Northeast Minnesota
Economic and Business Conditions Report
Fourth Quarter 2018

This issue is part of a series for the six planning areas of Minnesota –
Central, Northeast, Northwest, Southeast, Southwest, and Twin Cities.
The Northeast Minnesota Planning Area consists of seven counties:
Aitkin, Carlton, Cook, Itasca, Koochiching, Lake and St. Louis.

Office of the Minnesota
Secretary of State

School of Public Affairs
Research Institute
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EXECUTIVE SUMMARY

A considerable slowing of economic growth in Northeast Minnesota is expected over the next several months according to the predictions of the Northeast Minnesota Index of Leading Economic Indicators (LEI). All five components of the LEI decreased as the overall index plummeted by 15.28 points in the fourth quarter. A smaller number of Duluth metropolitan area residential building permits, a decline in a general measure of statewide business conditions, a weaker purchasing managers' manufacturing index, and rising regional initial jobless claims all weighed on this quarter's leading index. The Northeast Minnesota LEI is now 10.3 percent lower than it was one year ago.

There were 535 new business filings with the Office of the Minnesota Secretary of State in Northeast Minnesota in the fourth quarter of 2018 — representing a 5.5 percent improvement from one year earlier. Forty-seven new regional business incorporations were filed in the fourth quarter—11.9 percent more than in the same period of 2017. New limited liability company (LLC) filings in Northeast Minnesota rose 5 percent to a level of 315. New assumed name filings increased 2.8 percent and there were 26 new filings for non-profit—four more filings than in the fourth quarter of 2017.

Sixty-four percent of new business filers in the Northeast Minnesota planning area completed the voluntary Minnesota Business Snapshot (MBS) survey in the fourth quarter. Results of this voluntary survey indicate that 5 percent of new filers come from communities of color, while 8.2 percent of new filings come from veterans. 2.6 percent of new filers come from the disability community and only 1.5 percent of new filings are made by the immigrant community. Forty-four percent of new business filings in Northeast Minnesota in the fourth quarter were initiated by women. MBS results also show that most new business filers in Northeast Minnesota have between 0 and $10,000 in annual gross revenues (although 39 new filers have revenues in excess of $50,000). The most popular industries for new businesses in Northeast Minnesota are construction, retail trade, professional/scientific/technical, real estate/rental/leasing, arts/entertainment/recreation, and other services. Employment levels at most new firms are between 0 and 5 workers, and nearly half of those starting a new business consider this a part-time activity.

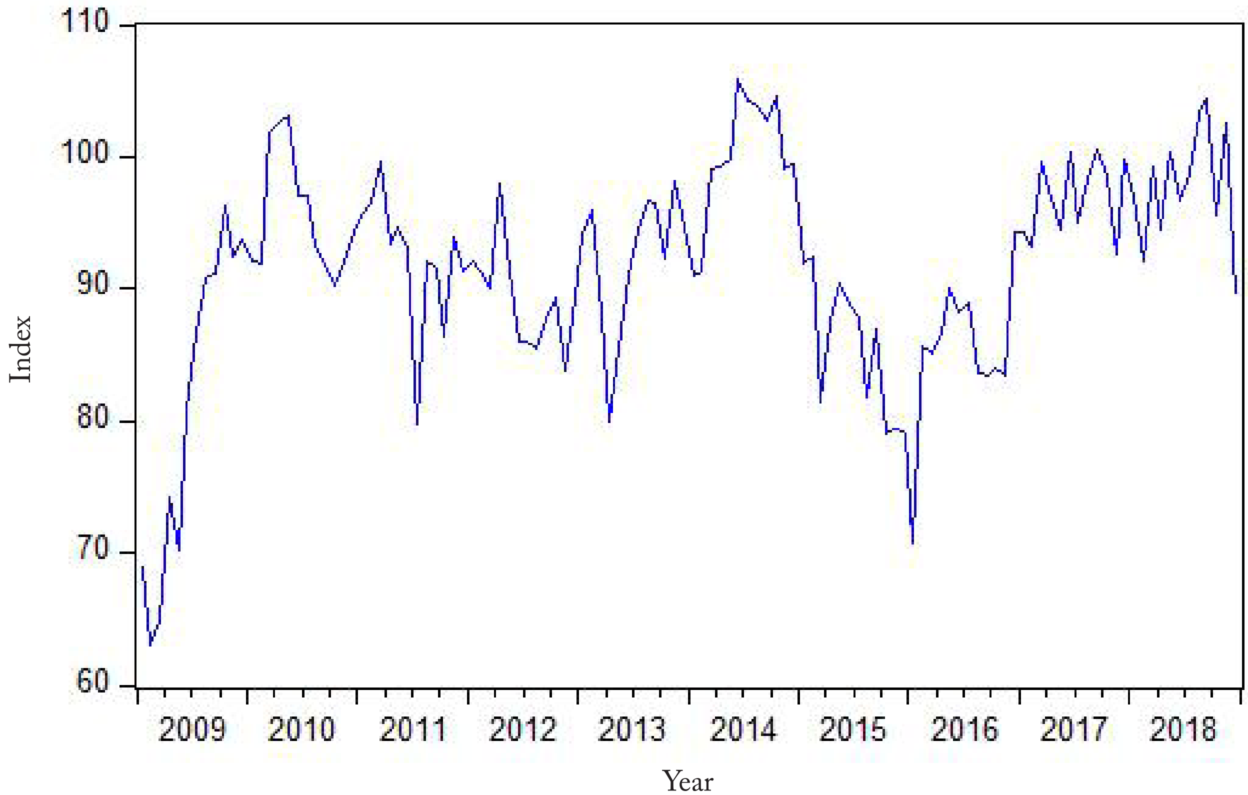
Northeast Minnesota employment was 2.2 percent higher than year ago levels in December. The regional unemployment rate was 4.5% (considerably lower than one year ago) and the labor force rose by 1.7 percent from one year earlier. December 2018 initial claims for unemployment insurance were 6.3 percent higher than the same month last year. Average weekly wages surged as labor shortages put upward pressure on regional labor costs. Annual bankruptcies in Northeast Minnesota were lower than one year ago.

Economic activity in the Duluth/Superior Metropolitan Statistical Area (MSA) was mixed. Northeast Minnesota's largest market experienced a small 0.1 percent increase in overall employment over the year ending December 2018. Manufacturing sector employment rose, but employment in the key education/health sector was flat. Average weekly work hours declined, but average hourly earnings jumped by 8.6 percent over the past twelve months. The Duluth area unemployment rate fell to 3.9 percent, but the labor force was little changed. The value of residential permits in the Duluth metropolitan area fell by 76.5 percent.

NORTHEAST MINNESOTA LEADING ECONOMIC INDICATORS INDEX

The SCSU Northeast Minnesota Leading Economic Indicators Index (LEI) is designed to predict performance of the regional economy with a four-to-six month lead time. After a revised 7.69 point increase in the third quarter, the fourth quarter LEI plunged 15.28 points. The LEI is now 10.3 percent below its December 2017 level. Note that all other planning areas in Minnesota also experienced declining leading indexes in the fourth quarter as current full employment conditions cause firms to reconsider where future growth will come.

The SCSU Northeast Minnesota Leading Economic Indicators Index
December 1999=100



Components of SCSU Northeast Leading Economic Indicators Index

Component of Index	Contribution to LEI, 4th quarter 2018	Contribution to LEI, 3rd quarter 2018
Minnesota Business Conditions Index	-1.63	0.42
Northeast Minnesota initial claims for unemployment insurance	-2.19	0.93
Northeast Minnesota new filings of incorporation	-0.54	1.02
Duluth Superior MSA residential building permits	-6.07	5.66
Institute of Supply Management Purchasing Managers Index for manufacturing	-4.85	-0.34
TOTAL CHANGE	**-15.28**	**7.69**

All five index components were weaker in the fourth quarter in the Northeast Minnesota planning area. Higher regional initial jobless claims and fewer new residential building permits in the Duluth/Superior MSA unfavorably impacted the region's leading index in 2018:III. Since an important element of the Northeast Minnesota economy is mining production and shipping of goods used in manufacturing, the Institute of Supply Management's purchasing managers' index is used as a proxy for demand for production in the region. This LEI component also declined in the most recent quarter. A weakening of the Minnesota Business Conditions Index (which is used as an indicator of general statewide business conditions) also weighed on the regional outlook.

SCSU Northeast Minnesota Leading Economic Indicators Index

	2018	2017	Percentage change
Minnesota Business Conditions Index December	55.5	56.8	-2.3%
Northeast Minnesota initial claims for unemployment insurance, December	1,778	1,672	6.3%
Northeast Minnesota new filings of incorporation Fourth Quarter	47	42	11.9%
Duluth-Superior MSA single-family building permits December	2	6	-66.7%
Institute for Supply Management Purchasing Managers' Index, manufacturing sector, December	54.3	59.3	-8.4%
Northeast Minnesota Leading Economic Indicators Index December (December 1999 = 100)	89.6	99.9	-10.3%

NORTHEAST MINNESOTA BUSINESS FILINGS

Total new business filings rose 5.5 percent compared to last year's fourth quarter. As can be seen in the accompanying graph, the moving total of this series has been generally trending upward since the end of 2011.

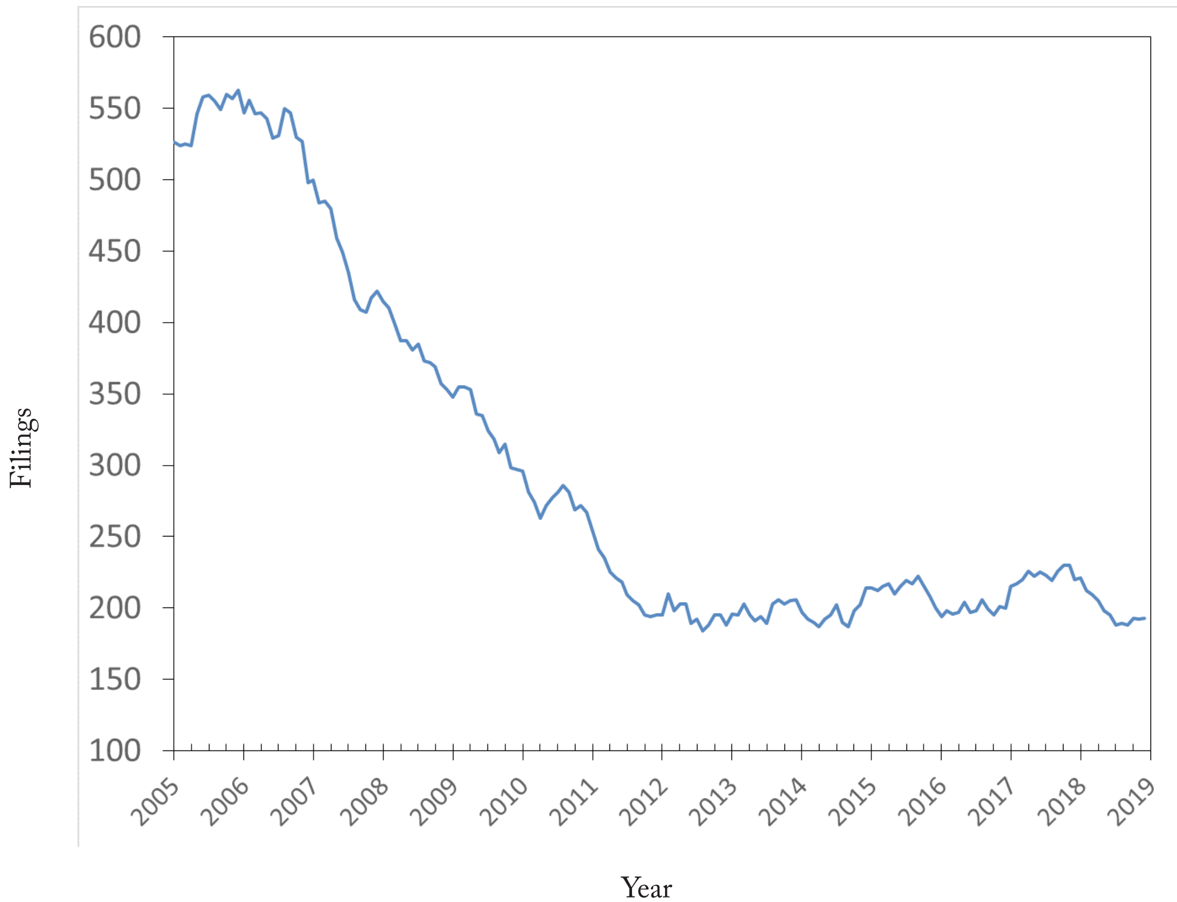
Note: The graphs in this section show the 12-month moving total for the various new business filings in Northeast Minnesota that are registered with the Office of the Minnesota Secretary of State. This adjustment is used to remove seasonal patterns in the data.

Total New Business Filings—Northeast Minnesota Planning Area (12-month moving total)

Quarter	IV: 2017	I: 2018	II: 2018	III: 2018	IV: 2018	2018 Quarter IV: Percent change from prior year
Northeast Minnesota Total New Business Filings	507	643	645	567	535	5.5%

Compared to the fourth quarter of 2017, new filings of incorporation in Northeast Minnesota were 11.9 percent higher. As can be seen in the graph, the 12-month moving total of Northeast Minnesota new business incorporations had been mostly flat for the past several years, before declining in 2018.

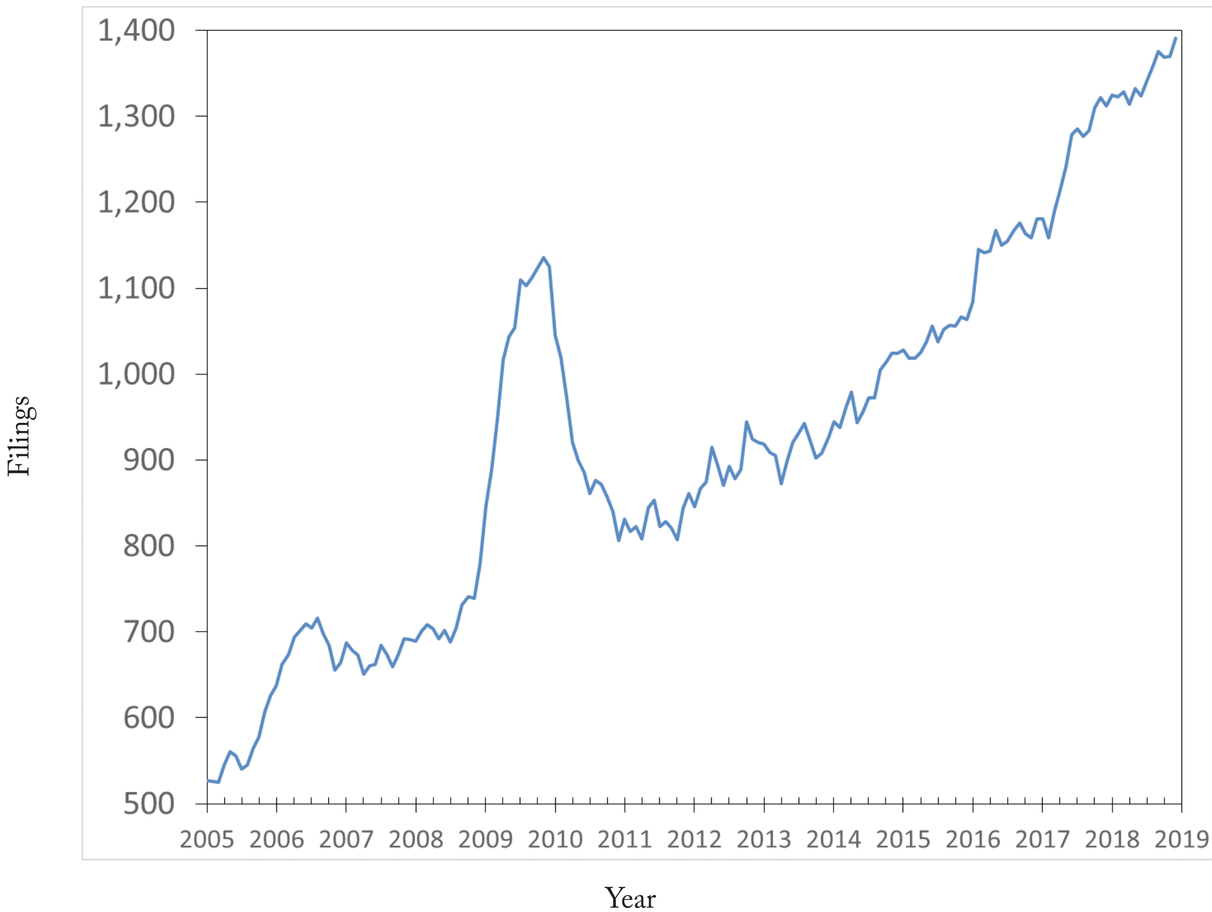
New Incorporations—Northeast Minnesota Planning Area (12-month moving total)



Quarter	IV: 2017	I: 2018	II: 2018	III: 2018	IV: 2018	2018 Quarter IV: Percent change from prior year
Northeast Minnesota New Business Incorporations	42	60	44	42	47	11.9%

Throughout Minnesota, there has been a move away from the traditional corporate form of business organization toward the LLC. LLCs are increasingly useful in evaluating regional economic performance. As seen below, there is considerable upward trend in LLCs in Northeast Minnesota. This trend continued in the fourth quarter as new LLC filings grew by 5 percent compared to the same period one year earlier. Note that an abrupt increase in new LLC filings was observed in 2008. This increase (which graphically looks like a shark fin) was related to considerably higher filings in the construction industry and appears to be a one-time only transitory event seen in the data in all regions of Minnesota.

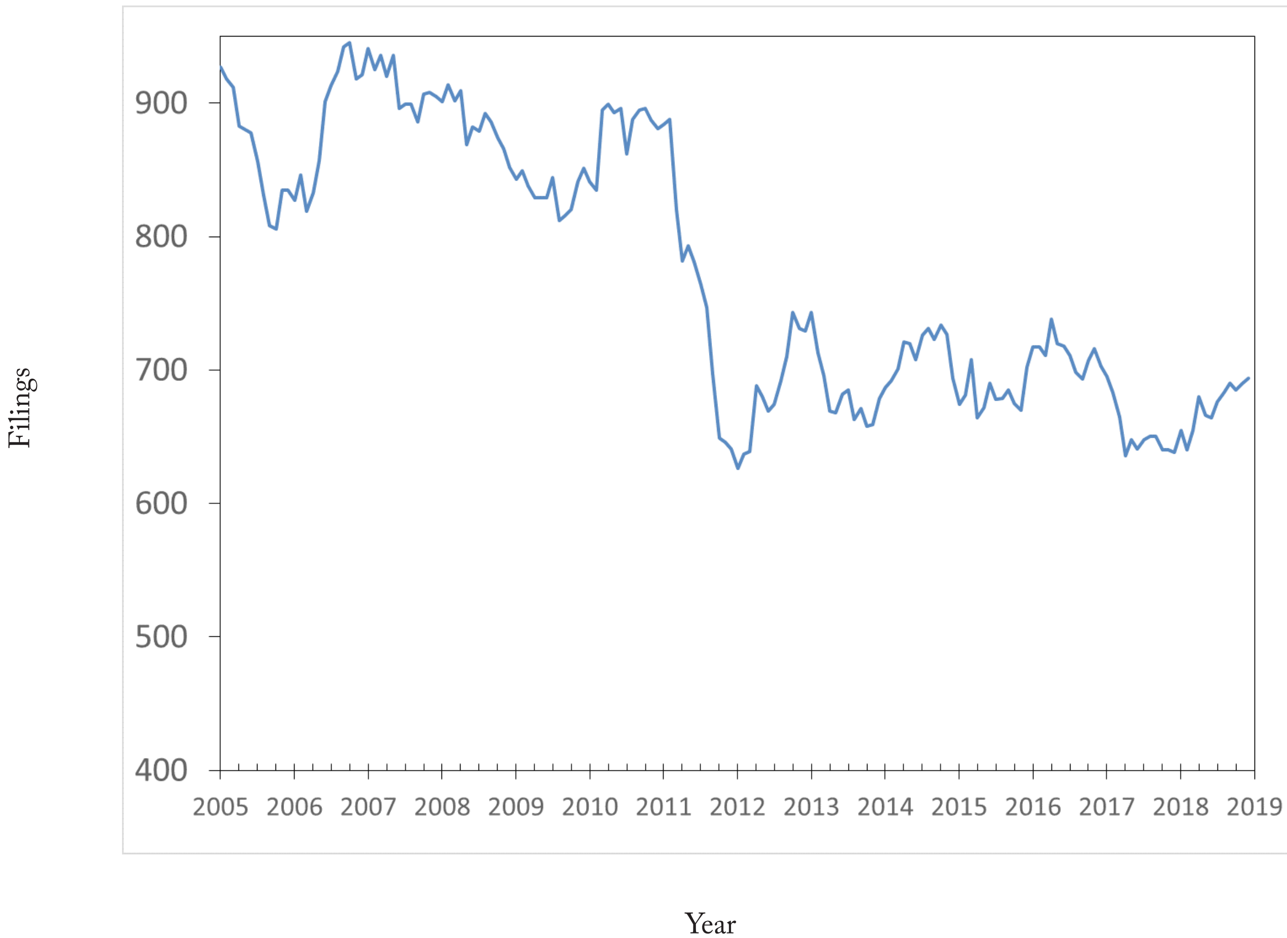
New Limited Liability Companies—Northeast Minnesota Planning Area (12-month moving total)



Quarter	IV: 2017	I: 2018	II: 2018	III: 2018	IV: 2018	2018 Quarter IV: Percent change from prior year
Northeast Minnesota New Limited Liability Companies	300	362	387	327	315	5.0%

Compared to the fourth quarter of 2017, assumed names rose by 2.8 percent in Northeast Minnesota. As can be seen in the accompanying figure, the moving total of this series had levelled out in 2017, but rose throughout 2018. Assumed name filings still remain well below their level of the mid-2000s.

New Assumed Names—Northeast Minnesota Planning Area (12-month moving total)



Quarter	IV: 2017	I: 2018	II: 2018	III: 2018	IV: 2018	2018 Quarter IV: Percent change from prior year
Northeast Minnesota New Assumed Names	143	194	184	169	147	2.8%

There were 26 new Northeast Minnesota non-profits registered with the Office of the Minnesota Secretary of State in the fourth quarter of 2018. This is four more filings than one year earlier.

New Non-Profits—Northeast Minnesota Planning Area (12-month moving total)

Quarter	IV: 2017	I: 2018	II: 2018	III: 2018	IV: 2018	2018 Quarter IV: Percent change from prior year
Northeast Minnesota New Non-Profits	22	27	30	29	26	18.2%

MINNESOTA BUSINESS SNAPSHOT SURVEY RESULTS

In Fall 2016, the Office of the Minnesota Secretary of State initiated a short voluntary survey (known as Minnesota Business Snapshot) for both new and continuing business filers. Questions found in the survey address basic questions related to the background of business filers, industry classification, employment levels and annual revenue of the filer, and whether the business is a full- or part-time activity for the filing entity. While a comprehensive analysis of this promising new data set is the beyond the scope of this regional economic and business conditions report, the survey results do provide useful additional background information to complement the business filing data.

To match up the Minnesota Business Snapshot (MBS) information with the data analyzed in this report, only surveys accompanying new filings in the fourth quarter of 2018 are analyzed. For the entire State of Minnesota, the overall response rate for this voluntary survey is approximately 59 percent. This yields thousands of self-reported records in this emerging data set. For Northeast Minnesota, about 64 percent of new business filers completed at least some portion of the MBS survey. The results are reported in this section.
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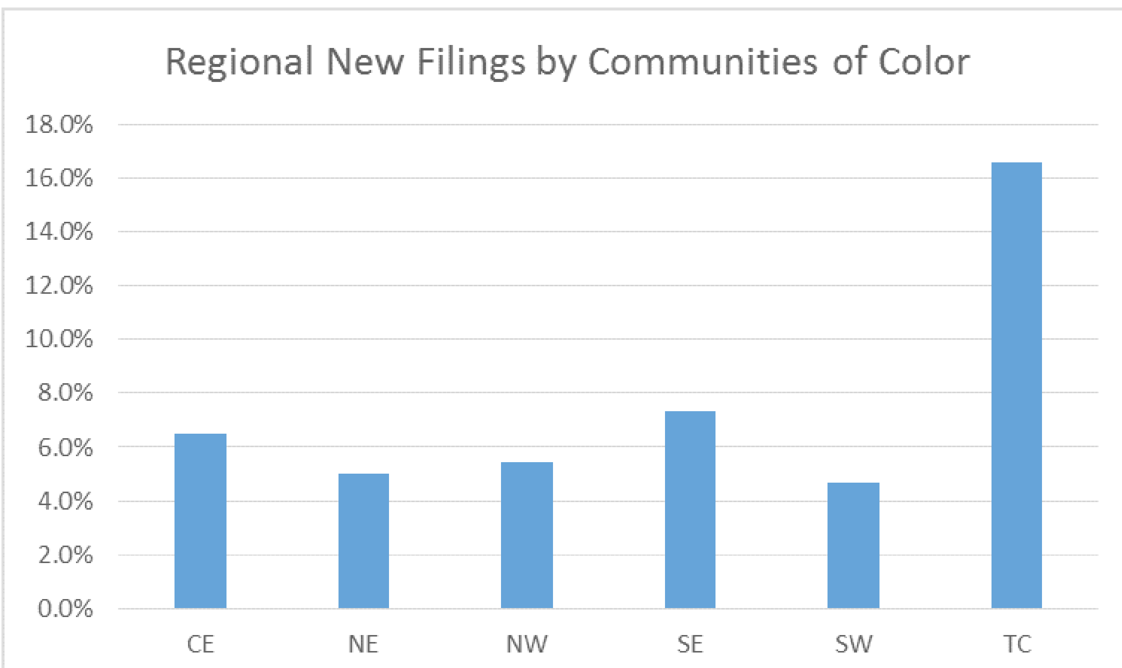
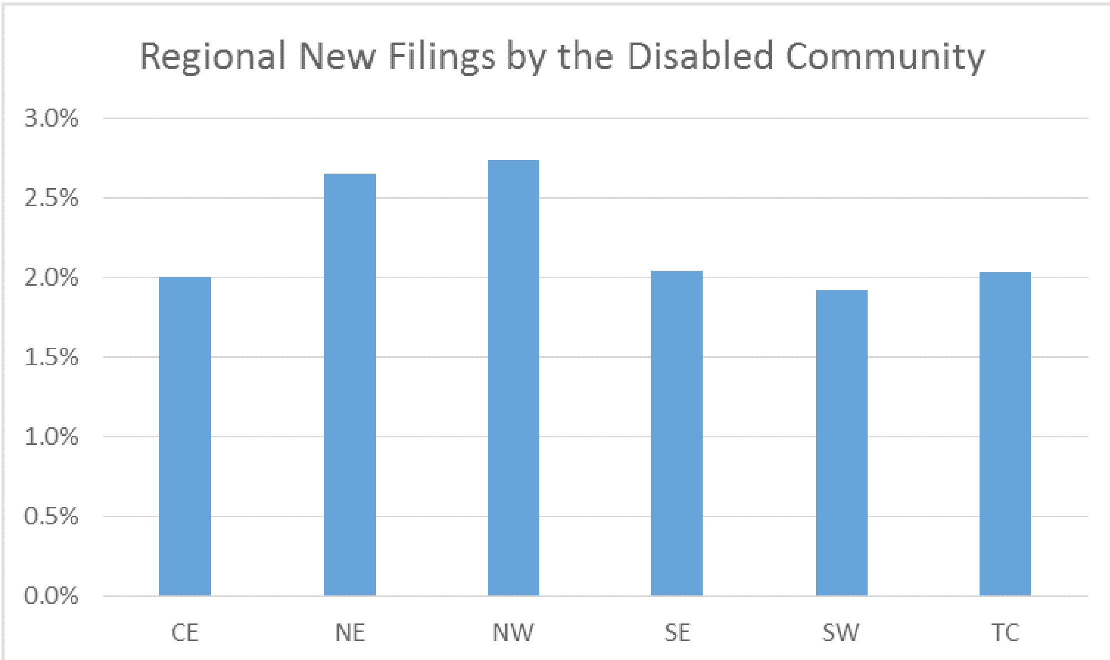
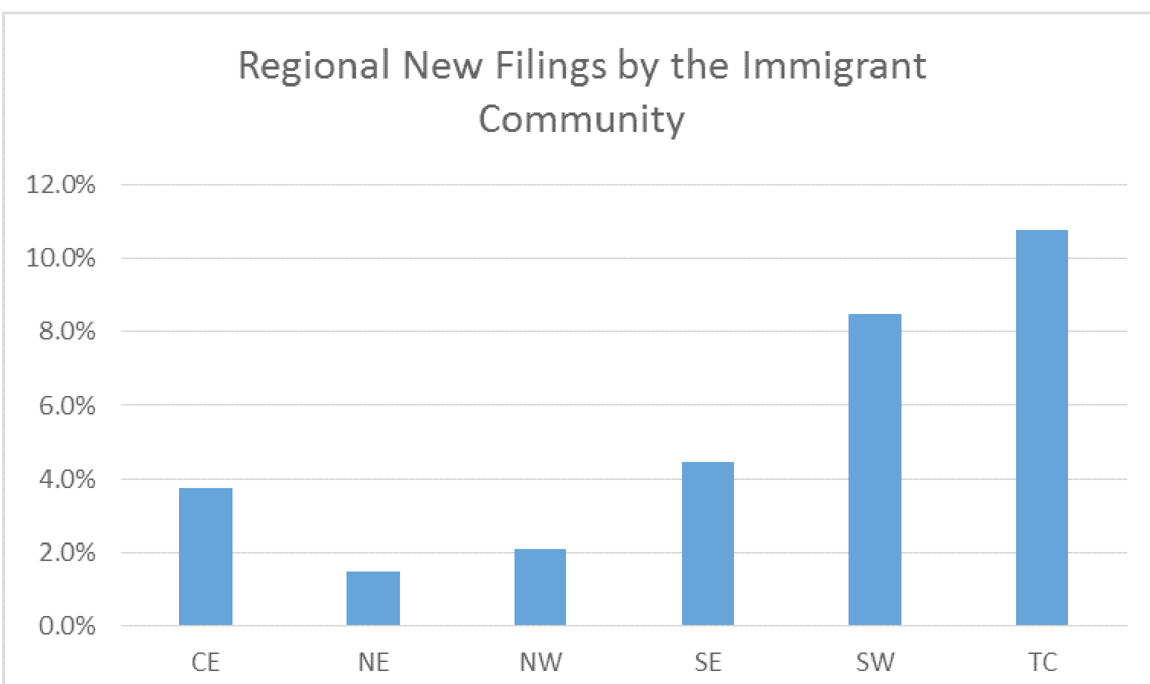
Five percent of those new filers completing the MBS from the Northeast Minnesota planning area report being from a community of color. This is much higher than the 2.8 percent value that was reported in this category in the third quarter of 2018.



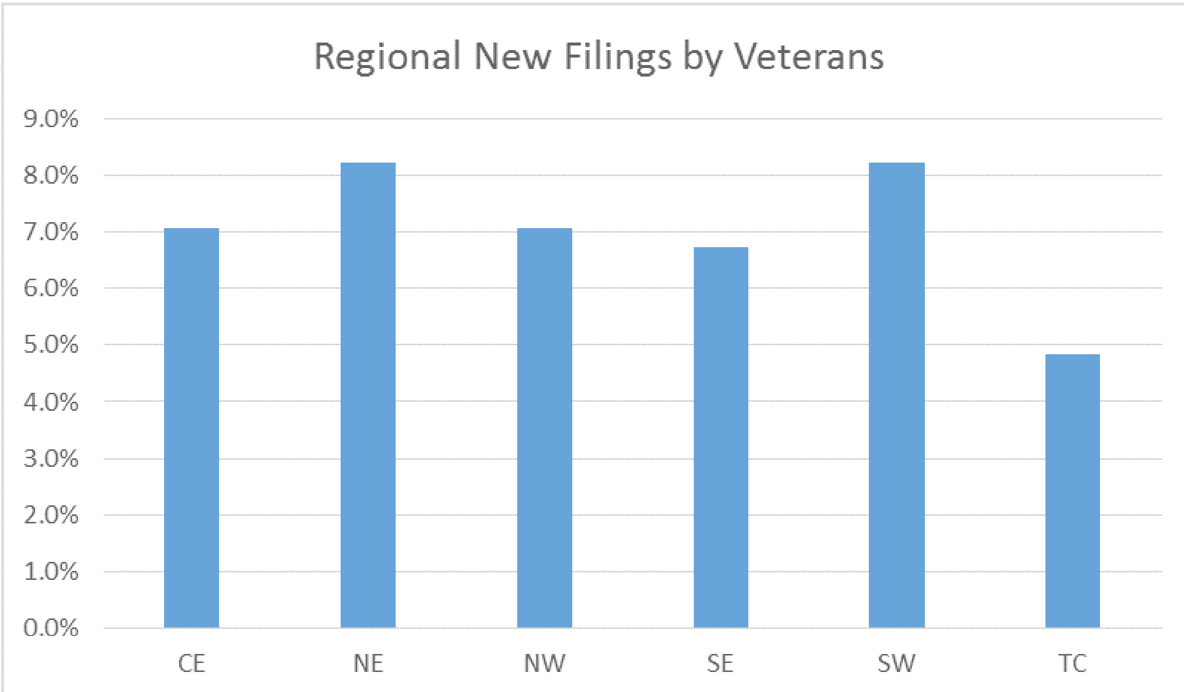
About 2.6 percent of Northeast Minnesota's new filers are from the disability community. This is the second highest percentage of any of Minnesota's six planning areas.



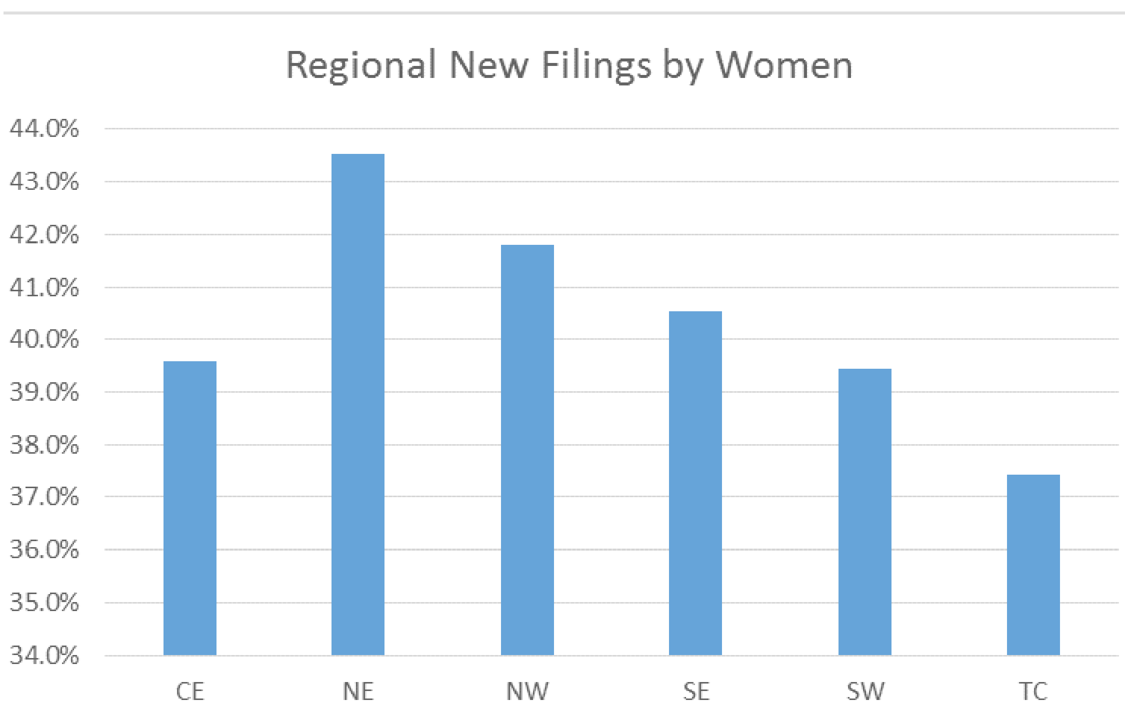
Very few (1.5 percent) new business filings in Northeast Minnesota come from the immigrant community. The percentage of immigrant new business filings in the Northeast portion of the state is well below what is seen in the other planning areas.



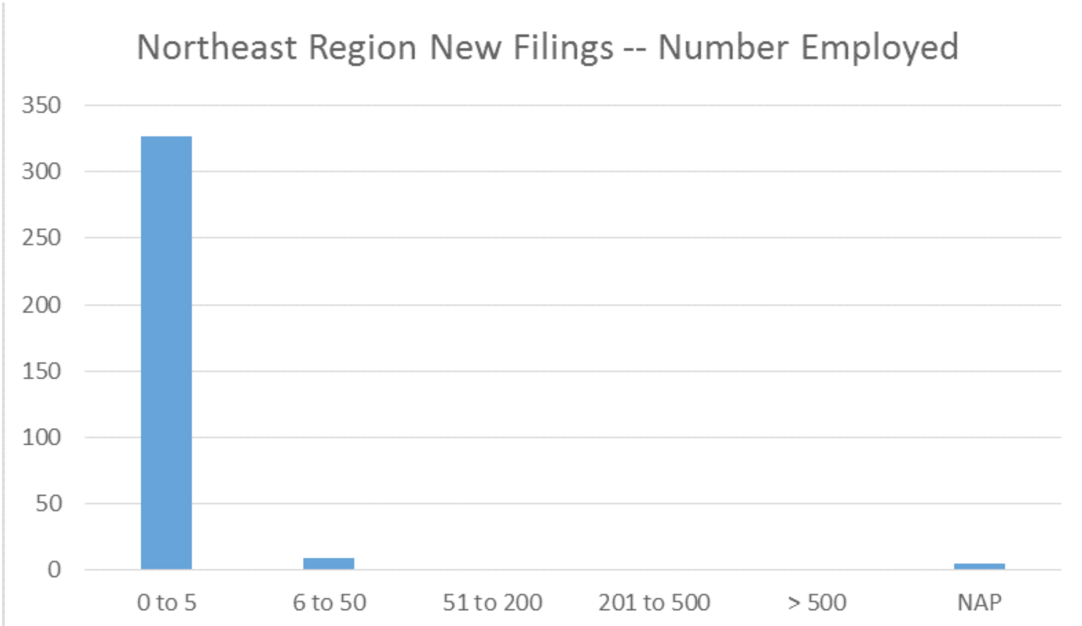
8.2 percent of all new filings in Northeast Minnesota came from military veterans in the fourth quarter of 2018. Since the inception of the Minnesota Business Snapshot survey in 2016, the Northeast region has consistently had the greatest share of new filings by veterans.



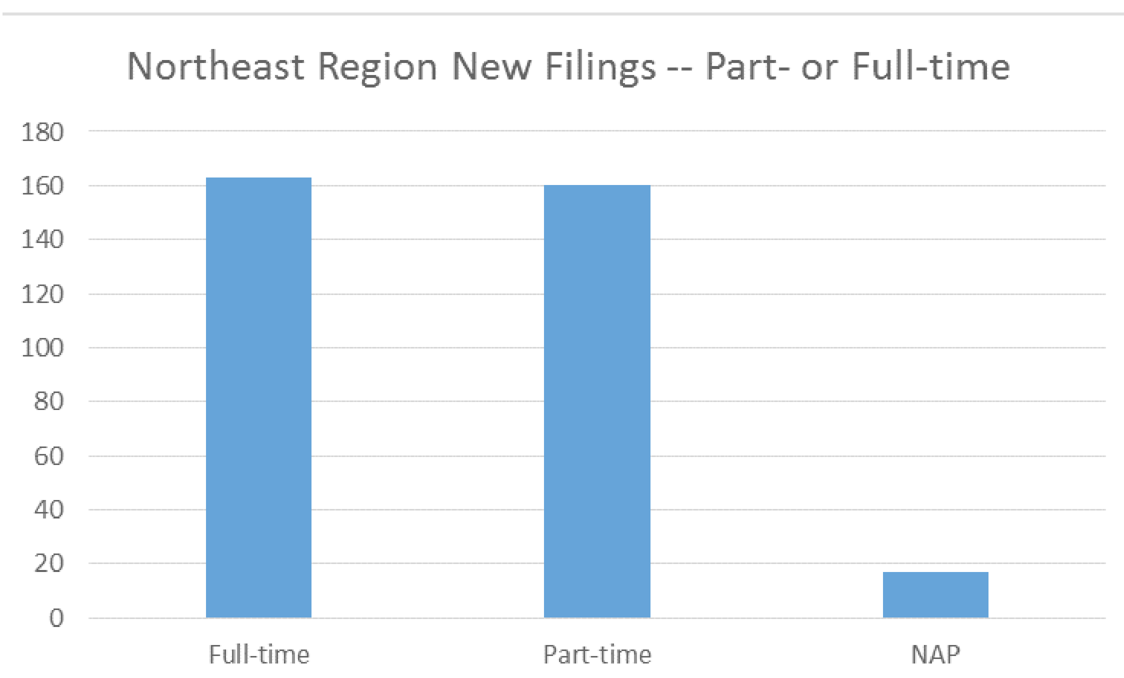
Woman owners represented 43.5 percent of the new business filings in Northeast Minnesota in the fourth quarter of 2018. This is the highest percentage of Minnesota's six planning areas.



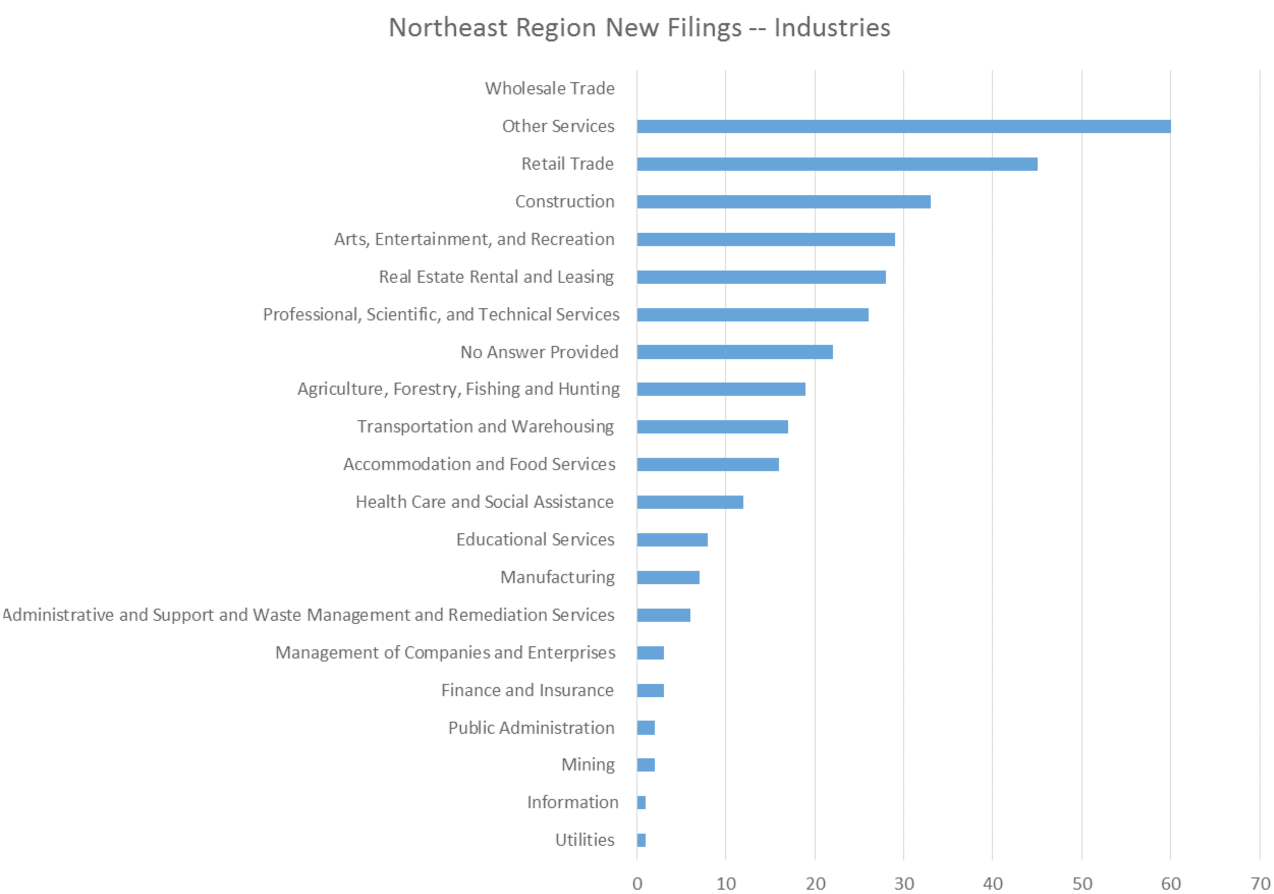
While not all of those participating in the survey completed all portions of the Minnesota Business Snapshot (those not responding to a particular question are represented in this section by "NAP"—no answer provided), 336 responses were tallied to a question asking the new business filer to indicate the range of employment at the business. As expected, most new businesses start small—employment at most companies submitting a new filing ranges from 0-5 employees.



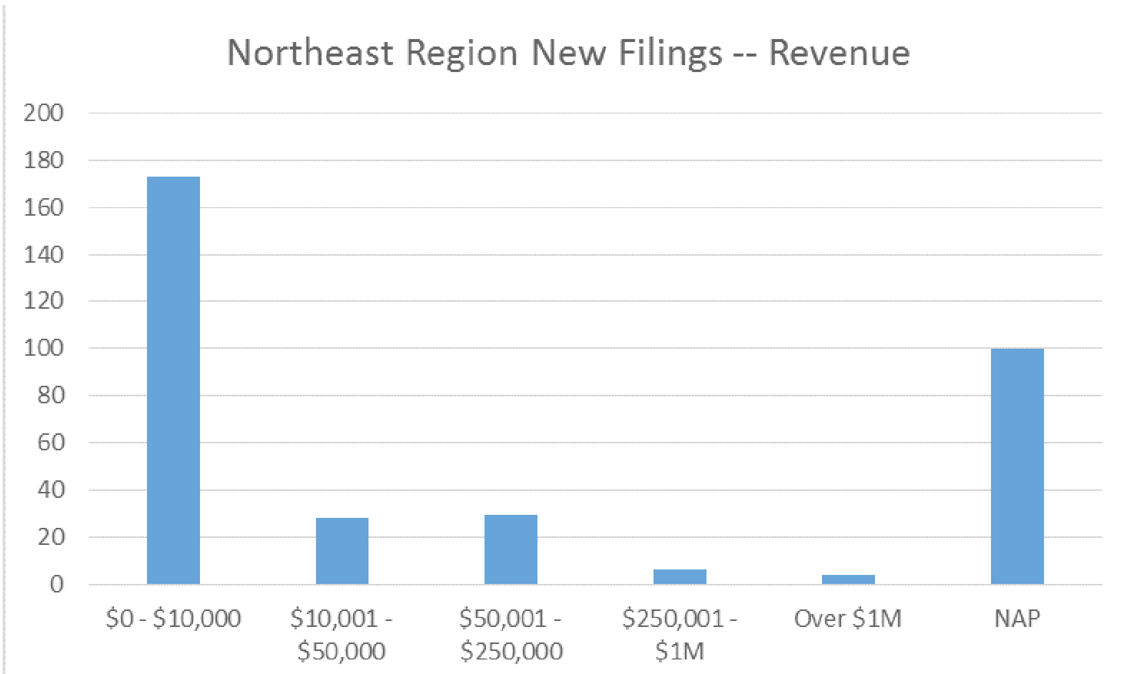
Nearly half of those submitting a new business filing in Northeast Minnesota are part-time ventures.



Using the North American Industry Classification System (NAICS), businesses submitting new filings were asked to identify the industry in which their company was operating. While a range of industries were reported, real estate/rental/leasing, retail trade, professional/scientific/technical, construction, arts/entertainment/recreation, and "other services" lead the way. Since businesses are often unsure of their industrial classification, the "other services" category is likely to represent a "catch-all" category for service-related businesses who were unable to specify their industry. Twenty-two new firms did not provide an answer to this survey item (see "NAP") and no firms identified the wholesale trade sector as the industry in which their firm was operating.



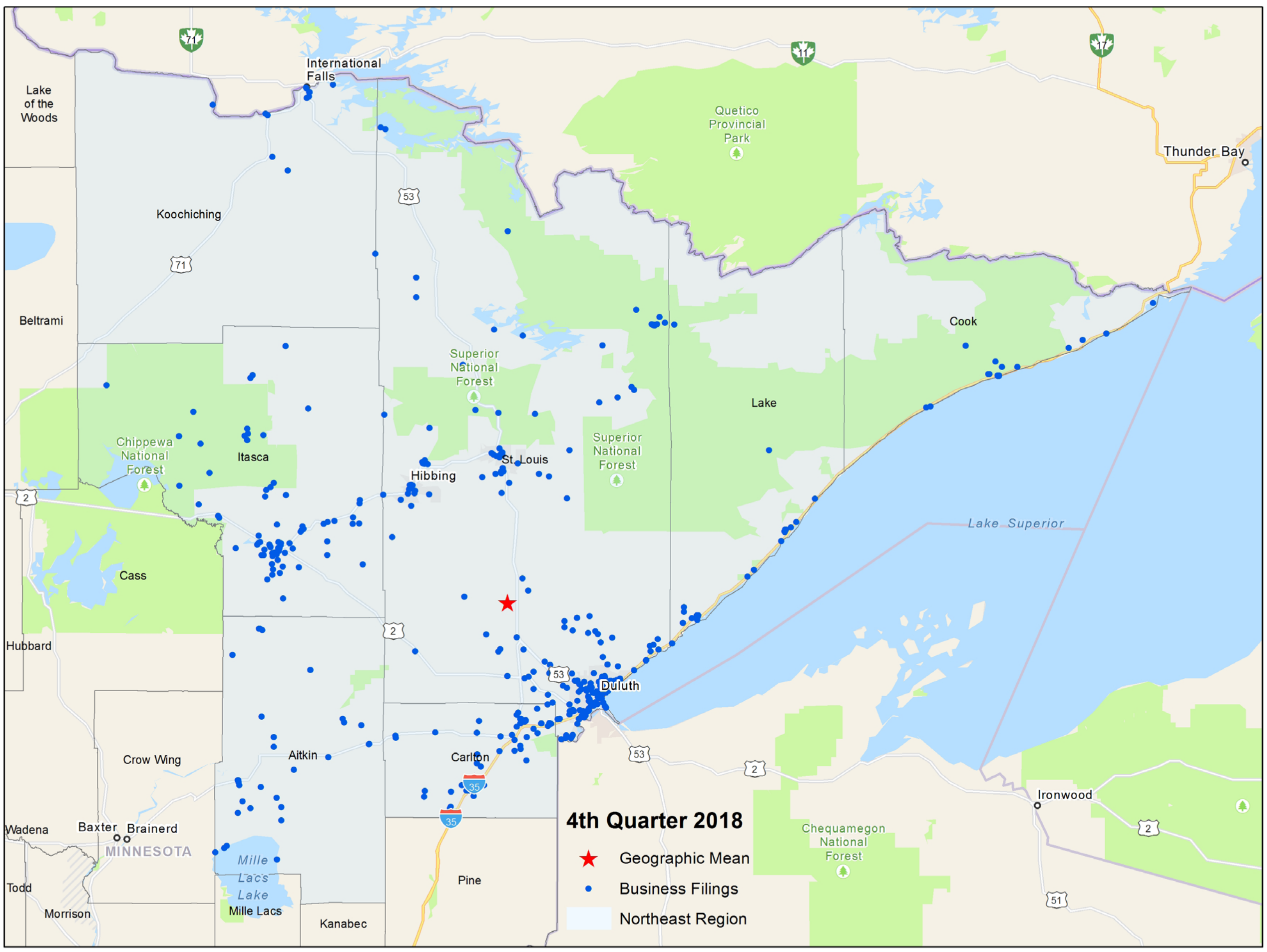
100 new business filers in Northeast Minnesota did not provide an answer to the MBS item that asked them to report the company's revenue. Of those businesses that answered the question, the largest share report revenues of less than $10,000. Thirty-nine new firms report revenues in excess of $50,000.



MAPS

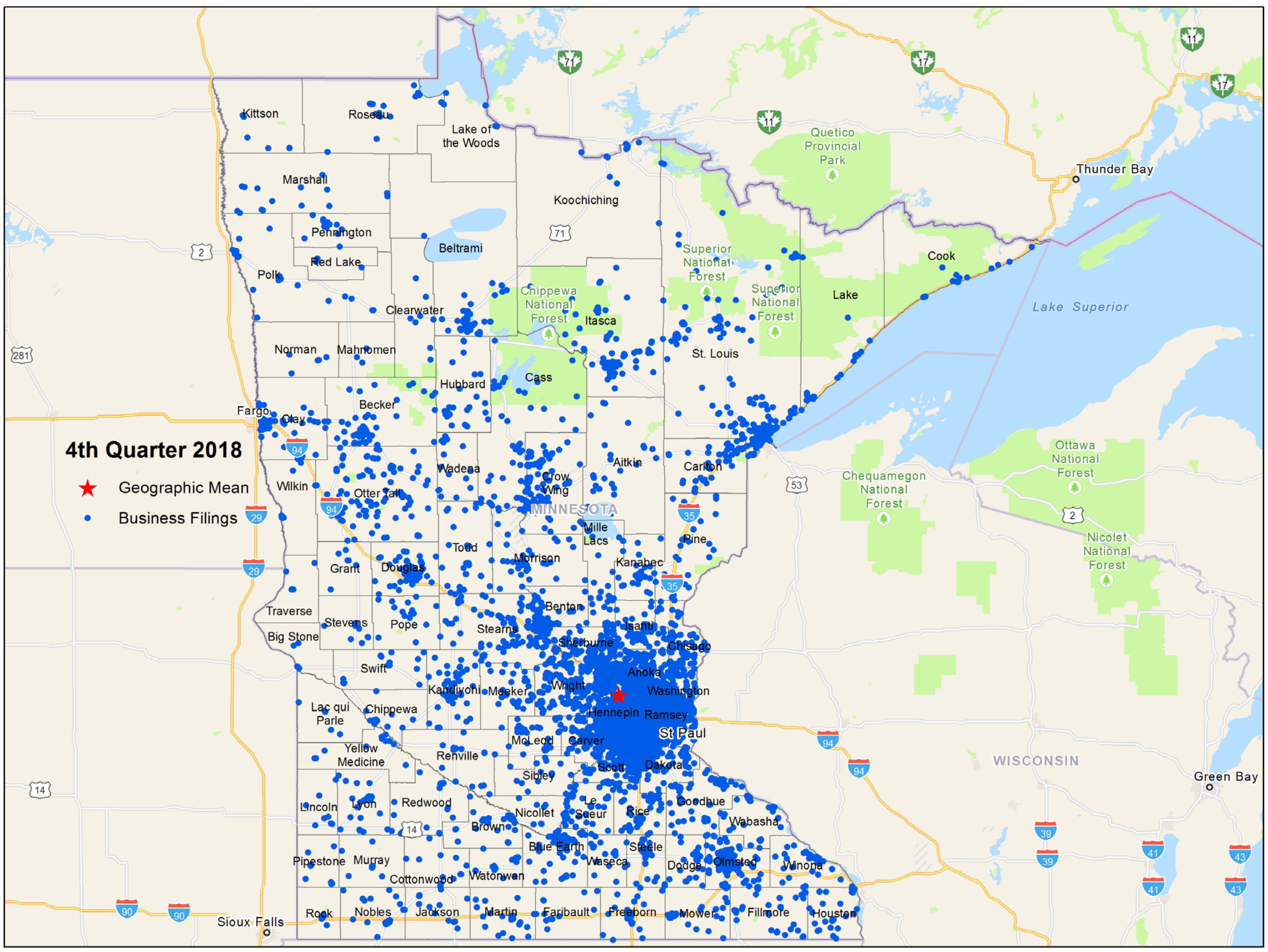
The first map shown below is a visual representation of new business formation around the Northeast Minnesota planning area in the fourth quarter of 2018. The densest areas of new business formation are in the Duluth metro as well as along the region's well-traveled roadways. There was a noticeable cluster of new business formation along Highway 169 (in the Virginia-Hibbing-Grand Rapids corridor), in Ely, International Falls, and along Highway 61.

Northeast Minnesota Planning Area--New Business Formation--Quarter 4: 2018



The second map shows new business filings for the state as a whole. This visual aid demonstrates the considerable extent to which the Twin Cities metro area dominates new business formation in the state. The map shows how the Twin Cities metro stretches along roadways into the Southeast, Southwest and Central planning areas. The map demonstrates the importance of cities and roadways in encouraging economic development. St. Cloud now appears to be integrated into the Twin Cities metro as the I-94/US-10 corridor continues to be a magnet for new business formation. There is also considerable new business formation in the southern part of the state, particularly in Rochester and between the Twin Cities and Mankato. The importance of Interstates 90, 94, and 35 as well as US-10 and MN 61 (along the North Shore) in new business filings is also easily seen in this map.

Minnesota--New Business Formation--Quarter 4: 2018

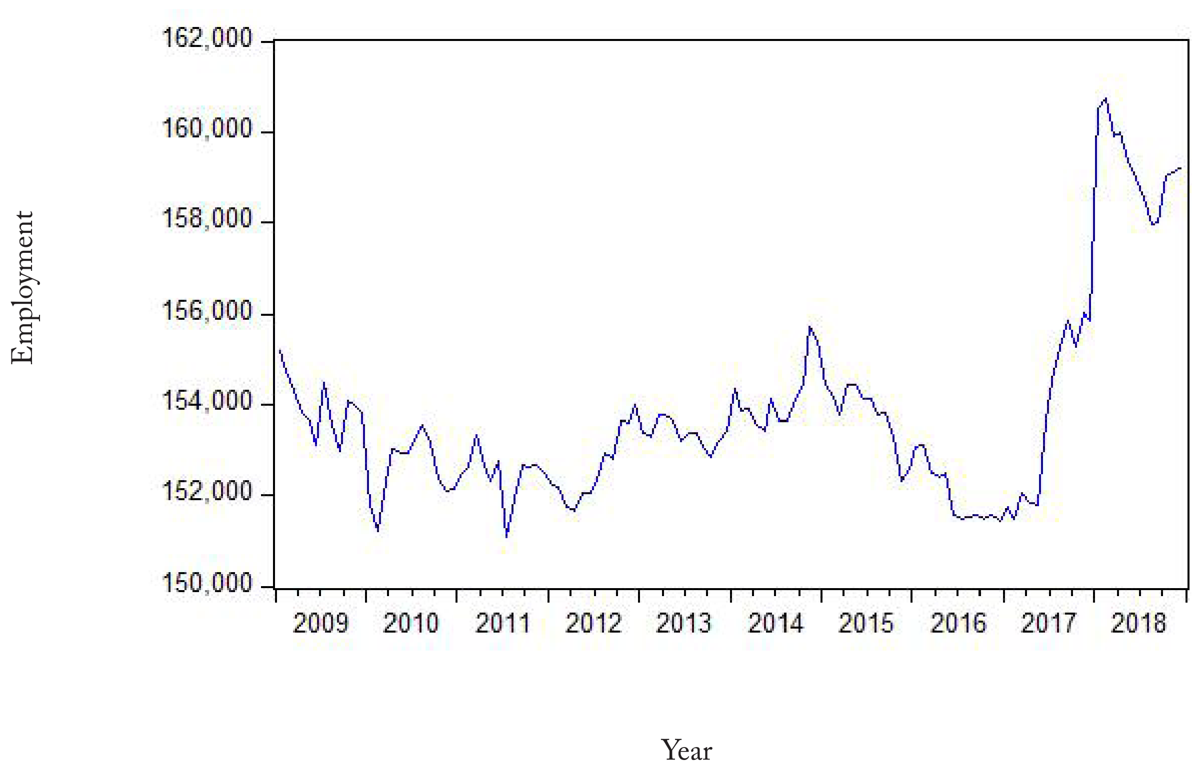


NORTHEAST MINNESOTA LABOR MARKET CONDITIONS

December 2018 employment in the Northeast Minnesota planning area was 2.2 percent higher than it was one year earlier. Using a 12-month moving average to remove seasonal employment patterns (see graph below), the current level of employment had been rising rapidly since the beginning of 2017. However, the seasonally adjusted level of employment in Northeast Minnesota appeared to turn down for much of 2018.

Note: seasonally adjusted labor market data are typically not available to evaluate regional economic performance so some series have been created to illustrate seasonal patterns of the regional labor market. Graphs of these indicators are found in this section of the report. Tabular data are not seasonally adjusted.

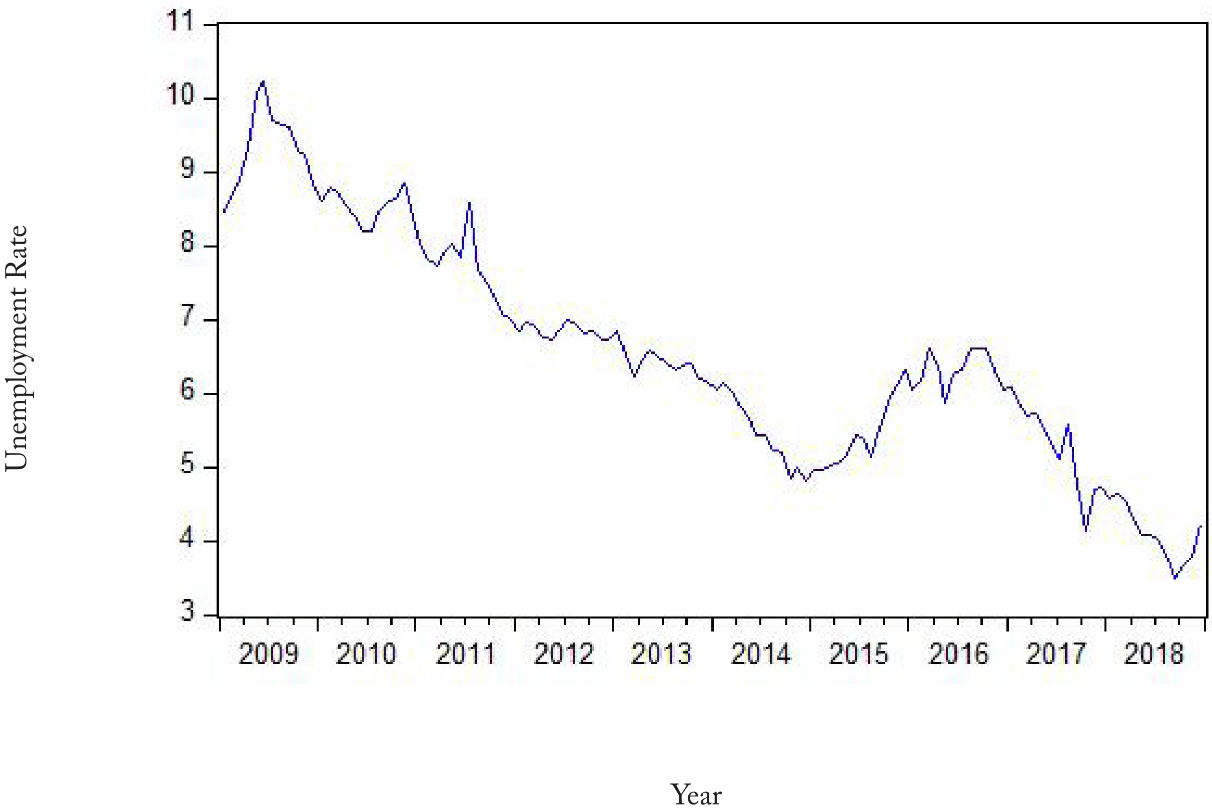
Employment—Northeast Minnesota Planning Area (12-month moving average)



Month	December 2017	July 2018	August 2018	September 2018	October 2018	November 2018	December 2018
Employment (Not seasonally adjusted)	154,387	161,042	159,117	159,551	159,917	159,071	157,775

There was an increase in the region's seasonally adjusted unemployment rate in the fourth quarter of 2018 (see accompanying graph). However, at 4.5 percent, the non-seasonally adjusted rate is considerably lower than one year earlier (when it was 5 percent). It should be noted that the Northwest planning area's unemployment rate is no longer the highest in Minnesota (the unemployment rate in Northwest Minnesota is now higher).

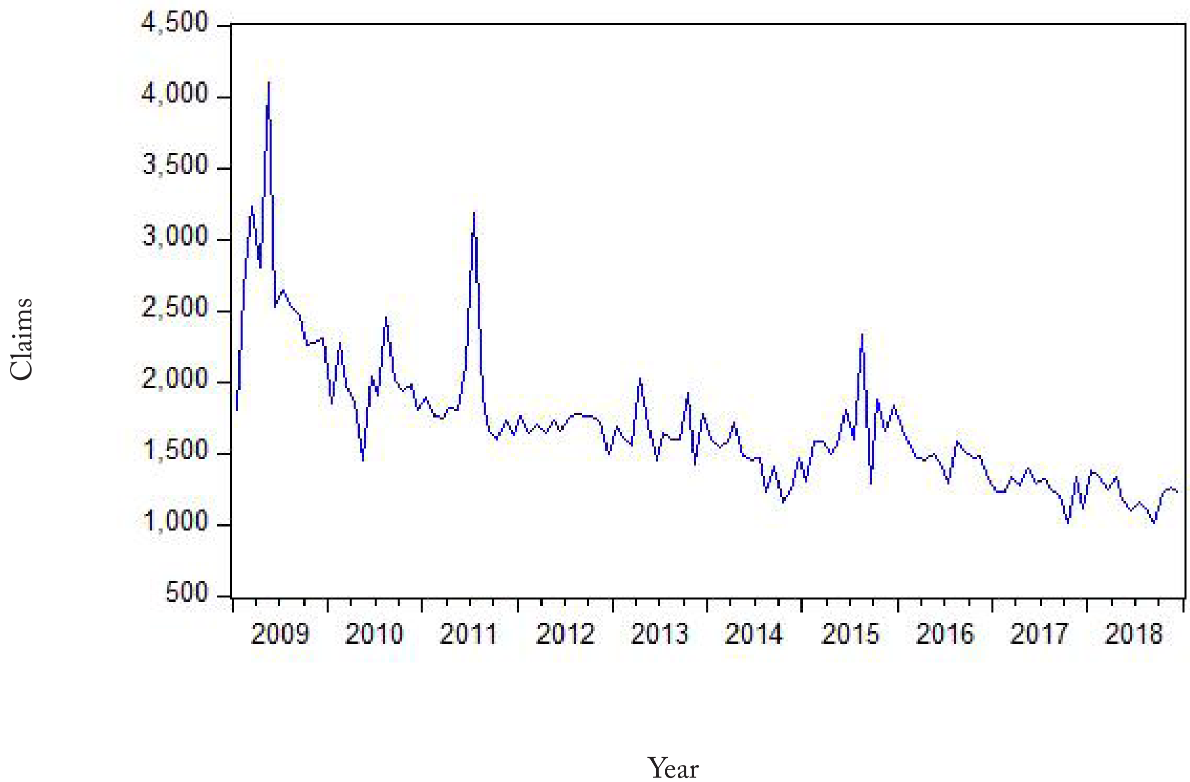
Unemployment Rate, seasonally adjusted—Northeast Minnesota Planning Area



Month	December 2017	July 2018	August 2018	September 2018	October 2018	November 2018	December 2018
Unemployment Rate (Not seasonally adjusted)	5.0%	3.7%	3.3%	2.8%	2.9%	3.4%	4.5%

On a seasonally adjusted basis, initial jobless claims in the Northeast region inched up in the recent quarter. This quarter's non-seasonally adjusted initial jobless claims rose by 6.3% compared to one year earlier.

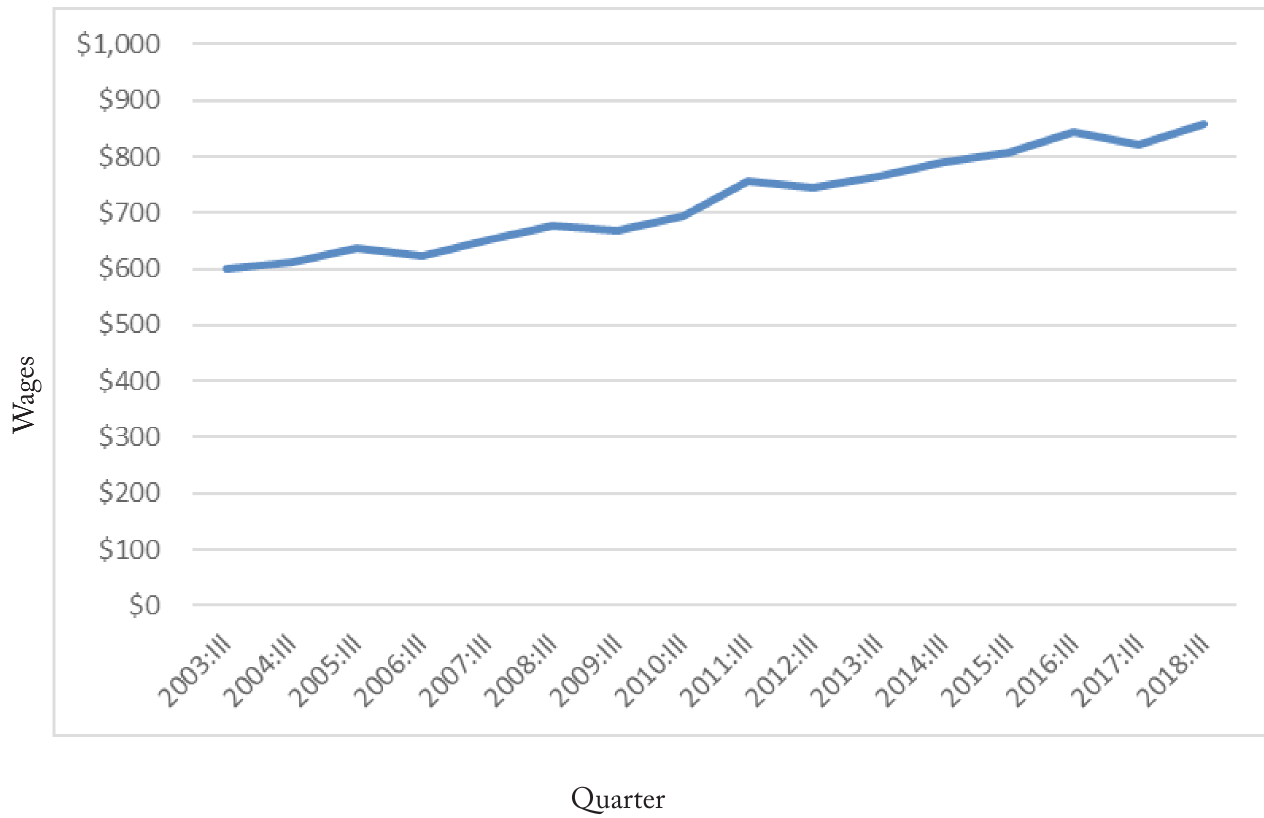
Total Initial Claims for Unemployment Insurance, seasonally adjusted—Northeast Minnesota Planning Area



Period	December 2017	July 2018	August 2018	September 2018	October 2018	November 2018	December 2018
Initial claims (Not seasonally adjusted)	1,672	829	739	675	1,361	2,357	1,778

The pressure on labor costs that has resulted from persistent worker shortages is being felt all across Minnesota. In the third quarter of 2018, average weekly wages in Northeast Minnesota jumped 4.8 percent compared to one year earlier.

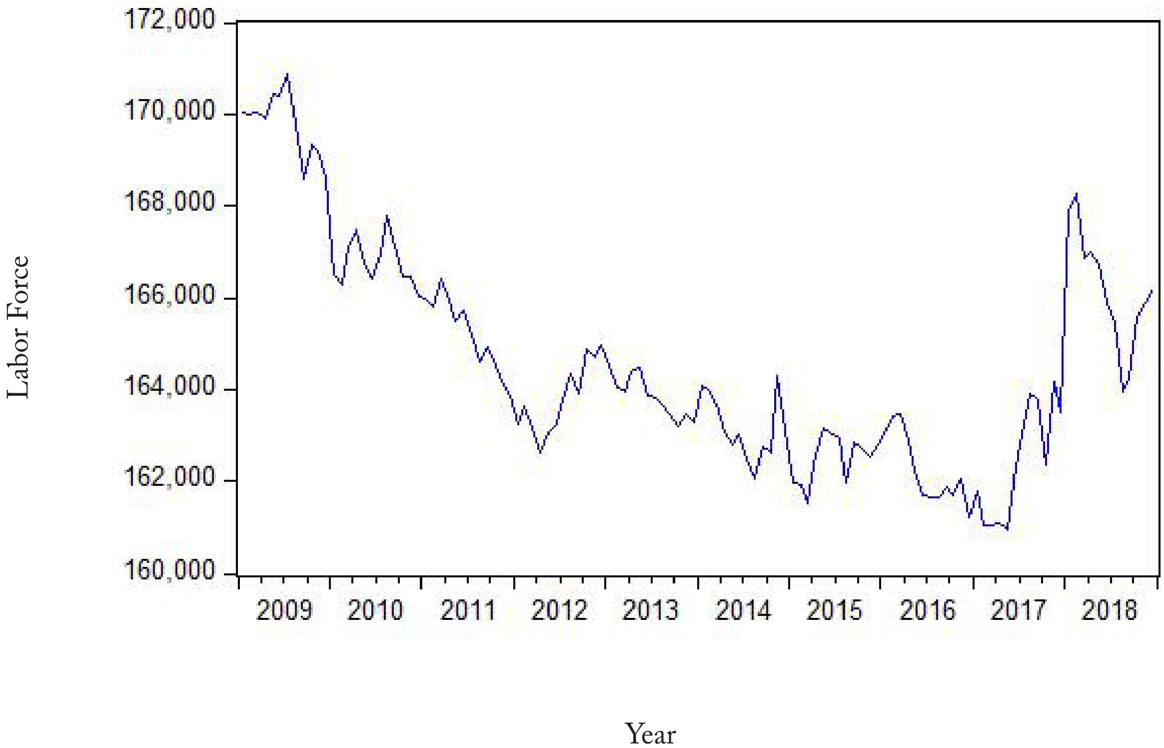
Average Weekly Wages---Northeast Minnesota Planning Area



Quarter	2013:III	2014:III	2015:III	2016:III	2017:III	2018:III
Average Weekly Wages	$764	$791	$806	$843	$820	$859

The Northeast Minnesota labor force rose by 1.7 percent in the fourth quarter of 2018 compared to one year earlier. Using a 12-month moving average to account for seasonality, the regional labor force numbers appears to have experienced uncharacteristic volatility in 2018.

Labor Force—Northeast Minnesota Planning Area (12-month moving average)



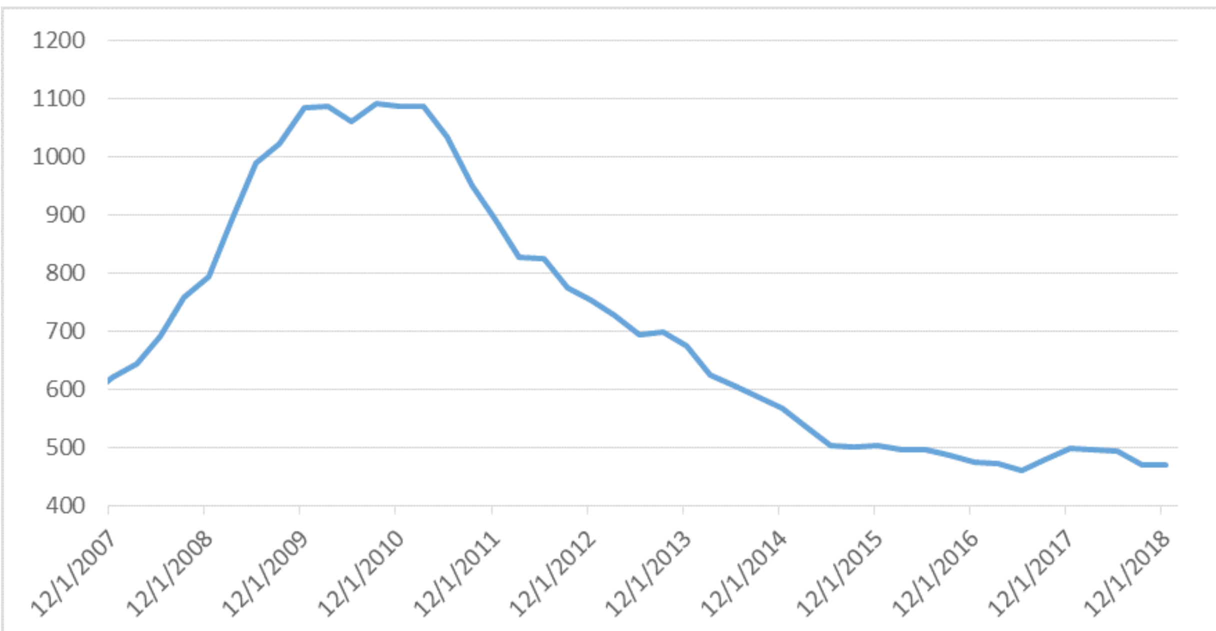
Year (December)	2013	2014	2015	2016	2017	2018
Labor Force (Not seasonally adjusted)	162,196	162,030	161,752	160,203	162,531	165,218

NORTHEAST MINNESOTA BANKRUPTCIES

The figure below shows the 12-month moving total for Northeast Minnesota bankruptcies since the second quarter of 2007 (shortly before the beginning of the Great Recession). As can be seen in the figure, this moving total increased until the third quarter of 2009, then leveled out for a few quarters. The series had gradually declined since the beginning of 2011, until the middle months of 2017, when it slowly started to inch up. However, this pattern was reversed in recent quarters, as the planning area's bankruptcies declined.

Northeast Minnesota Bankruptcies (12-month moving total)

Bankruptcies



Quarter

Year (Fourth Quarter)	2013	2014	2015	2016	2017	2018
Annual Bankruptcies (Not seasonally adjusted)	674	567	504	475	499	469

ECONOMIC INDICATORS

Duluth-Superior MSA Indicators	Period Covered	Current Period	Prior Year	Annual Percent Change	Long-Term Average (since 1999, unless noted)
Employment	December 2018 (m)	137,088	136,939	0.1% ↑	0.2%
Manufacturing Employment	December 2018 (m)	7,916	7,665	3.3% ↑	-1.3%
Educational and Health Sector	December 2018 (m)	32,514	32,525	0.0% ↔	2.5%
Average Weekly Work Hours--Private Sector	December 2018 (m)	32.0	32.5	-1.5% ↓	32.3 (since 2007)
Average Earnings Per Hour--Private Sector	December 2018 (m)	$26.22	$24.14	8.6% ↑	2.3% (since 2006)
Unemployment Rate	December 2018 (m)	3.9%	4.3%	NA ↓	5.6%
Labor Force	December 2018 (m)	144,386	144,118	0.2% ↑	0.0%
Duluth-Superior Residential Building Permit Valuation	December 2018 (m)	530	2,258	-76.5% ↓	NA

(m) represents a monthly series

Northeast Minnesota contains the Duluth/Superior MSA, where economic performance was mixed in the recent quarter. Overall employment rose by a small 0.1 percent over the year ending December 2018, although employment growth in the manufacturing sector was strong. The key education/health sector saw no change in employment and overall average weekly work hours fell. The size of the labor force was little changed and the value of residential building permits fell by 76.5 percent. On a positive note, average hourly earnings jumped 8.6 percent and the Duluth area unemployment rate fell to 3.9 percent.

STATE AND NATIONAL INDICATORS

MINNESOTA Indicators	Dec 2018	Sep 2018	Dec 2017	Change from one quarter ago	Annual Change
Nonfarm payroll employment, SA	2,961,100	2,958,100	2,942,800	0.1%	0.6%
Average weekly hours worked, private sector	34.1	34.4	33.9	-0.9%	0.6%
Unemployment rate, seasonally adjusted	2.9%	2.8%	3.1%	NA	NA
Earnings per hour, private sector	$29.82	$29.38	$28.67	1.5%	4.0%
Philadelphia Fed Coincident Indicator, MN	138.54	137.84	133.48	0.5%	3.8%
Philadelphia Fed Leading Indicator, MN	0.70	1.88	1.08	-62.8%	-35.2%
Minnesota Business Conditions Index	55.5	60.0	56.8	-7.5%	-2.3%
Price of milk received by farmers (cwt)	$16.30	$17.50	$17.10	-6.9%	-4.7%
Enplanements, MSP airport, thousands	1,456.4	1,533.7	1,471.6	-5.0%	-1.0%
NATIONAL Indicators	Dec 2018	Sep 2018	Dec 2017	Change from one quarter ago	Annual Change
Nonfarm payroll employment, SA, thousands	150,275	149,575	147,596	0.5%	1.8%
Industrial production, index, SA	109.9	109.1	105.8	0.7%	3.9%
Real retail sales, SA, millions ($)	199,183	201,083	199,766	-0.9%	-0.3%
Real personal income less transfers, billions	13,753.9	13,533.7	13,338.5	1.6%	3.1%
Real personal consumption expenditures, bill.	13,014.5	12,965.9	12,735.6	0.4%	2.2%
Unemployment rate, SA	3.9%	3.7%	4.1%	NA	NA
New building permits, thousands of units	95.4	99.4	94.8	-4.0%	0.6%
Standard and Poor's 500 stock price index	2,567.3	2,901.5	2,664.3	-11.5%	-3.6%
Oil, price per barrel in Cushing, OK	$49.52	$70.23	$57.88	-29.5%	-14.4%

Economic performance found in the State and National Indicators table are mixed. For the state as a whole, there was growth in employment and improved earnings over the past year (as well as in the fourth quarter). Minnesota's seasonally adjusted unemployment rate was lower than one year ago, but inched up in the fourth quarter. Only one of the three state indicators series reported in the table were improved over the past twelve months. Milk prices fell and enplanements at the Minneapolis-St. Paul airport are lower than one year ago.

The national economic indicators found in the table are also mixed. While employment, income, industrial production and consumer spending are all improved, other measures suggest slowing national economic growth. For example, the seasonally adjusted national unemployment rate was higher in December than three months earlier and end-of-the year stock prices were lower (although they have rebounded in the first quarter of 2019). Retail sales weakened, building permits were sluggish and oil prices were also lower.

The Northeast Minnesota Quarterly Economic and Business Conditions Report is a collaboration between the Office of the Minnesota Secretary of State and the School of Public Affairs Research Institute (SOPARI) of St. Cloud State University. All calculations and text are the result of work by SOPARI, which is solely responsible for errors and omissions herein.

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Sources

Council for Community and Economic Research: Cost of Living Index.

Creighton University Heider College of Business: Minnesota Business Conditions Index, Rural MainStreet Index.

Federal Reserve Bank of Philadelphia: Minnesota Coincident Indicator Index, Minnesota Leading Indicators Index.

Federal Reserve Board of Governors: Industrial Production.

Institute for Supply Management: Manufacturing Business Survey, Purchasing Managers Index.

Metropolitan Airports Commission: MSP Enplanements.

Minnesota Department of Employment and Economic Development (and U.S. Department of Labor Bureau of Labor Statistics): Average Hourly Earnings, Average Weekly Work Hours, Employment, Initial Claims for Unemployment Insurance, Job Vacancies, Labor Force, Manufacturing Employment, Unemployment Rate.

Office of the Minnesota Secretary of State: Assumed Names, Business Incorporations, Limited Liability Companies, Non-Profits.

Standard & Poor's: Standard & Poor's 500 Stock Price Index.

Thomson Reuters and University of Michigan, Index of Consumer Sentiment

U.S. Bankruptcy Courts: Bankruptcies

U.S. Bureau of Census: Durable Goods Orders, Housing Permits, Residential Building Permits, Retail Sales.

U.S. Department of Agriculture: Milk Prices.

U.S. Department of Commerce Bureau of Economic Analysis: Real Personal Consumption, Real Personal Income, Real Wages and Salaries.

U.S. Energy Information Administration: Oil Prices.