Pulp Mills	\$10,455,070	1.49%	<10	\$70,095
Commercial Lithographic Printing	\$8,051,631	3.41%	68	\$46,100
Paperboard Mills	\$7,293,279	0.00%	0	\$0
Wood Window and Door Manufacturing	\$4,275,167	45.85%	334	\$30,863
Sanitary Paper Product Manufacturing	\$4,155,665	0.00%	0	\$0
Reconstituted Wood Product Manufacturing	\$3,914,076	64.36%	99	\$78,906
Folding Paperboard Box Manufacturing	\$3,759,459	0.00%	0	\$0
Coated and Laminated Paper Manufacturing	\$3,627,465	4.99%	0	\$0
Wood Container and Pallet Manufacturing	\$3,626,359	27.09%	79	\$43,658
All Other Converted Paper Product Manufacturing	\$3,590,864	2.36%	0	\$0
Other Millwork (including Flooring)	\$3,374,286	38.48%	228	\$38,134
Wood Preservation	\$3,250,390	11.31%	<10	\$70,044
Commercial Screen Printing	\$2,301,827	8.95%	109	\$38,767
Quick Printing	\$2,209,496	20.00%	54	\$62,071
Softwood Veneer and Plywood Manufacturing	\$2,203,893	0.00%	0	\$0
Hardwood Veneer and Plywood Manufacturing	\$2,043,737	65.99%	84	\$40,077
Other Commercial Printing	\$1,814,673	6.07%	11	\$31,592
Coated and Laminated Packaging Paper Mfg	\$1,737,702	0.00%	0	\$0
Newsprint Mills	\$1,695,544	0.00%	0	\$0 \$0
Nonfolding Sanitary Food Container Mfg	\$1,593,117	0.00%	0	\$0
All Other Miscellaneous Wood Product Mfg	\$1,522,274	57.97%	105	\$35,923
Commercial Flexographic Printing Support Activities for Forestry	\$1,397,716 \$1,371,714	32.85% 64.40%	94 19	\$62,083 \$36,758
Fiber Can, Tube, Drum, and Similar Products Mfg	\$1,231,275	0.00%	0	\$30,738
Digital Printing	\$1,164,353	4.14%	<10	\$61,172
Uncoated Paper and Multiwall Bag Manufacturing	\$1,110,949	0.00%	0	\$0
Manufactured Home (Mobile Home) Mfg	\$1,069,517	42.22%	<10	\$78,835
Cut Stock, Resawing Lumber, and Planing	\$1,040,071	47.97%	<10	\$28,645
Manifold Business Forms Printing	\$1,022,824	0.16%	0	\$48,667
Books Printing	\$946,859	0.00%	0	\$0
Envelope Manufacturing	\$883,959	0.00%	0	\$0
Coated Paper Bag and Pouch Manufacturing	\$874,755	0.00%	0	\$0
Truss Manufacturing	\$793,907	0.00%	0	\$0
Prefabricated Wood Building Manufacturing	\$707,080	38.37%	10	\$31,940
Die-Cut Paper, Paperboard Office Supplies Mfg	\$663,136	0.00%	0	\$0
Timber Tract Operations	\$631,389	85.43%	<10	\$87,165
Prepress Services	\$553,918	0.00%	0	\$0
Commercial Gravure Printing	\$481,305	5.72%	<10	\$60,907
Setup Paperboard Box Manufacturing	\$444,926	0.00%	0	\$0
Tradebinding and Related Work	\$420,249	0.00%	0	\$0

Stationery, Tablet, and Related Product Mfg	\$276,677	0.00%	0	\$0
Engineered Wood Member (except Truss) Mfg	\$262,117	0.00%	0	\$0
Blankbook, Looseleaf Binders, and Devices Mfg	\$250,170	1.73%	0	\$48,667
Surface-Coated Paperboard Manufacturing	\$228,244	0.00%	0	\$0
Forest Nurseries and Gathering of Forest Products	\$214,302	98.86%	<10	\$108,507

Defined Region 2012 Gap Analysis Report: Transportation & Logistics

	Total —	% Satisfied in		
Industry	Total Requirements	% Satisfied in Region	# Jobs	AAWW
General Freight Trucking, L-D, Truckload	\$40,431,238	35.38%	681	\$45,116
Scheduled Passenger Air Transportation	\$34,651,127	1.24%	<10	\$59,728
Rail Transportation	\$28,938,759	23.60%	70	\$94,741
General Freight Trucking, Local	\$18,725,429	24.44%	117	\$40,558
General Freight Trucking, Long-Distance, Less Than Truckload	\$17,514,355	17.93%	76	\$43,130
General Warehousing and Storage	\$16,600,107	3.75%	12	\$58,170
Couriers and Express Delivery Services	\$15,479,747	33.92%	111	\$57,114
Specialized Freight (except Used Goods) Trucking, Local	\$13,976,444	76.10%	253	\$49,511
Specialized Freight (except Used Goods) Trucking, Long- Distance	\$8,473,827	15.99%	12	\$38,191
Freight Transportation Arrangement	\$7,584,743	10.84%	20	\$43,682
Used Household and Office Goods Moving	\$4,470,706	10.16%	16	\$19,122
Other Support Activities for Air Transportation	\$3,591,005	6.04%	12	\$20,695
Nonscheduled Chartered Passenger Air Transportation	\$3,325,227	0.72%	0	\$0
School and Employee Bus Transportation	\$2,329,723	49.21%	330	\$17,629
Inland Water Freight Transportation	\$2,001,153	0.00%	0	\$0
Limousine Service	\$1,806,184	2.68%	<10	\$42,370
Other Warehousing and Storage	\$1,717,295	4.45%	0	\$0
Marine Cargo Handling	\$1,620,252	0.00%	0	\$0
Deep Sea Freight Transportation	\$1,605,777	0.00%	0	\$0
Refrigerated Warehousing and Storage	\$1,595,626	5.38%	0	\$0
Pipeline Transportation of Natural Gas	\$1,424,177	0.00%	0	\$0
Motor Vehicle Towing	\$1,342,893	38.15%	25	\$21,029
Local Messengers and Local Delivery	\$1,339,870	65.92%	25	\$30,450
Coastal and Great Lakes Freight Transportation	\$1,286,890	0.00%	0	\$0
Taxi Service Other Airport Operations	\$1,165,409	34.85%	22	\$12,057 \$7,019
·	\$1,142,173	3.47% 0.00%	<10 0	\$7,019
Scheduled Freight Air Transportation Special Needs Transportation	\$1,129,802 \$1,030,592	39.65%	26	\$15,101
Port and Harbor Operations	\$1,030,392	0.00%	0	\$13,101
Navigational Services to Shipping	\$914,176	0.00%	0	\$0
Support Activities for Rail Transportation	\$822,461	0.00%	0	\$0
Bus and Other Motor Vehicle Transit Systems	\$818,716	0.00%	0	\$0
Other Support Activities for Road Transport	\$801,808	8.27%	<10	\$14,849
Nonscheduled Chartered Freight Air Transport	\$744,819	0.00%	0	\$0
Deep Sea Passenger Transportation	\$713,753	0.00%	0	\$0
All Other Transit and Ground Passenger Transportation	\$587,215	10.47%	<10	\$84,663
Charter Bus Industry	\$549,531	41.31%	<10	\$20,952
Coastal and Great Lakes Passenger Transportation	\$541,633	0.00%	0	\$0
Other Nonscheduled Air Transportation	\$511,960	23.43%	<10	\$33,043
Pipeline Transportation of Crude Oil	\$456,509	0.00%	0	\$0
Packing and Crating	\$444,418	19.72%	<10	\$37,895
Interurban and Rural Bus Transportation	\$409,821	56.62%	0	\$101,394

Other Support Activities for Water Transportation	\$379,518	0.00%	0	\$0
Inland Water Passenger Transportation	\$370,632	0.00%	0	\$0
Scenic and Sightseeing Transportation, Water	\$346,844	24.56%	<10	\$13,152
Farm Product Warehousing and Storage	\$340,899	21.50%	0	\$13,132
Pipeline Transportation of Refined Petroleum Products	\$297,861	0.00%	0	\$0
Scenic and Sightseeing Transportation, Land	\$262,726	14.58%	0	\$0
All Other Support Activities for Transportation	\$254,906	0.00%	0	\$0
Mixed Mode Transit Systems	\$145,093	0.00%	0	\$0
Air Traffic Control	\$119,894	0.00%	0	\$0
Scenic and Sightseeing Transportation, Other	\$95,520	0.00%	0	\$0
Postal Service (Private Sector)	\$86,038	0.00%	0	\$0
Commuter Rail Systems	\$41,893	0.00%	0	\$0
All Other Pipeline Transportation	\$16,370	0.00%	0	\$0
Other Urban Transit Systems	\$12,614	0.00%	0	\$0

Defined Region

2012 Gap Analysis Report: Metal Product Manufacturing

	Total	0/ (-1:-61:-		
Industry	Total Requirements	% Satisfied in Region	# Jobs	AAWW
Machine Shops	\$21,367,691	8.68%	291	\$38,308
Farm Machinery and Equipment Manufacturing	\$8,345,553	0.59%	<10	\$83,752
Construction Machinery Manufacturing	\$8,295,448	0.63%	11	\$61,527
Other Engine Equipment Manufacturing	\$7,202,841	0.00%	0	\$0
Air-Conditioning and Warm Air Heating Equipment				
and Commercial and Industrial Refrigeration	\$5,442,836	0.00%	0	\$0
Equipment Manufacturing	ÅE 24E 460	0.000/		40
Turbine and Turbine Generator Set Units Mfg Electroplating, Plating, Polishing, Anodizing, and	\$5,315,160	0.00%	0	\$0
Coloring	\$4,868,842	6.37%	44	\$33,466
Other Commercial and Service Industry Machinery	\$4,388,420	11.26%	122	\$48,239
Manufacturing	\$ 4 ,366,420	11.2070	122	J 4 0,∠JJ
Metal Coating, Engraving (except Jewelry and	\$4,290,930	0.58%	0	\$0
Silverware), and Allied Services to Mfrs All Other Miscellaneous Fabricated Metal Product	44404 200	F 470/	4.4	Å== ==0
Manufacturing	\$4,181,308	5.17%	14	\$55,558
Fabricated Pipe and Pipe Fitting Manufacturing	\$3,951,707	1.45%	<10	\$52,944
Bolt, Nut, Screw, Rivet, and Washer Mfg	\$3,486,231	0.00%	0	\$0
Ball and Roller Bearing Manufacturing	\$3,284,948	0.00%	0	\$0
All Other Industrial Machinery Manufacturing	\$3,135,469	0.45%	<10	\$12,792
Precision Turned Product Manufacturing	\$3,082,528	0.00%	0	\$0
Special Die and Tool, Die Set, Jig, and Fixture Mfg	\$2,913,786	1.42%	<10	\$59,181
Metal Tank (Heavy Gauge) Manufacturing	\$2,895,404	55.21%	164	\$50,264
Fluid Power Valve and Hose Fitting Mfg	\$2,711,540	0.00%	0	\$0
Hardware Manufacturing	\$2,700,547	31.33%	83	\$40,831
Conveyor and Conveying Equipment Mfg	\$2,557,451	6.64%	66	\$44,588
Pump and Pumping Equipment Manufacturing	\$2,502,861	0.00%	0	\$0
Lawn and Garden Tractor and Home Lawn and Garden	\$2,451,425	17.18%	82	\$57,146
Equipment Manufacturing Semiconductor Machinery Manufacturing	\$2,253,421	0.00%	0	\$0
Metal Can Manufacturing	\$2,233,085	0.00%	0	\$0
Oil and Gas Field Machinery and Equip. Mfg	\$2,009,809	0.00%	0	\$0 \$0
			-	
Power Boiler and Heat Exchanger Mfg	\$1,968,277	0.00%	0	\$0 \$0
Industrial Valve Manufacturing	\$1,966,326	0.00%	0	\$0
Mechanical Power Transmission Equip. Mfg	\$1,934,236	48.00%	135	\$81,725
Metal Heat Treating	\$1,919,087	5.82%	14	\$39,984
Other Fabricated Wire Product Manufacturing	\$1,892,360	50.29%	213	\$45,401
Industrial Mold Manufacturing All Other Miscellaneous General Purpose Machinery	\$1,814,894	1.33%	<10	\$76,387
Manufacturing	\$1,804,734	2.15%	<10	\$52,701
Cutting Tool and Machine Tool Accessory Mfg	\$1,744,986	8.61%	36	\$51,692
Industrial Truck, Tractor, Trailer, and Stacker Machinery	\$1,647,288	9.85%	36	\$60,504
Manufacturing Food Product Machinery Manufacturing				
Food Product Machinery Manufacturing	\$1,642,588	0.00%	0	\$0 \$0
Air and Gas Compressor Manufacturing	\$1,561,152	0.00%	0	\$0
Packaging Machinery Manufacturing	\$1,541,206	0.20%		

Fluid Power Pump and Motor Manufacturing	\$1,540,674	0.00%	0	\$0
Heating Equipment (except Warm Air Furnaces)	\$1,221,371	0.00%	0	\$0
Manufacturing Other Metal Container Manufacturing			0	
Overhead Traveling Crane, Hoist, and Monorail System	\$1,208,211	0.00%	0	\$0
Manufacturing	\$1,172,590	26.56%	83	\$50,933
Fluid Power Cylinder and Actuator Mfg	\$1,096,921	0.00%	0	\$0
Other Metal Valve and Pipe Fitting Mfg	\$1,039,012	3.32%	<10	\$30,586
Plastics and Rubber Industry Machinery Mfg	\$990,847	0.00%	0	\$0
Machine Tool (Metal Cutting Types) Mfg	\$941,128	5.18%	22	\$47,598
Power-Driven Handtool Manufacturing	\$915,534	0.00%	0	\$0
Enameled Iron and Metal Sanitary Ware Mfg	\$914,023	0.00%	0	\$0
Air Purification Equipment Manufacturing	\$871,141	0.00%	0	\$0
Paper Industry Machinery Manufacturing	\$866,261	0.00%	0	\$0
Other Metalworking Machinery Manufacturing	\$862,508	0.00%	0	\$0
Printing Machinery and Equipment Mfg	\$859,873	0.00%	0	\$0
Speed Changer, Industrial High-Speed Drive, and Gear	\$835,766	38.86%	220	\$68,128
Manufacturing Spring (Light Gauge) Manufacturing	\$815,532	0.00%	0	\$0
Welding and Soldering Equipment Mfg	\$734,650	0.00%	0	\$0
Ammunition (except Small Arms) Mfg	\$728,592	0.00%	0	\$0
Small Arms Manufacturing	\$719,813	0.00%	0	\$0
Elevator and Moving Stairway Manufacturing	\$713,177	0.00%	0	\$0
Plumbing Fixture Fitting and Trim Mfg	\$630,666	0.00%	0	\$0
Industrial and Commercial Fan and Blower Mfg	\$606,357	9.66%	32	\$58,523
Textile Machinery Manufacturing	\$452,111	0.00%	0	\$0
Other Ordnance and Accessories Mfg	\$444,825	0.00%	0	\$0
Machine Tool (Metal Forming Types) Mfg	\$441,955	0.00%	0	\$0
Rolling Mill Machinery and Equipment Mfg	\$432,086	0.00%	0	\$0
Photographic and Photocopying Equipment Mfg	\$404,620	0.00%	0	\$0
Sawmill and Woodworking Machinery Mfg	\$370,512	21.27%	16	\$58,277
Small Arms Ammunition Manufacturing	\$353,429	89.02%	311	\$40,196
Industrial Process Furnace and Oven Mfg	\$332,783	0.00%	0	\$0
Industrial Pattern Manufacturing	\$315,240	0.00%	0	\$0
Spring (Heavy Gauge) Manufacturing	\$298,611	0.00%	0	\$0
Mining Machinery and Equipment Mfg	\$284,735	0.00%	0	\$0
Measuring and Dispensing Pump Mfg	\$243,191	0.00%	0	\$0
Scale and Balance Manufacturing	\$177,901	0.00%	0	\$0
Optical Instrument and Lens Manufacturing	\$141,772	0.00%	0	\$0

Gap Analysis Reports - Convergent Data, Langlade County & Defined Region

Overview

Information contained in the following tables includes sub-sectors of target industries that share some level of established demand in both Langlade County and the Defined Region. In addition to established demand, an approximate 10% - 50% market shortage (indicated by "% Satisfied in Region" heading) was also required to be included in this data set.

Agribusiness and Food Processing (Value-Added Ag Products)

Industry	Total (Local) Requirements	% Satisfied in Region	AAWW
Postharvest Crop Activities (not Cotton Ginning)	\$921,811	8.05%	\$12,829
Retail Bakeries	\$436,465	13.20%	\$12,211
Support Activities for Animal Production	\$798,445	13.50%	\$24,677
Meat Processed from Carcasses	\$2,953,011	15.34%	\$44,718
Crop Production	\$9,938,552	21.17%	\$24,330
Soil Preparation, Planting, and Cultivating	\$583,033	29.78%	\$25,294
Cheese Manufacturing	\$16,519,228	32.73%	\$44,387
Farm Labor Contractors and Crew Leaders	\$1,851,607	33.40%	\$25,494
Fertilizer (mixing only) Manufacturing	\$695,223	41.60%	\$27,344

Wood Product Manufacturing (includes Paper & Printing Products)

Industry	Total (Local) Requirements	% Satisfied in Region	AAWW
Other Commercial Printing	\$212,316	23.57%	\$31,510
Wood Container and Pallet Manufacturing	\$381,599	36.24%	\$36,792
Sawmills	\$5,5679,508	36.98%	\$46,213
Logging	\$6,695,674	40.78%	\$30,897
Support Activities for Forestry	\$341,065	48.66%	\$11,447
All Other Miscellaneous Wood Product Mfg	\$232,369	52.93%	\$32,795

Transportation and Logistics

Industry	Total (Local) Requirements	% Satisfied in Region	AAWW
Charter Bus Industry	\$76,688	14.72%	\$20,952
General Freight Trucking, LD, Less than Truckload	\$2,836,144	18.04%	\$39,371
Specialized Freight (not Used Goods) Trucking, LD	\$1,371,323	20.26%	\$63,401
Other Airport Operations	\$195,548	20.29%	\$7,019
Local Messengers and Local Delivery	\$265,903	30.99%	\$13,010
Freight Transportation Arrangement	\$1,299,606	31.05%	\$76,040
General Freight Trucking, Local	\$3,032,443	37.13%	\$48,402
General Freight Trucking, Long Distance, Truckload	\$6,548,786	54.67%	\$48,688

Metal Product Manufacturing

Industry	Total (Local) Requirements	% Satisfied in Region	AAWW
Other Metal Valve and Pipe Fitting Mfg	\$124,051	27.83%	\$30,586
Metal Heat Treating	\$280,878	28.34%	\$39,984
Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	\$251,150	41.56%	\$60,504
Mechanical Power Transmission Equipment Mfg	\$1,500,407	56.88%	\$81,725

Key Takeaway

As stated in the data overview, industries that are targeted for development should display some level of existing capacity (as shown in the data, no less than approx. 10% market gap), as well as room in the market for further development (vis a vis data upper market gap threshold of approx. 50%). Convergent datasets are helpful, in that they show market demand and activity across the regional landscape – which promotes a more realistic, proximity-based perspective in cluster development strategies for a given area.

Industry sub-sectors that have sufficient market volume (Total Requirements), market capacity (10-50% satisfied in the region) and pay a living wage are good potential targets for further cluster development. A number of sub-sectors profiled fit these parameters, particularly in the Metal Product Manufacturing and Transportation and Logistics industries.

Few occupations in both the Wood Products Manufacturing or Agribusiness and Food Processing, both industries of historical focus, offer a regional network of living wage jobs that are coupled with increased market potential.

Workforce Topics and Trends

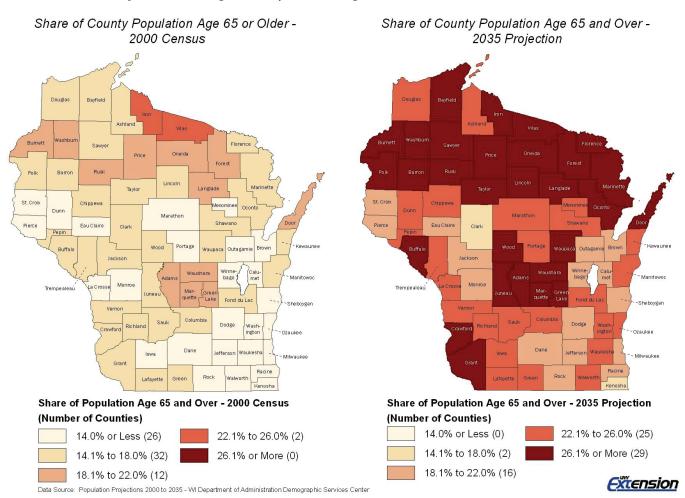
State of Wisconsin

Overview

Occupational and Industry Trend data would not be complete without a brief, yet critical, discussion of workforce demographics. This data is particularly salient in north and central Wisconsin, where "Baby Boomer" residency remains high. The graphic below illustrates the imperative nature of the demographic shifts by highlighting population concentrations for retirement age individuals across the State through the year 2035. Subsequent datasets serve to then contextualize these changes, by industry, throughout the State of Wisconsin.

According to the Wisconsin Workforce Development Office of Economic Advisors, the workforce trends that the State is facing are "unprecedented," "largely unalterable" and "potentially devastating." The OEA contends that these trends necessitate a focus on talent via large investments in education and training, as well as a concerted effort to match the talent supply to the industry demand – or risk the loss of both.⁶

Projected Change in Population Age 65 and Over - 2000 to 2035



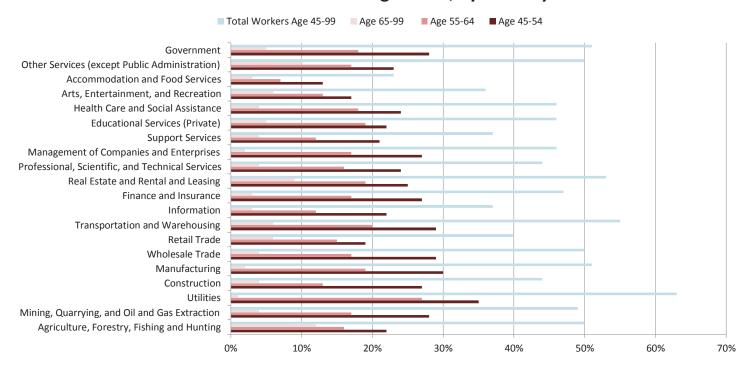
Source: Wisconsin DOA Demographic Service Center 2008 projections. Map produced by Matt Kures, UW-Extension Center for Community and Economic Development (CCED)

Workforce Demographics per Sector

Industry Age:	% 14-18	% 19-21	% 22-24	% 25-34	% 35-44	% 45-54	% 55-64	% 65-99
Agriculture, Forestry, Fishing and Hunting	7%	6%	6%	14%	16%	22%	16%	12%
Mining, Quarrying; Oil, Gas Extraction	1%	3%	4%	21%	23%	28%	17%	4%
Utilities		1%	2%	14%	20%	35%	27%	1%
Construction	1%	2%	4%	24%	25%	27%	13%	4%
Manufacturing	1%	3%	4%	19%	22%	30%	19%	2%
Wholesale Trade	1%	2%	4%	20%	23%	29%	17%	4%
Retail Trade	7%	11%	9%	19%	14%	19%	15%	6%
Transportation and Warehousing	1%	3%	4%	16%	21%	29%	20%	6%
Information	2%	3%	8%	28%	23%	22%	12%	3%
Finance and Insurance	1%	2%	4%	23%	24%	27%	17%	3%
Real Estate and Rental and Leasing	2%	4%	5%	18%	19%	25%	19%	9%
Professional, Scientific, and Technical Services	1%	2%	5%	24%	23%	24%	16%	4%
Mngmt of Companies and Enterprises	1%	3%	5%	22%	23%	27%	17%	2%
Support Services	2%	7%	8%	25%	20%	21%	12%	4%
Educational Services (Private)	2%	6%	5%	20%	21%	22%	19%	5%
Health Care and Social Assistance	1%	4%	6%	23%	21%	24%	18%	4%
Arts, Entertainment, and Recreation	10%	10%	8%	20%	16%	17%	13%	6%
Accommodation and Food Services	16%	15%	12%	22%	12%	13%	7%	3%
Other Services	4%	5%	6%	18%	18%	23%	17%	10%
Government	2%	4%	4%	15%	22%	28%	18%	5%

Source: EMSI Complete Employment – 2013.4

Percent of Workers Age 45-99, by Industry



Data Summary

State of Wisconsin Workforce Demographics

In order to further illustrate the impact of the mass demographic shift occurring across the state, the data has been parsed by age and industry, first in table form, and then in graphic form. The graphic in particular highlights the percentage of workforce per industry that is above age 45.

A number of industries' share of employees over age 45 exceeds 50%, including Agriculture, Forestry, Fishing and Hunting; Utilities; Manufacturing; Wholesale Trade; Transportation and Warehousing; Real Estate, Rental and Leasing; Other Services and Government.

As summarized in prior datasets, more than half of the highlighted industries pay living wages, with wage averages partially attributable to senior positions in organizations as well as skill levels required per sector. Overall, the loss of this workforce may place a downward pressure on wages and incomes, negatively affecting the overall health of Wisconsin's economy.

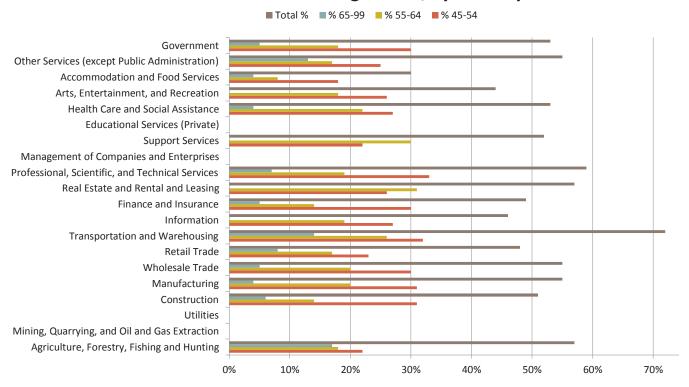
Langlade County

Workforce Demographics per Sector

Industry Age:	% 14-18	% 19-21	% 22-24	% 25-34	% 35-44	% 45-54	% 55-64	% 65-99
Agriculture, Forestry, Fishing and Hunting	7%	5%	5%	13%	15%	22%	18%	17%
Mining, Quarrying;	1%	3%	4%	21%	23%	28%	17%	4%
Oil, Gas Extraction								
Utilities	0%		0%		0%			0%
Construction	0%			19%	26%	31%	14%	6%
Manufacturing	1%	2%	5%	17%	21%	31%	20%	4%
Wholesale Trade				18%	22%	30%	20%	5%
Retail Trade	6%	11%	7%	15%	14%	23%	17%	8%
Transportation and Warehousing	0%	0%		8%	19%	32%	26%	14%
Information					24%	27%	19%	
Finance and Insurance			7%	19%	21%	30%	14%	5%
Real Estate and	1%	2%	5%	24%	23%	24%	16%	4%
Rental and Leasing	0%					26%	31%	
Professional, Scientific, and Technical Services	0%	0%		17%	21%	33%	19%	7%
Mngmt of Companies and Enterprises								
Support Services				16%	16%	22%	30%	
Educational Services (Private)	0%	0%	0%				0%	0%
Health Care and	16%	15%	12%	22%	12%	13%	7%	3%
Social Assistance	1%	3%	5%	19%	19%	27%	22%	4%
Arts, Entertainment, and Recreation						26%	18%	
Accommodation and Food Services	19%	13%	8%	17%	13%	18%	8%	4%
Other Services	2%		4%	17%	20%	25%	17%	13%
Government	3%	3%	3%	15%	24%	30%	18%	5%

Source: EMSI Complete Employment – 2013.4

Percent of Workers age 45-99, by Industry



Data Summary

Langlade County Workforce Demographics

Similar to the State of Wisconsin data, information presented in the table (where available) is structured by age and industry. The graphic above highlights the percent of workers per industry age 45 and older.

Alarmingly, eleven of twenty industry sectors within Langlade County have workforces comprised of 50% or more workers age 45 or older. Of these, the majority (5 of 8) are industries that pay living wages. The implication of this data is a marked loss of worker earnings, as well as skill sets, within the next 20 years.

Managing this potential crisis will require strategies that are aimed at retiree skill retention, workforce attraction, as well as support for investment in technologies for increased efficiencies in targeted industries.

CONCLUSIONS AND RECOMMENDATIONS

Overview

Data and analysis alone will not stimulate the local economy. Data must be interpreted and utilized to inform actionable strategies and activities. With this in mind, Redevelopment Resources has analyzed the data, compared and contrasted it with local perspective, economic conditions, and available resources (land, transportation, workforce and other assets). We are, therefore, recommending a series of implementation strategies that focus on leveraging existing assets for further business growth and strengthening of existing industry clusters. These approaches are discussed under the heading 'Business Retention & Expansion Strategies' and 'Workforce Attraction Strategies,' respectively.

In addition, Redevelopment Resources advocates a highly targeted attraction approach for the LCEDC service territory that is rooted in increasing living wage jobs in industries with particular presence, including:

Manufacturing AAWW: \$48,500

Wholesale Trade AAWW: \$56,900

Transportation & Warehousing AAWW: \$40,000

Finance and Insurance AAWW: \$55,611

Management of Enterprises AAWW: \$86,000

Health Care & Social Assistance AAWW: \$48,000

Utilities AAWW: \$66,511

It is also important to consider the county's infrastructure needs such as utilities, transportation and workforce housing. Strategy and action recommendations included herein target Business Attraction, as well as Community Development Strategies.

Primary Directives

To-date, investments in development programs have been focused on low industries that are linked to the land. Examples of these investments include the Wood Center for Excellence and the emphasis on tourism vis a vis "County of Trails" activities.

While Langlade County is a leader in wood industry activities, the industry itself yields low economic performance for area residents, with Fish, Forestry, Hunting and Agriculture super sector accounting for 10% of AAJ, but a mere 7.3% of AAWW.

Tourism, measured as a combination of Arts, Entertainment, Recreation and Accommodation & Food Services, represents 10.1% of AAJ. While numbers provided by the Wisconsin Department of Tourism appear impressive in regards to Direct Visitor Spending (\$43.3 million in 2012), Total Business Sales (\$61.6 million in 2012), Employment (511 in 2012), Total Labor Income (\$10.4 million in 2012), and State and Local Tax Revenue (\$4.4 million in 2012); many of these numbers are ascertained via a proprietary, state-wide expenditure modelling metric utilized by the State's consulting firm Tourism Economics – not direct tracking of receipts within the County proper. Actual labor receipts reflected in statistics collected by the BLS show that AAWW in the related industries (listed above) are \$10,921 and \$15,138, respectively.

Taken together, a full 20.1% of all area jobs (more, if the 14.1% of the Retail Trade sector is included) pay less than \$25,000 on average annually. Paradoxically, recent economic development programs have been centered directly on these industries, despite the weak economic yields for local residents. These investments point to a faithfulness to the legacy of Langlade County: Forestry, Agriculture and Tourism. Meanwhile, industries that pay a living wage have not seen the focused efforts and investments that are required to grow and thrive.

With the data above in mind, the most focused energy (time and resources) should be placed on fostering the growth and development of industries that pay a living wage. Initial emphasis should center on local, existing businesses through a comprehensive Business Retention and Expansion (BR&E) program.

Traditional BR&E includes surveys and business assistance, however, it is imperative for the LCEDC service territory in particular, that the centerpiece of the program is relationship development, and the founding of a multi-entity, public-private partnership designed to both increase the size of labor pool, and enhance area skill sets. Labor and demographic challenges, as outlined in this report, are the primary impediment to long-term economic relevancy for much of Wisconsin's Northwoods, and Langlade County is no exception to this unfolding economic reality.

The second highest priority should be on developing infrastructure needed to facilitate the businesses' growth and expansion in the county. Infrastructure specific to current and future business needs includes high-speed internet access, high quality roads/highways, available land for business expansion, utility capacity (energy, water and sewer) and adequate housing stock for employees.

I. Business Retention & Expansion Strategies

Retention & Expansion activities are vital to the stability of any community. As mentioned earlier in this report, not only is it much more cost effective to assist existing companies to grow and expand than it is to recruit new companies to a region such as Langlade County, but the positive business climate these practices promote make the area attractive to new companies considering the community for location. In short, by focusing energy on facilitating the success of existing companies, those efforts will go far to attract new companies, as well. Often communities that implement such strategies find that their existing businesses become their most vocal — and most effective — marketers of the region.

Recommendations aimed at both retaining and expanding local, existing businesses include:

- 1. Conduct in-depth retention visits with all significant employers, especially small companies with potential for growth in the four subsectors identified as target industries. Do not rely on a lengthy retention survey to draw out relevant information without zeroing in on possible outcomes for the visit and leveraging the responses to strategically advance the company, and therefore, the County. Work to discover unmet needs and business opportunities.
- 2. Be mindful of employers with headquarters in other locations. Develop relationships directly with corporate headquarters. This is essential to understanding threats and opportunities, and for communicating how much the location in Langlade County is appreciated. Dig in through relationship building and see what they appreciate about their facility in the area, and if there are ways to bring other portions of production or operations to Langlade County. These facilities will be quick to pull up stakes if the workforce or other factors become less favorable to their operation.
- 3. Be prepared to encourage and assist businesses with exporting goods to international markets. Often this seems like a daunting task for a business to undertake but the Wisconsin Economic Development Corporation (WEDC) and Wisconsin Manufacturing Extension Partnership (WMEP) have services available to educate and assist with exporting. The United States only comprises 5% of the world population so the demand for goods and services worldwide is exponentially larger than what exists in the United States.
- 4. Host in-depth discussions with local companies about succession planning. These conversation cans be one-on-one or in a larger group in an effort to build awareness and encourage planning for the retirement of significant numbers of workers. Brainstorm ideas with the business community on solutions to maintaining a vibrant workforce.
- 5. Pursue opportunities for local companies to fill supply chain gaps and replace imported components for the targeted industries. This is most successfully achieved by developing solid relationships with every manufacturer in the target clusters (including suppliers and customers) and being aware of their specific products, components and markets.
- 6. Utilize available data (market intelligence) which is industry specific and related to the sectors which exist in Langlade County. This can be obtained through the North Central Wisconsin Regional Plan Commission (NCWRPC). Study it in-depth and share it one-on-one with select businesses in the county helping to review and interpret it with them. Most importantly, show company leadership how such information can make them more competitive.
- 7. Improve the industrial efficiency of the manufacturing sector through the connection to lean manufacturing services, zero waste, energy management services and other forms of process improvement. Facilitate the sharing of training events by matching manufacturers with like needs to offset costs for individual companies. Tap into UW Stout Manufacturing Outreach Center, http://www.uwstout.edu/moc/about/index.cfm to provide opportunities for companies to improve their operations.
- 8. Encourage small firms to be flexible in their products, services and overall offerings in an effort to spur partnerships with larger firms and facilitate collaboration. To implement this strategy, keep the support industries informed as to changes that may be coming, as well as advising them that flexibility in their respective field could enhance their position. In turn, increased flexibility in the lower tiers becomes an added advantage to the cluster as a whole in terms of resources, versus importation. Host a networking event where small job shops and custom manufacturers can present their services to larger manufacturers.
- 9. Encourage collaboration as another strategy to aid cluster development. Promoting industries to work together can have a beneficial effect on all concerned. Some of the smaller support firms may be too specialized to take on a particular job, but if they are aware of another firm that can do the needed work, they can refer that firm.
- 10. Facilitate joint ventures on purchasing, training, and research & development for companies which may not be able to make the investment on their own but would be able to split the cost with a non-competing or complementary company. Commonality of interest is a strong motivating force and it becomes more so, when those interests can operate more efficiently and less costly. Economies of scale could go a long way in enhancing the clusters and the groups that are directly or indirectly linked to their supply chain. Ask about this when conducting retention visits.

II. Workforce Development Strategies

In light of the demographic trends highlighted in this report, as well as the ever-shifting landscape of required skill sets needed in business, human capital—the knowledge and skills local workers possess—is a critical area for increased investment in Langlade County.

High levels of human capital not only contribute to individual economic success, but also to local economic vitality. Human capital investments can also help build important connections between rural residents, businesses, and institutions and the surrounding regional networks.

Increasingly, communities throughout the country are beginning to recruit workers like they formerly recruited companies – including providing direct financial incentives to individuals. Examples of talent attraction and retention programs include: DakotaRoots.com, LivelnLou.com, and FuelMilwaukee.org. Small municipalities as well as rural regions are also working to develop local talent through attraction and retention – as evidenced by the UW Extension's Gogebic Range Next Generation Initiative.

In light of the aging workforce in several of Langlade County's most prevalent industrial sectors, steps must be taken with urgency to ensure existing jobs are able to be filled with new, younger workers. Additionally, the County must recognize that in order to attract new residents, a serious proactive community development effort must be undertaken to create an appealing and enticing environment in which to live and raise a family.

Strategies to enhance human capital as it relates to the focus clusters include:

- 1. When conducting in-depth retention visits thoroughly document the existing workforce by age and discuss future workforce needs with business leaders. Learn their needs and concerns in the area and chart the needs county-wide. This information will allow trends to be apparent and will lend recognition to broad-based upcoming challenges as well as foster thought and ideas on solutions.
- 2. Host meetings of H.R. professionals from companies with like needs or complementary needs to encourage dialogue and shared solutions. For example, with manufacturers who need a specific skill set, or health care providers with a specific skills need, host a roundtable discussion or quarterly breakfast for dialogue and information sharing. Information such as:
- 3. Work with employers to share articles and information to assist them in presenting themselves well to potential new employees. As this article states, employers need to build their brand with college students where the students are: online and on campus: http://blogs.hbr.org/2014/03/how-companies-can-attract-the-best-college-talent/
- 4. Inventory employee skillsets and shortages of employers in the focus clusters in Langlade County. Through a survey or one-on-one meetings with companies, document the existing need and growth or stretch needs for up to five years.
- 5. Follow plant closures statewide (and in neighboring states) where similar skill sets exist to what employers need in Langlade County. When a plant closure is announced, facilitate a recruiting call or trip to the closing facility to assist local employers recruit new workers. Bring along marketing material about the community (schools, housing, medical facilities, recreation, etc.). At the very least reach out to the closing facility's H.R. director and connect any employers in the County so they can recruit new workers.

Leverage report data, direct market information and area statistics to build the foundation for a talent attraction and retention taskforce. This Public-Private Partnership should be aimed specifically at building, attracting, and retaining a skilled workforce. Participants should include significant employers from across the area industry spectrum, as well as education and training service providers.

III. Community Development Strategies

In every business retention and attraction effort, as well as in workforce recruitment efforts, efforts are fruitless if there isn't an appealing location with the proper infrastructure and amenities. Community development is an unending task that is best implemented at the municipal level but if left unattended, infrastructure and assets deteriorate rapidly and have a cascading effect communitywide.

Very briefly outlined below area areas of focus communities in Langlade County will need to address if they are interested in retaining and growing the economy with local business.

- 1. Securing reliable and redundant high speed internet access is critical to future business success. It's also imperative as a community asset for attracting residents. Every municipal official and county official, elected and non-elected should be advocating and lobbying for installation of high speed internet access. Additionally, the county and the local municipalities should be dedicating resources (human and financial) to facilitate an expedient solution to this apparent challenge. By investing a significant amount of time and money in this valuable asset, entrepreneurs in cottage industries who can work from anywhere with an internet connection would find Langlade County's setting, safety and affordable living very appealing.
- 2. Attending to the housing stock in Langlade County is another community development activity that if left unattended will have far reaching negative ramifications. Blighted properties and lack of options for new workers will turn potential employees away from jobs or force them to live outside the county and commute. This does not bode well for their longevity in the job. Programs exist through the Wisconsin Department of Administration which aid communities in eliminating blight and providing decent, safe and sanitary housing for residents in rural communities.
- 3. With Transportation and Warehousing as one of the identified focus industries for Langlade County, it is critical that the highways and roads throughout the county be well-maintained and serviced. Considering the location of Langlade County within the state of Wisconsin, as well as the fact that the railroad does not run through the county, trucking is the only transportation option to bring in raw materials and transport finished goods to customers.

IV. Business Attraction Strategies

Business attraction, particularly when undertaken through a combination of cold leads and broad strokes including advertising in national publications – is inefficient and costly. As with any marketing effort, business attraction efforts are most effective when target, niche markets are identified and approached where a need can be met.

Business attraction is a long-term and expensive endeavor; even targeted approaches do not result in immediate responses. Targeted attraction is more likely to provide a return on investment for the county, especially if the program is rooted in data and strategy, supported by local industry, and approached in a deliberate way.

The following recommendations constitute a starting place for business attraction efforts in key industry sectors based on the data presented throughout this report.

- 1. Through the development of strong relationships with local industry representatives, discover supply chain gaps to develop direct attraction targets. Specifically, seek to understand challenges to obtaining raw materials, components, services related to manufacturing processes, and access to new markets. Work with the business owners to identify prospects and to meet stated needs through recruitment of new business or startups to address concerns and assist to grow the business.
- 2. Many employers in Langlade County have established solid business practices as government contractors, holding long term contracts with the federal government, particularly the Department of Defense. Through retention visits, seek to understand and establish a coalition of suppliers that can collaborate and discover new opportunities for supplying the DOD. Look for a common thread to their processes or final output. Leverage direct interviews and the Gap Analysis to call on and recruit supportive businesses to this sector, or assist in the facilitation of a start up in a related and supportive product or service line.
- 3.Gather testimonials from existing businesses in Langlade County to use as marketing material for business recruitment. Find out why they have low turnover, have business growth and have continued success in that environment and use that information to market the area. Get specific details about how they survived the recession and continue to manufacturer their goods or offer their services. Record these in video form as well as still photography and post them on the web site. Create marketing sheets (in pdf) to include in email blasts to targeted businesses.
- 4. Develop a list of site selectors who work in the industries called out previously in this report. Connections can be made through the Mid-America Economic Development Council's event held each year in December in Chicago. This year it will be held December 7-9, 2014. Plan to attend this conference and meet as many site selectors as possible. Take marketing material developed from testimonials and profiles on the business clusters including available property and workforce data. http://www.maedc.net/competitiveness.asp
- 5. Relationships with existing manufacturers in Langlade County should be leveraged by asking them to partner with you in the business recruitment effort. When they attend industry trade shows, ask them if they would be willing to take LCEDC marketing material and make it available in their booth. Who better to promote the benefits of Langlade County than the businesses already successful there?

FOOTNOTES:

- Executive Summary: Making Sense of Clusters: Regional Competitiveness and Economic Development, Joseph Cortright, Brookings Institution, March 2006. www.brookings.edu/research/reports/2006/03/cities-cortright
- ⁱⁱ Location Quotients are calculated by comparing an industries' regional share of employment vs. that industries' national share of employment. National industries are considered the baseline or = 1.0, so any industry that registers above 1.0 is considered to have a specialty in the area..
- Data Sources and Calculations: ESMI (Economic Modeling Specialists, Intl.'s ESMI Complete Employment 2012.4) Input-Output Data: The input-output model in this report is created using the national Input-Output matrix provided by the federal Bureau of Economic Analysis. This is combined with the national Total Gross Output, the regional Total Gross Output, the land area of the subject region, regional DIRT data and regional in/out commuter patterns in order to calculate regional requirements, imports and exports. After using matrix algebra to calculate the regional multiplier, the resulting matrix is multiplied by the sales vector and converted back to jobs or earnings. Specifically, this data comes from the U.S. Department of Commerce, Bureau of Economic Analysis, Industry Economic Accounts: Benchmark & Annual Input-Output (I-O) Accounts. Industry Data: In order to capture a complete picture of industry employment, EMSI basically combines covered employment data from Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor with total employment data in Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA), augmented with County Business Patterns (CBP) and Non-employer Statistics (NES) published by the U.S. Census Bureau. Projections are based on the latest available EMSI industry data, 15-year past local trends in each industry, growth rates in statewide and (where available) sub-state area industry projections published by individual state agencies, and (in part) growth rates in national projections from the Bureau of Labor Statistics. Additionally, State-Level data was collected specifically from the Wisconsin Department of Workforce Development.
- Source U.S. Census Bureau: State and County QuickFacts. Data derived from Population Estimates, American Community Survey, Census of Population and Housing, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits
 Last Revised: Tuesday, 17-Dec-2013
- http://livingwage.mit.edu/counties/55097; see also: http://livingwage.mit.edu/pages/about
- vi Source: presentation, "Will our Workforce be Adequated and Capable" as presented to SHRMC 12 November 2013. Author, Presenter: Dennis K. Winters, Chief, Office of Economic Advisors, Wisconsin Department of Workforce Development.



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