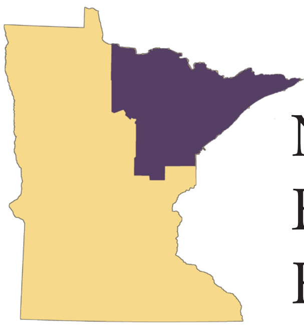

Northeast Minnesota
Economic and Business Conditions Report
Fourth Quarter 2016

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
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St. Cloud State University

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Executive Summary

An acceleration 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). Three of the five components of the LEI increased as the overall index surged by 8.23 points in the fourth quarter. An increase in the number of Duluth area residential building permits, an improvement in a general measure of statewide business conditions, and a rise in a supply managers' survey all helped lift this quarter's index. A reduction in new filings of incorporation in the Northeast Minnesota planning area and higher initial jobless claims had a negative impact on the LEI.

There were 496 new business filings with the Office of the Minnesota Secretary of State in Northeast Minnesota in the fourth quarter of 2016 — representing a 1.8 percent increase from one year earlier. Forty-eight new regional business incorporations were filed in the fourth quarter—one more than in the same period of 2015. New limited liability company (LLC) filings in Northeast Minnesota rose 1.9 percent to a level of 271. New assumed names totaled 155 in the fourth quarter—a 6.9 percent increase from the fourth quarter of 2015. There were 22 new filings for Northeast Minnesota non-profit in the 2016 fourth quarter—seven fewer than one year earlier.

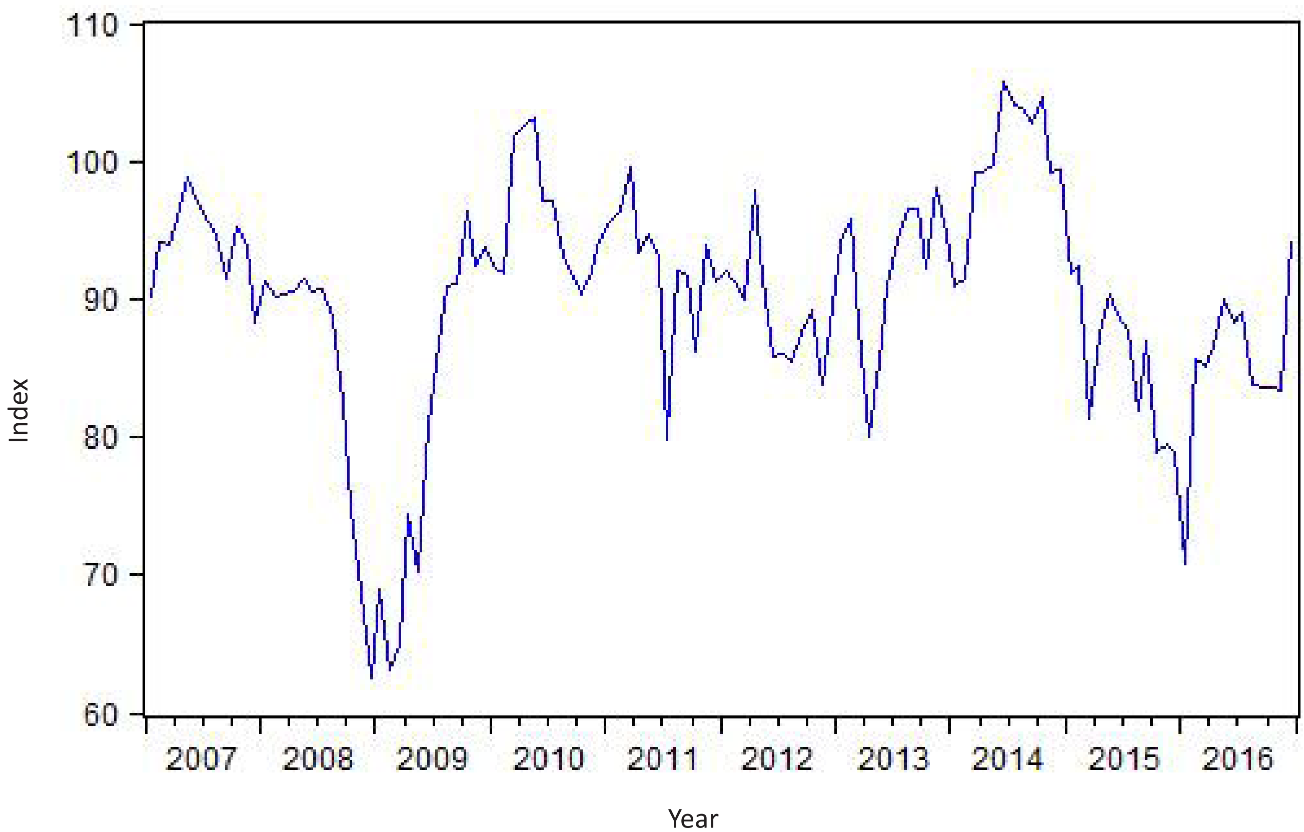
Based on preliminary data, Northeast Minnesota employment was 2.7 percent lower than year ago levels in December. The regional unemployment rate was 6.3% (unchanged from one year ago) while the labor force contracted by 4,542, a 2.8% decline from one year earlier. December 2016 initial claims for unemployment insurance were 862 lower than the year earlier (a 29.7 percent decrease). The average weekly wage in Northeast Minnesota improved slightly to $765 in the most recent quarter for which data are available. Northeast Minnesota bankruptcies continued to slowly decline in this year's fourth quarter.

Economic activity in the Duluth/Superior Metropolitan Statistical Area (MSA) was mostly favorable. Northeast Minnesota's largest market experienced a 0.2 percent increase in overall employment over the year ending December 2016. It also added employment in its key education/health sector. The area unemployment rate fell to 5.6 percent, but the labor force contracted by 2.2 percent. The value of residential building permits rose in December compared to the same period in 2015.

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 1.36 point decline in the third quarter, this quarter's LEI surged 8.23 points. The LEI is now 19.4 percent above its December 2015 level. As can be seen in the accompanying figure, the LEI has shown considerable quarterly volatility since the end of the Great Recession, but had trended downward from mid-2014 until the beginning of 2016. On balance, 2016 has been a fairly good year for the Northeast Minnesota Leading Economic Indicators Index.

The SCSU Northeast Minnesota Leading Economic Indicators Index



Components of SCSU Northeast Leading Economic Indicators Index

Component of Index	Contribution to LEI, 4th quarter 2016	Contribution to LEI, 3rd quarter 2016
Minnesota Business Conditions Index	1.61	-1.34
Northeast Minnesota initial claims for unemployment insurance	-1.93	0.56
Northeast Minnesota new filings of incorporation	-0.15	1.81
Duluth Superior MSA residential building permits	5.85	-0.76
Institute of Supply Management Purchasing Managers Index for manufacturing	2.85	-1.63
TOTAL CHANGE	**8.23**	**-1.36**

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 improved in the fourth quarter. Slightly lower new filings for business incorporation and an increase in initial unemployment claims had a negative impact on the index. Stronger performance of the Minnesota Business Conditions Index (which is used as an indicator of general statewide business conditions) lifted the Northeast Minnesota leading index as did higher residential building permits in the Duluth/Superior MSA.

SCSU Northeast Minnesota Leading Economic Indicators Index	2016	2015	Percentage change
Minnesota Business Conditions Index December	52.3	48.2	8.5%
Northeast Minnesota initial claims for unemployment insurance December	2,043	2,905	-29.7%
Northeast Minnesota new filings of incorporation Fourth Quarter	48	47	2.1%
Duluth-Superior MSA single-family building permits December	6	2	200.0%
Institute for Supply Management Purchasing Managers' Index manufacturing sector, December	54.5	48.0	13.5%
Northeast Minnesota Leading Economic Indicators Index December (December 1999 = 100)	94.3	79.0	19.4%

Northeast Minnesota Business Filings

Total new business filings rose by 1.8 percent compared to the fourth quarter of 2015. The 12-month moving total of this series has trended upward since the end of 2011. After a precipitous drop in the pace of new business formation during the Great Recession, new business filings in Northeast Minnesota still have not returned to the pace observed ten years ago.

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: 2015	I: 2016	II: 2016	III: 2016	IV: 2016	2016 Quarter IV: Percent change from prior year
Northeast Minnesota Total New Business Filings	487	639	584	479	496	1.8%

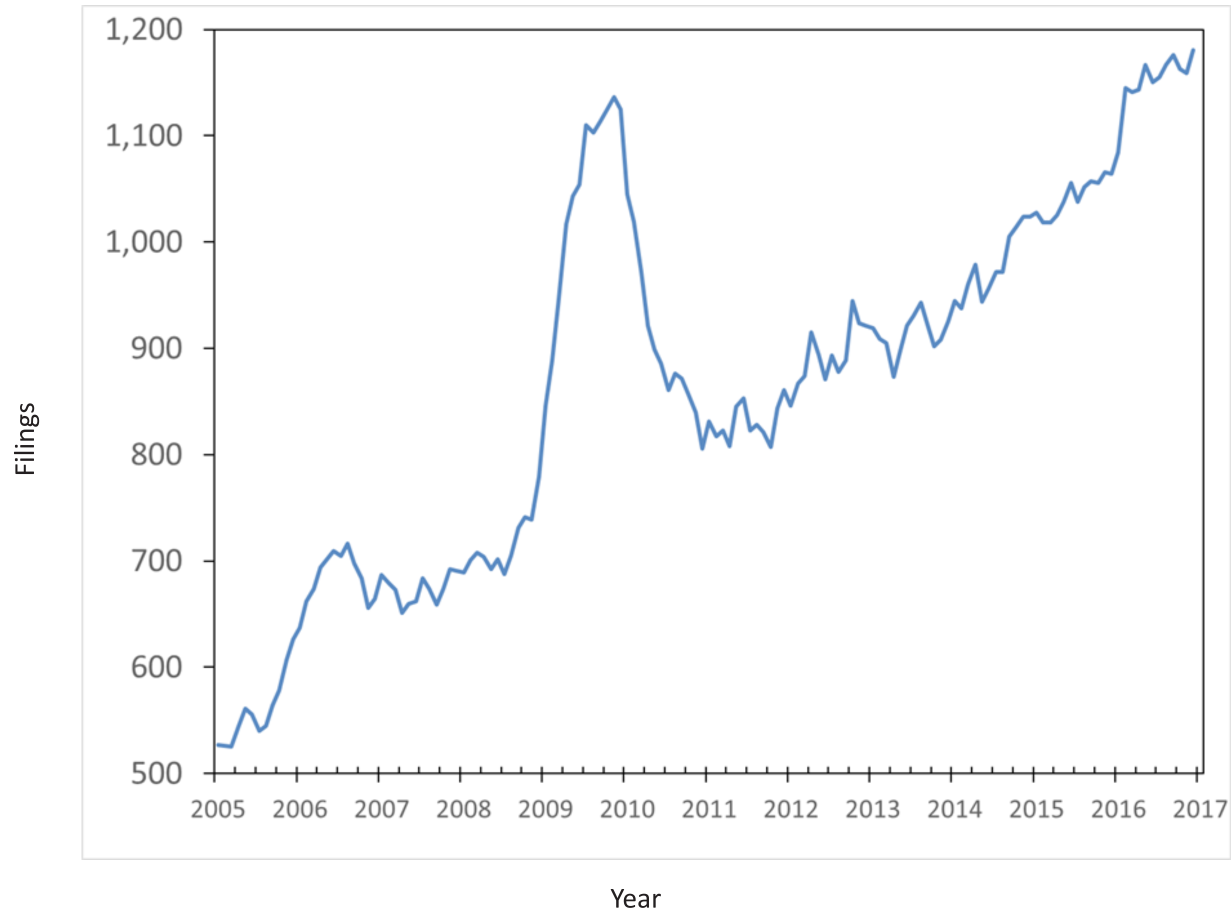
New filings for business incorporation rose 2.1 percent from last year's fourth quarter. As can be seen in the accompanying graph, the 12 month moving total of Northeast Minnesota new business incorporations has flattened out since the beginning of 2012.

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

Quarter	IV: 2015	I: 2016	II: 2016	III: 2016	IV: 2016	2016 Quarter IV: Percent change from prior year
Northeast Minnesota New Business Incorporations	47	51	53	48	48	2.1%

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 1.9 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.

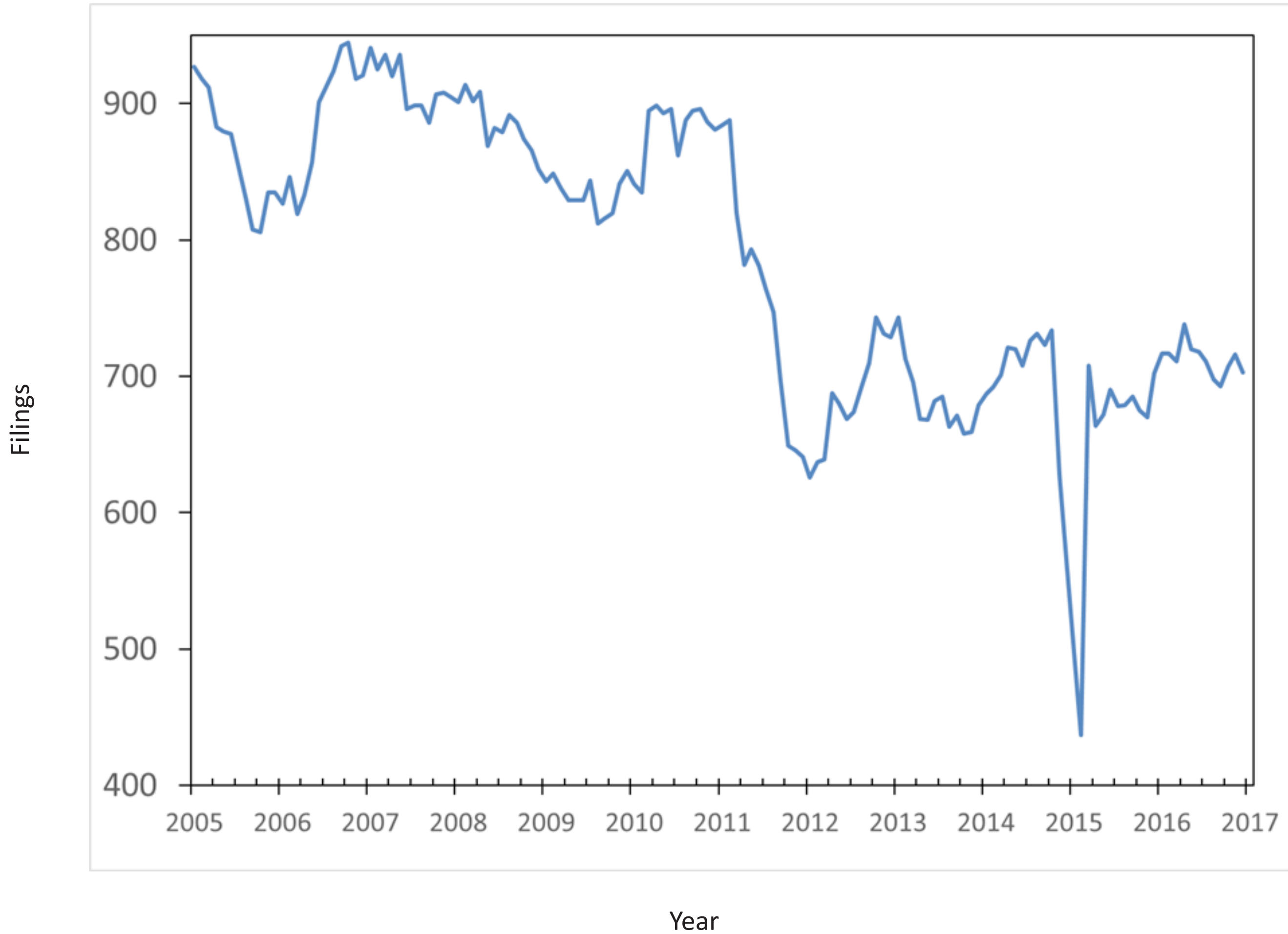
New Limited Liability Companies—Northeast Minnesota Planning Area (12-month moving total)



Quarter	IV: 2015	I: 2016	II: 2016	III: 2016	IV: 2016	2016 Quarter IV: Percent change from prior year
Northeast Minnesota New Limited Liability Companies	266	337	302	271	271	1.9%

Compared to the fourth quarter of 2015, assumed names rose by 6.9 percent in Northeast Minnesota. After leveling out from 2011 to 2014, new assumed names filings in Northeast Minnesota declined precipitously in 2014, but have since returned to the 2011-14 trend. However, the series still remains well below its level of the mid-2000s.

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



Quarter	IV: 2015	I: 2016	II: 2016	III: 2016	IV: 2016	2016 Quarter IV: Percent change from prior year
Northeast Minnesota New Assumed Names	145	215	199	134	155	6.9%

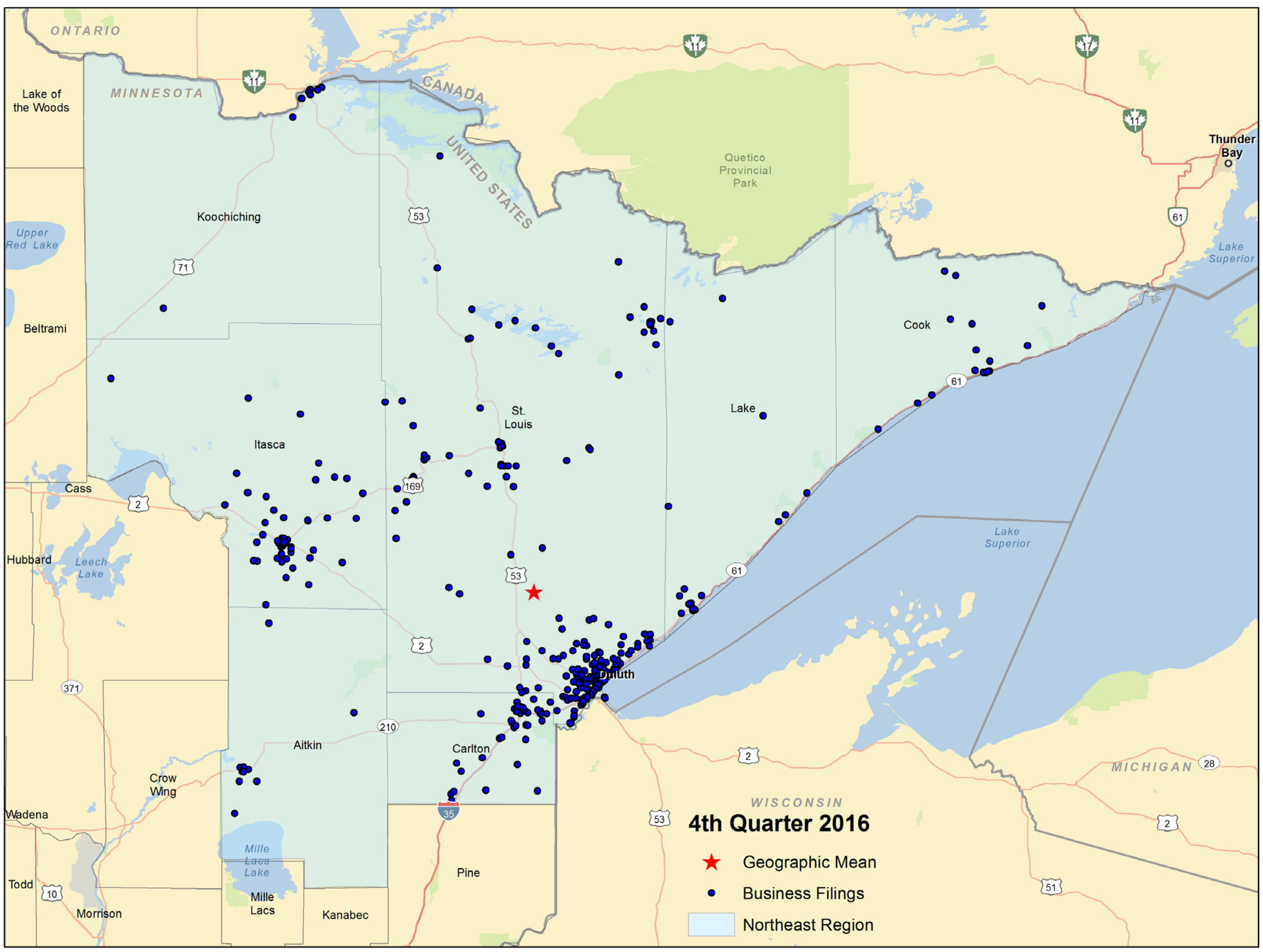
There were 22 new Northeast Minnesota non-profits registered with the Office of the Minnesota Secretary of State in the fourth quarter of 2016, seven fewer than were recorded one year ago.

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

Quarter	IV: 2015	I: 2016	II: 2016	III: 2016	IV: 2016	2016 Quarter IV: Percent change from prior year
Northeast Minnesota New Non-Profits	29	36	30	26	22	-24.1%

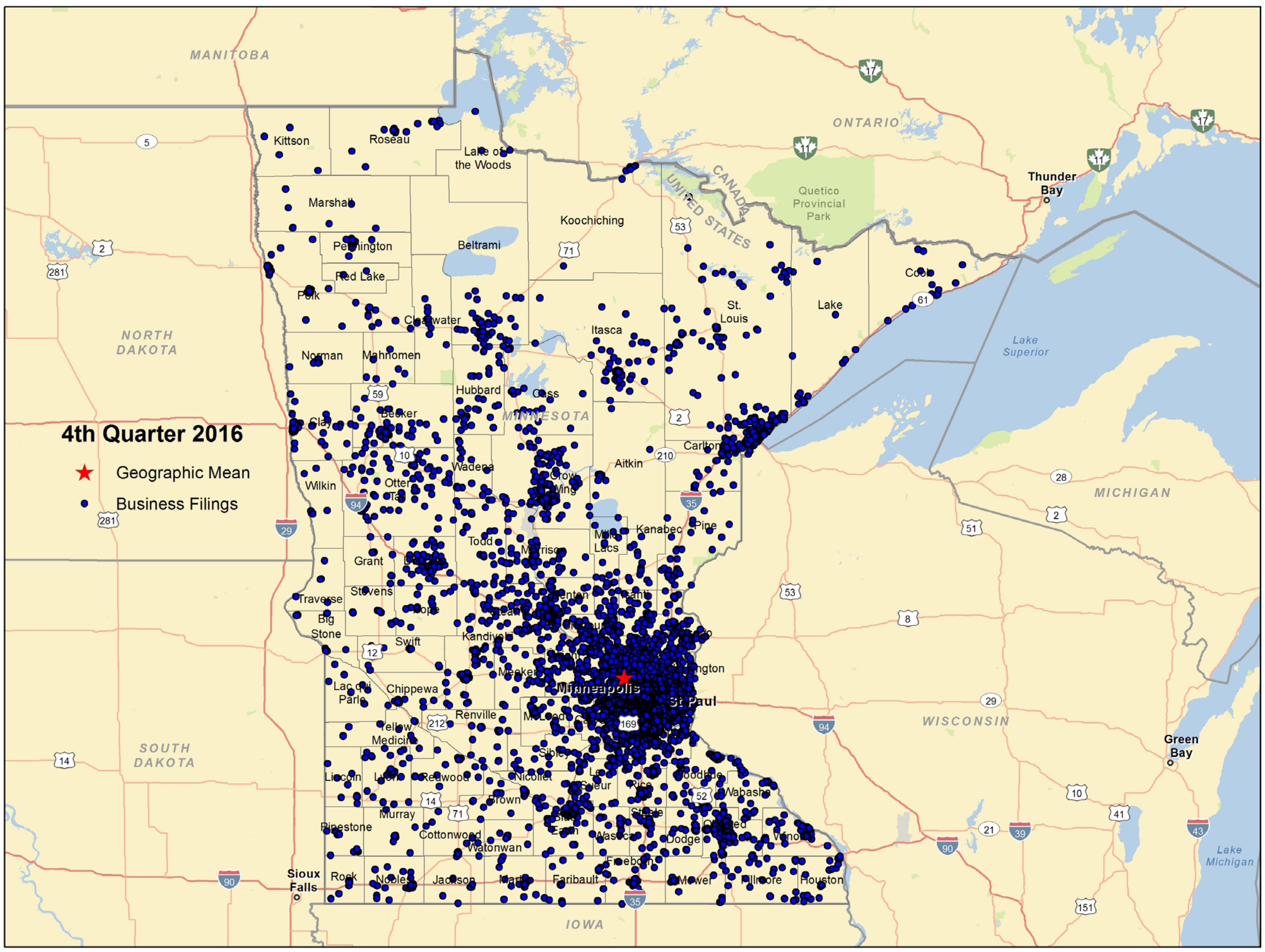
The first map shown below is a visual representation of new business formation around the Northeast Minnesota planning area in the fourth quarter of 2016. The densest areas of new business formation are in the Duluth metro as well as along the region's well-traveled roadways. There was a noticeable cluster of new business formation along Highway 169, in the Virginia-Hibbing-Grand Rapids corridor. Aitkin, Ely, International Falls, Lake Vermillion, and Grand Marais also saw a pickup in new business formation.

Northeast Minnesota Planning Area--New Business Formation--Quarter 4: 2016



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.

Minnesota--New Business Formation--Quarter 4: 2016

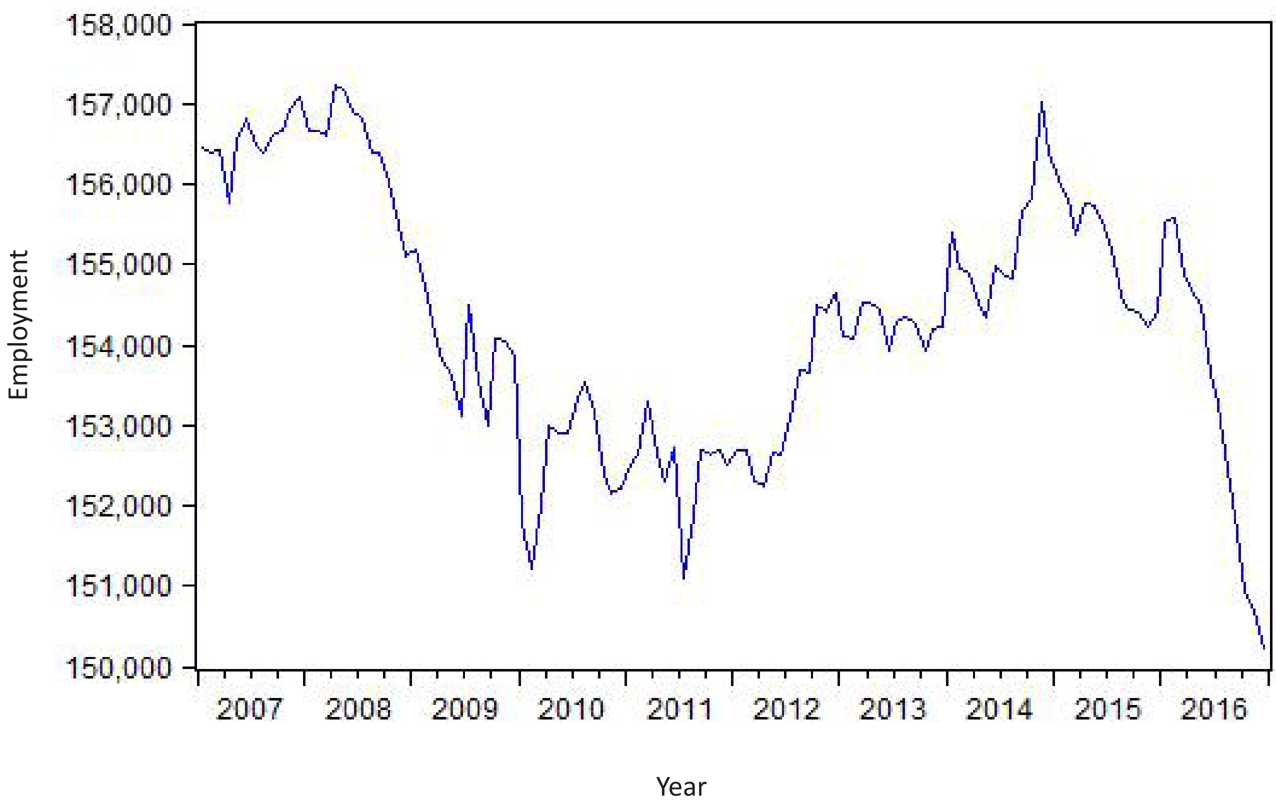


Northeast Minnesota Labor Market Conditions

December 2016 employment in the Northeast Minnesota planning area was 2.7 percent lower 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 slowly rising from the end of 2013 to the beginning of 2015, but this pattern has reversed since that time. Note that upcoming benchmark revisions to regional employment estimates could re-shape the current path of this series.

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.

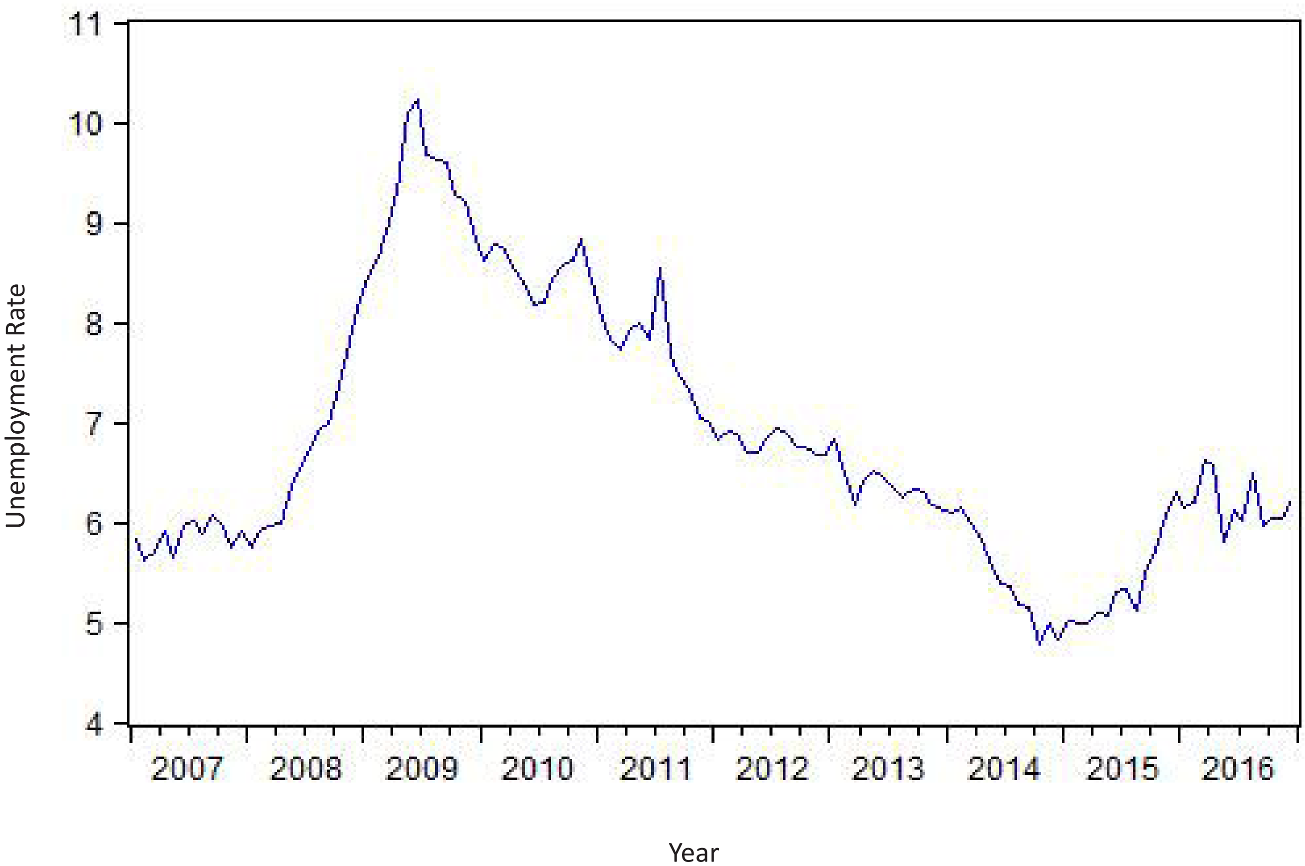
Employment—Northeast Minnesota Planning Area (12-month moving average)



Month	December 2015	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016
Employment (Not seasonally adjusted)	153,545	155,721	153,924	152,840	151,780	150,900	149,372

The seasonally adjusted unemployment rate in Northeast Minnesota had been trending upward since the end of 2014. However, this series has flattened out in recent quarters. At 6.3 percent, the non-seasonally adjusted rate was unchanged from one year earlier. The unemployment rate in Northeast Minnesota is higher than in any of Minnesota's six planning areas.

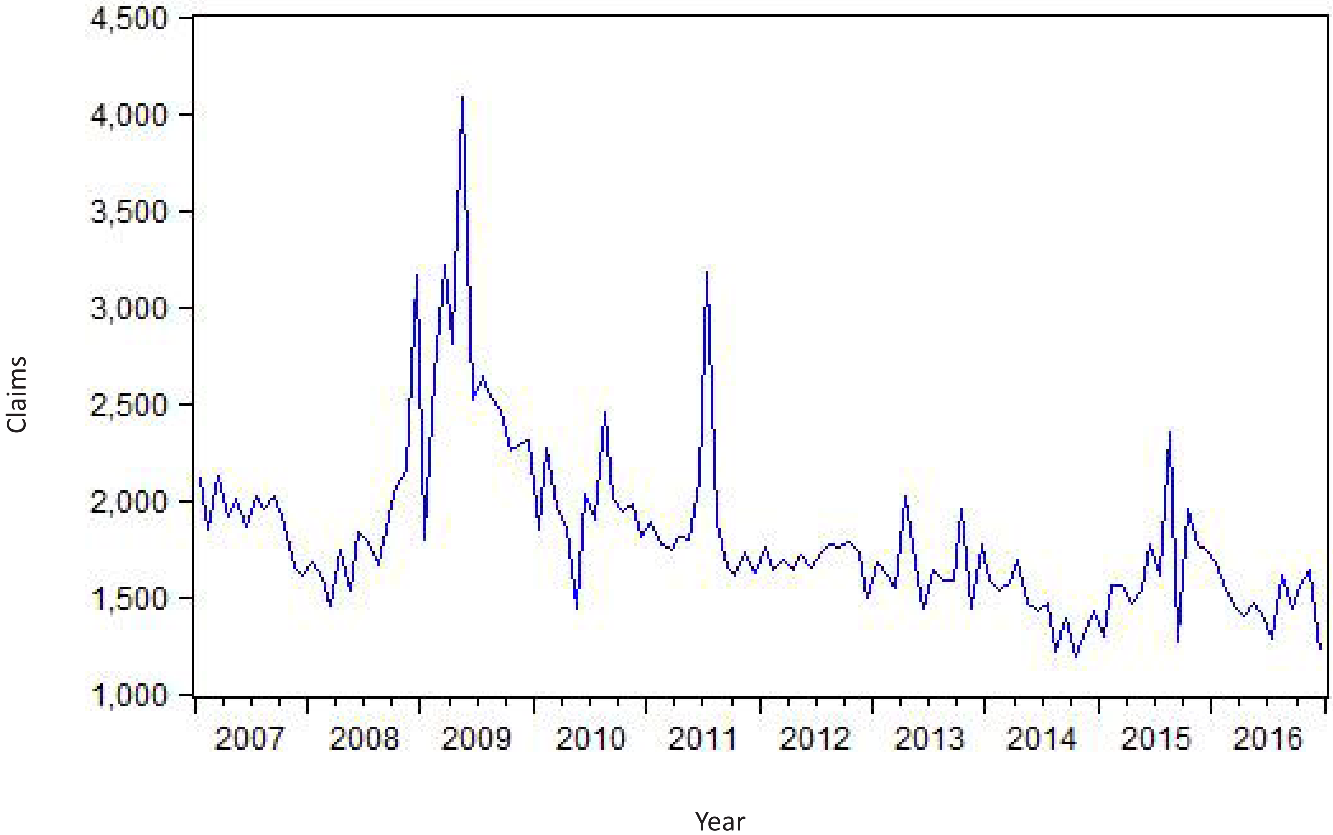
Unemployment Rate, seasonally adjusted—Northeast Minnesota Planning Area



Month	December 2015	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016
Unemployment Rate (Not seasonally adjusted)	6.3%	5.8%	5.9%	5%	4.9%	5.5%	6.3%

On a seasonally adjusted basis, initial jobless claims in the Northeast region have been declining over the past five quarters. This quarter's initial jobless claims fell by 29.7% compared to one year earlier.

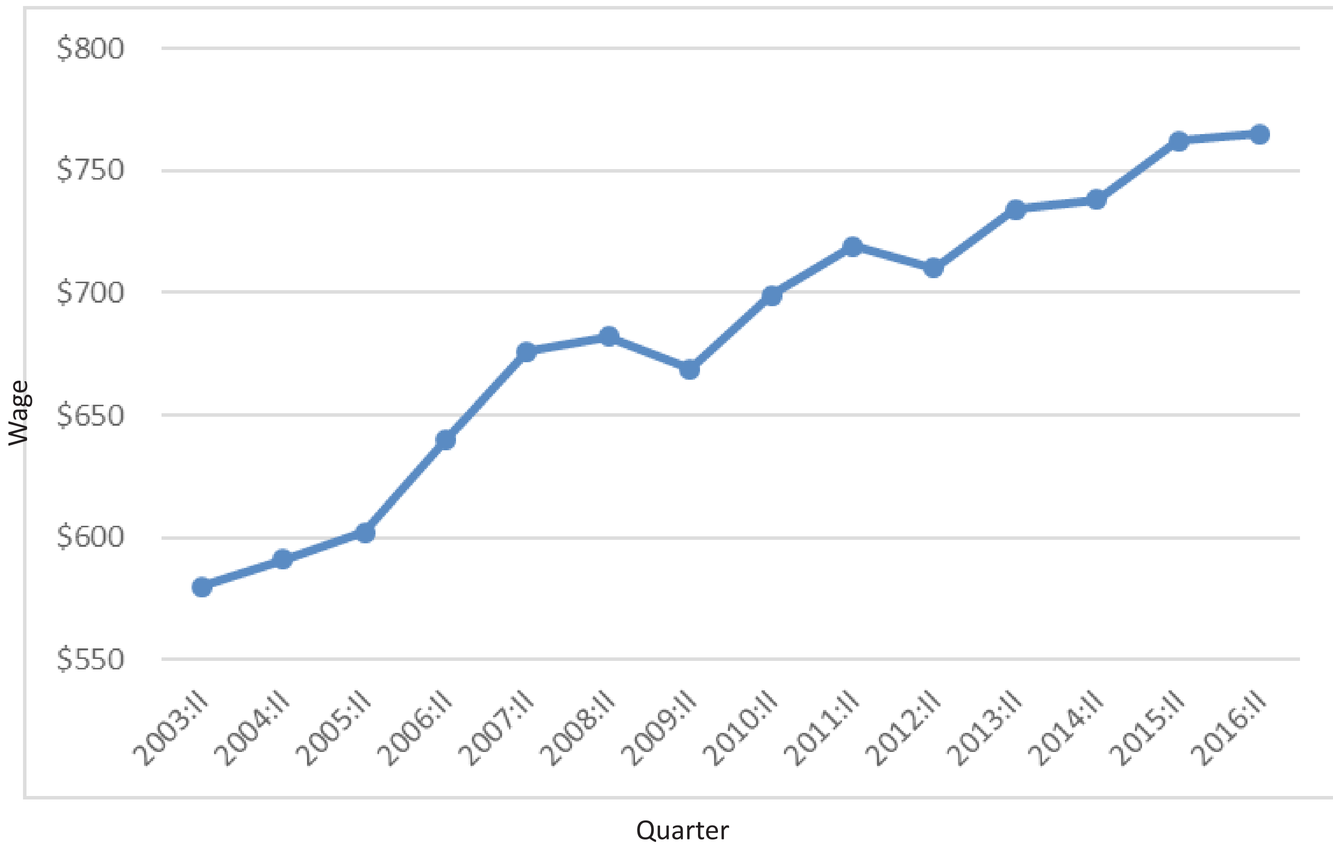
Total Initial Claims for Unemployment Insurance, seasonally adjusted—Northeast Minnesota Planning Area



Period	December 2015	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016
Initial claims (Not seasonally adjusted)	2,905	931	1,039	1,041	1,614	2,632	2,043

The average weekly wage in the second quarter of 2016 was nearly unchanged from one year earlier (this is the most recently available data). At $765, Northeast Minnesota wages are now lower than those reported in Central Minnesota (where they are $766). This is the first time Northeast Minnesota wages have fallen below those paid in the central region. Northeast Minnesota's average weekly wage is considerably below that paid in the Southeast planning area ($872) and in the Twin Cities ($1,117).

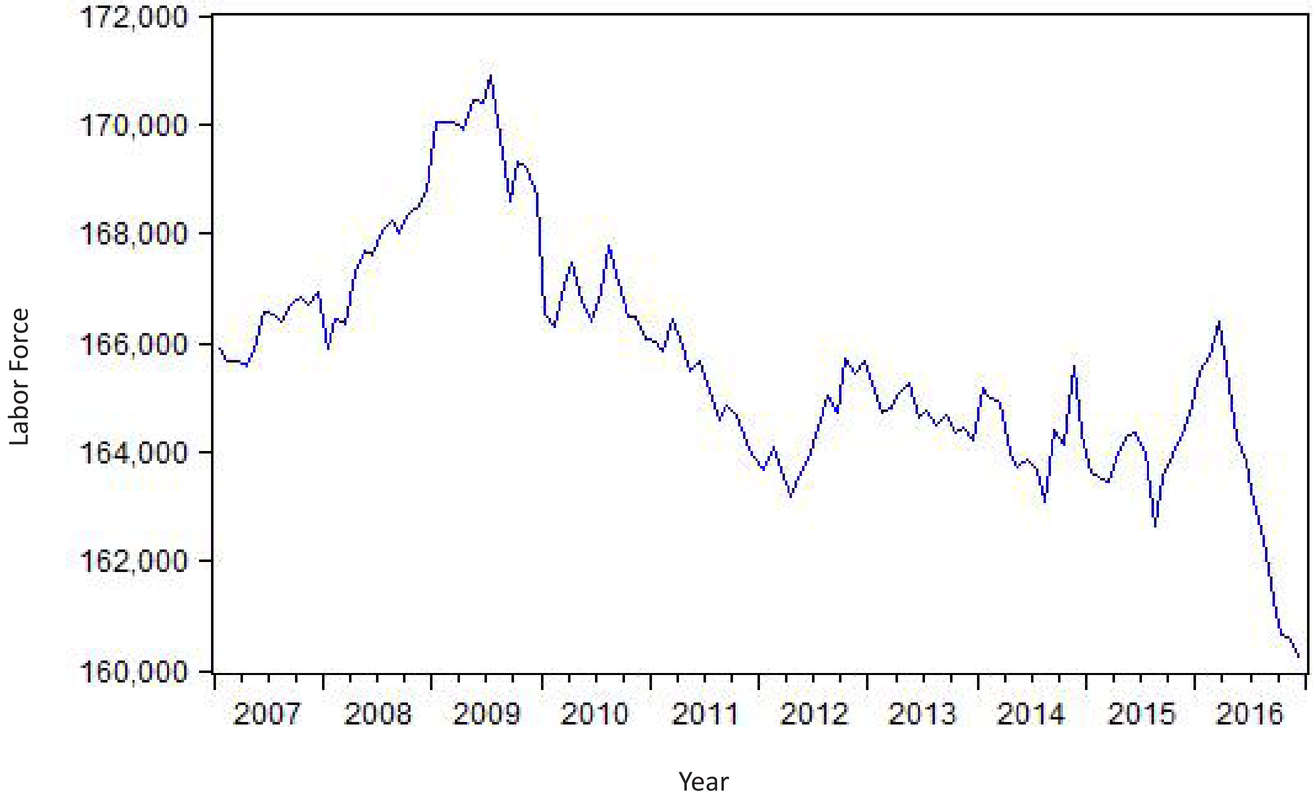
Average Weekly Wage--Northeast Minnesota Planning Area



Quarter	2011:II	2012:II	2013:II	2014:II	2015:II	2016:II
Average Weekly Wage	$719	$710	$734	$738	$762	$765

The Northeast Minnesota labor force contracted by 2.8 percent over the past year. Using a 12-month moving average to account for seasonality, the regional labor force numbers weakened throughout 2016.

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

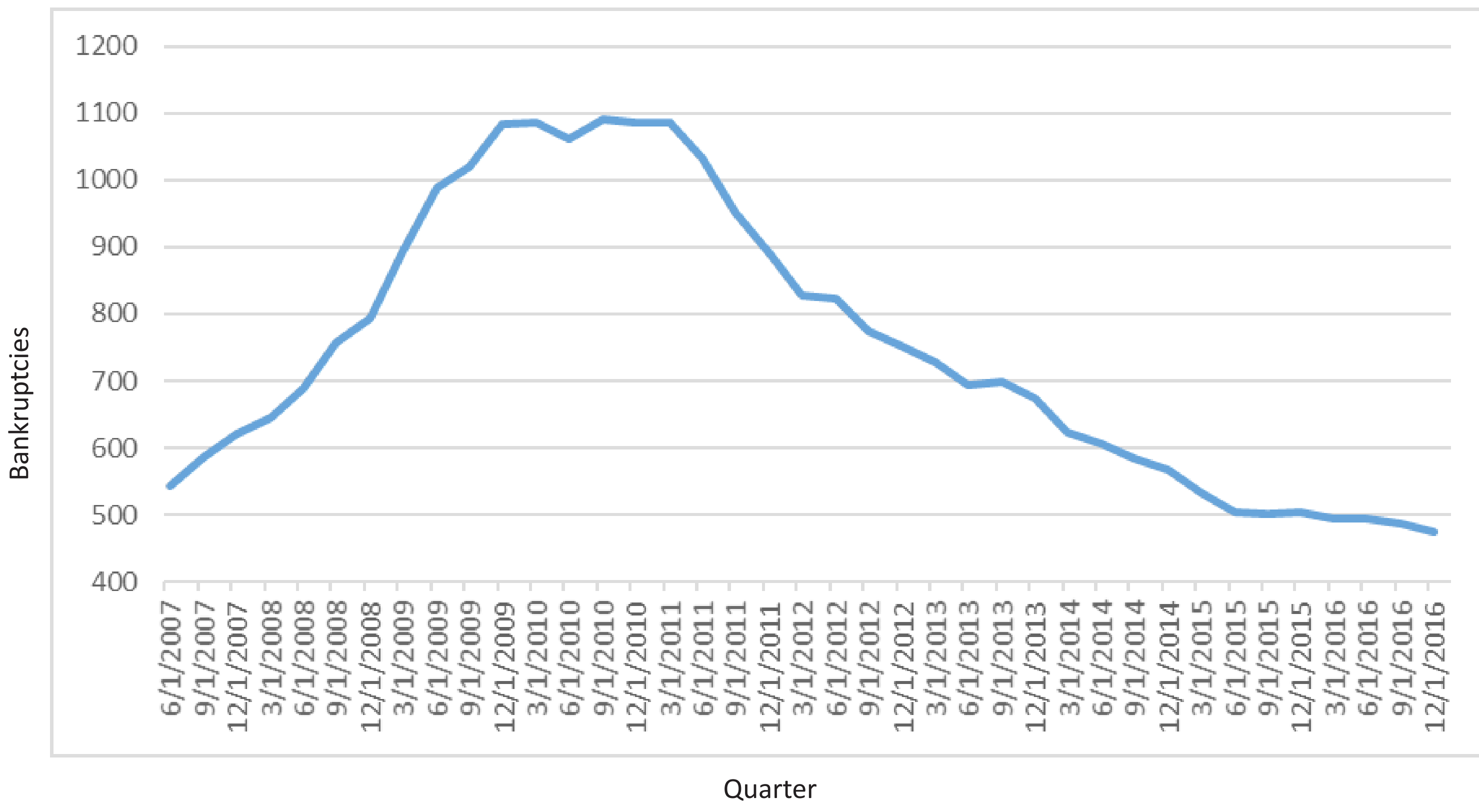


Year (December)	2011	2012	2013	2014	2015	2016
Labor Force (Not seasonally adjusted)	162,639	164,460	163,186	163,369	163,941	159,399

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 gradually declined until the middle part of 2015. Since that time, Northeast Minnesota bankruptcies have leveled out at an historically low level.

Northeast Minnesota Bankruptcies (12-month moving total)



Year (Fourth Quarter)	2011	2012	2013	2014	2015	2016
Annual Bankruptcies (Not seasonally adjusted)	890	752	674	567	504	475

Economic Indicators

Duluth-Superior MSA Indicators	Period Covered	Current Period	Prior Year	Annual Percent Change	Long-Term Average (since 1999, unless noted)
Employment	December 2016 (m)	133,896	133,642	0.2% ↑	0.0%
Manufacturing Employment	December 2016 (m)	6,606	6,730	-1.8% ↓	-2.6%
Educational and Health Sector Employment	December 2016 (m)	32,099	31,742	1.1% ↑	2.5%
Average Weekly Work Hours-Private Sector	December 2016 (m)	NA	NA	NA	NA
Average Earnings Per Hour-Private Sector	December 2016 (m)	NA	NA	NA	NA
Unemployment Rate	December 2016 (m)	5.6%	5.7%	NA ↓	5.8%
Labor Force	December 2016 (m)	138,979	142,112	-2.2% ↓	-0.2%
Duluth-Superior Residential Building Permit Valuation, in thousands	December 2016 (m)	1,160	400	190.0% ↑	NA

(m) represents a monthly series

Northeast Minnesota contains the Duluth/Superior MSA, where economic performance was mostly favorable in the recent quarter. Overall employment rose by 0.2 percent over the year ending December 2016 and employment in the key education/health sector (where more than 30,000 people have jobs) also rose. Average weekly work hours and average hourly earnings data were not available. The area unemployment rate decreased and the value of residential building permits in the Duluth/Superior MSA rose from levels reported one year earlier. The area's labor force contracted by 2.2 percent.

State and National Indicators

MINNESOTA Indicators	Dec 2016	Sep 2015	Dec 2015	Change from one quarter ago	Annual Change
Nonfarm payroll employment, SA	2,919,300	2,905,600	2,875,700	0.5%	1.0%
Average weekly hours worked, private sector	33.9	34.1	33.7	-0.6%	0.6%
Unemployment rate, seasonally adjusted	3.9%	4.0%	3.7%	NA	NA
Earnings per hour, private sector	$27.87	$27.33	$26.36	2.0%	5.7%
Philadelphia Fed Coincident Indicator, MN	181.73	180.23	176.73	0.8%	2.8%
Philadelphia Fed Leading Indicator, MN	2.01	1.19	1.23	68.9%	63.4%
Minnesota Business Conditions Index	52.3	48.4	39.4	8.1%	32.7%
Price of milk received by farmers (cwt)	$19.70	$17.90	$17.00	10.1%	15.9%
Enplanements, MSP airport, thousands	1,456.8	1,536.1	1,429.0	-5.2%	1.9%

NATIONAL Indicators	Dec 2016	Sep 2015	Dec 2015	Change from one quarter ago	Annual Change
Nonfarm payroll employment, SA, thousands	145,303	144,808	143,146	0.3%	1.5%
Industrial production, index, SA	104.6	104.2	104.0	0.4%	0.6%
Real retail sales, SA ($)	193,017	191,817	189,246	0.6%	2%
Real personal income less transfers ($, bill.)	12,074.8	12,022.9	11,848.2	0.4%	1.9%
Real personal consumption expenditures ($, bill.)	11,672.4	11,603.3	11,351.5	0.6%	2.8%
Unemployment rate, SA	4.7%	4.9%	5.0%	NA	NA
New building permits, SA, thousands	17,581	20,857	17,620	-15.7%	-0.2%
Standard & Poor's 500 stock price index	2,246.6	2,157.7	2,054.1	4.1%	9.4%
Oil, price per barrel in Cushing, OK	$51.97	$45.18	$37.19	15.0%	39.7%

Across the state there was growth in payrolls, higher earnings per hour, and more average weekly hours worked in the private sector over the past twelve months. The seasonally adjusted unemployment rate rose over the past twelve months. Indicators from the Federal Reserve Bank of Philadelphia are favorable—current conditions are stronger and the future conditions index surged compared to one year earlier. The Minnesota Business Conditions index also turned positive this quarter. Milk prices have finally started to rise and enplanements at the Minneapolis-St. Paul airport increased by 1.9 percent over the last twelve months.

The national economic indicators reported in the table are also largely favorable. Over the past twelve months, stock prices rose, employment increased, and real income and consumer expenditures expanded. The national unemployment rate fell and retail sales improved. Industrial production picked up. National building permits were nearly unchanged from one year earlier and oil prices have begun to rise. While rising oil prices will adversely impact the discretionary income of households, it will also improve the economic well-being of those employed in the energy sector (which has been struggling over the last two years).

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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Thomson Reuters and University of Michigan: Index of Consumer Sentiment

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