Economic Composition of Southeast Minnesota: Industries and Performance

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Presented in partnership with the EDA Center at the University of Minnesota, Crookston

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ECONOMIC COMPOSITION OF SOUTHEAST MINNESOTA: KEY FINDINGS

To analyze the economic composition of Southeast Minnesota, University of Minnesota Extension conducted an analysis of industry outputs, employment and wages, and interdependencies. Following is a report of key findings. This report is presented in partnership with the EDA Center at the University of Minnesota, Crookston.

Southeastern Minnesota's economy, as defined in this study, is a significant generator of output, accounting for nearly one-quarter of Greater Minnesota's total output. Health care and manufacturing are two major drivers of the economy. A more in-depth analysis reveals regional strengths and concerns.

REGIONAL STRENGTHS:

- **Health care and social assistance**: The health care and social assistance industry accounts for 20 percent of employment in the region. Southeastern Minnesota is competitive in key areas including offices of doctors and dentists and hospitals. The industry has relatively high wages and experienced strong wage growth between 2003 and 2013. Further, data indicates that specialization in the health care industry has allowed medical and diagnostic labs to generate business from outside the region.

- **Manufacturing:** The manufacturing industry is responsible for the creation of 35 percent of the region's output. While health care is concentrated around the regional center in Rochester, manufacturing is fairly distributed across the region. Key strengths for the manufacturing industry include the diversity of manufacturing sectors (i.e. food products to computers) and its competitiveness despites losses in the manufacturing industry in the United States.

- **Employment Services:** The employment services sector added over 2,500 jobs. In particular, the region added a significant number of temporary help services jobs between 2003 and 2013. The temporary help services sector includes workers who are employed directly by the employment services business, but are placed in positions with other companies.

REGIONAL CONCERNS:

The analysis also revealed areas of potential concern for the region from an economic standpoint. These industries are not as competitive in the region and may warrant additional attention and exploration.

- **Construction:** The region lost over 2,500 construction jobs between 2003 and 2013. The job losses spanned across most construction activities – residential, commercial, and highway.

- **Retail Trade**: The Southeast region lost retail trade jobs between 2003 and 2013. While the retail trade industry lost jobs at a national level, losses in the Southeast region exceeded what is expected. Job losses were highest at supermarkets, sporting goods stores, and new car dealerships.

STUDY BACKGROUND AND OVERVIEW OF SOUTHEAST REGION

Minnesota's regions differ in size, social and economic characteristics, history, and geography. These differences influence the economy of the regions, as well as economic development decisions and discussions. Therefore, conversations about Minnesota's economy and its economic future must include discussions of the diverse drivers of economic activity in the state's regions. University of Minnesota Extension, in responding to a broader conversation about the role of Greater Minnesota in the state's economy, is producing economic profile reports on Minnesota's 12 non-metro regions. This report is provided in partnership with the EDA Center at University of Minnesota, Crookston.

Located at the extreme southeastern corner of Minnesota, this region is comprised of eleven counties including Dodge, Fillmore, Freeborn, Goodhue, Houston, Mower, Olmsted, Rice, Steele, Wabasha, and Winona. The region is home to Rochester, one of Greater Minnesota's largest cities with a population of nearly 109,000. There are also multiple regional economic and population centers in this area.

Map 1: Map of Southeast Region in Minnesota

SOUTHEAST REGION

Dodge, Fillmore, Freeborn, Goodhue, Houston, Mower, Olmsted, Rice, Steele, Wabasha, and Winona counties
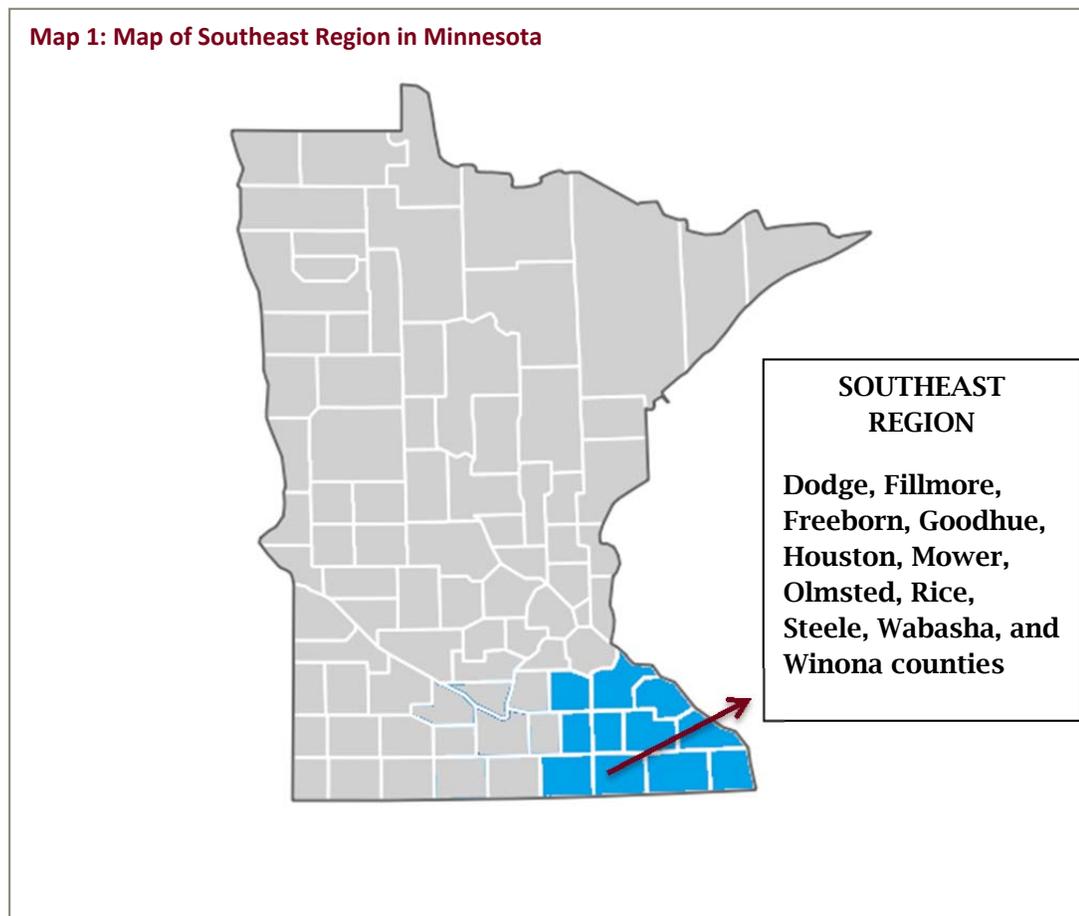
This report explores industry outputs, employment and wages by industry and sector, and industry interdependencies in the region. The goals of the report are to 1) identify the region's strengths – both industries that are the current core of the economy and emerging industries – and 2) identify concerns for the region. Regional concerns focus on industries that may be underperforming or declining.

To ascertain which industries are regional strengths and which are potential regional concerns, this report draws from output, employment, and wage data. The first section looks at industry outputs. Output

measures the value of sales by industry. Studying output by industry provides perspective on which industries are driving the highest sales in the region. The second section details employment. Studying employment by industry provides perspective on the industries employing the highest number of people in the region. The employment section of this report also discusses wages. The third section of this report looks at economic interdependencies. Examining how sectors interact and connect with each other can provide powerful insights into an economy.

INDUSTRY OUTPUT

Output is an important factor to consider when assessing the economic composition of a specific geography. Output provides information about the economic activity of a region and also is directly tied to employment.

In 2012, businesses and industries in the Southeast region produced $50.9 billion in goods and services, according to estimates from the IMPLAN economic model. Output in the Southeast region accounts for approximately 9 percent of Minnesota's $567.8 billion economy and 24 percent of Greater Minnesota's $218.8 billion economy. The manufacturing industry contributes 35 percent of total output, the professional and business services industry contributes 19 percent, and the health and social services industry contributes 14 percent (chart 1). These three industries produced 70 percent of all output in the region.

Chart 1: Industry Share of Total Output Southeast
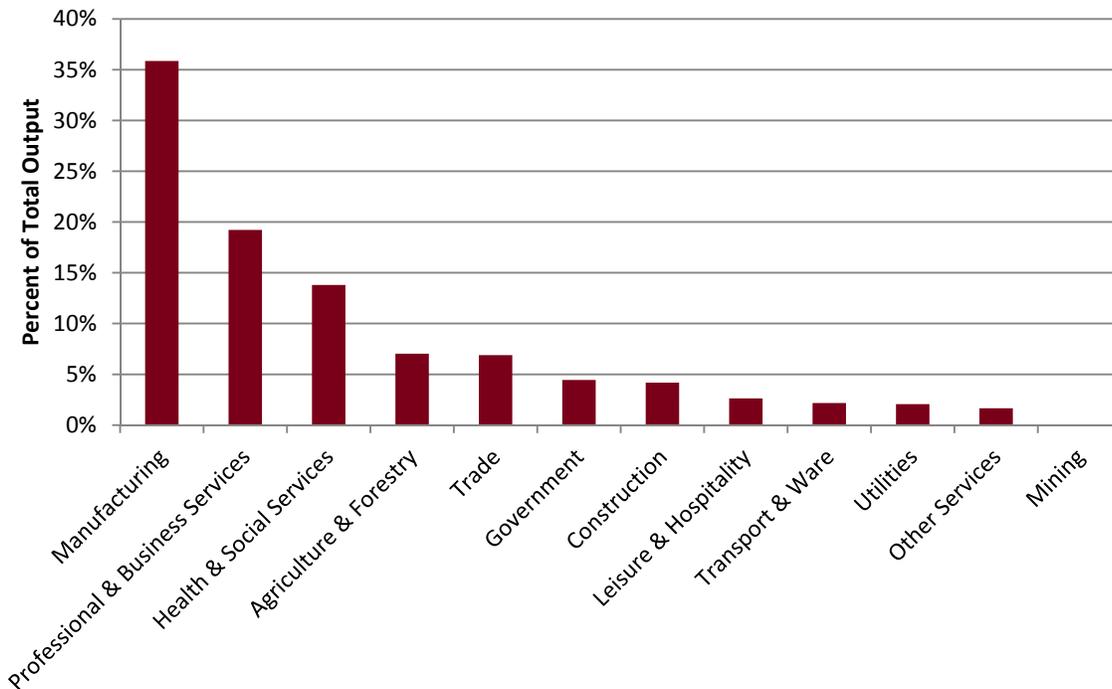
Source: IMPLAN

Chart 1 shows output by major industry category, which helps frame discussions about output in the region. However, examining output by sector can be valuable too. Sectors are a more refined level of analysis. Individual sectors form industries. For example, crop production and animal production are sectors within the industry of agriculture.

Beyond the major industry categories, the top ten *sectors* in the Southeast region produce an estimated $20.3 billion of output (table 1). Electronic computer manufacturing; offices of physicians, dentists, and other health practitioners; and the housing market are the top generators of output in the region.

For the majority of the sectors in table 1, high output is driven by high productivity (output per worker). Each electronic computer manufacturing employee produces an estimated $1.4 million in output annually. The industries with the lowest output per worker in the region include private household services (households providing services to other households, such as cleaning) and agriculture and forestry support services. Since the model measures one job as one job, these two industries, which have relatively high seasonal and part-time employment, likely have lower output per worker because a significant share of the workers are working less than full-time.

**Table 1: Top Ten Sectors in Southeast Region, Sorted by Output**

Sector	Total Output (millions)	Output per Worker
Electronic computer manufacturing	$4,644.0	$1,401,000
Offices of physicians, dentists, and other health practitioners	$3,613.5	$146,700
Housing market	$2,170.0	NA
Private hospitals	$1,916.3	$141,000
Wholesale trade businesses	$1,585.8	$197,600
Animal (except poultry) slaughtering, rendering, and processing	$1,467.8	$335,000
Grain farming	$1,449.9	$150,200
Monetary authorities and depository credit intermediation activities	$1,258.2	$418,000
Real estate establishments	$1,170.6	$162,000
Fats and oils refining and blending	$977.2	$4,476,000
Top ten total	$20,253.3 (40%)	
Total output in region	$50,855.0	Source: IMPLAN

EMPLOYMENT AND WAGES

Job growth in the region was strong over the period studied (chart 2). While the region lost jobs between 2001 and 2003, the number of jobs grew by 6,700 between 2004 and 2008.[1] The Great Recession of 2008-2009 affected Southeastern Minnesota, leading to a drop of 9,000 jobs between 2008 and 2010. The region has since recovered and the number of jobs in 2013 is the highest number of jobs in the time period.

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[1] Quarterly Census of Employment and Wages

Source: QCEW
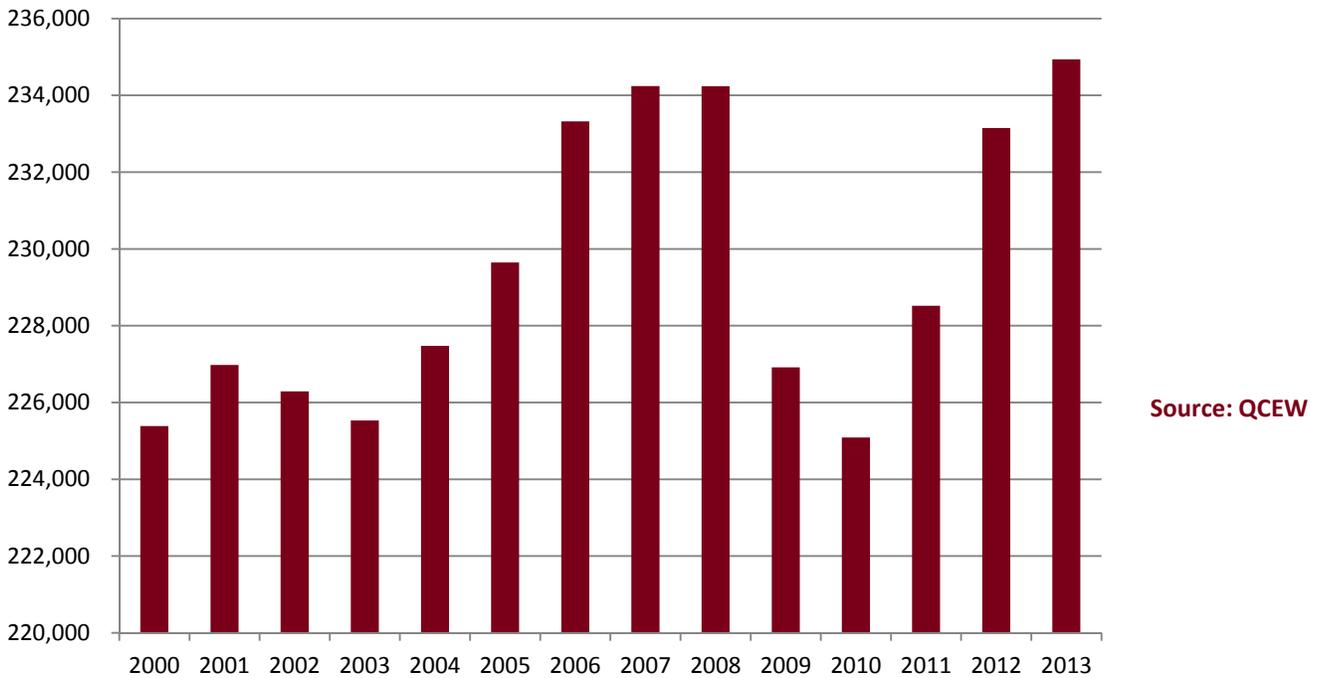
The highest employment growth industries between 2003 and 2012 were health care and social assistance (10,480 new jobs); administrative and support and waste management and remediation services (3,065 new jobs); and management of companies and enterprises (1,277 new jobs). The industries suffering the most jobs losses during the period include manufacturing (5,513 lost jobs), construction (2,577 lost jobs), and retail trade (1,405 lost jobs). [2]

Shift-share analysis provides an examination of the drivers of growth and decline for a specific industry in a specific region by comparing to industry and national trends. The analysis provides an interesting interpretation of the changes in each industry (table 2). In this analysis, the primary focus is on the competitive effect. A strongly positive competitive effect indicates particular characteristics of the local economy are driving growth in the region. A strongly negative competitive effect can be interpreted as a warning that the local economy may not be faring as well as it should. For more on shift-share analysis and how to fully interpret the results, see page 12.

While the health care and social assistance industry posted the largest gains in the region, shift-share analysis reveals it gained fewer jobs than expected given national and industry trends. If the industry had grown at the same rate as the health care and social assistance industry in the United States, as a whole, the Southeast region should have added 9,287 new jobs. If the health care and social assistance industry had grown at the rate of overall employment in the nation for all industries, it should have added 1,461 jobs. In total, industry and national growth averages would predict an addition of 10,748 jobs. However, the industry added 10,480 jobs, or 268 fewer jobs than national trends. The competitive effect then is a negative 268 jobs. The region registered positive competitive shares for hospitals and for offices of health care providers – two important sectors within the broader health care industry. However, the Southeast region lagged for competitive share of employment in outpatient mental health and substance clinics.

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[2] EMSI

Shift-share analysis is a useful tool for examining job growth. However like many economic analysis tools, it has limitations, especially when employment is the measure used, as it is here. Productivity is a measure of output per worker, so sectors or establishments with high productivity will use fewer workers, thus creating the possibility that they will appear less competitive based on employment patterns from a shift-share analysis. This could be the case with health care in Southeast Minnesota. As an example, the Rochester-based Mayo Clinic is Southeast Minnesota's premiere health care provider, and Mayo is noted for high quality care and innovative service delivery models.[3] If the Mayo Clinic and other providers in the region are delivering care using fewer workers, then the Southeast region could lag national levels for health care employment growth. If this is the case, then shift-share analysis may not work well as a measure of competitiveness.

In the case of health care, the location quotient offers some insight into the role of health care in the region. The location quotient measures the relative concentration of jobs as compared to a state or national average. (For more on location quotients, see page 13). The location quotient for ambulatory health care in Olmsted County is 5.9 compared to the state average. That means there are nearly 6 times as many ambulatory health care workers in the county than in Minnesota. The location quotient for hospitals is 2.8 indicating nearly 3 times as many hospital workers.

Table 2: Shift-Share Analysis for Growth and Decline Industries[4]

Industry	Change 2003-2013	Industry Mix Effect	National Growth Effect	Competitive Effect
Top 3 Job Adding Industries				
Health care and social assistance	10,480	9,287	1,461	(268)
Administrative and support and waste management and remediation services	3,065	128	180	2,757
Management of companies and enterprises	1,277	273	47	957
Top 3 Job Loss Industries				
Manufacturing	(5,513)	(8,748)	1,285	1,950
Construction	(2,577)	(1,915)	301	(963)
Retail trade	(1,405)	(979)	851	(1,280)

Source: EMSI

The administrative and support and waste management and remediation services industry; the management of companies and enterprises industry; and the manufacturing industry added more jobs than national averages yielding positive competitive shares. The industry called "administrative and support and waste management and remediation services" includes jobs in office support, facilities support, services to building and dwellings, travel reservations, and employment services. Within the broad industry, the sector employment services - and more specifically temporary help services - added 2,552 of the 3,065 jobs (83

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[3] For one examination of health care that references the Mayo Clinic approach, see the winter 2010 article "Can Cost Effective Health Care = Better Health Care" from the Harvard School of Public Health at http://www.hsph.harvard.edu/news/magazine/winter10assessment/ .

[4] For an explanation of shift-share analysis, please see the methodology section.

percent). According to NAICS.com, temporary help services are "primarily engaged in supplying workers to clients' businesses for limited periods of time to supplement the working force of the client. The individuals provided are employees of the temporary help service establishment. However, these establishments do not provide direct supervision of their employees at the clients' work sites."

Management of companies and enterprises also added jobs in the Southeast region. While the industry performed well during the time, Southeast Minnesota outperformed the national industry trends. In fact, Southeast Minnesota added 957 more jobs than expected.

The manufacturing industry lost over 5,000 jobs between 2003 and 2013. As a whole, manufacturing suffered during the Great Recession; therefore national manufacturing trends would predict the industry would have lost 8,748 jobs in the region. Given these trends, Southeast Minnesota was competitive in the manufacturing industry.

The retail trade industry lost 1,405 jobs during the time period. The majority of these job losses (1,280 jobs) can be attributed to the competitive effect and are related to characteristics of the region rather than national and industry trends. A closer examination of the data finds the top two categories with job gains were department stores (383 jobs) and gasoline stations with convenience stores (230 jobs). Job losses were highest in supermarkets (-431), sporting goods stores (-293), and new car dealers (-293). Note, general merchandise stores can carry groceries and sporting goods, but would be classified in the general merchandise sector. Supermarkets and sporting goods here refer to stores where these are the primary goods sold.

The construction industry shed 2,577 jobs between 2003 and 2013. While the construction industry at the national level also struggled during the period, the Southeast region lost more jobs than would have been expected. Jobs losses spanned construction activities, with most types of construction (residential, commercial, and highway) posting job losses.


Key things for economic developers to consider from this employment data:

- The number of jobs in Southeastern Minnesota has increased to above pre-Great Recession levels.
- Find ways to support competitive industries. This will likely mean engaging industry leaders to discuss the key drivers of economic advantage in this region. It may also involve discussions regarding potential for the industry. Adding temporary help services jobs may not be a long-term growth strategy, understanding where those employees are being placed would provide insight into where growth is occurring.
- For some non-competitive industries, it's important to learn more about the key drivers. Retail trade, overall, was not as competitive as it could have been in Southeast Minnesota. Certain retail trade sectors lost jobs while other sectors posted job gains. Exploring these trends could assist in the formulation of a policy to address potential retail weaknesses.
- Job losses in an industry, such as manufacturing, can simply reflect national and industry trends and do not necessarily reflect on the Southeast as a place to do business.

Employment and Wages by Industry

Employment by industry in the Southeast region is depicted in chart 3. The health and social services industry is responsible for 20.8 percent of employment, professional and businesses services for 17.2 percent, and government for 10.9 percent. The two largest industries – health and social services, and professional and business services – also posted the largest job gains between 2003 and 2013.

Chart 3: Employment by Industry: Southeast

Pie chart segments: Government 10.9%, Agriculture & Forestry 6.2%, Utilities 0.5%, Construction 4.4%, Manufacturing 11.7%, Trade 12.8%, Transport & Ware 3.1%, Professional & Business Services 17.2%, Health & Social Services 20.8%, Leisure & Hospitality 7.7%, Other Services 4.8%
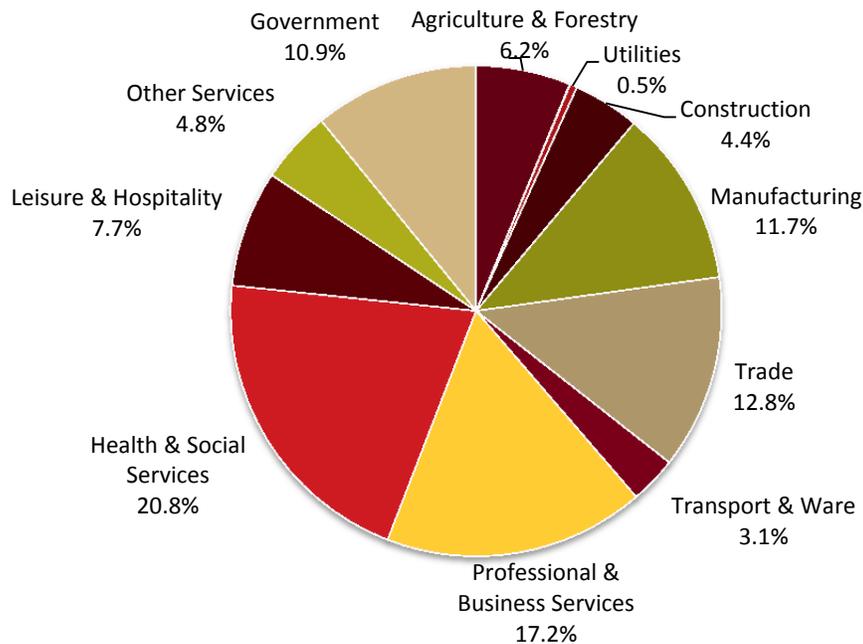
Source: IMPLAN

Health Care and Social Services

Within the health care and social services industry, there are 23,700 jobs at offices of physicians, dentists, and other health care providers, and there are 13,500 jobs at hospitals. While clearly the region is well known for the Mayo Clinic Hospital - Rochester (including the Methodist and St. Marys campuses), the number of jobs is higher in the health care clinics and offices that support patients at the hospitals. Both offices of health care providers and hospitals added jobs between 2003 and 2013 and had positive competitive shares, indicating growth rates above the national rate. Job losses occurred in the outpatient mental health and substance clinics, and the competitive share for that sector was negative.

Wages in the health care and social services industry are relatively high in Southeastern Minnesota. The average weekly wage in 2013 was $1,127. In comparison, the average weekly wage for all industries in the region was $843, nearly $300 per week lower. Wage growth in the industry has also been fairly strong. Health care and social assistance wages rose an inflation-adjusted 16 percent between 2000 and 2013, while wages across all industries grew by 7 percent.

However, wages vary quite significantly depending on the category of health care. The average weekly wage for those working in the offices of physicians, dentists, and other health care providers was $1,549 in 2013, for those working in hospitals it was $1,118. Jobs in nursing homes, however, paid $434 per week. Social assistance jobs paid $392.

Jobs in the health care and social services industry are fairly concentrated in Olmsted County. Olmsted County had approximately 40,000 health care jobs in 2013. Goodhue, Mower, Rice, and Winona counties each had about 3,000 health care jobs. Wages are also lower in the counties outside of Olmsted. Aside from Olmsted County, average weekly wages range from a low of $469 in Houston County to a high of $747 in Goodhue County.

Professional and Business Services

The largest sectors within the professional and business services industry include administrative and support and waste management and remediation services (8,968 jobs); finance and insurance (5,930 jobs); and private educational services (4,275).

As discussed above, the administrative and support and waste management and remediation services industry has been growing, fueled primarily by additional jobs in the category of temporary help services. In fact, temporary help services accounted for 83 percent of the job growth.

Manufacturing

In 2013, there were over 36,000 manufacturing jobs in the region. While Olmsted County has the most manufacturing jobs (7,343), other counties also have a significant number of manufacturing jobs. Winona County has 5,891 jobs, Steele County has 5,160 jobs, Goodhue County has 3,994 jobs, Rice County has 3,823, and Mower County has 3,569 jobs. Manufacturing jobs are relatively dispersed throughout the region.

Interestingly, the manufacturing jobs are distributed across several different types of manufacturing. The largest type of manufacturing is food products with nearly 8,500 jobs including meat, poultry, and other animal processing; breakfast cereal manufacturing; and fruit and vegetable canning. Other manufacturing sectors with more than 1,000 employees each in this region are: fabricated metal manufacturing; machinery manufacturing; computer and electronic manufacturing; nonmetallic mineral manufacturing: printing and related support activities; rubber and plastics manufacturing; transportation equipment, furniture and related manufacturing; and leather and allied products manufacturing.

Manufacturing wages are relatively high in the region. In 2013, the average weekly wage for all manufacturing jobs in the region was $1,027 compared to the average weekly wage across all industries of $843. Manufacturing wages rose modestly (2.9 percent growth after adjusting for inflation). The highest wages are in Olmsted County at $1,500 a week, Rice County at $1,064 per week, and Dodge County at $1,044 per week. The lowest wages are in Houston County at $606 per week.

LOCAL INTERDEPENDENCIES

Beyond studying basic structure, examining how sectors interact with each other can provide powerful insights into an economy. Input-output models have been developed to estimate how industries connect within a region. This section of the report will examine the two main drivers of the Southeast economy (health care and manufacturing) and their connections with other sectors. Specifically, the analysis will focus on 1) offices of physicians, dentists and other health care providers and 2) meat processing, which are two of the largest sectors within their respective industries.

Multipliers include both indirect and induced effects. Indirect effects are generated when a firm purchases inputs (goods and services) from other business establishments, which in turn purchase the goods and services need for their output. These are often referred to as supply chain effects. Induced effects are generated when employees of an industry spend their wages. The discussion here focuses on indirect effects.

Multipliers are driven by the amount of purchases a sector makes from other sectors. Understanding what inputs are necessary for the production of a good or service and the extent to which those inputs are produced locally can provide insights into the potential for economic development from the sector.

Health Care

Output multipliers for the health care sectors in the Southeast region are estimated to range from 1.4 to 1.6. In other words, for every dollar of output generated by the sector (hospitals, for example), $0.40 to $0.60 cents are generated in other regional sectors that supply that sector.

Table 3 highlights expenditures by the offices of physicians, dentists, and other health care providers. For every dollar spent on inputs, physicians and dentists are estimated to spend 4 percent on pharmaceuticals, 2 percent on real estate, and 2 percent on insurance. Land (real estate property) is a fixed commodity, so all demand is satisfied locally. However, the region does not produce pharmaceuticals or management, scientific, or technical consulting services in high enough quantities to satisfy the local demand. Therefore, physicians and dentists are importing those items from elsewhere.

Two points are of interest here. In terms of local supply meeting local demand, it is telling that most of the inputs are available locally. Given the high concentration of the health care industry in Southeast Minnesota, it would appear the supply chain has also developed in the region. The specialization is also creating an opportunity for the region to export health care services. For example, in the case of medical and diagnostic testing labs, supply far exceeds demand in the region, indicating the labs are providing services for health care providers outside the region.

Table 3: Top Purchases by Offices of Physicians, Dentists, and Other Health Care Providers in the Southeast Minnesota Region, Percent of Total Expenditures, and Local Availability

Input	Percent of Input Expenditures	More than 50% of Demand Available from Suppliers within the Southeast Region
Pharmaceutical preparations	4%	No
Real estate	2%	Yes
Insurance	2%	Yes
Medical and diagnostic labs	1%	Yes
Management, scientific, and technical consulting	1%	No
Banks	1%	Yes
Wholesale trade	1%	Yes
Employment services	1%	Yes
Telecommunications	1%	Yes
Accounting, tax preparation, bookkeeping, and payroll services	1%	Yes

Source: IMPLAN

Table 3 also helps illustrate two points. First, physicians and dentist offices are important sources of local

demand for real estate (land), insurance providers, medical and diagnostic labs, and banks.[5] These industries and sectors with strong connections to offices of physicians and dentists are the top industries capturing the 40 to 60 cents of additional economic activity that flows from every dollar of output mentioned above. Second, there may be opportunities for increased local production of pharmaceuticals and management, scientific, and technical consulting services, because physicians and dentists are purchasing these outputs from outside the region. Pursuing economic development based on possible opportunities for supply chain development is one economic development approach. However before moving forward, decision-makers should 1) take a scan of the industry, as it could be that the suppliers are located just outside the region as defined for this study and therefore considered local, and 2) explore the reasons for the current industry location, as location decisions are based on a broad variety of factors, including proximity to supplies and transportation routes.[6]

Manufacturing

Multipliers for food product manufacturing sectors are estimated to range from 1.3 to 1.9. Manufacturing multipliers are often higher, particularly if they use an agricultural product in their manufacturing process. Table 4 shows the top inputs purchased locally by animal slaughtering facilities, the percent of total input expenditures spent on the item, and the local availability of the item.

Table 4: Top Purchases by Animal Slaughtering, Rendering, and Processing Facilities in the Southeast Minnesota Region, Percent of Total Expenditures, and Local Availability

Input	Percent of Input Expenditures	More than 50% of Demand Available from Suppliers within the Southeast Region
Animal production	60%	Yes
Processed animal meats	14%	Yes
Wholesale trade	2%	Yes
Management of companies	2%	Yes
Truck transportation	2%	Yes
Electricity	1%	Yes
Banks	1%	Yes
Paperboard containers	1%	Yes
Seasonings and dressings	1%	Yes
Natural gas	1%	Yes

Source: IMPLAN

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[5] Local here is the Southeast region.

[6] For more on the role of health care and economic development in Southeast Minnesota, the reader may wish to review "The Rochester, Minnesota Health Services Cluster" report by Chris Henjum, Matt Schmit, Jennifer Schuller, and Jenna Schwietz from the Humphrey School of Public Affairs. http://www.hhh.umn.edu/centers/slp/economic_development/pdf/RochesterMNHealthSvcsCluster-2010.pdf.

For every dollar spent on inputs in the animal slaughtering process, 60 percent is spent on the purchase of the animal itself. In Southwest Minnesota this means animal slaughtering facilities purchase $530 million of animals. To the extent that these animals are produced locally, this drives high sales for local producers. These two examples (health care and manufacturing) demonstrate the importance of economic interdependencies and interactions in the region. In general, industries that purchase from local suppliers tend to have higher economic impacts in the region.

METHODOLOGY, DATA, AND SOURCES

This report presents the economic characteristics of the region and an analysis of industries, income and employment. Three data sources were accessed in the preparation of the report. One data source is the IMPLAN database. IMPLAN is an input-output model developed by MIG, Inc. The database compiles a variety of sources to provide data on output, employment, and labor income by county for 440 economic sectors. A second data source is the Quarterly Census of Employment and Wages (QCEW) data provided by the Minnesota Department of Employment and Economic Development. These data are used, when necessary, to compliment or clarify the IMPLAN data. Finally, data from Economic Modeling Specialists International (EMSI) is presented in this report. The EMSI data in this report is derived from QCEW data; however, EMSI provides simple tools for performing calculations, such as shift-share analysis, on the data.

The Regional Development Commission boundaries were used for this study's definition of Southeast Minnesota. The North American Industry Classification System (NAICS) code was used in the study. The NAICS is the standard used by federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. This was used to enable uniformity and also for easy data accessibility.

Finally, data was analyzed with input from Extension Educators in the region and findings were compiled into the report.

Shift-Share Analysis

The results of shift-share analysis are presented in this report. Shift-share analysis is a powerful tool for understanding the drivers of economic change in an industry. Shift-share analysis parses economic change (here employment changes) into three components: national growth, industrial mix, and competitive share.

- National Growth: National growth indicates how many jobs a local economy would have been gained (or lost) as a result of the growth (or decline) of employment at the national level. For example, consider a local economy with 100,000 jobs at the beginning of the time period. If during the period under consideration, the number of jobs in the United States grew by a rate of 2 percent, then at the end of the time period under consideration, the local economy would be expected to have 102,000 jobs.

- Industrial Mix: Industrial mix indicates how many jobs a particular industry within the local economy would have gained (or lost) if the local industry grew (or declined) at a rate similar to the industry as a whole in the United States. For example, if 1,000 people were employed in the finance industry in the local economy at the beginning of the period, and the finance industry as a whole in the U.S. grew at a rate of 10 percent, then at the end of the time period under consideration, the local finance industry would be expected to have 1,100 jobs.

- Competitive Share: Competitive share is the remainder of change in employment for the region examined. From our example, the region's employment should have grown by 2,100 jobs (2,000 from national growth and 100 from industrial mix growth). If the local economy actually grew by 3,100 jobs

in the finance industry, then 1,000 jobs were added because the local economy grew faster than expected, given national and industry trends. Conversely, if the local economy grew by only 1,000 jobs, then the economy was not as competitive as it should have been, given national and industry trends.

- Percent Competitive Share: This is the percent of total jobs that are sourced from competitive share. A competitive share of 80 percent would indicate that 80 percent of the jobs during the time period were derived from the competitive share, rather than from national and industry trends.

Location Quotients

This analysis reports the location quotient for certain industries. Location quotients are used in determining the concentration of a particular industry or sector in a region compared to a larger study area. In this analysis, the location quotient for the region versus the state is reported. If, say, 30 percent of employment in a region is in health care, but at the state, only 15% of employment is in health care, then the location quotient would be 2, indicating that the region has twice as much employment in health care than the state as a whole.

OTHER DATA RESOURCES

Source	Link	Description
Harvard Business School and the U.S. Economic Development Administration	http://www.clustermapping.us/	Open data on regional industry clusters and economies, with analysis available for states, economic areas, metropolitan and micropolitan areas, counties, and customized regions based on counties. Data offers insights into performance, business environment and demographics.
Wilder Foundation	www.mncompass.org	Comprehensive data source for Minnesota counties and cities. In collaboration with the Initiative Foundations and others, Minnesota Compass has added data about smaller cities.
MN Demographers Office	http://mn.gov/admin/demography/data-by-topic/population-data/our-estimates/index.jsp	Go here for population estimates by EDR, County, and City/Townships. 2013 Estimates are available.
MN Land Economics	http://www.landeconomics.umn.edu/	Go here for information about land sales, land values, property taxes, soil type, etc. The database can be used to get information at the local, county, and state levels.
Headwaters Economics	http://headwaterseconomics.org/tools/eps-hdt	Generate your own socioeconomic profiles from federal data sources, by using the EPS-HDT Tool. The attached guidebook presents the data and provides a step by step walk-through on how to think about it.
DEED Data Tools	http://mn.gov/deed/data/data-tools/index.jsp	DEED provides access to several data tools such as labor market data, unemployment data, and many others. Most labor market data can be accessed through the labor market portal: https://apps.deed.state.mn.us/lmi/rws/
University of Wisconsin Extension	http://fyi.uwex.edu/downtown-market-analysis/understanding-the-market/demographics-and-lifestyle-analysis/	Learn More about Demographic and Lifestyle analysis
University of Wisconsin Extension	http://cced.ces.uwex.edu/files/2013/02/Resource-Document-Total-12.pdf	Useful Computer Links to Sources of Information for Economic Developers
OnTheMap	http://onthemap.ces.census.gov/	Mapping tool from the census. Use this understand where people live vs work
University of Wisconsin-	http://www.netmigration.wisc.edu/	Use this to learn about – and visualize – migration patterns for U.S. counties.

Madison, Michigan Tech University, University of New Hampshire		