Northeast Minnesota
Economic and Business Conditions Report
First 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.

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EXECUTIVE SUMMARY

A steady pace 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). Two of the five components of the LEI decreased as the overall index was basically flat for the second consecutive quarter. A decline in Duluth metropolitan area residential building permits and recently higher initial jobless claims in the region weighed on this quarter's outlook, while recent strength in a general measure of statewide business conditions and improved new business filings contributed favorably to the leading index.

There were 643 new business filings with the Office of the Minnesota Secretary of State in Northeast Minnesota in the first quarter of 2018 — representing a 2.7 percent increase from one year earlier. Sixty new regional business incorporations were filed in the first quarter—15.5 percent fewer than in the same period of 2017. New limited liability company (LLC) filings in Northeast Minnesota rose 4.9 percent to a level of 362. New assumed name filings increased 9.6 percent and there were 27 new filings for non-profit—6 fewer filings than in the first quarter of 2017.

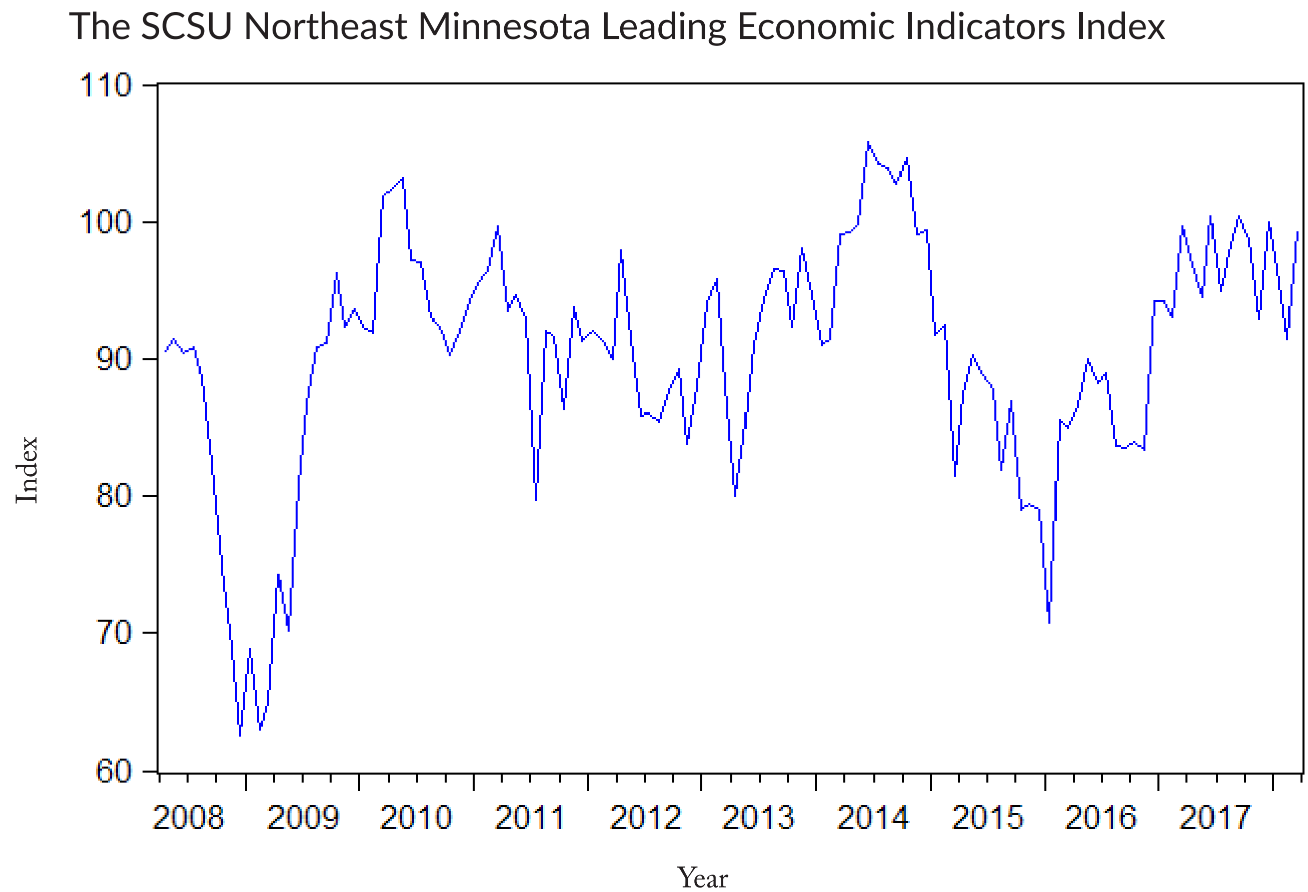
Sixty-eight percent of new business filers in the Northeast Minnesota planning area completed the voluntary Minnesota Business Snapshot (MBS) survey in this year's first quarter. Results of this voluntary survey indicate that 3 percent of new filers come from communities of color, while 9 percent of new filings come from veterans. 1.6 percent of new filers come from the disability community and less than 1 percent of new filings are made by the immigrant community. Thirty-nine percent of new business filings in Northeast Minnesota in this year's first 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 45 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, agriculture/forestry/fishing/hunting and other services. Employment levels at most new firms are between 0 and 5 workers, and more than half of those starting a new business consider this a part-time activity.

Northeast Minnesota employment was 5.1 percent higher than year ago levels in March. The regional unemployment rate was 5.4% (considerably lower than one year ago) and the labor force rose by 3.5% from one year earlier. March 2018 initial claims for unemployment insurance were 7.5 percent lower than the same month last year. While the regional job vacancy rate declined from the second quarter of 2017, recent job vacancies still remain elevated relative to the number of unemployed workers in the region. Annual bankruptcies in Northeast Minnesota continue to inch up.

With the exception of a recent year-over-year decline in the value of Duluth area building permits, economic activity in the Duluth/Superior Metropolitan Statistical Area (MSA) was strong. Northeast Minnesota's largest market experienced a 1 percent increase in overall employment over the year ending March 2018, and education/health and manufacturing sector employment also rose. The area unemployment rate fell to 4.8 percent and the labor force rose 2.6 percent. Average weekly work hours rose 0.3 percent and average hourly earnings increased.

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 small 0.51 point decrease in the fourth quarter, this quarter's LEI continued to be flat, declining by 0.56 points. The LEI is now 0.2 percent below its March 2017 level. As can be seen in the accompanying figure, the LEI has shown a lot of variability in recent quarters, but is mostly unchanged from where it was at the end of 2016.



Components of SCSU Northeast Leading Economic Indicators Index

Component of Index	Contribution to LEI, 1st quarter 2018	Contribution to LEI, 4th quarter 2017
Minnesota Business Conditions Index	1.49	-0.94
Northeast Minnesota initial claims for unemployment insurance	-2.34	0.84
Northeast Minnesota new filings of incorporation	1.65	-1.37
Duluth Superior MSA residential building permits	-1.36	2.22
Institute of Supply Management Purchasing Managers Index for manufacturing	0	-1.26
TOTAL CHANGE	**-0.56**	**-0.51**

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 indicator was unchanged in the first quarter. Higher regional initial jobless claims were a drag on this quarter's leading index as were a decline in the number of new residential building permits in the Duluth/Superior MSA. Stronger performance of the Minnesota Business Conditions Index (which is used as an indicator of general statewide business conditions) and improved new business filings each made a positive impact on the Northeast planning area economic outlook.

SCSU Northeast Minnesota Leading Economic Indicators Index

	2018	2017	Percentage change
Minnesota Business Conditions Index March	61.0	61.8	-1.3%
Northeast Minnesota initial claims for unemployment insurance, March	1,178	1,274	-7.5%
Northeast Minnesota new filings of incorporation First Quarter	60	71	-15.5%
Duluth-Superior MSA single-family building permits March	6	8	-25.0%
Institute for Supply Management Purchasing Managers' Index, manufacturing sector, March	59.3	57.2	3.7%
Northeast Minnesota Leading Economic Indicators Index March (December 1999 = 100)	99.4	99.6	-0.2%

NORTHEAST MINNESOTA BUSINESS FILINGS

Total new business filings rose by 2.7 percent compared to last year's first quarter. This series has essentially been 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	I: 2017	II: 2017	III: 2017	IV: 2017	I: 2018	2018 Quarter I: Percent change from prior year
Northeast Minnesota Total New Business Filings	626	653	491	507	643	2.7%

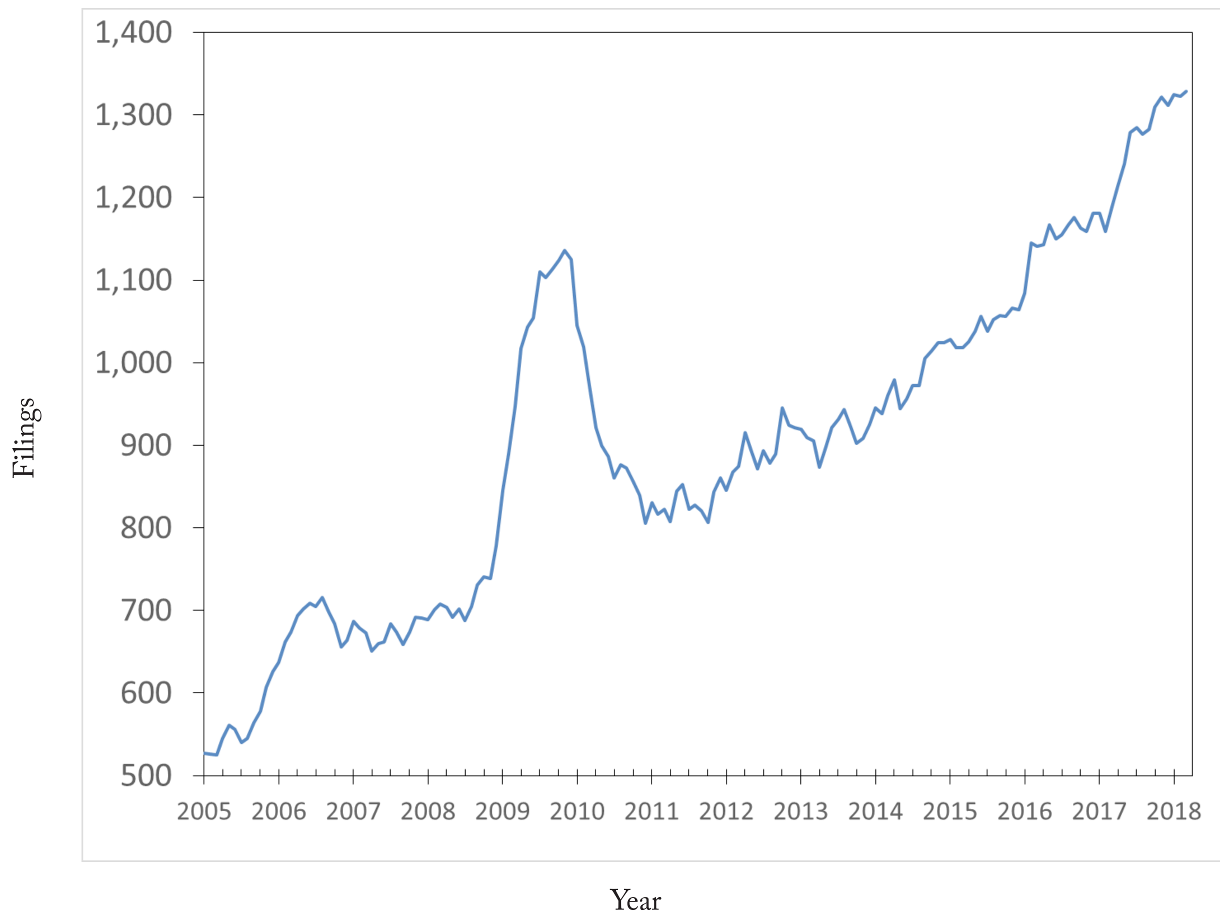
Compared to the first quarter of 2017, new filings of incorporation in Northeast Minnesota were 15.5 percent lower. As can be seen in the graph, the 12-month moving total of Northeast Minnesota new business incorporations has been mostly flat for the past several years.

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

Quarter	I: 2017	II: 2017	III: 2017	IV: 2017	I: 2018	2018 Quarter I: Percent change from prior year
Northeast Minnesota New Business Incorporations	71	58	49	42	60	-15.5%

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 first quarter as new LLC filings rose by 4.9 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.

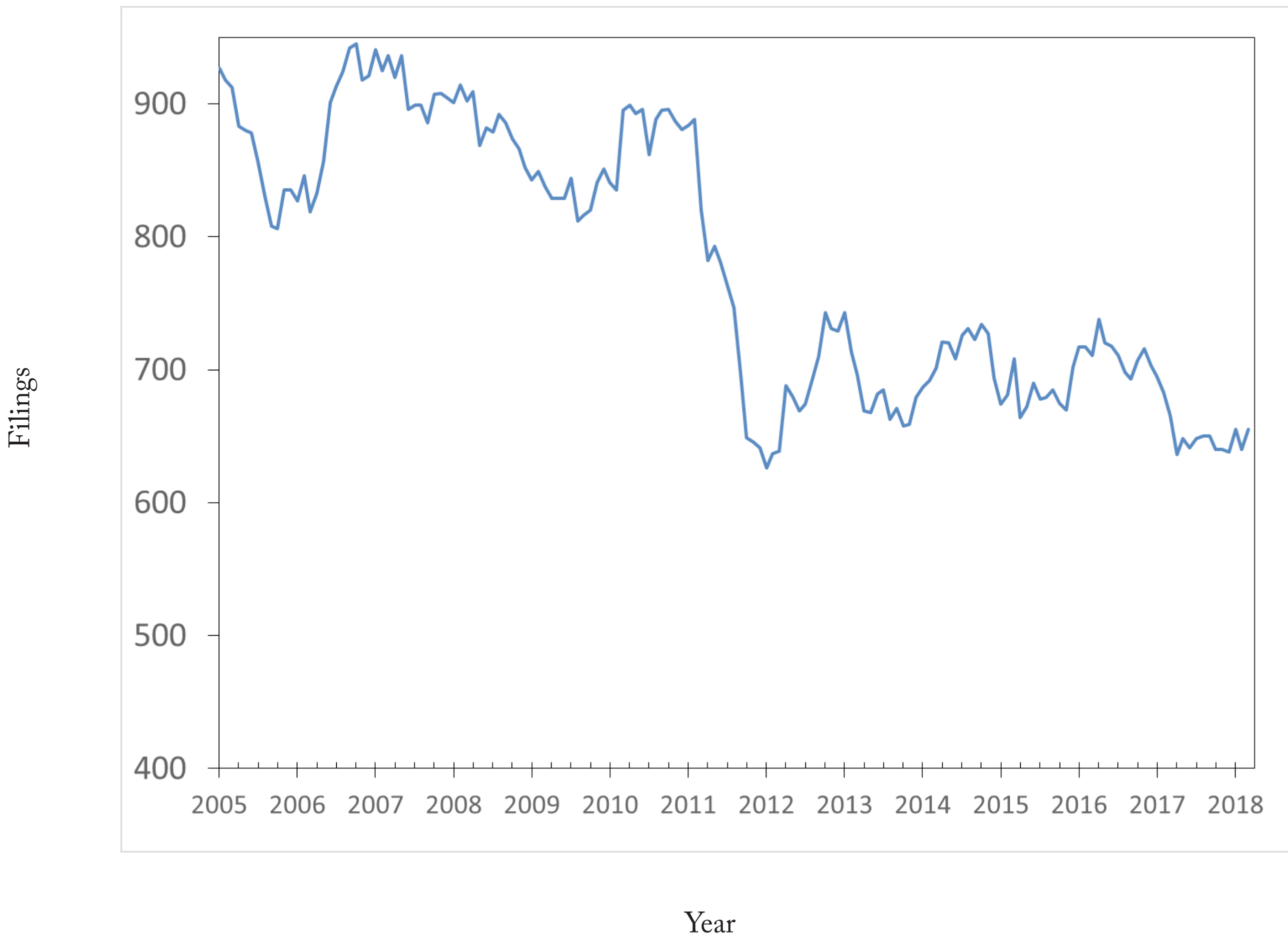
New Limited Liability Companies—Northeast Minnesota Planning Area (12-month moving total)



Quarter	I: 2017	II: 2017	III: 2017	IV: 2017	I: 2018	2018 Quarter I: Percent change from prior year
Northeast Minnesota New Limited Liability Companies	345	392	275	300	362	4.9%

Compared to the first quarter of 2017, assumed names rose by 9.6 percent in Northeast Minnesota. As can be seen in the accompanying figure, this series has levelled out in recent quarters, but assumed name filings still remain well below their level of the mid-2000s.

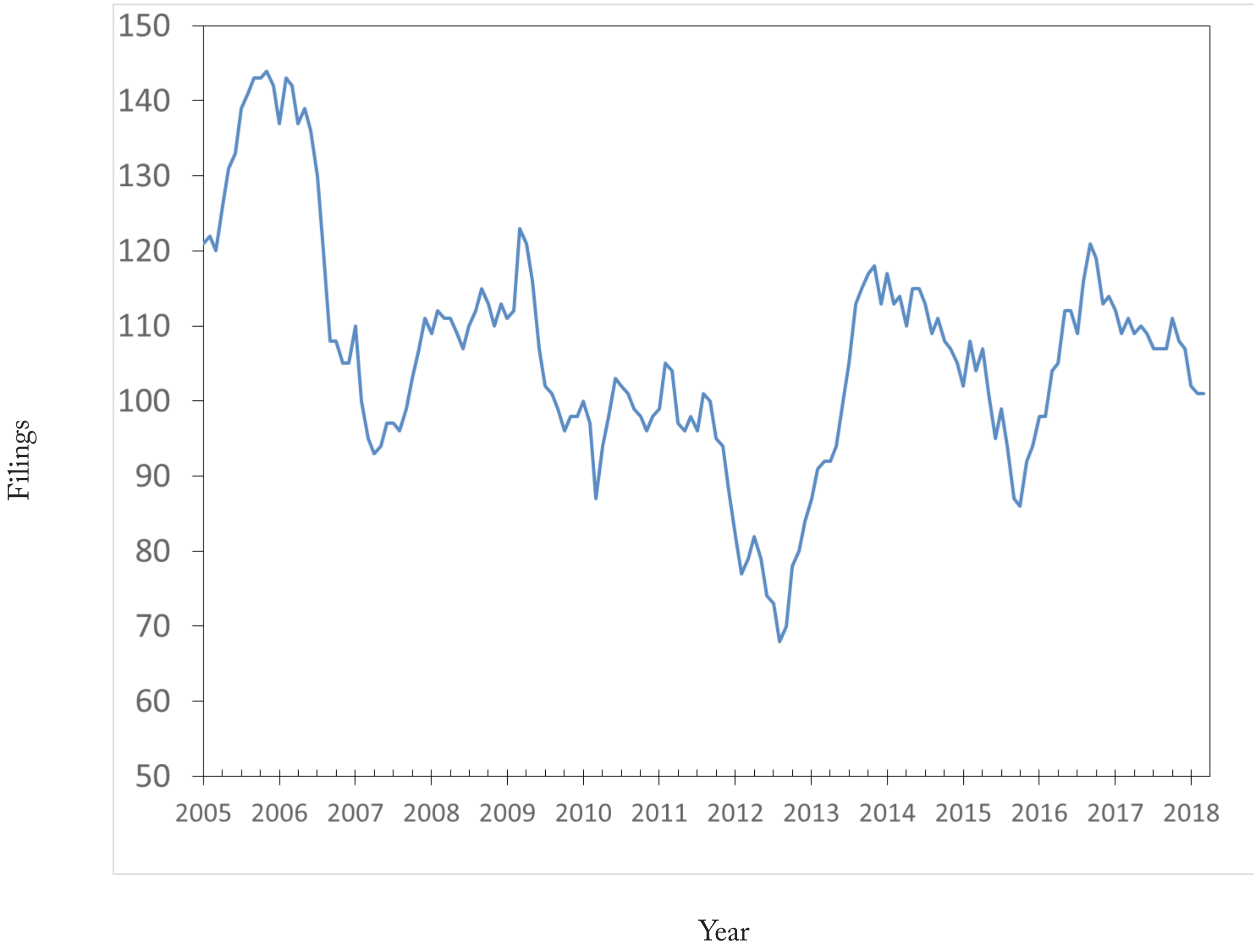
New Assumed Names—Northeast Minnesota Planning Area (12-month moving total)



Quarter	I: 2017	II: 2017	III: 2017	IV: 2017	I: 2018	2018 Quarter I: Percent change from prior year
Northeast Minnesota New Assumed Names	177	175	143	143	194	9.6%

There were 27 new Northeast Minnesota non-profits registered with the Office of the Minnesota Secretary of State in the first quarter of 2018. This is six fewer filings than one year earlier.

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



Quarter	I: 2017	II: 2017	III: 2017	IV: 2017	I: 2018	2018 Quarter I: Percent change from prior year
Northeast Minnesota New Non-Profits	33	28	24	22	27	-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 first quarter of 2018 are analyzed. For the entire State of Minnesota, the overall response rate for this voluntary survey is approximately 62 percent. This yields thousands of self-reported records in this emerging data set. For Northeast Minnesota, about 68 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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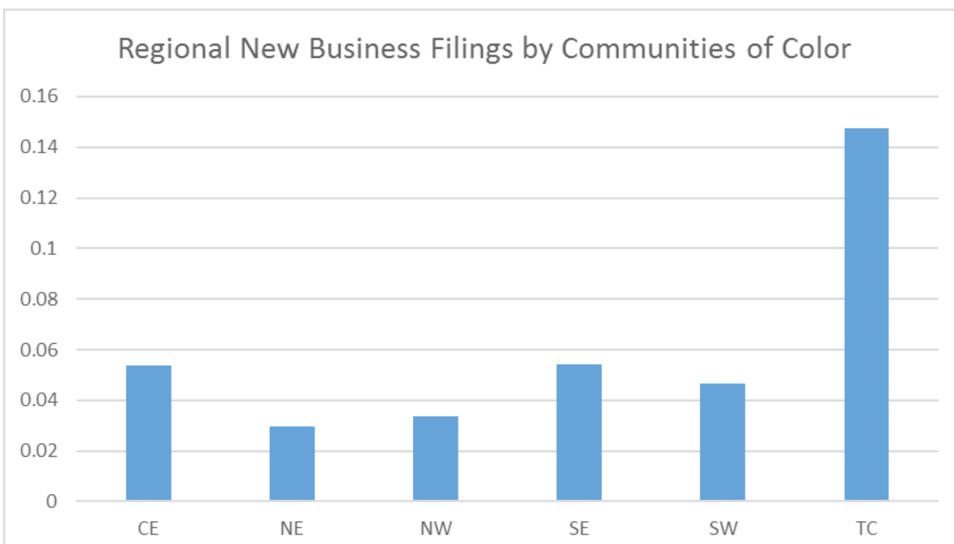
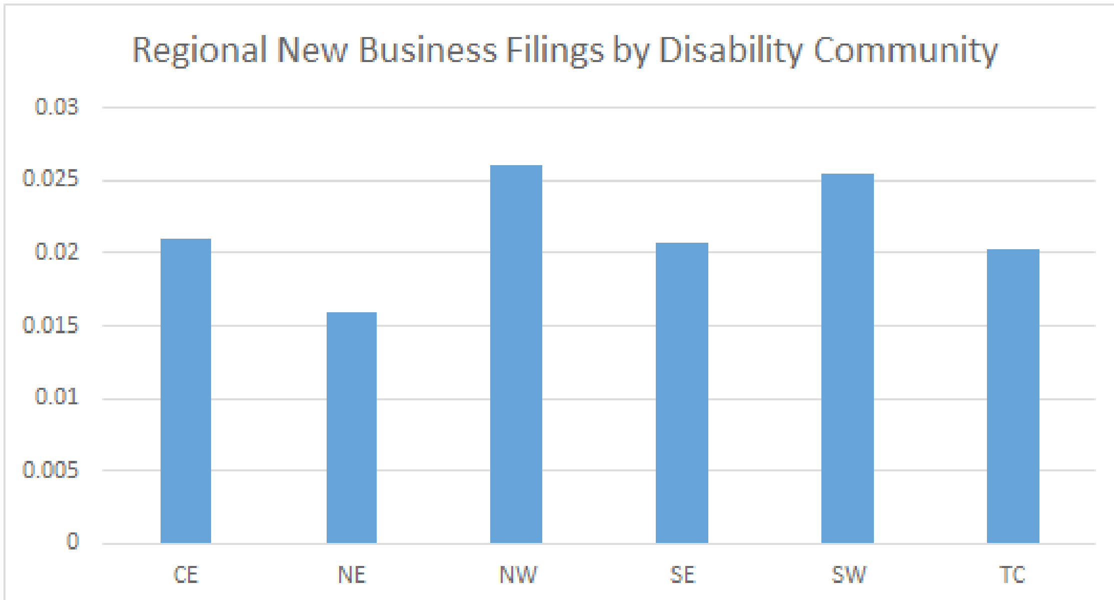
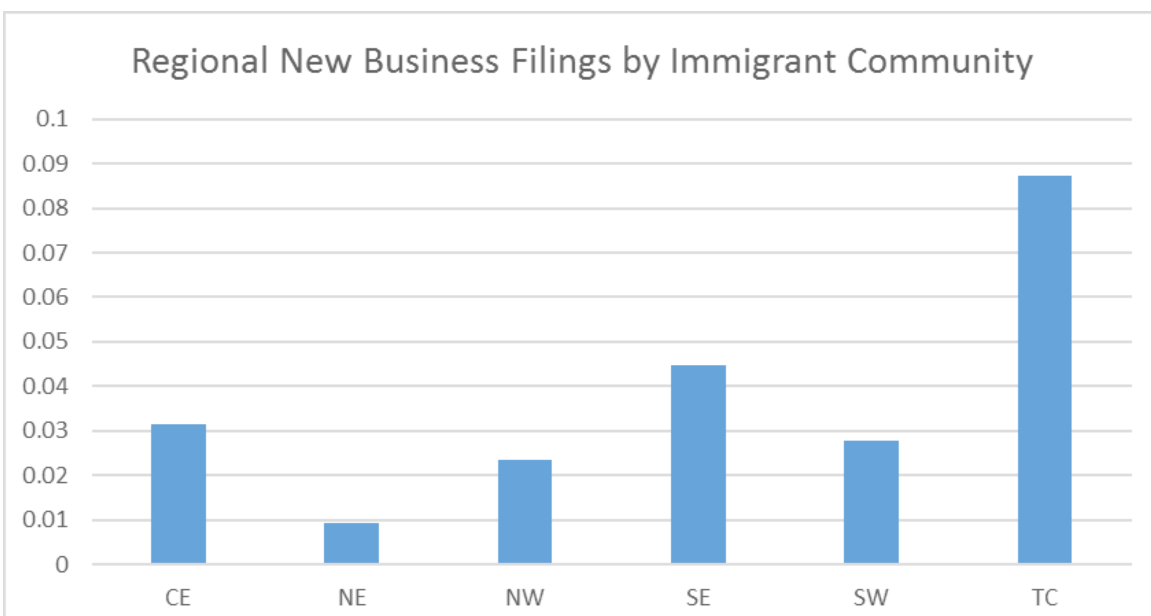
Three percent of those new filers completing the MBS from the Northeast Minnesota planning area report being from a community of color. This is the lowest percentage of Minnesota's six planning areas.



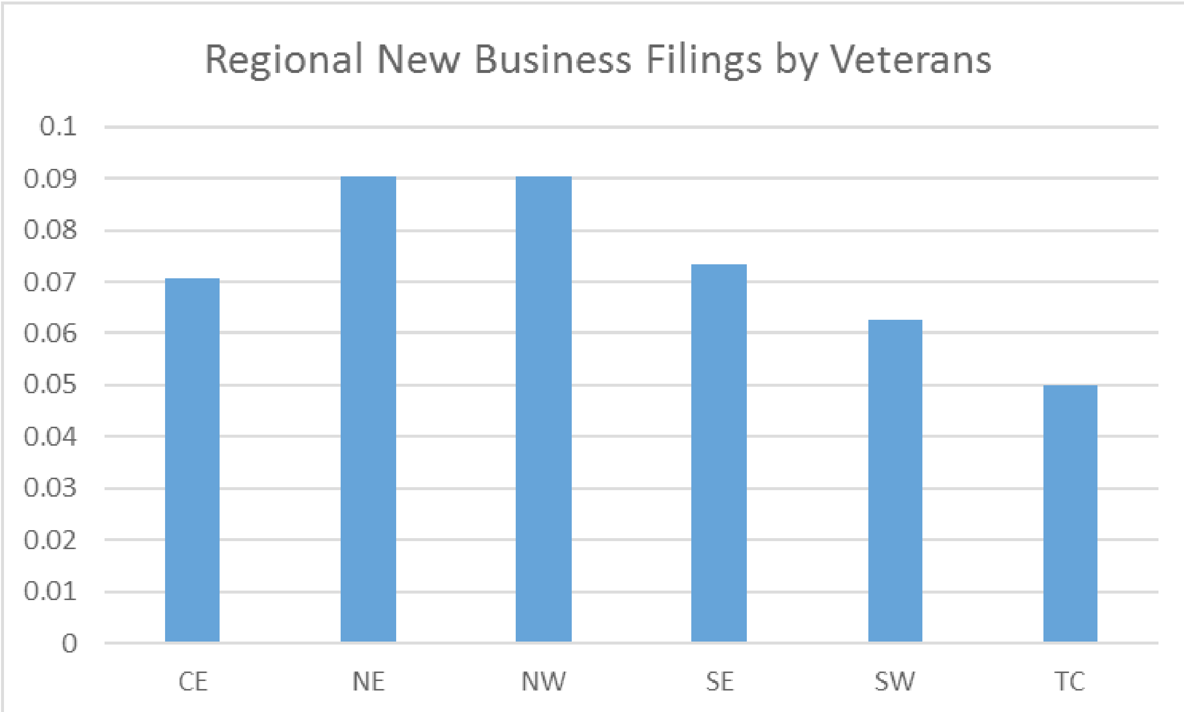
About 1.6 percent of Northeast Minnesota's new filers are from the disability community. This is also the lowest percentage of any of Minnesota's six planning areas.



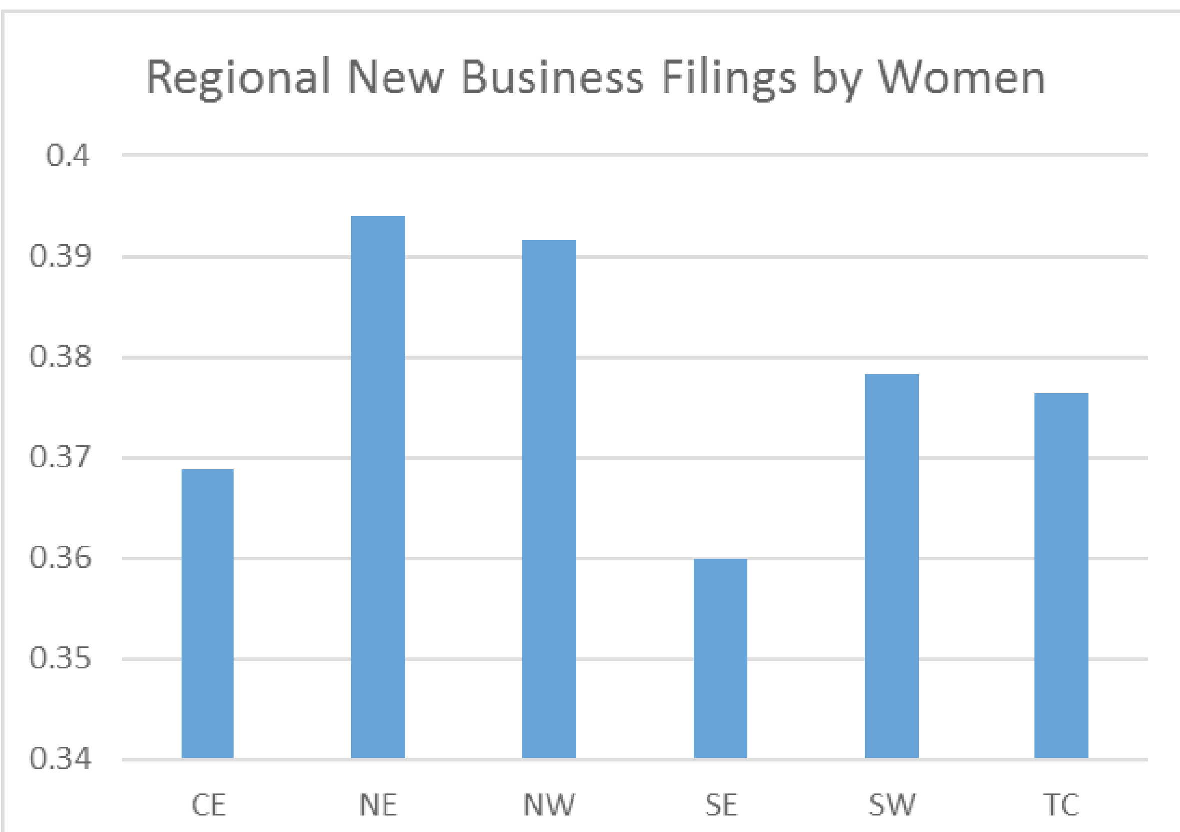
Very few (less than 1 percent) new business filings in Northeast Minnesota come from the immigrant community. The percentage of immigrant new business filings in the northeast portion of the state is well below what is seen in the other planning areas.



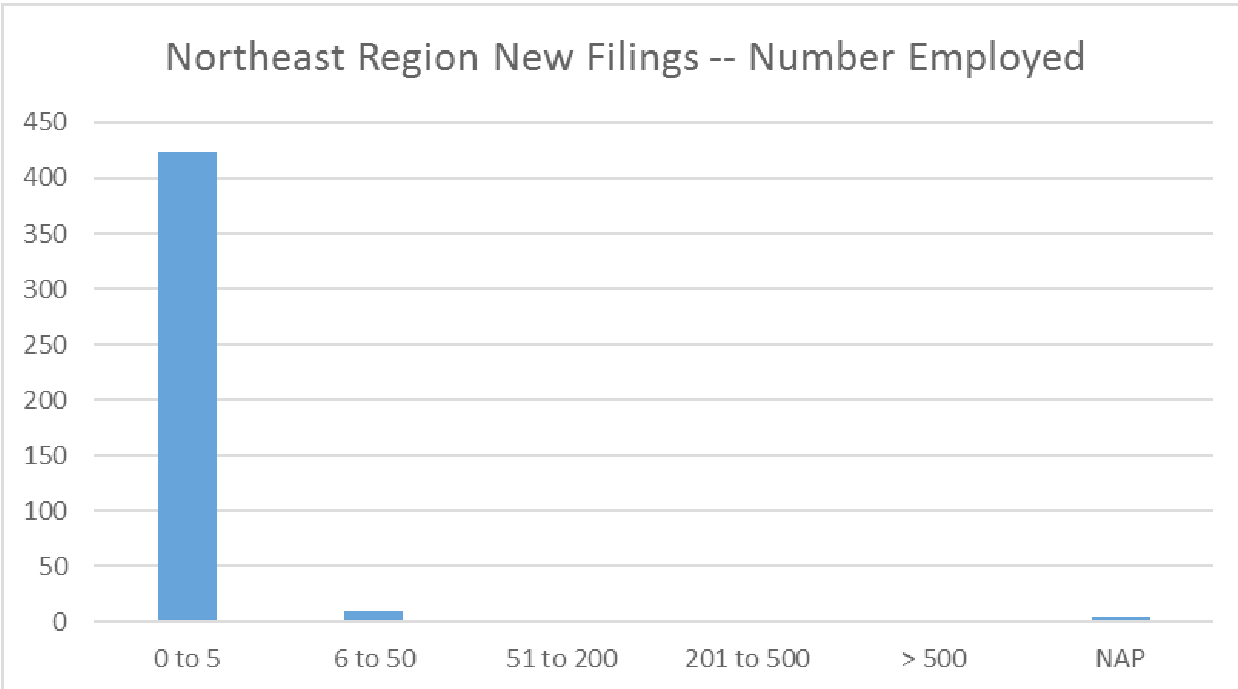
Approximately 9 percent of all new filings in Northeast Minnesota came from military veterans in the first quarter of 2018. The Northwest and Northeast regions of Minnesota have the greatest share of new filings by veterans.



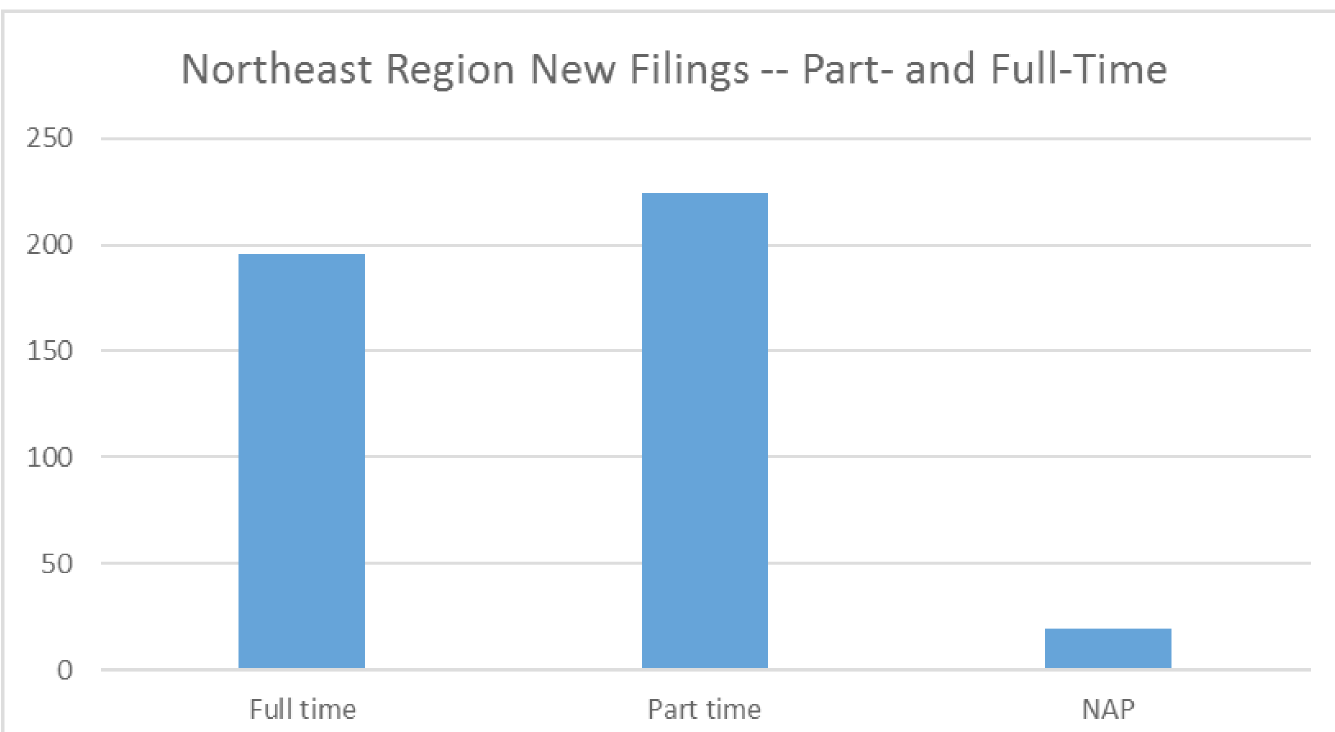
Woman owners represented about 39 percent of the new business filings in Northeast Minnesota in the first quarter of 2018. This is the highest percentage of any of Minnesota's six planning areas.



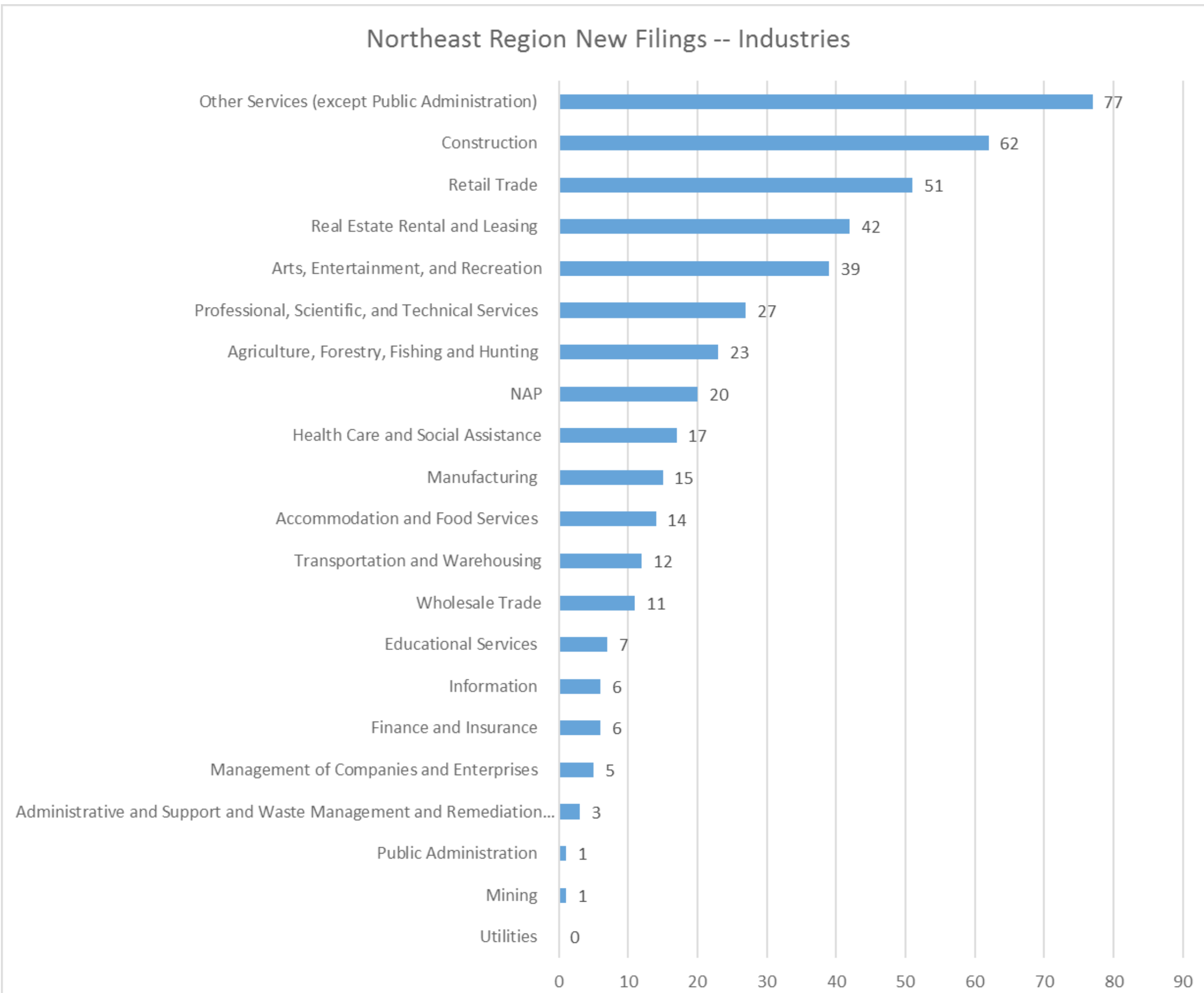
While not all of those participating in the survey completed all portions of the Minnesota Business Snapshot (those not responding to a particular question are represented in this section by "NAP"—no answer provided), 434 responses were tallied to a question asking the new business filer to indicate 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.



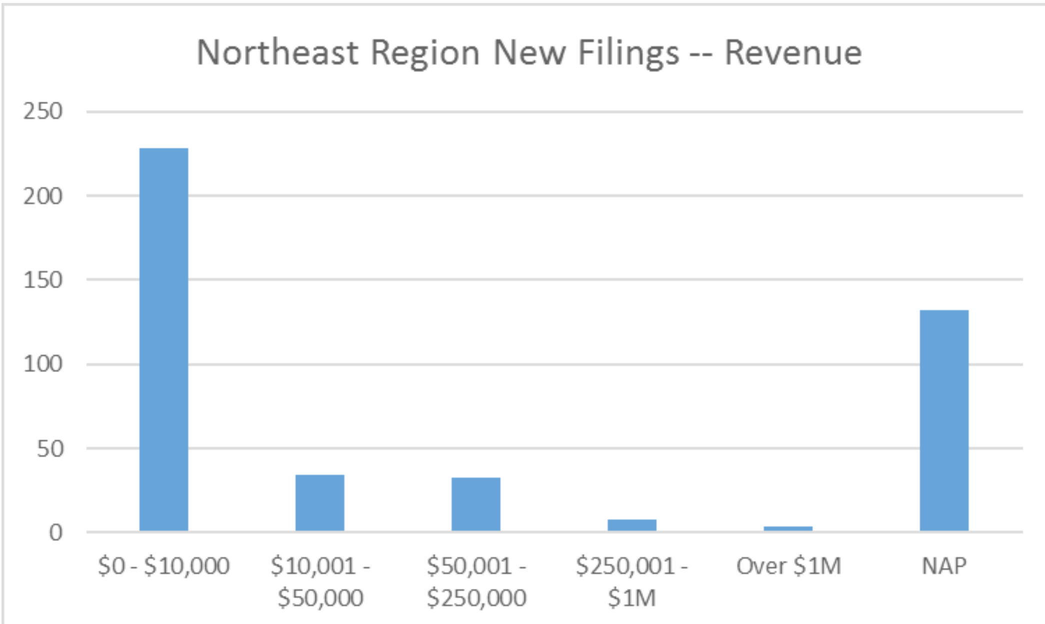
More than half of those submitting a new business filing in Northeast Minnesota are part-time ventures.



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, arts/entertainment/recreation, retail trade, professional/scientific/technical, construction, agriculture/forestry/fishing/hunting 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 new firms did not provide an answer to this survey item (see "NAP")



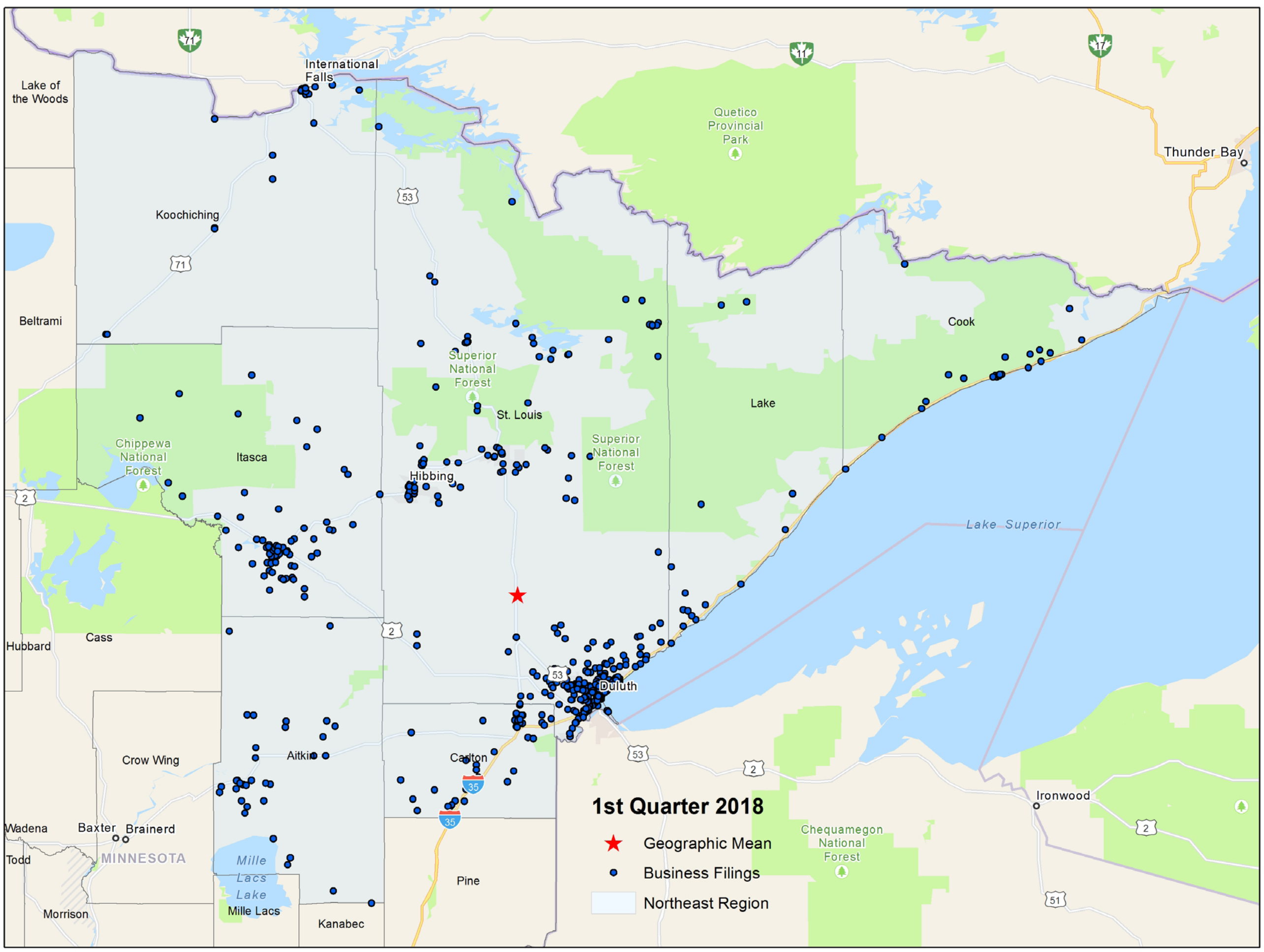
132 new business filers in Northeast Minnesota did not provide an answer to the MBS item that asked them to report the company's revenue. Of those businesses that answered the question, the largest share report revenues of less than $10,000. Forty-five new firms report revenues in excess of $50,000.



MAPS

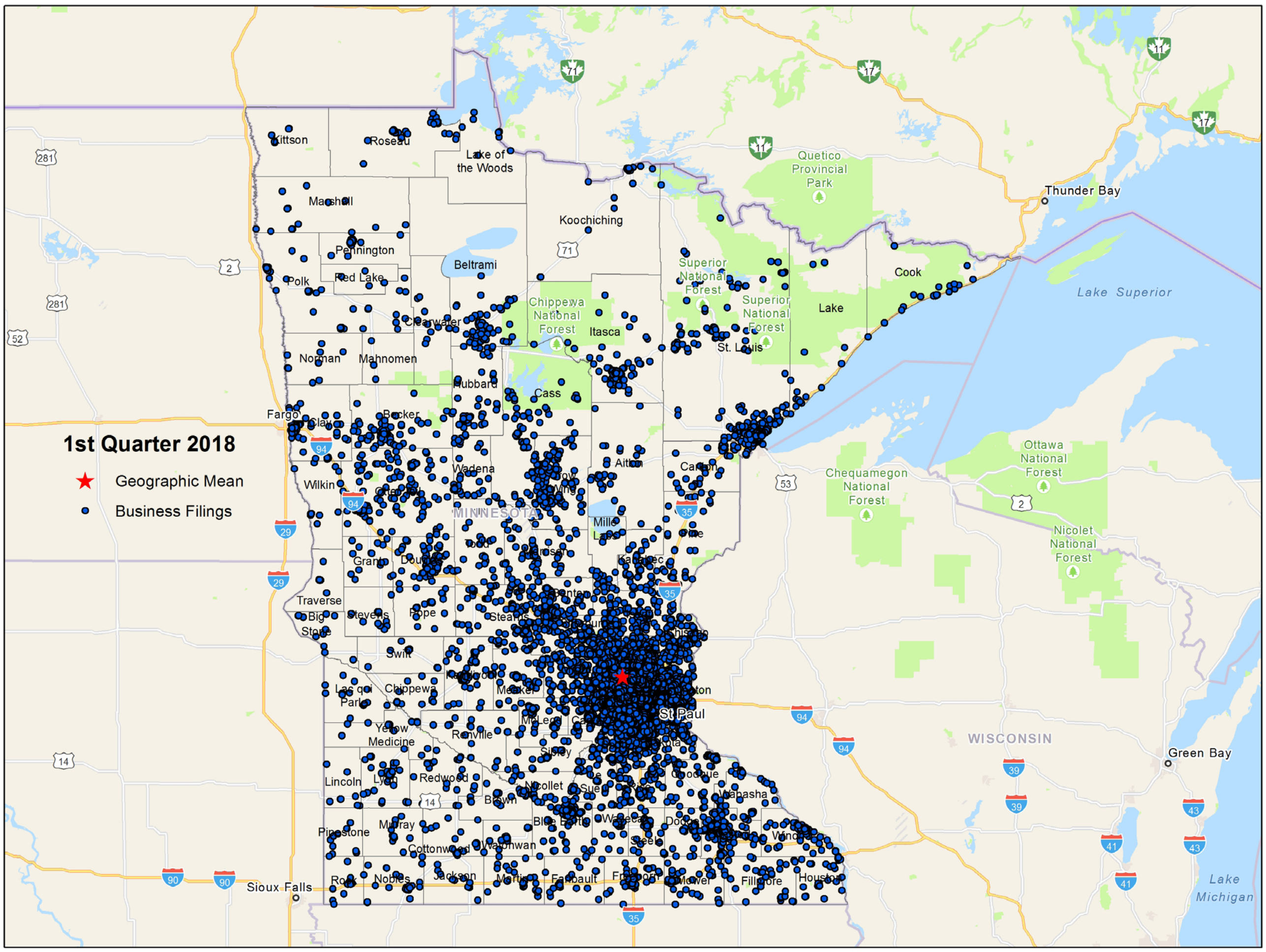
The first map shown below is a visual representation of new business formation around the Northeast Minnesota planning area in the first quarter of 2018. The densest areas of new business formation are in the Duluth metro as well as along the region's well-traveled roadways. There was a noticeable cluster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

Northeast Minnesota Planning Area--New Business Formation--Quarter 1: 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 1: 2018

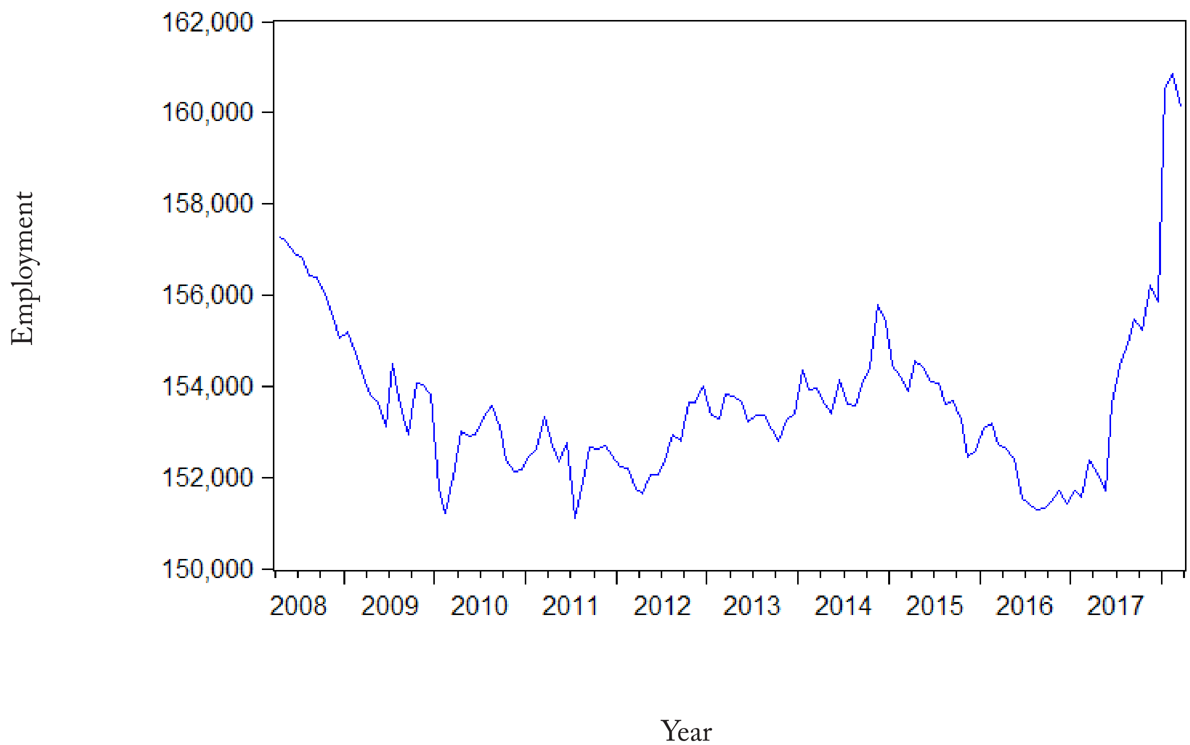


NORTHEAST MINNESOTA LABOR MARKET CONDITIONS

March 2018 employment in the Northeast Minnesota planning area was 5.1 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 has been rising rapidly since the beginning of 2017.

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.

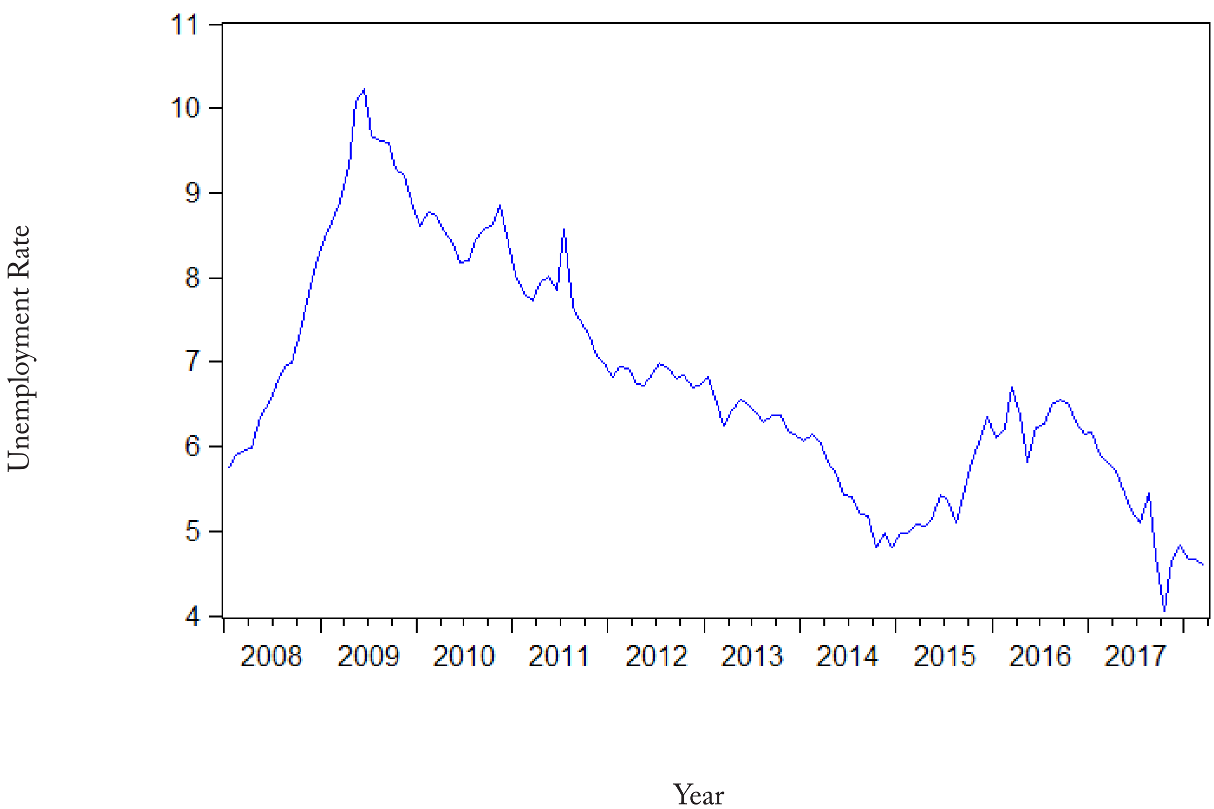
Employment—Northeast Minnesota Planning Area (12-month moving average)



Month	March 2017	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018
Employment (Not seasonally adjusted)	150,554	156,173	156,025	154,387	157,169	159,055	158,229

After a sharp increase in the seasonally adjusted unemployment rate in last year's fourth quarter, this series resumed its downward trend in the first quarter of 2018. At 5.4 percent, the non-seasonally adjusted rate is considerably lower than one year earlier. The unemployment rate in Northeast Minnesota is no longer the highest regional rate in Minnesota. The Northwest Minnesota planning area (at a rate of 5.5 percent) now has the highest unemployment rate of Minnesota's six planning areas.

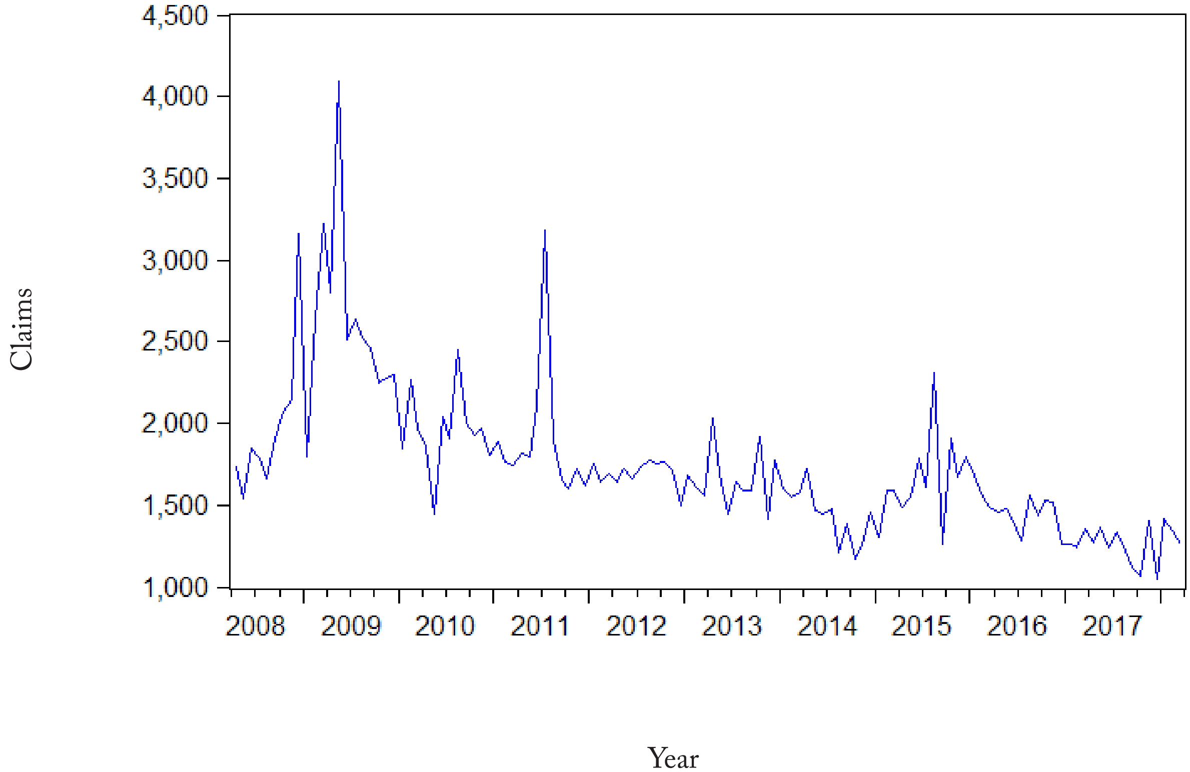
Unemployment Rate, seasonally adjusted—Northeast Minnesota Planning Area



Month	March 2017	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018
Unemployment Rate (Not seasonally adjusted)	6.8%	3.2%	4.3%	5.0%	5.7%	5.5%	5.4%

On a seasonally adjusted basis, initial jobless claims in the Northeast region have levelled out over the past three quarters. This quarter's initial jobless claims fell by 7.5% compared to one year earlier.

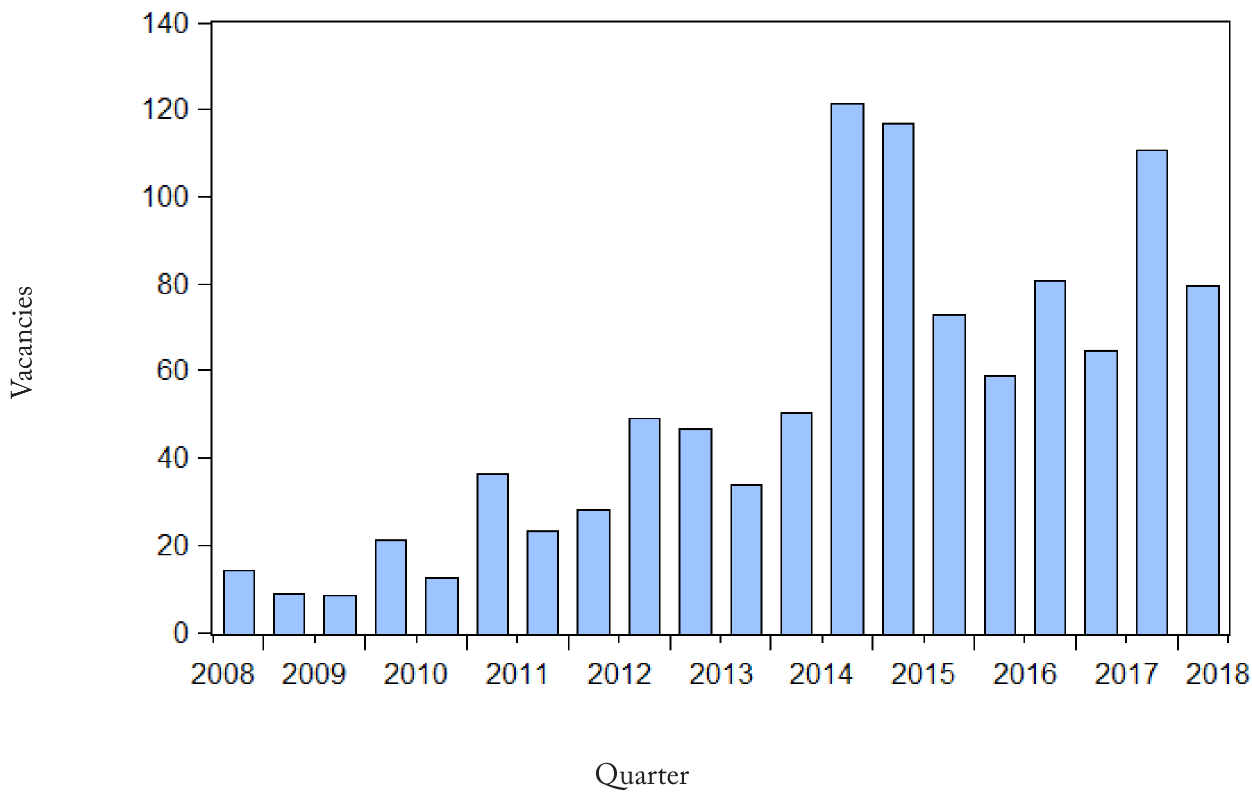
Total Initial Claims for Unemployment Insurance, seasonally adjusted—Northeast Minnesota Planning Area



Period	March 2017	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018
Initial claims (Not seasonally adjusted)	1,274	1,122	2,459	1,672	1,686	1,132	1,178

Employers report surging job vacancies throughout the country. This is evident throughout Minnesota, where all planning areas are experiencing shortages of qualified workers to fill vacant positions. For every 100 unemployed workers in Northeast Minnesota, there are 79.33 job vacancies. While this job vacancy rate remains elevated, it must be noted that is lower than the observed rate in last year's second quarter. As can be seen in the figure below, the ratio of job vacancies to unemployed workers has risen significantly since the beginning of the decade.

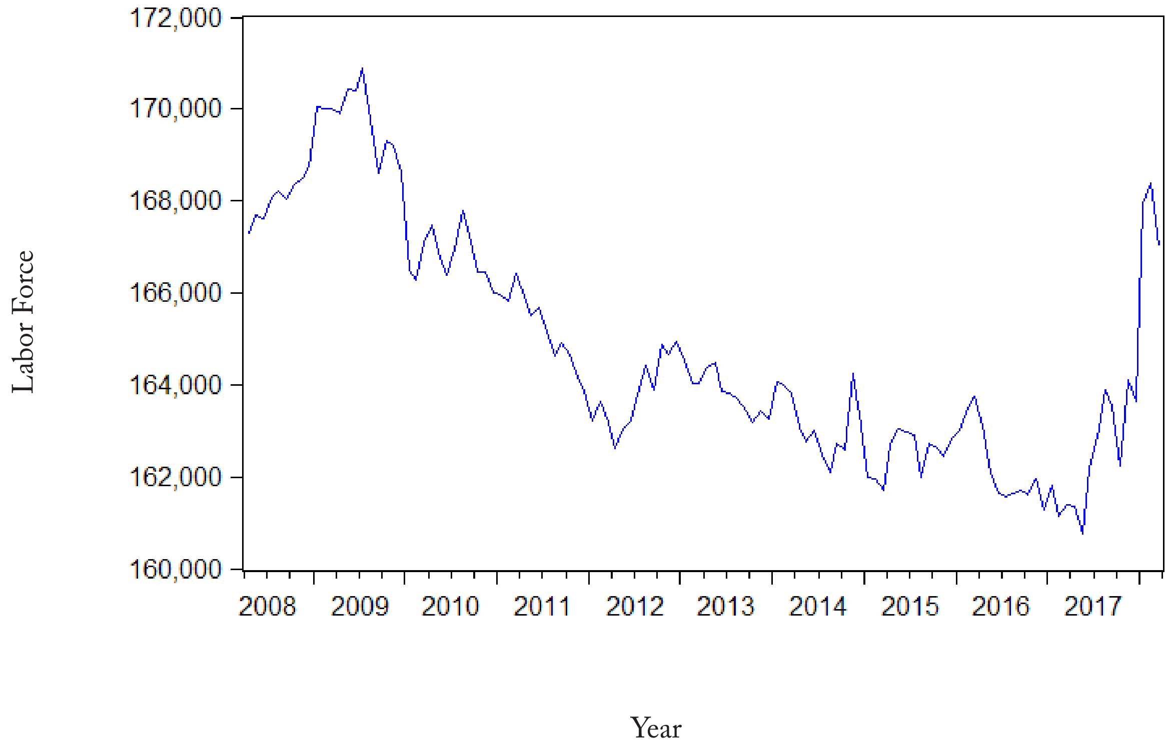
Job Vacancies per 100 Unemployed---Northeast Minnesota Planning Area



Quarter	2015:II	2015:IV	2016:II	2016:IV	2017:II	2017:IV
Job Vacancies per 100 Unemployed	73.18	59	80.62	64.64	110.53	79.33

The Northeast Minnesota labor force rose by 3.5 percent over the past year. Using a 12-month moving average to account for seasonality, the regional labor force numbers appear to have bottomed out earlier in mid-2017. Note that all of Minnesota's planning areas are now seeing increases in their workforce on a year-over-year basis.

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

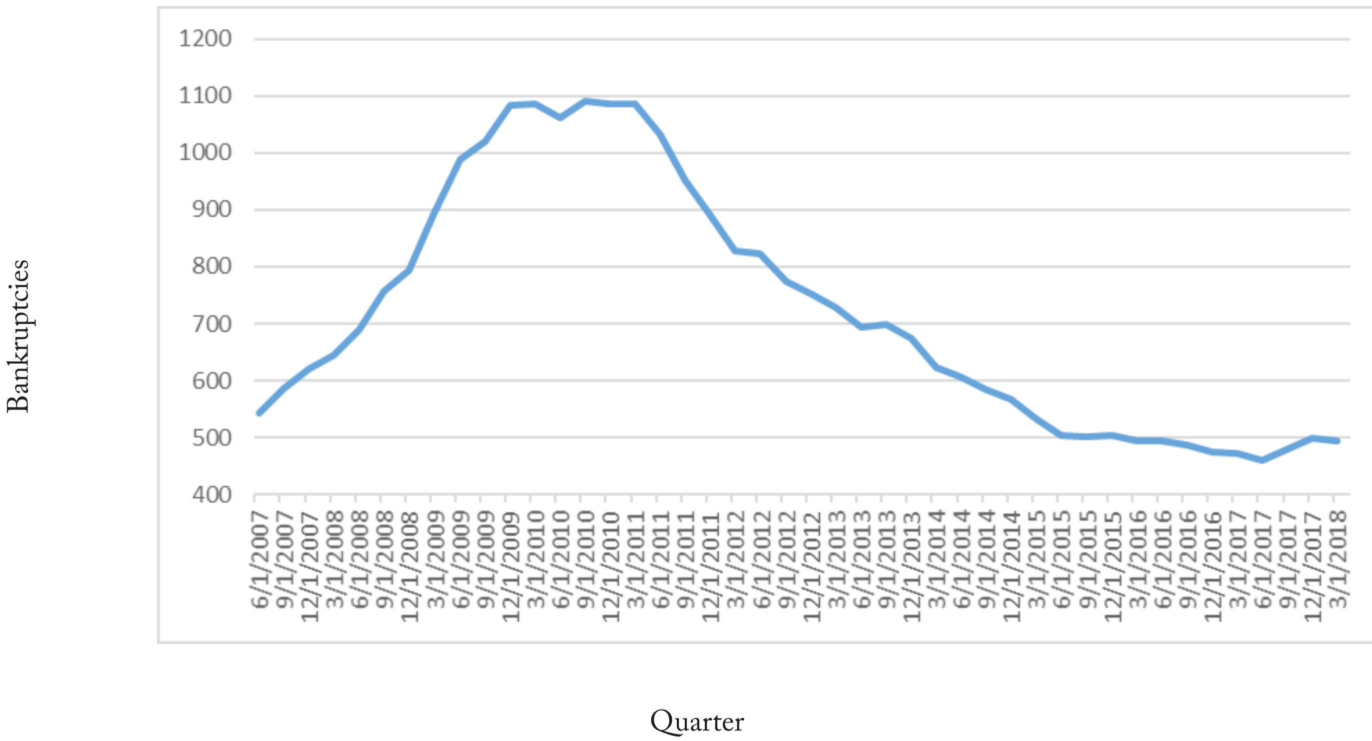


Year (March)	2013	2014	2015	2016	2017	2018
Labor Force (Not seasonally adjusted)	163,598	163,543	161,602	163,769	161,513	167,205

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 has gradually declined since the beginning of 2011, although it has begun to slowly inch up in recent quarters.

Northeast Minnesota Bankruptcies (12-month moving total)



Year (First Quarter)	2013	2014	2015	2016	2017	2018
Annual Bankruptcies (Not seasonally adjusted)	727	624	534	495	472	495

ECONOMIC INDICATORS

Duluth-Superior MSA Indicators	Period Covered	Current Period	Prior Year	Annual Percent Change	Long-Term Average (since 1999, unless noted)
Employment	March 2018 (m)	136,410	135,006	1.0% ↑	0.4%
Manufacturing Employment	March 2018 (m)	7,584	7,416	2.3% ↑	-1.2%
Educational and Health Sector Employment	March 2018 (m)	32,848	32,314	1.7% ↑	2.7%
Average Weekly Work Hours-Private Sector	March 2018 (m)	32.9	32.8	0.3% ↑	32.2 (since 2007)
Average Earnings Per Hour-Private Sector	March 2018 (m)	$24.83	$24.39	1.8% ↑	2.5% (since 2006)
Unemployment Rate	March 2018 (m)	4.8%	5.9%	NA ↓	6.8%
Labor Force	March 2018 (m)	146,716	142,946	2.6% ↑	0.2%
Duluth-Superior Residential Building Permit Valuation, in thousands	March 2018 (m)	1,252	1,539	-18.6% ↓	NA

(m) represents a monthly series

Northeast Minnesota contains the Duluth/Superior MSA, where economic performance was strong in the recent quarter. Overall employment rose by 1 percent over the year ending March 2018 and employment also increased in the education/health and manufacturing sectors. Average weekly work hours rose and average hourly earnings picked up. The area unemployment rate decreased and the MSA's labor force rose by 2.6 percent. With a year-over-year decline of 18.6 percent, the value of residential building permits in the Duluth/Superior MSA was the only weak performer in the first quarter.

STATE AND NATIONAL INDICATORS

MINNESOTA Indicators	Mar 2018	Dec 2017	Mar 2017	Change from one quarter ago	Annual Change
Nonfarm payroll employment, SA	2,951,300	2,943,700	2,930,000	0.3%	0.7%
Average weekly hours worked, private sector	33.7	33.9	33.8	-0.6%	-0.3%
Unemployment rate, seasonally adjusted	3.2%	3.3%	3.6%	NA	NA
Earnings per hour, private sector	$28.87	$28.67	$28.28	0.7%	2.1%
Philadelphia Fed Coincident Indicator, MN	135.38	134.22	130.78	0.9%	3.5%
Philadelphia Fed Leading Indicator, MN	1.64	1.13	2.61	45.1 %	-37.2%
Minnesota Business Conditions Index	61.0	56.8	61.8	7.4%	-1.3%
Price of milk received by farmers (cwt)	$16.10	$17.20	$17.50	-6.4%	-8.0%
Enplanements, MSP airport, thousands	1,716.4	1,471.6	1,731.6	16.6%	-0.9%
NATIONAL Indicators	Mar 2018	Dec 2017	Mar 2017	Change from one quarter ago	Annual Change
Nonfarm payroll employment, SA, thousands	148,260	147,625	145,969	0.4%	1.6%
Industrial production, index, SA	107.2	105.8	102.7	1.3%	4.4%
Real retail sales, SA ($)	198,249	198,828	194,208	-0.3%	2.1%
Real personal income less transfers, billions	12,221.2	12,187.1	12,017.7	0.3%	1.7%
Real personal consumption expenditures, bill.	12,093.9	12,080.5	11,816.1	0.1%	2.4%
Unemployment rate, SA	4.1%	4.1%	4.5%	NA	NA
New building permits, SA, thousands	24,168	18,355	22,864	31.7%	5.7%
Standard & Poor's 500 stock price index	2,702.8	2,664.3	2,366.8	1.4%	14.2%
Oil, price per barrel in Cushing, OK	$62.72	$57.88	$49.33	8.4%	27.1%

For the state as a whole, most categories of economic performance found in the State and National Indicators table are favorable. There was growth in payrolls, higher earnings per hour, and a lower seasonally adjusted unemployment rate compared to last quarter as well as one year ago. Coincident and leading Indicators from the Federal Reserve Bank of Philadelphia are each higher than last quarter and the Minnesota Business Conditions index is improved over the last three months. However, enplanements at the Minneapolis-St. Paul airport fell over the past year and average weekly work hours were lower. Milk prices continue to fall.

The national economic indicators found in the table are highly favorable. Stock prices have now rebounded and employment has increased. Real income and consumer expenditures have expanded and the national unemployment rate continues to fall. Industrial production rose and national building permits were strong. Oil prices are now 27.1 percent higher than they were one year ago. The adverse impact of rising oil prices on household budgets is at least partially offset by the benefits of higher crude prices enjoyed in the domestic energy sector.

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.