North Central Wisconsin
Regional Planning Commission

Comprehensive Economic Development Strategy (CEDS)

2017

A Five-Year Regional Strategy for North Central Wisconsin
The North Central Wisconsin Regional Planning Commission (NCWRPC) is a voluntary association of governments, created in 1973 under Wisconsin State Statute 66.945, now 66.0309. Currently, the Commission serves the Counties of Adams, Forest, Juneau, Langlade, Lincoln, Marathon, Oneida, Portage, Vilas and Wood.

This document was prepared by the North Central Wisconsin Regional Planning Commission and was partially funded by the U. S. Economic Development Administration (EDA). Since 1980, the Region has been designated as an Economic Development District (EDD) by the U. S. Department of Commerce, Economic Development Administration (EDA). Although Portage and Wood Counties are included in some sections of the Report they do not actively participate in neither the Economic Development District nor the NCWRPC.
Abstract

Title: Comprehensive Economic Development Strategy

Subject: An assessment of economic development activities of the North Central Wisconsin Regional Planning Commission over the last decade and the past year. The report’s seven sections describe the CEDS Committee, Past Year’s Activities, the Physical Region, Changes in the Region’s Population, changes in the Region’s Economy, a Regional Development Strategy, and an Economic Development Work Plan. Also included is a list of potential public works projects. This CEDS process maintains the Region’s eligibility as an Economic Development District (EDD) with the U.S. Economic Development Administration. The District consists of ten counties. These counties are Adams, Forest, Juneau, Langlade, Lincoln, Marathon, Oneida, Portage, Vilas, and Wood. However, Portage, and Wood Counties do not fully participate in the EDD - only some local communities with these two Counties participate.

Agency: North Central Wisconsin Regional Planning Commission
210 McClellan Street, Suite 210
Wausau, WI 54403

Contact: Dennis Lawrence, AICP
Executive Director

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Introduction

NCWRPC Background

The North Central Wisconsin Regional Planning Commission (NCWRPC) is a voluntary association of governments, created in 1973 under Wisconsin State Statute 66.945, now 66.0309. The NCWRPC provides assistance within a ten county Region in the areas of economic development, geographic information systems (GIS), intergovernmental cooperation, land use planning and transportation. Staff provides professional planning services to communities and for projects of both local and Regional significance.

The NCWRPC is designated as an Economic Development District (EDD) by the U. S. Department of Commerce, Economic Development Administration (EDA). Current members of the EDD are Adams, Forest, Juneau, Langlade, Lincoln, Marathon, Oneida, and Vilas, as well as parts of Portage and Wood Counties. However, the demographic and economic information presented in the report includes the entire ten county Region.

Purpose of the CEDS

The purpose of the CEDS is multifaceted. The CEDS is designed to provide baseline information on demographics and economic data, development of strategies, and identify potential projects within the Region. Preparation and adoption of the CEDS maintains both the Region’s EDD designation, but also maintains grant eligibility for those participating units of government.

EDA History in North Central Wisconsin

Since 1979 the North Central Wisconsin Regional Planning Commission has partnered with the EDA as an Economic Development District. That partnership has led to an investment of nearly 20 million dollars in North Central Wisconsin. Table 1 displays EDA investments in the Region.

The public works program, which supports the construction, expansion or upgrade of essential public infrastructure and facilities, comprises roughly three fourths of the investment in the Region. The remaining projects were funded under the EDA’s technical assistance programs. To date, all but one county in the region has received EDA funding.

Portage and Wood Counties are not active members of the EDD which eliminates them from being listed in the CEDS and receiving EDA grants. However, there are some local cities and villages within those counties that are active members and those communities do list projects in the CEDS and are eligible for funding.
<table>
<thead>
<tr>
<th>Year</th>
<th>Recipient</th>
<th>County</th>
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**Total EDA Investment:** $19,590,970
CEDS Process and Committee

Development of CEDS, including the meetings, took place over 2016. Economic development corporations, regional organizations, and others were invited to the meetings and/or were provided an opportunity to review and comment on the CEDS. Numerous mailings were made, drafts distributed, comments reviewed, and committee meetings were held. The result of that process is this document.

The CEDS Strategy Committee included representatives from both the public and private sector. CEDS NCWRPC Committee members are: Richard Bakovka, Angie Close, Ted Cushing, Bob Egan, Jerry Nelson, Ron Nye, Thomas Rudolph, and Ed Wafle. Other included are Todd Kuckkahn, Lee Kruse, Daric Smith, Terry Whipple, Ken Maule, Jim Warsaw, Christine Berry, Rene Daniel, Steve Nelson, Jenny Harms and Brad Lenz.

Our CEDS Committee recommends adoption of the document to the NCWRPC for final adoption. The Commission also directs the NCWRPC's work program. Three Commissioners represent each of the member counties of the North Central Wisconsin Regional Planning Commission. One Commissioner is appointed by the county and the other two are appointed by the Governor; one outright and one from a list of names submitted by the county. The NCWRPC staff has no authority to choose its Commissioners. A list of Commissioners can be found on the inside cover of this document.

Regional History

Originally, the Region’s diverse natural and agricultural resources were the basis of the economy, whether it was the fertile soils of the central and southern areas or the vast forests of the north. As more people settled in the Region, they developed roads, railroads, and dams for power. This new infrastructure, in turn, expanded the economy beyond simple farming and logging operations. Resources that once left the Region in their “raw” state were now transformed into finished products here.

Communities like Rhinelander, Merrill, Wausau, Stevens Point, and Wisconsin Rapids capitalized on their location to form value added industries focused on wood products, agriculture, and manufacturing. As these industries progressed, so did the service-oriented industries such as government, transportation, communications, public utilities, trade, finance, insurance, and real estate. The result is the wide diversity of economic activity that we see in the Region today.

Land Area & Communities

The ten counties cover an area of 9,328 square miles, or about 17 percent of the state's total area. The Region is long and narrow stretching 185 miles from Forest and Vilas Counties in the north to Adams and Juneau Counties in the south. See Map 1 (page 81).
The area is diverse, from lakes and forests in the north, to rolling hills and agriculture in the center, to relatively flat areas of forest and agriculture in the south. Within the Region there are 267 local units of government, of which 198 are towns, 38 are villages, 21 are cities and 10 are counties. These ten counties together are home to over 444,000 persons.

According to the U.S. Census Bureau, only Marathon County meets the requirements to be classified as a Metropolitan Statistical Area (MSA). The other nine counties are considered to be rural in nature. The City of Wausau, located in Marathon County, is the only major population center in the Region. The combined population of the Wausau urban area exceeds 65,000 persons.
Chapter 1: Demographics & Workforce

Population

The 2015 Regional population is estimated at 444,941 people. Three of the ten counties experienced a decline in population since 2010. The Region as a whole increased about 2.5 percent from 2000 to 2010. This is much slower growth than the previous decade where all ten counties increased. Juneau County had the largest percent of population growth between 2000 and 2010 with an increase of 9.66 percent. It is important to note that the US Census does not track seasonal residents in their population counts. Therefore, there may be times throughout the year where counties experience a much higher population than recorded through the US Census.

Throughout the document the tables include summaries for North, Central, and South subregions. The North includes the counties of Forest, Langlade, Lincoln, Oneida and Vilas. The Central includes Marathon, Portage and Wood, while the South includes Adams and Juneau Counties. These are “Sub” Regions that have been identified in our Region. Map 2 (page 83) shows the sub regions.

Figure 1-1 shows the 30 year growth trend of the region, demonstrating that growth in the region is subject to more extreme fluctuations than the state or nation, but in general followed the same trends of growth and decline. Growth was very high during the 1970s, declined dramatically during the 1980s, increased again during the 1990s, and declined again in the 2000s. The northern sub-region had a population decline during the 2000s. The south sub-region consistently shows the largest growth rate of each decade displayed between 1970 and 2010. During the past decade, the north and central sub-regions were below the state’s growth rate and all three sub Regions were well below the national rate of growth.

The North Central Region makes up 7.7 percent of Wisconsin’s 2015 population. Marathon County’s 2015 population of 135,341 people makes up 30 percent of the Region’s population. Wood County (74,965) and Portage County (70,940) follow as second and third. Combined, these three counties represent 63 percent of the Region's population while the remaining seven counties are primarily rural in character with populations ranging from about 9,000 to 36,000.
Seasonal Dwellings

The continuing increase in seasonal dwellings in most counties indicates that the southern and northern sub-regions continue to draw people, but that a likely effect of the Great Recession has been to lead the owners of many of these seasonal dwelling to postpone their retirement. Nearly three-quarters of all seasonal dwellings in the Region are in the northern sub-region, with another fifth in the south. Seasonal and recreational dwellings are a minor factor in the housing picture in the central sub-Region, comprising less than three percent of all units in Marathon, Portage, and Wood counties. The fact that seasonal dwellings increased throughout the Region, in spite of the economic dislocation of the last decade, indicates an underlying dynamic that could reignite population growth after the effects of the financial crisis have passed. Those who have seasonal dwellings in the Region are often not counted in the population where the seasonal and recreational dwellings are located, because they claim full time residency in other parts of the state and country and are counted in those population counts. This creates seasonal fluctuations of population in the north and south sub regions as seasonal dwellings comprise between 17 percent and 50 percent of dwelling units in these counties. So although the north sub Region saw a reduction of population between 2000 and 2010, it may be the result of full time residents becoming seasonal residents.

Population Projections

Figure 1-2 displays the projected rate of population growth showing that North Central Wisconsin can expect a growth in population until approximately 2035. These projections show that the highest rate of population growth occurs between 2010 and 2015, and gradually declines after that. During this time, the southern sub-Region will have the highest rate of growth at 12.72 percent. The entire Region will grow slower than the state, for a total projected population increase of approximately 36,000 people over the 25 year period. Growth rates across all regions, the state, and the United States will slow over the time period. The North Central Region is expected to show negative growth by 2040, ranging from 2.74 percent in 2020 to -1.22 percent in 2040.

Figure 1-2: Projected Rate of Population Growth

Source: Wisconsin Department of Administration, US Census
**Population Age**

According to The Bureau of Labor Statistics, the baby-boom generation will move entirely into the 60-years-and-older age group by 2024. The aging of baby boomers and the transition into retirement age is causing labor force participation rates to decline, a trend that is expected to continue into the future.

In the North Central Region the percent of population over 65 years of age increased from 15.3 percent to 17.3 percent of the population between 2000 and 2010. By 2035, 29.1 percent of the Region will be people aged 65 and older, compared to 34 percent in the south sub-region, 25.2 percent in the central sub-region, and 33.3 percent in the north sub-region.

**Figure 1-3: Percent of Population Over 65**

<table>
<thead>
<tr>
<th>Region</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>13.1%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>15.2%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Central</td>
<td>13.1%</td>
<td>14.6%</td>
</tr>
<tr>
<td>North</td>
<td>18.9%</td>
<td>21.2%</td>
</tr>
</tbody>
</table>

Source: US Census

In addition to the Region’s growing population of those over 65 years of age, there is a reduction in those aged 17 and under. Between 2000 and 2010, the North Central Region had a 3.9 percent reduction in population aged 17 and under. The south and north sub Regions saw the largest reductions over that time period of 3.7 percent and 3.5 percent respectively.

**Figure 1-4: Percent of Population Under 17**

<table>
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<tr>
<th>Region</th>
<th>2000</th>
<th>2010</th>
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<tr>
<td>State</td>
<td>25.5%</td>
<td>23.6%</td>
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<tr>
<td>Region</td>
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<td></td>
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<tr>
<td>South</td>
<td>24.8%</td>
<td>19.1%</td>
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<tr>
<td>Central</td>
<td>25.8%</td>
<td>23.1%</td>
</tr>
<tr>
<td>North</td>
<td>23.4%</td>
<td>19.9%</td>
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Source: US Census
Future projections show the 19 and under population increasing in the Region at a rate of 3.9 percent over 25 years, well below the state projection of 10.2 percent. The central sub Region is the only sub Region to see any growth in population under the age of 65 by 2035, with a three percent increase in population aged 19 and under.

Migration

Between 2000 and 2010, the North Central Wisconsin Region had a slight in-migration of 6.9 people per 1,000 people. Figure 1-5 shows net migration trends for the region, highlighting out-migration for four age groups, 20-24, 25-29, 30-34 and 75+. These migration trends are typical of rural areas where many young adults migrate seeking secondary education or employment opportunities, and many older adults migrate out to move closer to family and/or seek urban amenities such as smaller, lower maintenance housing, health care services, and cultural amenities.

![Figure 1-5: 2000-2010 Net Migration (net migrants per 100 expected population)](image)


In-migration of 15-24 year olds is entirely concentrated in Portage County at a rate of 53 migrants per 100 people, and is likely due to incoming students at UW-Stevens Point. Every county in the region experienced an out-migration of 25-29 year olds. Portage County also accounts for the higher rate of out-migration of 30-34 year olds, with Portage and Forest being the only counties with an out-migration of this age group. Vilas, Juneau and Adams County have the highest rates of in-migration of 30-34 year olds. Wood, Portage, Marathon and Lincoln Counties are the only counties with in-migration of people older than 75 years old.
**Income**

Per capita income provides a measure of relative earning power on a per person level. According to the ACS, the per capita income in 2010 was $25,012. Per capita incomes have risen over the last thirty years, by 35 percent after adjusting for inflation. This exceeds the state growth rate of 34 percent for the same time period.

The U.S. Bureau of Economic Analysis ranked Wisconsin 25th in the nation with respect to personal per capita income; this has remained steady from a ranking 24th in 1980.

While Wisconsin is not among the wealthiest states in the nation, it ranks in the top half. Over the last thirty years within the Region, Vilas County showed the highest gain in per capita income while Wood County showed the lowest. The North sub-region showed the highest percent gain in per capita income, and Central sub-region showed the lowest percent gain. However, the Central sub-region still has the highest per capita income of the sub-regions.

In 2014, approximately 28 percent of jobs filled by residents produce earnings of less than $15,000 per year, according to the US Census LEHD data. Almost 35 percent produced earnings of more than $39,996 per year, while the remaining 37 percent produced earnings between $15,000 and $39,996. Earnings were slightly lower in the South sub-region, with 30 percent earning less than $15,000 per year, and 40 percent earning between $15,000 and 39,996. The Central sub-region had the highest proportion of jobs earning more than $39,996, at 37 percent, and the fewest earning less than $15,000, at 27 percent. Earnings in the North sub-region were similar to the South sub-region, with 31 percent earning less than $15,000, 38 percent earning between $15,000 and 39,996, and 31 percent earning more than $39,996. Figure 1-7 shows poverty and median household income by zip code.

45 percent of workers earnings less than $1,250 per month are 29 or younger. By contrast, 23 percent of workers earning $1,251 to $3,333 per month are 29 or younger, and 8.7 percent of workers earning over $3,333 per month are 29 or younger. 8.5 percent of goods producing workers earn less than $1,250 per month, while 31 percent of Trade, Transportation and Utilities workers earn the same, and 26.6 percent of all other trades earn less than $1,250.
Education

Educational attainment levels have increased substantially in the Region from 1990 to 2010. In 1990, only 75.5 percent of the population 25 and over had completed four years of high school or more. By 2010, that rate increased to 88.7 percent. All three sub-Regions also have seen a substantial increase in high school educational attainment levels. In 2010, the north sub-Region had the highest percentage of population who has completed four years of high school, followed by the central and south. However, in 2014 the central sub-region has surpassed the north sub-region for high school completion. Compared to the state, the Region lags behind slightly, but that gap has narrowed from a 5.0 percent deficit in 1990 to a 1.7 percent deficit in 2010.
The rate of persons with a bachelor’s degree or better is also increasing, but the Region still lags behind the state and the gap is widening. In 1990, 13.3 percent of the Region had a bachelor’s degree, compared to the state rate of 18.3 percent for a difference of 5.0 percentage points; meanwhile by 2010 the Region’s rate was 19.8 percent to the state’s rate of 25.8 percent. Educational attainment levels increased significantly for the Region despite it lagging further behind the state. All three sub-Regions also have seen a significant increase in post-secondary educational attainment levels.

In 2000, 2010 and 2014, the central sub-Region had the highest educational attainment rate for both high school and a bachelor’s degree, followed by the north and south. As expected due to the presence of a four-year university, Portage County has the highest proportion of residents with a bachelor’s degree at 28.3 percent, followed by Oneida (24.4%) and Vilas (24.9%) Counties. Marathon County comes in slightly lower at 23 percent.

Taken together these two education indicators show a Region that is improving its education attainment levels, but at a slower rate than Wisconsin as a whole and with a significant gap in higher education.

**Vocational and Technical Education**

As many industries, including manufacturing and agriculture, become increasingly technical and automated, vocational and technical educations are becoming increasingly necessary to obtain even entry level positions in many fields. A high school education is no longer sufficient to obtain a living wage in most cases.

9.9 percent of state residents 25 and older have an associate’s degree as their highest level of educational attainment. The Region exceeds the state at 10.6 percent of residents achieving an associate’s degree as the highest level of attainment, with Marathon, Lincoln, and Wood counties being the only counties that exceed the state proportion. The proportion of residents 25 and older with some college, but no degree (which includes technical certificates and other vocational training that does not result in a degree) is lower than Wisconsin and the United States. Approximately 20.96 percent of residents 25 and older in the region have some college, 23.56 percent in the North subregion, 19.54 percent in the Central subregion, and 22.26 percent in the South subregion. About 21.1 percent of State residents 25 and older and 21.2 percent of U.S. residents have some college.

Partnerships between local businesses, governments, and educational institutions are very useful in developing the Regional economy. Institutions such as UW-Stevens Point, UW Marathon County and Wood County, Northcentral Technical College (NTC) (Wausau, Antigo, and Spencer), Midstate
Technical College (Wisconsin Rapids, Adams, Stevens Point, and Marshfield), Nicolet College (Rhinelander and Minocqua), and Western Wisconsin Technical College (Mauston) often direct their programs to the training needs of local workers and businesses; and have developed two outreach centers: Wisconsin Learning Center (Stevens Point) and Northwest Wisconsin Manufacturing Outreach Center (UW-Stout campus). The Region's four technical colleges had a total enrollment of 2013-2014 enrollment of 43,491; Mid-State (7,457), Nicolet Area (7,085), Northcentral (17,092), and Western Wisconsin Technical College (11,857). This is a decline of over 13,000 people since the total 2009-2010 enrollment of 56,219 people. Of those, 16,235 were enrolled for an associate’s degree, 4,041 were enrolled for a technical diploma, and 18,626 were enrolled as a vocational adult. (Wisconsin Blue Book 2015-2016) While each category saw a decline, the largest decline was by far in vocational adults, an almost 10,000 person decline between 2009-2010 and 2015-2016. In comparison, technical diploma and associate’s degree enrollments declined by a little over 1,000 people.

**Labor Force and Unemployment**

The total Regional labor force is the population 16 years of age and older that is employed or actively pursuing employment. Persons sixteen and older who are students, homemakers, retired, institutionalized, or unable/unwilling to seek employment are not considered part of the labor force. According to the 2010-2014 ACS, the population was 443,189 and the labor force was 230,785. Table 1-1 shows the most recent annual labor force and unemployment in the region, and compares it to Wisconsin and the United States. The unemployment rate for the region is higher than Wisconsin and lower than the United States. Marathon County had the lowest unemployment rate in 2015; lower than Wisconsin, while Forest County had the highest unemployment rate. Adams, Forest, and Vilas counties had unemployment rates higher than the United States in 2015. In the table, county unemployment rates higher than the regional rate are shown in red, while those lower than the regional rate are in black.

<table>
<thead>
<tr>
<th>Area</th>
<th>Labor Force</th>
<th>Employment</th>
<th>Unemployment</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams County</td>
<td>8,338</td>
<td>7,724</td>
<td>614</td>
<td>7.4%</td>
</tr>
<tr>
<td>Forest County</td>
<td>4,035</td>
<td>3,731</td>
<td>304</td>
<td>7.5%</td>
</tr>
<tr>
<td>Juneau County</td>
<td>13,566</td>
<td>12,857</td>
<td>709</td>
<td>5.2%</td>
</tr>
<tr>
<td>Langlade County</td>
<td>9,526</td>
<td>8,938</td>
<td>588</td>
<td>6.2%</td>
</tr>
<tr>
<td>Lincoln County</td>
<td>15,382</td>
<td>14,589</td>
<td>793</td>
<td>5.2%</td>
</tr>
<tr>
<td>Marathon County</td>
<td>73,833</td>
<td>70,833</td>
<td>3,000</td>
<td>4.1%</td>
</tr>
<tr>
<td>Oneida County</td>
<td>18,554</td>
<td>17,458</td>
<td>1,096</td>
<td>5.9%</td>
</tr>
<tr>
<td>Portage County</td>
<td>39,748</td>
<td>37,905</td>
<td>1,843</td>
<td>4.6%</td>
</tr>
<tr>
<td>Vilas County</td>
<td>9,973</td>
<td>9,260</td>
<td>713</td>
<td>7.1%</td>
</tr>
</tbody>
</table>
In 1980, only 61 percent of the population over 16 was in the labor force. As shown in Figure 1-10, the labor force participation rate increased to 67 percent through 2000, and then declined slightly through 2014 where it currently sits at 64 percent. This decline has been a lingering effect of the Great Recession and a result of retirements. Although unemployment levels have declined, labor force participation has remained lower as people retired early or did not continue looking for work. According to US Census LEHD data, approximately 24 percent of workers who live in North Central Wisconsin are 55 or older, so many of them will be dropping out of the labor force within the next 10 to 15 years. The Region consistently has a higher labor force participation rate than the nation, while consistently being lower than the state. The U.S. Bureau of Labor Statistics predicts that the national labor force participation rate will decrease another two percentage points between 2014 and 2024, in large part due to the number of retiring workers. This reduction in labor force participation will be concurrent with an increase in job openings due to retirements.

The 2014 labor force participation rate for the region and each county is shown in Figure 1-11. The three counties with the lowest labor force participation rate, Adams, Forest, and Vilas, also have some of the highest unemployment rates. Juneau, Lincoln, Marathon and Portage Counties have the lowest unemployment rates in the region, while Lincoln, Marathon, and Portage Counties have the highest labor force participation rates. Marathon (70.2%), Portage (67.6%) and Wood (65.1%) also make up 63 percent of the total population in the region; have the lowest percentage of residents over 65 years of age; and with the exception of Portage County, the highest percentage of residents under 17. Only two counties, Marathon and Portage, exceeded the state’s 67.44 percent participation.
rate in 2014. Labor force participation rates have generally declined slightly since the last CEDS update.

**Figure 1-11: Labor Force Participation Rates, 2014**

As shown in Figure 1-12, the Regional unemployment rate has been slightly greater than the state unemployment for the past 15 years, but mirrors both state and national trends. Unemployment was at its highest in 2010, at 9.6 percent, and the lowest in 2000, at 4.1 percent. In 2015, the regional unemployment rate was 5.1%, meaning 11,569 people were unemployed. The Wisconsin unemployment rate was 4.6 percent and the nation was 5.3 percent. The regional unemployment rate was 1.1 percent points lower than the previous year, and the last time the region saw an unemployment rate this low was in 2006.
Within the region, unemployment rates ranged from 4.1 percent in Marathon County to 7.5 percent in Forest County in 2015. Marathon County had unemployment rates lower than the state while Adams, Forest, Langlade, Oneida, Vilas, and Wood all had rates higher than the nation. Nonetheless, after a spike in unemployment between 2009 and 2010, our Region has experienced a steady decline in unemployment over the past five years.

Other workers that the unemployment rate does not include are: discouraged workers and workers marginally attached to the labor force that are able and willing to work but have not searched for work in the previous four weeks, and those that are employed involuntary part-time. When these workers are included the 2015 annual average unemployment rate in Wisconsin according to the Bureau of Labor Statistics Current Population Survey, increases from 4.6 percent to 8.3 percent, the lowest rate since 2006. These other measures of unemployment tend to follow the same trends as the official unemployment rate provided through the Local Area Unemployment Statistics (LAUS).

The unemployment rate in North Central Wisconsin fluctuates more seasonally than the rates for the United States and Wisconsin. This is largely due to the prominent tourism industry in the North and South sub regions. As shown in Figure 1-13, the unemployment rate in the region has generally returned to pre-recession levels, after peaking in 2010.
Commuting

Analyzing worker commutes in the region shows that the labor shed is wide, and spreads across the state of Wisconsin and into the neighboring states of Illinois, Minnesota, and Michigan. Figure 1-14 shows where workers that live in the region commute to work, while Figure 1-15 shows where workers that work in the region live. Places of work are noticeably more centralized in urban areas than places of residence, which are spread all over the region. About 153,000 people both live and work in the region, while about 45,000 commute into the region for work, and about 59,000 commute out of the region for work. A majority of workers commute less than 24 miles, but between one fifth and one quarter commute more than 50 miles.
Figure 1-14: Where workers that live in the region work.

![Map and chart showing job distribution by distance and direction in 2014.]

Source: US Census OnTheMap

Figure 1-15: Where workers that work in the region live.

![Map and chart showing home census block to work census block job counts by distance and direction in 2014.]

Source: US Census OnTheMap
Chapter 2: Regional Economy

This chapter examines the condition of the region’s economy. This includes changes in employment by sector, regional unemployment trends, the Gross Regional Production, and the out-of-region exporting of sectors. The assessment also includes a location quotient quadrant analysis as well as a regional cluster analysis. The sector concludes with a look at tourism, entrepreneurship and future employment projections in the Region.

Employment

Employment statistics here are provided by the Wisconsin Department of Workforce Development, and only include QCEW employees. The QCEW does not account for certain types of employment, such as railroad and military workers, and does not capture self-employed individuals. EMSI provides estimates for the number of non-QCEW jobs and self-employment, which adds approximately 25,000 employees in our region in 2015, most of which fall under the construction and crop and animal production industries, but many other industries have a noticeable proportion of estimated workers that are not covered under the QCEW. There may also be small differences between totals in QCEW data in some instances due to industry level suppressions.

| Table 2.1: North Central Wisconsin Employment 1990 - 2015 |
|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|
| Adams           | 2,816 | 3,788 | 4,605 | 4,455 | 34.52%                  | 21.6%                      | -3.3%                        | 17.6%                        |
| Forest          | 2,076 | 3,272 | 3,193 | 3,122 | 57.61%                  | -2.4%                      | -2.2%                        | -4.6%                        |
| Juneau          | 7,461 | 8,754 | 8,717 | 9,197 | 17.33%                  | -0.4%                      | 5.5%                         | 5.1%                         |
| Langlade        | 6,754 | 7,970 | 7,595 | 7,346 | 18.00%                  | -4.7%                      | -3.3%                        | -7.8%                        |
| Lincoln         | 10,333 | 12,051 | 10,225 | 10,811 | 16.63%                 | -15.2%                     | 5.7%                          | -10.3%                       |
| Marathon        | 50,619 | 66,447 | 64,558 | 70,123 | 31.27%                 | -2.8%                      | 8.6%                          | 5.5%                          |
| Oneida          | 13,086 | 17,764 | 16,109 | 16,585 | 35.75%                 | -9.3%                      | 3.0%                          | -6.6%                        |
| Portage         | 25,941 | 31,379 | 31,600 | 33,605 | 20.96%                 | 0.7%                       | 6.3%                          | 7.1%                          |
| Vilas           | 5,127 | 8,111 | 7,371 | 7,566 | 58.20%                 | -9.1%                      | 2.6%                          | -6.7%                        |
| Wood            | 38,087 | 43,746 | 41,742 | 36,915 | 14.86%                 | -4.6%                      | -11.6%                       | -15.6%                       |
| Region          | 162,300 | 203,282 | 195,715 | 199,725 | 25.25%                 | -3.7%                      | 2.0%                          | -1.7%                        |
| North           | 37,376 | 49,168 | 44,493 | 45,430 | 31.55%                 | -9.5%                      | 2.1%                          | -7.6%                        |
| Central         | 114,647 | 141,572 | 137,900 | 140,643 | 23.49%                 | -2.6%                      | 2.0%                          | -0.7%                        |
| South           | 10,277 | 12,542 | 13,322 | 13,652 | 22.04%                 | 6.2%                       | 2.5%                          | 8.9%                         |
| State           | 2,217,507 | 2,737,382 | 2,630,246 | 2,791,742 | 23.44%               | -3.9%                      | 6.1%                          | 2.0%                         |

Source: WI DWD, QCEW
In 2015, there were 196,821 jobs in the Region. Figure 2-1 shows that between 2005 and 2015 the Region had a net loss of approximately 4,930 jobs. Most of these job losses occurred between 2007 and 2010 during the peak of the national Great Recession. The Region was gaining jobs until 2007. Jobs started increasing marginally again in 2011 but have not reach pre-recession levels. Jobs are expected to continue to increase over the next 10 years, as shown later in the chapter in Table 2.5.

**Figure 2-1: Regional Jobs Change 2000-2015**

Between 2000 and 2007, the number of jobs increased by approximately 8,900. During the recession, approximately 15,000 jobs were lost in the Region, from 2007 to 2011. Post-recession, the number of jobs in the region increased by 4,501 jobs between 2011 and 2015. From 2000 to 2015, the south and central sub-regions gained 1,032 and 1,544 jobs respectively. The north sub-region lost 1,818 jobs. Combined, this was a net increase of .4 percent, or 758 jobs gained. By comparison, Wisconsin saw a 2.0 percent increase in jobs during the same period.

**Employment by Sector**

Since the recession, the majority of industries have made gains in jobs. From 2005 to 2010, 12 out of 20 industries had lost jobs. Between 2010 and 2015, only five industries lost jobs. The three sectors with the highest employment in the Region in 2015 were manufacturing, healthcare and social assistance, and retail trade.

Manufacturing has continued to add jobs since the end of the recession and is the top employer in the Region. As the Region’s largest exporter of goods and services, this industry is crucial to the economic health of the Region. During the past five years, 2010 to 2015, jobs in this industry have increased from 32,022 to 34,476. However, in 2005, this industry employed 39,538 people. While this industry is going through several major transitions in this region, it is expected to continue to

<table>
<thead>
<tr>
<th>Industry</th>
<th>2010</th>
<th>2015</th>
<th>2010 -2015 % Change</th>
<th>% of Total Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag, Forestry Fishing &amp; Hunting</td>
<td>1,644</td>
<td>2,470</td>
<td>50.2%</td>
<td>1.25%</td>
</tr>
<tr>
<td>Mining Quarrying &amp; Oil &amp; Gas Extraction</td>
<td>29</td>
<td>113</td>
<td>289.7%</td>
<td>0.06%</td>
</tr>
<tr>
<td>Utilities</td>
<td>813</td>
<td>849</td>
<td>4.4%</td>
<td>0.43%</td>
</tr>
<tr>
<td>Construction</td>
<td>6,612</td>
<td>7,394</td>
<td>11.8%</td>
<td>3.76%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>7,350</td>
<td>8,007</td>
<td>8.9%</td>
<td>4.07%</td>
</tr>
<tr>
<td>Information</td>
<td>624</td>
<td>2,439</td>
<td>290.9%</td>
<td>1.24%</td>
</tr>
<tr>
<td>Finance &amp; Insurance</td>
<td>11,527</td>
<td>11,678</td>
<td>1.3%</td>
<td>5.93%</td>
</tr>
<tr>
<td>Real Estate &amp; Rental &amp; Leasing</td>
<td>1,220</td>
<td>1,321</td>
<td>8.3%</td>
<td>0.67%</td>
</tr>
<tr>
<td>Professional &amp; Technical Services</td>
<td>3,555</td>
<td>4,305</td>
<td>21.1%</td>
<td>2.19%</td>
</tr>
<tr>
<td>Management Of Companies &amp; Enterprises</td>
<td>1,299</td>
<td>2,629</td>
<td>102.4%</td>
<td>1.34%</td>
</tr>
<tr>
<td>Admin &amp; Waste Services</td>
<td>4,563</td>
<td>5,167</td>
<td>13.2%</td>
<td>2.63%</td>
</tr>
<tr>
<td>Edu Services</td>
<td>12,747</td>
<td>12,498</td>
<td>-2.0%</td>
<td>6.35%</td>
</tr>
<tr>
<td>Health Care &amp; Social Assistance</td>
<td>31,699</td>
<td>29,611</td>
<td>-6.6%</td>
<td>15.04%</td>
</tr>
<tr>
<td>Arts Entertainment &amp; Recreation</td>
<td>2,940</td>
<td>2,856</td>
<td>-2.9%</td>
<td>1.45%</td>
</tr>
<tr>
<td>Accommodation &amp; Food Services</td>
<td>16,603</td>
<td>16,979</td>
<td>2.3%</td>
<td>8.63%</td>
</tr>
<tr>
<td>Other Services Excl. Public Admin</td>
<td>6,765</td>
<td>5,809</td>
<td>-14.1%</td>
<td>2.95%</td>
</tr>
<tr>
<td>Public Admin</td>
<td>11,744</td>
<td>11,421</td>
<td>-2.8%</td>
<td>5.80%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>32,022</td>
<td>34,476</td>
<td>7.7%</td>
<td>17.52%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>25,739</td>
<td>26,372</td>
<td>2.5%</td>
<td>13.40%</td>
</tr>
<tr>
<td>Transportation &amp; Warehousing</td>
<td>10,274</td>
<td>10,427</td>
<td>1.5%</td>
<td>5.30%</td>
</tr>
<tr>
<td>Total</td>
<td>189,769</td>
<td>196,821</td>
<td>3.7%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Source: WI DWD, QCEW

The Health Care and Social Assistance and Retail Trade industries continue to be the second and third highest employer industries, as they have been for at least the last 15 years. The Health Care and Social Assistance industry actually declined in employment by .57 percent from 2005 to 2015, after peaking at 31,699 jobs in 2010. This had been the fastest growing industry during the first decade of the new millennium. The average earnings in this sector are similar to manufacturing, but the industry only produces a fraction of the sales in exports that the manufacturing does. While rural
regions have had a difficult time attracting health care professionals, over the past several years there has been a concentrated effort by local leaders to train and retain medical practitioners in the area.

Retail Trade experienced a -5.92 percent decline in unemployment from 2005 to 2015, losing 1,659 jobs. Since 2010, this sector has only added 633 jobs. This sector provides average wages that are only 61.1 percent of the Regional average wage. However, this sector is expected to add twice the number jobs that the manufacturing industry will add.

_Agriculture, Forestry, Fishing and Hunting:_
The agriculture, forestry, fishing and hunting sector comprises establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats.

Between 2010 and 2015, this sector grew by 50.2 percent, a much higher growth than between 2005 and 2015. This industry added 826 jobs between 2010 and 2015 and 1,070 over the past 10 years. Nearly 2,470 persons are employed in this sector which accounts for 1.25 percent of total employment in the Region. The location quotient for this industry is 2.25, meaning it is highly concentrated in the North Central Region compared to the rest of the United States.

However, according to the UW-Extension in Marathon County, more jobs do not mean the industry is growing. With the low prices for dairy and agricultural commodities in 2015, increased rent for cropland, increasing farm debt, and aging farmers, many farms have been consolidated across the Midwest. As farms get larger, they need more farmhands. Farm operators are not counted in the QCEW but the farm hands are. In other words, more agriculture workers are being counted than previous years rather than the actual existence of more farm workers.

The Region’s climate, soil, and water are well suited for the dairy industry, and the production of: potatoes, oats, barley and hay, snap beans, green peas, sweet corn, soybeans, cranberries, ginseng and trees. The timber produced in the area, both hard and soft wood, supplies the lumber mills, the pulp and paper mills, the millwork and housing components industries and the factory-built housing industry.
Mining:
The mining sector comprises establishments that extract naturally occurring mineral solids, such as sand and gravel; liquid minerals, such as crude petroleum; and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity.

Non-metallic mining activity within the Region typically involves sandstone and gravel extraction for local use and some granite quarrying. Metallic mining has been of minor importance in the Region over the last two decades. There are a few substantial metallic deposits located in the Region, if any of these mines would open, then this sector may have a substantial impact within the Region.

The North Central Region had an increase of 84 jobs from 2010 to 2015 resulting in a 289.7 percent surge in mining employment. In 2005, there were 51 workers in this sector. This number dropped to 29 in 2010 after the 2008 economic recession but surpassed 113 workers by 2015. This accounts for .06 percent of the workforce in our region. The location quotient of 0.16 means this sector is far less concentrated in the region than the United States as a whole.

In 2013, Wisconsin saw a dramatic increase in the number of frac sand mining and processing facilities. This increase was attributed to a surge in hydraulic fracturing (fracking), a technique used by the petroleum industry to extract natural gas and/or crude oil from rock formations, which requires a certain quality of sand in the process. According to the United States Geological Survey, Wisconsin was the number one producer of frac sand in 2014, with 24 million metric tons. That same year, oil prices plummeted across the globe as Saudi Arabia ramped up production. Hydraulic fracturing was no longer an economically viable endeavor and 19 mining operations in Wisconsin have gone dormant since this time.

According to the Wisconsin Department of Natural Resources, there were 11 locations of industrial sand mines and processing plants in North Central Wisconsin, most located in Wood County. Three sites were inactive mines, including one that was applying for reclamation. Six mines were open and there were four processing/rail facilities.

When oil prices rise again, more locations may open in the region. Two mining operations in Western Wisconsin reopened in the fall of 2016. While providing jobs to struggling regions across
Wisconsin, frac sand mining has been contentious and has brought a number of local control issues to the forefront of Wisconsin politics.

Utilities:

The utilities sector comprises establishments engaged in the provision of the following utility services: electric power, natural gas, steam supply, water supply, and sewage removal. Within this sector, the specific activities associated with the utility services provided vary by utility: electric power includes generation, transmission, and distribution; natural gas includes distribution; steam supply includes provision and/or distribution; water supply includes treatment and distribution; and sewage removal includes collection, treatment, and disposal of waste through sewer systems and sewage treatment facilities.

Over the past 10 years employment in the utilities sector has grown by 25.6 percent and has grown by 4.4 percent in the past five years. The location quotient of 0.89 shows that the utilities sector is not highly concentrated in the Region. Overall, the utilities sector accounts for 4.43 percent of the Region’s employment.

Construction:

The construction sector comprises establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems). Establishments primarily engaged in the preparation of sites for new construction and establishments primarily engaged in subdividing land for sale as building sites also are included in this sector.

Over the past 10 years the Region and the state have experienced a large decline in construction jobs mainly due to the downturn in the economy and the housing crisis of 2008. Between 2005 and 2015 the Region experienced a decline of 20.8 percent in the construction sector, which was more than the state (-14.27) over the same time period. From 2010 to 2015, this sector did see a rebound.
of 782 jobs. Over 7,394 persons are employed in this sector which equates to roughly 4 percent of total employment.

**Manufacturing:**
The manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified as construction.

Manufacturing is the largest employer in the North Central Region with roughly 34,500 employees in this sector. Between 2005 and 2010, this sector experienced substantial losses, losing 7,516 jobs. Furthermore, the Region experienced considerable loses in paper and wood project manufacturing between 2011 and 2012. However, over the past five years this sector has seen a 7.7 percent increase in industry employment, resulting in a net increase of 2,454 jobs. The losses from paper mill plant closures offset sizable gains in other subsectors. For example, metal fabrication and food manufacturing grew by 28.0 percent and 20.4 percent, respectively from 2010 to 2015. Machinery manufacturing grew 17.4 percent, adding 666 jobs.

Traditionally paper production has been the dominant manufacturing subindustry in the Region, both in terms of employment and revenues. Paper mills have flourished across Wisconsin for over one hundred years in ample forests for supplies and water flows to power them. Wisconsin is largest paper producer in the country.

However, this industry has been seeing a decline in demand since the 1990s with the rise in email, annotatable PDFs, digital calendars, e-books and paperless billing. Furthermore, the state is facing fierce price wars with foreign competitors. The U.S. imposed tariffs on glossy magazine paper imports from China and Indonesia, citing allegations of government subsidies in 2010. One paper mill a year has been closing in Wisconsin since 2006. Over the next ten years, more losses are expected.

At the same time, some paper companies are retooing. Some mills have switched to produce high end stock use in photobooks, like those made by Shutterfly and Snapfish. The manufacturing of
boxes has increased with the advent of online shopping. Tissue sales, which are not tied to the rise and fall of the economy, are also increasing.²

Another way to add value to wood products is sourcing wood pulp from Forest Stewardship Council (FSC) certified forests. Founded in 1993, the FSC seeks to protect forests around the world by harnessing the market demand for responsibly sourced products and sets the gold standard for responsibly managed forests. FSC stamped products are not made from recycled paper, but are still ecofriendly by certifying that wood suppliers work to protect habitat, prevent pollution, plant more trees than are harvested and avoid displacing wildlife. Furthermore, the FCS will not certify genetically modified tree products which gives an advantage to the North Central Region’s forests over some of its foreign competitors who utilize fast growing genetically modified trees. A number of well-known brands, including Five-Star, Band-Aid, Scott Tissue, Ben and Jerrys, and McDonalds are requesting paper products made FSC certified products for their packaging needs.

Wholesale Trade:
The wholesale trade sector comprises establishments engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The merchandise described in this sector includes the outputs of agriculture, mining, manufacturing, and certain information industries, such as publishing.

Between 2005 and 2015, this sector increased by 1.1 percent. That increase took place over the past 5 years where the sector increased roughly 9.0 %. Over 8,007 persons are employed in this sector which accounts for 4.1 percent of total employment in the Region.

² Rosenwald, Take Note: The Paper Industry is Planning a Big Comeback. The Washington Post. 2015
**Retail Trade:**
The retail trade sector comprises establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The retailing process is the final step in the distribution of merchandise; retailers are, therefore, organized to sell merchandise in small quantities to the general public. This sector comprises two main types of retailers: store and non-store retailers.

Between 2010 and 2015, this sector increased by 2.5 percent. 26,372 persons are employed in this sector, which is the third-largest employment sector, accounting for over 13.4 percent of total employment.

**Transportation and Warehousing:**
The transportation and warehousing sector includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. Establishments in these industries use transportation equipment or transportation related facilities as a productive asset. The type of equipment depends on the mode of transportation. The modes of transportation are air, rail, water, road, and pipeline.

From 2005 to 2015 this sector decreased by 2.0 percent in North Central Wisconsin. However, from 2010 to 2015, this sector has increased 1.5 percent. 10,427 persons are employed in this sector accounting for 5.5 percent of the regions employment.

**Information:**
The information sector comprises establishments engaged in the following processes: producing and distributing information and cultural products, providing the means to transmit or distribute these products as well as data or communications, and processing data. The main components of this sector are the publishing industries, including software publishing, and both traditional publishing and publishing exclusively on the Internet; the motion picture and sound recording industries; the
broadcasting industries, including traditional broadcasting and those broadcasting exclusively over the Internet; the telecommunications industries; Web search portals, data processing industries, and the information services industries.

Between 2005 and 2015 this sector experienced a decline of over 18 percent in the region but between 2010 and 2015 experienced a surge of 290.9 percent in employment, or 1,815 jobs. The lack of broadband infrastructure is a critical issue throughout the region, especially in the rural areas, and as this infrastructure develops the information sector is likely to increase. This sector now accounts for 1.2 percent of the work force.

**Finance and Insurance:**
The finance and insurance sector comprises establishments primarily engaged in financial transactions (transactions involving the creation, liquidation, or change in ownership of financial assets) and/or in facilitating financial transactions.

From 2005 to 2015 this sector grew by 3.87 percent regionally, and has remained stable with a 1.3 percent increase over the past five years. Employment in this sector accounts for nearly 6 percent of the region’s employment, with approximately 11,678 persons working in the finance and insurance industry.

**Real Estate & Rental & Leasing**
The real estate and rental and leasing sector comprises establishments primarily engaged in renting, leasing, or otherwise allowing the use of tangible or intangible assets, and establishments providing related services. The major portion of this sector comprises
establishments that rent, lease, or otherwise allow the use of their own assets by others. The assets may be tangible, as is the case of real estate and equipment, or intangible, as is the case with patents and trademarks.

From 2005 to 2015 this sector decreased by just 3.0 percent in the region but has increased 8.3 percent over the past five years. The decline of this sector from 2005 to 2010 can be attributed to the housing crisis in 2008 and recession that ensued shortly thereafter, but has rebounded since 2010. Persons working in the real estate market made up just .7 percent of the regions employment in 2015.

**Professional, Scientific & Technical Services:**
The professional, scientific, and technical Services sector comprises establishments that specialize in performing professional, scientific, and technical activities for others. These activities require a high degree of expertise and training. Activities performed include: legal advice and representation; accounting, bookkeeping, and payroll services; architectural, engineering, and specialized design services; computer services; consulting services; research services; advertising services; photographic services; translation and interpretation services; veterinary services; and other professional, scientific, and technical services.

Between 2010 and 2015 employment in this sector grew by 21.1 percent in the Region. The sector lost roughly 300 jobs from 2005 to 2010, during the recession. Since 2010, 750 jobs have been added. The professional and technical services now accounts for 2.2 percent of the Regions employment.

**Management of Companies & Enterprises:**
The management of companies and enterprises sector comprises establishments that hold the securities of (or other equity interests in) companies and enterprises for the purpose of owning a controlling interest or influencing management decisions or non-governmental
establishments that administer, oversee, and manage establishments of the company or enterprise and that normally undertake the strategic or organizational planning and decision-making role of the company or enterprise. Establishments that administer, oversee, and manage may hold the securities of the company or enterprise.

The region experienced a growth of 76.0 percent in employment from 2005 to 2015, adding 1,135 jobs in this industry. The majority of that growth occurred between 2010 and 2015 when the Region saw a 102.4 percent increase in employment, or about 1,330 jobs. About 200 jobs were lost in this sector between 2005 and 2010. Although the Region had a significant increase, this sector still comprises a small percentage of all employment, making up just 1.3 percent of the regions employment.

Administrative & Waste Services:
The administrative and waste management sector comprises establishments performing routine support activities for the day-to-day operations of other organizations. These essential activities are often undertaken in-house by establishments in many sectors of the economy. The establishments in this sector specialize in one or more of these support activities and provide these services to clients in a variety of industries and, in some cases, to households. Activities performed include: office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services.

North Central Wisconsin increased employment 24.3 percent in the sector from 2005 to 2015. This industry added 406 jobs between 2005 and 2010 and added 604 jobs between 2010 and 2015. Overall 5,167 people work in this industry, making up 2.6 of the workforce.

Educational Services
The educational services sector is comprised of establishments that provide instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities, and training
centers. These establishments may be privately owned and operated for profit or not for profit, or they may be publicly owned and operated. They may also offer food and/or accommodation services to their students.

Between 2005 and 2015 the educational services sector had a 1.9 percent decrease in employment regionally. This sector has not rebounded since the recession, losing 249 jobs since 2010. The education services sector employs 12,498 persons in the Region making 6.4 percent of the Regions employment.

**Health Care & Social Assistance:**

The health care and social assistance sector comprises establishments providing health care and social assistance for individuals. The sector includes both health care and social assistance because it is sometimes difficult to distinguish between the boundaries of these two activities. The industries in this sector are arranged on a continuum starting with those establishments providing medical care exclusively, continuing with those providing health care and social assistance, and finally finishing with those providing only social assistance.

With 29,611 persons employed in this sector, it is the second largest sector in the region and accounts for 15.0 percent of the regions employment. From 2005 to 2010, this was the fastest growing industry in the region. However, after shedding 2,088 jobs over the past 5 years, this industry’s employment has virtually remained the same since 2005.

For years, the shortage of physicians and other health care workers in rural areas has been a concern. According the U.S, Department of Health and Human Services, seven out of ten of the counties in North Central Wisconsin had shortages of physicians and psychiatrists. Leaders in north central Wisconsin have teamed up with Medical College of Wisconsin to create the new North Central Medical School and Psychiatrics Residency Program in Wausau. The program started in July of 2016 and had 25 students in the inaugural class. Another program in Green Bay opened simultaneously. The training of physicians in the state is essential, as most settle in the area of their residency.

**Arts Entertainment & Recreation:**

The arts, entertainment, and recreation sector includes a wide range of establishments that operate facilities or provide services to meet varied cultural, entertainment, and recreational interests of their
patrons. This sector comprises establishments that are involved in producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; establishments that preserve and exhibit objects and sites of historical, cultural, or educational interest; and establishments that operate facilities or provide services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests.

Between 2005 and 2015 this sector experienced an increase in employment, resulting in 256 more jobs. However, over the past five years, the Region has seen a 2.9 percent decrease in employment. This sector only accounts for 1 percent of employment in the Region and employs 2,856 people.

The industries of this sector are often referred to as “creative industries.” According to the United Nations 2008 Creativity Report, creative industries can be defined as cycles of creation, production and distribution of goods and services that use creativity and intellectual capital as primary inputs.

These arts-centric businesses play an important role in building and sustaining economic vibrancy. They employ a creative workforce, spend money locally, generate government revenue, and are a cornerstone of tourism and economic development.

The creative economy emphasizes competition for human talent rather than competition for business and industries. While communities continue to view arts, culture, and the creative economy as an integral part of their quality of life and development, the complementarities with innovation and entrepreneurship, manufacturing and industry, natural resource-based development, tourism development, and workforce development, among others, is becoming increasingly apparent.

**Accommodation & Food Services:**
The accommodation and food services sector comprises establishments providing customers
with lodging and/or preparing meals, snacks, and beverages for immediate consumption. The sector includes both accommodation and food services establishments because the two activities are often combined at the same establishment.

From 2010 to 2015 North Central Wisconsin experienced a 2.3 percent growth in this sector. Accommodations and Food Services is one of the larger sectors in the Region with 16,979 persons employed and it accounts for 8.6% of all employment.

**Other Services except Public Administration:**
The other services (except Public Administration) sector comprises establishments engaged in providing services not specifically provided for elsewhere in the classification system. Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grant making, advocacy, and providing dry cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

Between 2005 and 2015 this sector grew by 8.7 percent Regionally. However, from 2010 to 2015 this sector has seen a 14.1 percent decrease in employment, losing 956 employees. The sector now employs 5,809 workers and comprises 3.0 percent of the Region's employment.

**Public Administration:**
The public administration sector consists of establishments of federal, state, and local government agencies that administer, oversee, and manage public programs and have executive, legislative, or judicial authority over other institutions within a given area. These agencies also set policy, create laws, adjudicate civil and criminal legal cases, provide for public safety and for national defense. In general, government establishments in the Public Administration...
sector oversee governmental programs and activities that are not performed by private establishments.

Between 2005 and 2015 this sector saw a 3.4 percent decrease. This sector has continued to decline since the recession, losing 323 people from 2010 to 2015. In 2015, this sector employed 11,421 people, which was 5.8 percent of the work force.

**Gross Regional Product**

The total Gross Regional Product (GRP) in 2014 was over 16.9 billion dollars in the Region. By industry, Manufacturing was the highest grossing industry, producing over 3.6 billion dollars, or 21.3 percent of the area’s GRP. The Paper (except Newsprint) Mills produced roughly 27 percent of the Manufacturing industry’s GRP. The Finance and Insurance industry was in second place, producing roughly 2.0 billion dollars, or 11.8 percent of the GRP. Half of this amount was created in the Direct Property and Casualty Insurance Carriers subindustry. This was followed by the Public Administration which generated 2.0 billion and the Health Care and Social Assistance industry which generated roughly 1.9 billion dollars in revenues.

**Exporting**

In 2014, the region produced 27.9 billion dollars in annual sales to industries and consumers outside of the Region. Manufacturing was the largest exporter in the region, with 11.3 billion dollars in export sales, which was roughly 91.1 percent of its total annual sales. Leather and Allied Product Manufacturing, Machinery Manufacturing, Paper Manufacturing, and Printing and Related Support Activities all exported over 95 percent of their annual sales.

Public Administration was the second largest exporter with 3.9 billion dollars, followed by Finance and Insurance with 2.4 billion dollars. The Health Care and Social Assistance Industry exported 1.8 million dollars in sales. Crop and Animal Production Industry exported 1.7 billion dollars in sales which was 89 percent of its annual sales.

**Location Quotient Analysis**

A location quotient is a way of quantifying how concentrated an industry is in a region compared to the nation. It can reveal what makes a particular region unique as well as its economic strengths and weaknesses. The location quotient model uses employment information for both a particular region and the nation and compares their ratios of industrial employment to total employment. Based on this information, each industry sector is assigned a numeric value called a location quotient which in turn is used identify exporter industries.

Export industries are the drivers of the local economy. Any industry with a location quotient value greater than one is considered to be an exporter and the higher the location quotient, the greater the concentration of jobs. Non-exporter industries have location quotients lower than one. While non-
exporter industries are less concentrated and are not major drivers of the local economy, they are important for economic diversity and possibly have the potential to grow.

The relative strength of a regional industry can be determined using a quadrant analysis. By examining the size and change over time of a location quotient value, mature, driver, troubled, and emerging industries can be identified by their quadrant position. Figure 2-2 displays a quadrant analysis for 2015 location quotients for metro area industries on the vertical axis and the percentage change from 2013 to 2015 on the horizontal axis. The size of each bubble in the figure represents the size of the labor force in each respective industry. The flowing section explains the differences in these economies and categorizes the regions industries. Table 2.3 displays the data for this figure.

**Driver Economies:**
Driver industries have above average job concentration and are expected increasing, defining the region. Like mature industries, they produce exports that brings outside money into the region. There were four driving economies: 1.) Crop and Animal Production, 2.) Mining, Quarrying, and Oil and Gas Extraction, 3.) Manufacturing and 4.) Finance and Insurance.

**Mature Economies:**
Mature industries have above average job concentration but are declining, possibly affecting the export base. There are three maturing industries in the Region: 1.) Retail Trade 2.) Transportation and Warehousing and 3.) Health Care and Social Assistance.

**Troubled Economies:**
A troubled economy is less important to the Regional economy and is declining, potentially impacting diversity. There were three trouble economies: 1.) Education Services, 2.) Accommodation and Food Services, and 3.) Other Services (Except Public Administration).

**Emerging Economies:**
An emerging economy is not yet concentrated in the Region, but the number of jobs in this industry are growing. There are ten emerging industries: 1.) Utilities, 2.) Construction, 3.) Wholesale Trade, 4.) Information, 5.) Real State and Rental and Leasing, 6.) Professional, Scientific, and Technical Services 7.) Management of Companies and Enterprises, 8.) Administrative and Support and Waste Management and Remediation Services, 9.) Arts, Entertainment, and Recreation, 10). Government.
Figure 2-2 Location Quotient Analysis, 2013-2015

Source: EMSI, 2016
### Table 2.3: Regional Location Quotients, 2013-2015

<table>
<thead>
<tr>
<th>Industry</th>
<th>2013 - 2015 % Change</th>
<th>2015 Location Quotient</th>
<th>2015 Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop and Animal Production</td>
<td>6%</td>
<td>2.25</td>
<td>4,030</td>
</tr>
<tr>
<td>Mining, Quarrying, and Oil and Gas Extraction</td>
<td>-5%</td>
<td>0.16</td>
<td>169</td>
</tr>
<tr>
<td>Utilities</td>
<td>5%</td>
<td>0.89</td>
<td>703</td>
</tr>
<tr>
<td>Construction</td>
<td>10%</td>
<td>0.76</td>
<td>7,012</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>5%</td>
<td>1.95</td>
<td>34,413</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>3%</td>
<td>0.97</td>
<td>8,131</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>0%</td>
<td>1.18</td>
<td>26,384</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>0%</td>
<td>1.43</td>
<td>9,393</td>
</tr>
<tr>
<td>Information</td>
<td>8%</td>
<td>0.63</td>
<td>2,475</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>3%</td>
<td>1.42</td>
<td>11,642</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>10%</td>
<td>0.41</td>
<td>1,218</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>5%</td>
<td>0.35</td>
<td>4,352</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>11%</td>
<td>0.83</td>
<td>2,600</td>
</tr>
<tr>
<td>Administrative and Support and Waste Management</td>
<td>15%</td>
<td>0.41</td>
<td>5,110</td>
</tr>
<tr>
<td>and Remediation Services</td>
<td>-10%</td>
<td>0.13</td>
<td>516</td>
</tr>
<tr>
<td>Educational Services</td>
<td>-8%</td>
<td>1.08</td>
<td>28,300</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>11%</td>
<td>0.64</td>
<td>1,985</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>2%</td>
<td>0.92</td>
<td>16,971</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>-7%</td>
<td>0.95</td>
<td>5,859</td>
</tr>
<tr>
<td>Other Services (except Public Administration)</td>
<td>-1%</td>
<td>0.94</td>
<td>28,611</td>
</tr>
</tbody>
</table>

Source: EMSI, 2016

Table 2.4 shows the five subindustries with the highest location quotients in each county throughout the Region compared to the nation. Within the individual counties, crop production, forestry and logging, fabricated metal product manufacturing, wood product manufacturing, leather and allied product manufacturing, paper manufacturing, and non-store retailers are strong subindustries.
### Table 2.4: Top Five County Location Quotients, 2015

<table>
<thead>
<tr>
<th>Adams County</th>
<th>LQ</th>
<th>Forest County</th>
<th>LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAICS 111</td>
<td>Crop Production</td>
<td>31.6</td>
<td>NAICS 113</td>
</tr>
<tr>
<td>NAICS 112</td>
<td>Animal Production and Aquaculture</td>
<td>11.96</td>
<td>NAICS 903</td>
</tr>
<tr>
<td>NAICS 721</td>
<td>Accommodation</td>
<td>9.31</td>
<td>NAICS 814</td>
</tr>
<tr>
<td>NAICS 447</td>
<td>Gasoline Stations</td>
<td>4.52</td>
<td>NAICS 221</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Juneau County</th>
<th>LQ</th>
<th>Langlade County</th>
<th>LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAICS 332</td>
<td>Fabricated Metal Product Mfg</td>
<td>11.8</td>
<td>NAICS 321</td>
</tr>
<tr>
<td>NAICS 447</td>
<td>Gasoline Stations</td>
<td>5.94</td>
<td>NAICS 112</td>
</tr>
<tr>
<td>NAICS 112</td>
<td>Animal Production and Aquaculture</td>
<td>4.83</td>
<td>NAICS 113</td>
</tr>
<tr>
<td>NAICS 331</td>
<td>Primary Metal Manufacturing</td>
<td>4.61</td>
<td>NAICS 111</td>
</tr>
<tr>
<td>NAICS 321</td>
<td>Wood Product Manufacturing</td>
<td>4.45</td>
<td>NAICS 485</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lincoln County</th>
<th>LQ</th>
<th>Marathon County</th>
<th>LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAICS 316</td>
<td>Leather and Allied Product Mfg</td>
<td>67.98</td>
<td>NAICS 321</td>
</tr>
<tr>
<td>NAICS 321</td>
<td>Wood Product Manufacturing</td>
<td>16.74</td>
<td>NAICS 322</td>
</tr>
<tr>
<td>NAICS 322</td>
<td>Paper Manufacturing</td>
<td>8.66</td>
<td>NAICS 454</td>
</tr>
<tr>
<td>NAICS 332</td>
<td>Fabricated metal Product Manufacturing</td>
<td>6.35</td>
<td>NAICS 112</td>
</tr>
<tr>
<td>NAICS 113</td>
<td>Forestry and Logging</td>
<td>5.57</td>
<td>NAICS 327</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oneida County</th>
<th>LQ</th>
<th>Portage County</th>
<th>LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAICS 322</td>
<td>Paper Manufacturing</td>
<td>11.09</td>
<td>NAICS 454</td>
</tr>
<tr>
<td>NAICS 454</td>
<td>Nonstore Retailers</td>
<td>8.47</td>
<td>NAICS 524</td>
</tr>
<tr>
<td>NAICS 114</td>
<td>Fishing, Hunting and Trapping</td>
<td>5.42</td>
<td>NAICS 322</td>
</tr>
<tr>
<td>NAICS 323</td>
<td>Printing and Related Support Activities</td>
<td>3.93</td>
<td>NAICS 111</td>
</tr>
<tr>
<td>NAICS 444</td>
<td>Building Material and Garden Equipment</td>
<td>2.9</td>
<td>NAICS 114</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vilas County</th>
<th>LQ</th>
<th>Wood County</th>
<th>LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAICS 721</td>
<td>Accommodation</td>
<td>5.34</td>
<td>NAICS 316</td>
</tr>
<tr>
<td>NAICS 237</td>
<td>Heavy and Civil Engineering Con.</td>
<td>4.48</td>
<td>NAICS 484</td>
</tr>
<tr>
<td>NAICS 712</td>
<td>Museums, Historical Sites, and Similar</td>
<td>4.1</td>
<td>NAICS 321</td>
</tr>
<tr>
<td>NAICS 814</td>
<td>Private Households</td>
<td>3.99</td>
<td>NAICS 551</td>
</tr>
</tbody>
</table>

Source: EMSI 2016
Regional Cluster Analysis

Clusters are a geographic concentration of interconnected companies, specialized suppliers, service providers and associated institutions in a particular field. Clusters develop because they increase the productivity with which companies can compete in an increasingly more competitive global market and they are the source of jobs, income and export growth. Clusters give businesses an advantage by providing access to more suppliers and customized support services, skilled and experience labor pools, and knowledge transfer through informal social exchanges. In short, clusters enhance competitiveness.

An economic cluster analysis groups related subindustries together and compares these “clusters” to others in the Region, based on five factors: earning, growth, regional competitiveness, regional specialization, and GRP. The clusters are given a score based on each of these factors.

Top clusters are those that drive wealth creation in the Region, primarily through the export of goods and services. Using EMSI, 59 clusters were identified in the North Central Region. The average cluster score was 36 out 100. The top and bottom clusters were determined by applying the average deviation (plus or minus 9) to the average cluster. There were 12 industry clusters identified as top clusters. 36 were classified as average clusters, while 11 clusters were in the bottom. The top 12 industry clusters are discussed below:

Paper and Packaging Cluster

The paper and packaging cluster was the top cluster in this analysis, with a score of 81 and included five subindustries. This cluster had a GRP of 932 million dollars in 2014 and it exported over 3 billion dollars in annual sales to industries and other consumers not inside the North Central Region. However, over the next ten years employment in this industry is expected to drop 13.3 percent, losing 682 jobs as the paper and wood manufacturing industries transition. Currently, there are 5,110 jobs in this cluster and the majority of losses will be in the Paper (except Newsprint) Mills subindustry.

Insurance Services

The Insurance Services was the second highest scoring cluster with a score of 72. This cluster had a GRP of 1.3 billion dollars in 2014. It was the third highest exporter in the Region, producing 2.4 billion dollars in service sales outside of the Region. This cluster also historically has been strong in the Region and originally had ties to the lumber industry. In 2015 this cluster had 6,356 employees and by 2025, there should be 34 more jobs.

Production Technology and Heavy Machinery

This cluster ranked third with a score of 59 and was comprised of 18 subindustries. This cluster produces a number of supporting industrial machinery, including farm machinery, construction machinery, and food product machinery manufacturing. The GRP of this cluster was 542 million
dollars in 2014. There were 4,677 jobs in 2015 and the cluster is expected to add 766 jobs, a 16 percent increase, during the next ten years.

Local Government Services

This cluster had one subindustry and does not include education or hospitals. It had a score of 59 and had 11,919 jobs in 2015. This cluster is expected to lose 92 jobs over the next ten years.

Local Education and Training

This cluster had a score of 58 and had five subindustries, including vocational rehabilitation services, automobile driving schools, and fine arts schools. There were 10,383 jobs in this cluster in 2015 and it was expected to add 82 jobs by 2025.

Transportation and Logistics

The Transportation and Logistics cluster had a score of 48 and included seven subindustries, ranging from Air Traffic Control to the Charter Bus Industry. This cluster employed 5,933 in 2015 and was expected to grow by roughly 1,000 jobs in the next ten years. It had a GRP of 360 million dollars.

Footwear Cluster

There was one subindustry, Footwear Manufacturing, identified in this cluster, which scored 47. The region had 331 jobs in this cluster and it is expected to grow by 9 percent, adding 31 jobs by 2025. This was an 18 million dollar subindustry.

Information Technology and Analytics Instruments

This cluster scored 47 and had three subindustries: Software Publishers, Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing, and Computer Storage Device Manufacturing. This cluster employed 1,365 workers and is expected to grow 33 percent in the next ten years, adding 340 jobs. This is a 248 million dollar cluster.

Recreational and Small Electric Goods

The Recreational and Small Electric Goods cluster includes blind and shade manufacturing, motorcycle and bicycle manufacturing, as well as sporting and athletic goods manufacturing. This cluster scored 47 and is a 94 million dollar industry. There are 910 employees in the four subindustries of this cluster. There is little growth in employment expected in this cluster.

Food Processing and Manufacturing

There were 13 subindustries in this 368 million dollar cluster. 3,618 people worked in these subindustries, including cheese manufacturing, breweries, fruit and vegetable canning, ice cream and frozen dessert manufacturing, and confectionery manufacturing. Food Manufacturing was the
second highest exporter, with 2.3 billion dollars in export sales. This cluster will grow by 13 percent, adding 463 jobs by 2025.

*Electric Power Generation and Transmission*

The Electric Power Generation and Transmission cluster employed 327 people in one subindustry: Fossil Fuel Electric Power Generation. This subindustry is expected to decrease by 23 percent, losing 72 jobs. In 2014, this subindustry generated 138 million dollars in revenues.

*Business Services*

This cluster had 18 subindustries and scored 46 in the Region. This cluster is expected to grow 22 percent, adding 1,011 jobs in the next ten years. In 2014, it had a GRP of 472 million dollars.

*Tourism*

Tourism has a large impact on the Regional economy with nearly $1.3 billion in direct visitor spending in 2015, up from 1.2 billion in 2014. The Region had a 3.4 percent growth in tourism expenditures while the state had a 4.4 percent increase in direct visitor spending. Marathon County continues to have the highest visitor spending in the Region ($336 million) and Forest County has the least amount of visitor spending ($13 million). Langlade County saw the greatest growth in visitor spending in the past year at 6.1 percent followed by Juneau (5.9%) and Adams (4.4%) Counties. Overall, all counties saw an increase in visitor spending over the past year. Roughly 44.2 percent of all tourism in the Region takes place in the North sub region. The Central sub region has the most workers in the tourism industry in 2015. The South sub region saw the greatest growth in visitor spending and was the only region to outperform the state’s one year growth in visitor spending. Overall, the Region was below the State's growth in both visitor spending and employment.

According to the US Travel Association for every $1 million in traveler spending, 12 jobs were created in Wisconsin in 2012. This means that Regional tourism expenditures of $1.11 billion in 2012 helped create 13,320 jobs in North Central Wisconsin. Although tourism related projects

![Figure 2-3: Tourism Employment](image-url)
are not typically EDA projects this sector needs to be identified in the CEDS for other sources of funding.

The Region’s tourism expenditures can be attributed to visits related to natural beauty, lakes, recreation vehicles, silent sports and hunting among a host of other things. Protection of the Region’s natural resources will help ensure the ability to attract and promote tourism throughout the Region. Threats to these natural resources include overdevelopment, such as filling in of wetlands and development in floodplains, high density shoreline development that increases run-off into lakes and rivers, pollution of lakes and rivers through phosphorus and nitrogen loading, groundwater drawdown from high capacity wells, groundwater quality degradation through soil contamination, and invasive species that reduce biodiversity and outcompete native species.

**Skills Gaps**

Skills and labor gaps are becoming increasingly prevalent problems in the current economy, employers in many industries, such as manufacturing, health care, and information technology, are having difficulty finding qualified workers to fill open positions across the country. According to the U.S. Department of Labor, there were 5.5 million unfilled jobs in 2016 and 49 percent of employers say that they are unable to fill many positions across the country. At the same time, 50 percent of college graduates are unemployed or underemployed. This has led to many initiatives across the country to solve what has been dubbed the “skills gap.”

In Wisconsin, the problem is a demographics and education gap. As the population growth slows, there are smaller high school graduating classes and it becomes crucial to educate each of these graduates in field that are relevant to employers and businesses who are struggling to find workers. Additionally, future population projections show a significant decline in the labor force over the next 25 years as baby boomers retire. The North Central Wisconsin Regional Livability Plan projects a 16,000 person labor shortage by the year 2025 if current population trends and commuting patterns continue. This labor shortage is enhanced by the migration trends described earlier in the first chapter.

Worker training programs are very important as the location mismatch between workers, relevant skills and available jobs continues to widen. Worker productivity has often been cited as one important reason for the strength of Wisconsin’s economy. Education and training are critical to maintaining that productivity, as well as keeping our Region competitive.

The state of Wisconsin and the Region’s technical colleges and universities, as well as businesses and local government entities, are taking proactive steps to educate and retain the labor force in the area, as well as attract new talent. Furthermore, programs are in place to develop talent already in the workforce. The local programs described below aim to educate future workers about opportunities in the area as well as put those unemployed back in the workforce.
At the same time unemployment levels in parts of the north central region are significantly higher than the state average, signaling the need to target the unemployed for retaining. Employment and training services for dislocated workers are primarily delivered through “Job Centers”. There are job centers located throughout the Region. These centers are one-stop resources for employers to meet their workforce needs and job seekers to get the career planning, job placement, and training services they need to obtain jobs.

Organizations such as the North Central Wisconsin Workforce Development Board and the Western Wisconsin Workforce Development Board are important to this process as well. The North Central Wisconsin Workforce Development Boards is comprised of nine of the ten counties (all except Juneau) in the North Central Region and offers workers access to training programs, business services and industry information and advocates the development, support, and coordination of an integrated service delivery system that develops a skilled workforce in the Region. The Western Wisconsin Workforce Development Board provides similar services to the region that includes Juneau County.

**Entrepreneurship**

Entrepreneurship plays an important part in the economy. Research focused on Wisconsin has demonstrated that just 29% of non-farm businesses have payroll employees, while 71% are nonemployers, sole proprietorships, or partnerships with no payroll employees. Since 2000, the number of nonemployer businesses has grown by 25% while the number of payroll businesses has declined slightly. New business start-ups create the largest share of jobs compared with businesses of any other age group, accounting for over 25% of gross job creation. 62.3% of new start-ups survive to three years of operation and 51.6% survive to five years, higher than the U.S. average. Without new firm job creation, Wisconsin would be experiencing significant job losses.

Entrepreneurship is an important part of the regional economy. Companies can generally be started by new entrepreneurs coming out of unemployment, or by those coming out of wage and salary work, school, or other labor force statuses. The share of those starting businesses out of unemployment due to necessity is higher during recession periods. Entrepreneurs can benefit from assistance, whether it is financial assistance, providing space for startups, technical assistance, connecting entrepreneurs with networks of capital and market information, maker spaces or technology labs to develop products, or training and education on running a business. These resources help to cultivate and promote a culture of entrepreneurship, and can pay dividends in job and income growth for the community.

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The demographics of entrepreneurs have changed over the past twenty years. The number of female entrepreneurs has decreased by 3.1 percentage points. A much higher proportion of entrepreneurs in 2015 are Latino, while the proportion entrepreneurs that are Black, Asian, or other races other than white have grown slightly as well. Immigrant entrepreneurs are also increasing relative to native born entrepreneurs; nearly 28 percent of all new entrepreneurs were immigrants in 2015, compared to 13.3 percent in 1996.

Resilience

According to the Economic Development Administration, resilience is defined as:

> It is becoming increasingly apparent that regional economic prosperity is linked to an area’s ability to prevent, withstand, and quickly recover from major disruptions (i.e., ‘shocks’) to its economic base. Many definitions of economic resilience limit its focus on the ability to quickly recover from a disruption. However, in the context of economic development, economic resilience becomes inclusive of three primary attributes: the ability to recover quickly from a shock, the ability to withstand a shock, and the ability to avoid the shock altogether. Establishing economic resilience in a local or regional economy requires the ability to anticipate risk, evaluate how that risk can impact key economic assets, and build a responsive capacity.

Often, the shocks and disruptions to the economic base of an area or region are manifested in three ways:

- Downturns or other significant events in the national or international economy which impact demand for locally produced goods and consumer spending;
- Downturns in particular industries that constitute a critical component of the region’s economic activity; and/or
- Other external shocks (a natural or man-made disaster, closure of a military base, exit of a major employer, etc.).

There are four components of planning for and implementing economic resilience: identify persistent economic challenges or deficiencies, prepare for disruptions by identifying “early-warning” tools, build mechanisms that create flexibility, and promote a positive vision for the region. Economic deficiencies in North Central Wisconsin can include a less educated workforce, an aging workforce, and dependence on a few industries. Some strategies to address these components include building a resilient workforce that can shift between jobs or industries through job-driven skills and support organization, promoting business continuity and preparedness to understand vulnerabilities including supply chains, and using safe development practices to reduce risks to structures caused by natural disasters and storms.
It is also important to build information networks among the private, public, and non-profit sectors so the region is prepared to respond quickly and effectively to economic shocks and disruptions. Regular communication and monitoring of business and community needs and issues can be part of a business retention and expansion strategy, and boost preparedness after an economic shock. Improving communication can encourage collaboration on common challenges across sectors. See Appendix D: Community Economic Recovery Guidebook for more information on resilience and recovering from disasters. This resource can help local communities to form an economic recovery strategy in the event of a disaster, improving the steps taken in the critical first weeks of a disaster and avoiding the negative effects. A disaster recovery strategy is a good first step in establishing a resilient region.

According to EDA, there are two commonly used ways to measure economic resilience, the degree of regional income equality, and the degree of regional economic diversification. The Gini coefficient measures inequality in a region through levels of income. A Gini coefficient of zero means that there is perfect equality (i.e. a scenario where everyone has the same income). An area with a Gini coefficient of one would occur if all the income in an economy went to one individual. Income inequality was high in the United States during the Gilded Age, but after two world wars, the introduction of high income taxes, and the Great Depression, a great amount of wealth was lost in the upper classes. As a result, the 1950s and the 1960s saw a period of high income equality. Since the 1970s, inequality has been on the rise. Some economists theorize that this is a result of globalization and public policy.

Higher levels of equality equate to a more cohesive response to disturbance, an element of resilience.\(^4\) Table 2.5 displays the Gini coefficient for the 10 counties in the North Central Region, which the U.S. Census Bureau started calculating in 2010 for this Region. Note that the North Central Region has lower income inequality than Wisconsin and the United States. However, given that there are only a few years of data, there is uncertainty of the direction of income inequality in the Region.

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### Table 2.5: Regional Gini Coefficients

<table>
<thead>
<tr>
<th>County</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams</td>
<td>0.4</td>
<td>0.4</td>
<td>0.38</td>
<td>0.38</td>
<td>0.40</td>
</tr>
<tr>
<td>Forest</td>
<td>0.44</td>
<td>0.44</td>
<td>0.41</td>
<td>0.4</td>
<td>0.41</td>
</tr>
<tr>
<td>Juneau</td>
<td>0.41</td>
<td>0.42</td>
<td>0.42</td>
<td>0.43</td>
<td>0.41</td>
</tr>
<tr>
<td>Langlade</td>
<td>0.41</td>
<td>0.4</td>
<td>0.42</td>
<td>0.43</td>
<td>0.43</td>
</tr>
<tr>
<td>Lincoln</td>
<td>0.39</td>
<td>0.38</td>
<td>0.39</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Marathon</td>
<td>0.4</td>
<td>0.41</td>
<td>0.42</td>
<td>0.43</td>
<td>0.43</td>
</tr>
<tr>
<td>Oneida</td>
<td>0.44</td>
<td>0.43</td>
<td>0.43</td>
<td>0.44</td>
<td>0.43</td>
</tr>
<tr>
<td>Portage</td>
<td>0.42</td>
<td>0.42</td>
<td>0.43</td>
<td>0.42</td>
<td>0.42</td>
</tr>
<tr>
<td>Vilas</td>
<td>0.44</td>
<td>0.44</td>
<td>0.44</td>
<td>0.44</td>
<td>0.44</td>
</tr>
<tr>
<td>Wood</td>
<td>0.41</td>
<td>0.41</td>
<td>0.41</td>
<td>0.42</td>
<td>0.42</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>0.43</td>
<td>0.43</td>
<td>0.43</td>
<td>0.44</td>
<td>0.44</td>
</tr>
<tr>
<td>United States</td>
<td>0.47</td>
<td>0.47</td>
<td>0.47</td>
<td>0.47</td>
<td>0.48</td>
</tr>
</tbody>
</table>

Source: ACS 2010-2014

According to the Building Resilient Region program at the University of California Berkeley, metropolitan statistical areas (MSAs) in the Northeast and the Midwest regions tend to have Very High, or Medium resilience capacity. Of the 12 MSAs in Wisconsin, 10 were ranked as having “very high” resilience, including the Wausau MSA. Regions in the Midwest generally earn high scores in regional affordability, health-insured, homeownership, and metropolitan stability.

The Wausau Metropolitan Statistical Area is the only MSA in the North Central Wisconsin Region. It scored 27th out of 361 MSAs in the country overall on the Regional Capacity Index. It scored particularly well in regional affordability (19/361), out of poverty (49/361), homeownership (25/361), and voter participation (28/361). The Wausau MSA scored low in economic diversity (296/361) and educational attainment (164/361).

Other resilience strategies focus on natural resources. The North Central Wisconsin Region has valuable natural resources that are important to the resilience of the region. The region has high concentrations of industries that are dependent on natural resources, including agriculture, forestry, and tourism. Natural areas also protect against the effects of strong storms and other natural disasters. For example, floodplains provide space for flood waters, wetlands slow, capture and filter stormwater and runoff, and trees provide a natural shield against wind.

Due to the dependency on natural resources for many industries in North Central Wisconsin, there are some threats to these resources that must be considered and mitigated to have a resilient region. Invasive species, such as Emerald Ash Borer, Oak Wilt, Japanese Beetles, Dutch Elm Disease, Japanese Knotweed, Reed Canary Grass, and Buckthorn (among many others) threaten the biodiversity of the region. These invasive species have the potential to devastate native and landscaped areas, including high value parks and natural areas, reducing their habitat value and
recreational value. Maintaining diverse habitats and landscaped areas can reduce the negative effect of any single invasive species or pest.

Another threat to natural resources in the region is the reduction of surface water and groundwater quality or quantity. For example, the soil and aquifer characteristics of the central sands area makes it vulnerable to well drawdown by high capacity wells, and some research has shown this is already affecting surface water availability in areas such as the Little Plover River.\textsuperscript{5} There is currently a modeling tool being developed that will allow better decision making regarding wells. The agriculture and recreation industries are both important to the region, so it is important to manage local water resources appropriately.

Water contamination is a potential issue in the North Central Wisconsin Region. Non-metallic mines, industrial activities, and runoff from urban and agricultural land uses all have the potential to impact groundwater and surface water quality. For example, the Wisconsin River is currently undergoing the process for a Total Maximum Daily Load (TMDL) under the Clean Water Act, which will restrict phosphorus levels. These restrictions can make treatment of discharge more costly, and the result of the pollution negatively impacts the recreational value of the river and damages the river ecosystem. The region has numerous outstanding resource waters and exceptional resource waters, which serve important natural functions, as well as a number of impaired waters with degraded water quality.

**Future Employment Projections**

Using projections created by Economic Modeling Specialists International (EMSI), the North Central Wisconsin region is expected to increase employment by approximately 15,282 jobs, or eight percent between 2015 and 2025. These projections use past trends and anticipated demographic and economic changes to estimate the change in employment by industry into the future. Unanticipated events affect the accuracy of projections. Health Care and Social Assistance is projected to grow by the most jobs, approximately 3,466, or 12 percent. Real Estate Rental and Leasing is expected to grow the fastest, at a 27 percent growth rate, or 327 jobs. Other high growth industries that are expected to grow by more than 1,000 jobs between 2015 and 2025 include Administrative and Support and Waste Management and Remediation Services, Finance and Insurance, Construction, Accommodation and Food Service, and Transportation and Warehousing. Table 2.6 shows projections for all two digit NAICS codes.

Table 2.6: Employment Projections by Industry, North Central Wisconsin

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Crop and Animal Production</td>
<td>4,031</td>
<td>4,322</td>
<td>291</td>
<td>7%</td>
</tr>
<tr>
<td>21</td>
<td>Mining, Quarrying, and Oil and Gas Extraction</td>
<td>169</td>
<td>212</td>
<td>43</td>
<td>25%</td>
</tr>
<tr>
<td>22</td>
<td>Utilities</td>
<td>703</td>
<td>707</td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td>23</td>
<td>Construction</td>
<td>7,014</td>
<td>8,371</td>
<td>1,357</td>
<td>19%</td>
</tr>
<tr>
<td>31</td>
<td>Manufacturing</td>
<td>34,424</td>
<td>35,352</td>
<td>928</td>
<td>3%</td>
</tr>
<tr>
<td>42</td>
<td>Wholesale Trade</td>
<td>8,132</td>
<td>8,617</td>
<td>485</td>
<td>6%</td>
</tr>
<tr>
<td>44</td>
<td>Retail Trade</td>
<td>26,387</td>
<td>27,104</td>
<td>717</td>
<td>3%</td>
</tr>
<tr>
<td>48</td>
<td>Transportation and Warehousing</td>
<td>9,393</td>
<td>11,218</td>
<td>1,825</td>
<td>19%</td>
</tr>
<tr>
<td>51</td>
<td>Information</td>
<td>2,473</td>
<td>2,577</td>
<td>104</td>
<td>4%</td>
</tr>
<tr>
<td>52</td>
<td>Finance and Insurance</td>
<td>11,643</td>
<td>12,865</td>
<td>1,222</td>
<td>10%</td>
</tr>
<tr>
<td>53</td>
<td>Real Estate and Rental and Leasing</td>
<td>1,221</td>
<td>1,548</td>
<td>327</td>
<td>27%</td>
</tr>
<tr>
<td>54</td>
<td>Professional, Scientific, and Technical Services</td>
<td>4,355</td>
<td>5,116</td>
<td>761</td>
<td>17%</td>
</tr>
<tr>
<td>55</td>
<td>Management of Companies and Enterprises</td>
<td>2,600</td>
<td>3,252</td>
<td>652</td>
<td>25%</td>
</tr>
<tr>
<td>56</td>
<td>Administrative and Support and Waste Services</td>
<td>5,110</td>
<td>6,231</td>
<td>1,121</td>
<td>22%</td>
</tr>
<tr>
<td>61</td>
<td>Educational Services</td>
<td>518</td>
<td>646</td>
<td>128</td>
<td>25%</td>
</tr>
<tr>
<td>62</td>
<td>Health Care and Social Assistance</td>
<td>28,296</td>
<td>31,762</td>
<td>3,466</td>
<td>12%</td>
</tr>
<tr>
<td>71</td>
<td>Arts, Entertainment, and Recreation</td>
<td>1,985</td>
<td>2,111</td>
<td>126</td>
<td>6%</td>
</tr>
<tr>
<td>72</td>
<td>Accommodation and Food Services</td>
<td>16,981</td>
<td>18,791</td>
<td>1,810</td>
<td>11%</td>
</tr>
<tr>
<td>81</td>
<td>Other Services (except Public Administration)</td>
<td>5,859</td>
<td>5,864</td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>90</td>
<td>Government</td>
<td>28,607</td>
<td>28,516</td>
<td>-91</td>
<td>-0%</td>
</tr>
<tr>
<td>99</td>
<td>Unclassified Industry</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>199,902</td>
<td>215,184</td>
<td>15,282</td>
<td>8%</td>
</tr>
</tbody>
</table>

Source: Economic Modeling Specialists International 2016

In addition to job growth, there are a large number of job openings expected due to retiring workers. According to EMSI, approximately 38,300 workers are between 55 and 64, and 9,089 workers are 65 or older. Many of these workers are expected to retire within the next 10 years, creating many more job openings due to retirement. The declining labor force participation rate, growth in retirements, and job growth combine to indicate a labor shortage is possible in the near future in the North Central Wisconsin Region.
Chapter 3: Regional Infrastructure

Adequate public and private infrastructure and transportation systems are essential for community businesses to grow and thrive. These structures and facilities include the transportation network of roads, rail and other means of moving people and goods, as well as the public and private utility systems for water and sewer, power, and telecommunications. The availability of industrial and business park space as well as sites for redevelopment are also identified in this chapter.

Transportation

Road Network

The Regional surface transportation network is comprised of federal, state, county and local roadways. The inventory covers over 18,500 miles of road, including 445 miles of Interstate and U.S. highways, 1,211 miles of state highways, 2,843 miles of county highways and 13,036 miles of local streets and roads. There is also nearly 1,000 miles of other miscellaneous roads, which are forest roads, fire lanes, and other roads not used for general travel purposes. Where jurisdictions overlap, the mileage is counted toward the higher class to avoid overstating the total miles of pavement within the system. See Map 3 (page 85).

Interstate and Federal Highways

The Region is served by Interstates 39 and 90/94 and several U.S. Highways (USH): 51, 45, 12, 10 and 8. These serve as principal arterial roads with the exception of USH 12 that parallels I-90/94 across the extreme southwestern corner of the Region through Juneau County and the City of Mauston. Due to its proximity to I-90/94, USH 12 serves as a two-lane minor arterial and alternate route for the interstate.

Other major East-West connections include USH 10 through Portage and Wood Counties, which connects Stevens Point and Marshfield, and USH 8 through Forest, Oneida and Lincoln Counties, connecting the City of Rhinelander and other Northwoods communities to the Twin Cities. Currently, USH 8 is a two-lane facility with a four-lane bypass at Rhinelander, and USH 10 has four-lane from the Fox Cities to Marshfield.

Major North-South routes include USH 51/I-39 and USH 45. USH 51/I-39 is the major north-south artery connecting the Northwoods, Wausau, Stevens Point and the rest of the Region with I-90/94 and Madison, Milwaukee and Chicago. North of Tomahawk, USH 51 is two-lane through Oneida County, expands to four at Minocqua and back to two through western Vilas County. WisDOT has long-term plans to expand USH 51 to four-lanes to Minocqua. USH 45 parallels USH 51 with two-lanes flowing through Langlade County widening to four-lane through Antigo, eastern Oneida County, and Eagle River and Vilas County.
State Highway System

The Region is also served by a number of state trunk highways (STH). These are primarily two-lane routes with some four-lane urban sections that serve as minor arterials. Two significant exceptions include STHs 29 and 54. STH 29 is a major four-lane east-west principal arterial for the Region, traversing Marathon County and intersecting with I-39/USH 51 at Wausau. The major section of STH 54 is a four-lane connecting Wisconsin Rapids to Interstate 39 and Stevens Point.

Major east-west connections include STH 70 across northern Forest and Oneida Counties and southern Vilas County through Eagle River; STH 64 through Langlade and Lincoln Counties including the Cities of Antigo and Merrill; and STHs 21 and 82 across Adams and Juneau Counties.

Major north-south routes include STHs 13, 34, 55, 47, 80 and 97. STH 13 runs between I-90/94, at Wisconsin Dells just below the southern boundary of the Region, and places in North Central Wisconsin without good interstate access. The Cities of Wisconsin Rapids and Marshfield are served by STH 13. STH 34 runs between USH 10 and I-39 at Knowlton. STH 80 runs through Juneau and Wood Counties (from STH 13). STH 55 carries traffic through Langlade County, Forest County and the City of Crandon. STH 47 Connects Menasha in Winnebago County to USH 51 in Manitowish in Vilas County, routing through Langlade and Oneida Counties. STH 97 connects the City of Marshfield and STH 66 near Goodrich, linking Marshfield with STH 29.

The Region's highways are a significant component of freight flow supporting the Region's economy. The principal truck routes within the Region are primarily U.S. and state highways linking the Region's main economic centers with the rest of the state and the nation. Local truck routes often branch out from these major corridors to link local industry with the main truck routes as well as for the distribution of commodities within the local area. Mapping these local routes is beyond the scope of this study, and local issues such as safety, weight restriction and noise impacts play significant roles in the designation of local truck routes.

Road conditions have been deteriorating across the Region as local road aids have declined and the ability for local governments to raise revenue for transportation is limited. Local economic development organizations have experienced the negative impact that these road conditions have on business.

County and Local Roads

An extensive network of county trunk highways (CTH) connects the Region's rural areas. These are classified as collector roads, and they serve as major traffic collectors from rural land uses and distribute the traffic to the arterial system. County trunk highways serve an important role in linking the Region's agricultural and forestry resources to the Region's cities and major highways. In addition, local roads, including municipal streets and town roads, provide access to local land uses like residential, commercial/industrial, and recreational areas.
Bicycle and Pedestrian Transportation

Bicycle and pedestrian trails and connections are important both for transportation and for quality of life improvements that help to attract employers and workers to the region. Employers increasingly recognize that networks for active transportation and recreation help in attracting the workforce, and according to surveys, many residents of our region bicycle or walk to save money on transportation, reduce the stress of their commute, or spend quality time with their families.

Transit

Public transit within the Region is comprised of fixed-route urban bus systems, demand response bus systems and shared-ride taxi services. The cities of Stevens Point and Wausau operate fixed-route bus systems including a paratransit component. The City of Merrill operates a demand-response bus system. Rural transit systems are operated by Lac du Flambeau, Menominee, and Northwoods Transit. The Village of Plover and the cities of Marshfield, Mauston, Rhinelander and Wisconsin Rapids all subsidize shared-ride taxi services. These taxi services also make accommodations for disabled riders. In addition to regular public transit, specialized transit services for the elderly and disabled are provided by each county in the Region. Other specialized transportation operations providing service throughout the area, based at medical and private care facilities, as well as social service agencies that provide various services for targeted populations.

Intercity bus service is available to Mosinee, Marshfield, Mauston, Stevens Point, Wausau, and Weston. Service is provided by Greyhound and Lamers Bus Lines. Connections can be made to Minneapolis, Chicago and points nationwide.

Airports

Airports are critical to economic development. There are 19 public use airports located in the Region, including two commercial airports. Commercial airports are located in Mosinee and Rhinelander and are critical for the continued growth for the Region. Both commercial airports have over 43,000 aviation operations annually. See Map 3.

Railroads

The rail system within the Region is made up of four rail providers, these are: Canadian National, Canadian Pacific, Tomahawk Railway, and Union Pacific. See Map 3 (page 85).

Canadian National (CN) is the primary railroad serving the Region, reaching eight of the 10 counties. CN operates track mileage by county as follows: Forest 39 miles, Juneau 29 miles, Lincoln 40 miles, Marathon 70 miles, Oneida 47 miles, Portage 55 miles and Wood 62 miles.
Canadian Pacific Railway (CPR) parallels Interstate 90/94 across the southwest corner of the Region with about 36 miles of track in Juneau County. This railroad connects with Canadian National at New Lisbon. The track in Juneau County was obtained by Canadian Pacific when it acquired the Soo Line Railroad in 1992. Amtrak utilizes this track through Juneau County, however, there are no passenger stops located within the Region. The nearest Amtrak stations are located in Portage, Tomah and Wisconsin Dells.

The Tomahawk Railway is perhaps one of the shortest railroads in the country. Formerly part of the Marinette, Tomahawk, and Western (MT & W) Railroad, the remaining 14 mile rail line services the paper mill and hauls products to a distribution center in the City of Tomahawk, where it is off-loaded for warehousing and transfer to trucks. The Louisiana-Pacific plant is also served by this line.

The Union Pacific Railroad (UP) crosses Adams and Juneau Counties with a connection to the Canadian National at Necedah. Union Pacific has about 29 miles of track in Adams County and about 19 in Juneau. Union Pacific tracks cross the State of Wisconsin from Superior and the Twin Cities to Milwaukee and south to Chicago.

**Northwoods Rail Commission**

The need for access to reliable rail service has been identified by local leaders and businesses in parts of our Region. The decline of rail service in northern Wisconsin has had a negative impact on manufacturers and loggers in the Region. North Central Wisconsin Regional Planning Commission assisted local leaders throughout northern Wisconsin and they formed the Northwoods Rail Commission in 2012. The commission consists of Ashland, Forest, Florence, Iron, Langlade, Lincoln, Marathon, Marinette, Oconto, Oneida, Price, Rusk, and Vilas counties. In addition to those counties several other counties have expressed interest, including some located in Michigan. The mission of the Northwoods Rail Commission is to sustain and enhance safe, reliable and efficient rail service critical to the businesses, communities and economies in northern Wisconsin.

**Utilities**

**Water & Wastewater Facilities**

Water and wastewater are among the most basic and fundamental municipal services. There are 59 municipal water systems in the Region, including ten systems that did not exist in 1978. Just over half of these systems are located in the more urbanized area of the central sub-Region. Ten systems are located in Juneau County, and 16 are located in the five northern counties. See Map 4 (page 87).

Currently there are 70 municipal wastewater treatment systems in the Region. This is an increase of 12 since 1978. Over half of these systems (36) are located in the three central counties. It would be expected that a high percentage of these facilities would be located in the most urbanized areas.
Energy Facilities

The energy system within North Central Wisconsin is a combination of the Weston power plant and several hydroelectric dams. Power is distributed via a system of high voltage power lines. See Map 4 (page 87).

The Weston Power Plant site includes four separate plants that generate 525-megawatts of electricity for WPS. There is also a biomass fueled cogeneration power plant in Rothschild, collocated with a paper mill and was built to create 50-megawatts of electricity. Along the Wisconsin River there are 15 hydroelectric dams that produce electricity.

A system of high voltage lines then moves the electricity from the source out to customers throughout the Region. The high voltage power lines generally follow major roads throughout the Region and connect areas with a higher concentration of population. In addition, power is moved in and out of the Region on the national power grid.

Telecommunications

Telecommunications infrastructure is critical in the new global economy. Generally cellular service has improved in the Region, but the major concern is access and reliability of broadband service. The ability to connect to the internet for both business and personal needs is an issue throughout the region and in particular in the rural areas. In addition to economic impacts, increased levels to broadband will improve access to vital basic services such as health care, government, and financial services. Service coverage in the Region mainly follows the larger population patterns, and particularly in the case of wireless phone service, mirrors the pattern of major highways. See Map 4.

Accessibility to broadband will help create job opportunities in rural area through means such as telecommuting and will increase rates of entrepreneurial business formation in rural areas. Tourism and related industries have a considerable impact on the business makeup of the Region and these businesses would see an increase in business due to those travelers who would extend their stay because they can conduct their business from anyplace.

Much of the investment in infrastructure has been in fiber optics to bring broadband access to consumers, but what has been missing from the system is a method to bring direct access to this new network of high-volume lines directly into the home or business of the final user: the so-called “last mile”. DSL has provided a partial solution to this problem, and wireless offers the hope of bridging this gap, but at this point this last mile poses an obstacle to full broadband access for many consumers, especially in rural areas in the Region.

The development of broadband access in Wisconsin has been aided by LinkWISCONSIN which is a statewide initiative, sponsored by the Public Service Commission of Wisconsin (PSCW), to promote
the availability and sustainable adoption of broadband internet access. The goal is to bring regional leadership together around a strategy to promote both the availability and use of high-speed Internet to improve economic opportunity and quality of life. The initiative is funded through a federal grant, as well as in state matching funds and in-kind services.
Business & Industrial Parks

Business and/or industrial parks are important assets to both the local community and the Region. There are 56 identified business and/or industrial parks within the Region. The parks are essentially an area of land that has “ready-to-build” industrial/business sites. All necessary infrastructure improvements are in place to allow a business to construct and operate with minimal difficulty. Table 5 provides a summary of each business and industrial park in the Region, according to size, services, and acres available in these parks. See Map 5 (page 89).

Every county in the Region has at least one, while there are 13 in Marathon County. The majority are located in the central and south sub-regions. In all, these parks include over 7,500 acres of business and industrial land, of which 2,100 acres are open and available with infrastructure. There are an additional 600 acres that still do not have infrastructure in place.

Most of the business and industrial parks listed have a full range of utility services (water, sewer, gas, and electric) and several have rail access.

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Table 3.1 Business and Industrial Parks

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<td>80</td>
<td>80</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Hwy 45 &amp; 70</td>
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<tr>
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<td>40</td>
<td>32</td>
<td>8</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Hwy 45 &amp; 70</td>
<td></td>
</tr>
<tr>
<td>Lac du Flambeau Industrial Park</td>
<td>Lac Du Flambeau</td>
<td>60</td>
<td>60</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
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<td>78</td>
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<td>0</td>
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<td>7</td>
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<td>Y</td>
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<td>0</td>
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<td>137</td>
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<td>Y</td>
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<td>Wisconsin Rapids</td>
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<td>Y</td>
<td>Y</td>
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<td>Y</td>
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<td>61</td>
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<td>Y</td>
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Source: Websites, Airphotos, & Survey Responses
Chapter 4: Regional Integration & SWOT Analysis

Integration with State, Regional & Local Efforts

The NCWRPC recognizes that in addition to efforts and activities initiated by the EDD, collaboration and coordination with state, regional, and local economic development efforts are crucial to the full implementation of the CEDS.

Wisconsin

Be Bold Wisconsin
In 2010, Be Bold Wisconsin: The Wisconsin Competitiveness Study was completed. The study was designed to provide a non-partisan framework to transform Wisconsin’s economic development strategy, for use by “decision makers in government, academia, and industry.” The study was funded by the Wisconsin Economic Development Association (WEDA), the Wisconsin Counties Association (WCA), and Competitive Wisconsin, Inc.

Although the study was targeted at a statewide strategy, it does recognize the importance for the statewide plan to target key industries, without “overlooking the fact that particular industries may be critical to a Regional economy without being an identified driver of the state’s economy”; it went on to state that “Regional-level clusters should be interwoven into the overall Wisconsin economy development strategy.”

Wisconsin Economic Development Corporation (WEDC) Strategic Plan
The Wisconsin Economic Development Corporation, formerly the state Department of Commerce, is charged with leading Wisconsin’s economic development efforts. WEDC has recently adopted a strategic plan. NCWRPC staff has and will continue to collaborate with WEDC to ensure that the North Central Wisconsin CEDS aligns with the WEDC efforts.

Regional

Economic Development District Designation, 1980
Formal economic development planning in the Region began in 1978 when the NCWRPC produced the first Overall Economic Development Program (OEDP). The OEDP was required as part of the process to gain designation for the Region as an Economic Development District (EDD) from the U. S. Department of Commerce, Economic Development Administration. In March of 1980 the designation was granted and is maintained to this day. Adams County was not included in the original OEDP or EDD designation, but was later added in 1993. The OEDP was renamed the Comprehensive Economic Development Strategy (CEDS) in 2000.
**Regional Livability Plan, 2015**

The North Central Wisconsin Regional Planning Commission adopted the Regional Livability Plan in 2015. This plan serves as an update to the Regional Comprehensive Plan. The Regional Livability Plan identifies ways to address the Region’s opportunities and weaknesses to become more livable for all residents.

The plan addresses four areas, including economic development. Economic development issues of available labor force and employment, living wage, and broadband were identified. There were five goals for economic development in the region: 1) Ensure the future availability of a skilled and flexible workforce; 2) Support and develop a diverse economic base ensuring economic growth and resiliency; 3) Support infrastructure needed for economic development; and 4) Develop tourism and the knowledge-based economy into leading economic sectors.

**SWOT Analysis, 2016**

The Region has several economic strengths and some areas of weaknesses for economic development. Through the CEDS process and several meetings with the Ad Hoc Committee the economic strengths, weaknesses, opportunities and threats (SWOT) to the Region were identified. These are shown on the following page.
### Strengths
- Strong Manufacturing Base
- Access to quality Interstates
- Access to Regional airport
- Regional economic development effort and communication
- Innovative workforce
- Tourism
- Knowledgeable and hardworking workforce
- Competitive wages for businesses
- Lower Cost of Living
- Quality education system
- Technical, 2 year and 4 year college programs
- Access to natural resources
- Quality freshwater resources
- Quality of life/place
- Quality healthcare options
- Wealth of recreational activities
- Low state taxes for businesses
- Access to regional and municipal airports
- Active economic development organizations

### Opportunities
- Industry specific 2 year training programs
- Innovative workforce
- Creative new uses for existing infrastructure i.e. paper mills
- Emerging healthcare sector
- Better use of the Regional airport
- Access to Federal Lands timber
- Specialized manufacturing clusters
- Access to freshwater
- Natural resources and environment
- Entrepreneurial support
- Increasing number of incubators and seed accelerators
- Increase Regional collaboration
- Capitalization of educated, active retiree population
- Strong work ethic
- Municipal airports
- Amtrak stop
- Re-entry training for incarcerated
- Development opportunities for disabled
- Access to quality Interstates

### Weaknesses
- Limited broadband
- Roads limits for heavy transportation
- Unprepared future workforce
- Lack of skilled labor for specialties
- Lack of knowledge of manufacturing careers
- Distance to major markets
- Limited freight rail access in North
- High dependence on traditional manufacturing industries
- Waste disposal/solid waste issues
- Declining young population
- Aquatic/ natural and terrestrial invasive species
- Lower wages for workers
- Availability of diverse affordable housing options
- Lack of public transit

### Threats
- Slow population growth
- Shrinking workforce
- Unprepared workforce
- Low wages result in low quality workers
- Aging population
- Manufacturing dependency
- Paper manufacturing dependency
- Lack of diversity in industries
- Shortage of older woods supply
- Shrinking manufacturing workforce
- Aquatic and terrestrial invasive species
- Declining water quality
- Lack of creative industry clusters
- Decreasing population under 17 years of age
- Aging/retiring workforce
- Growing healthcare costs
- Brain drain, threat of people not moving back after receiving education
- Funding for entrepreneurial, small, and midsize businesses
Chapter 5: Economic Development Resources

The following is a brief listing of federal, state, regional and local resources and programs to assist economic development efforts in the Region. This list is only a summary of some of the programs available, and provides the most current program information. Contact NCWRPC for current information on any of the programs listed.

Federal Programs:

**Economic Development Administration (EDA)**

The EDA is part of the U.S. Department of Commerce focusing on providing financial assistance to meet the economic development needs of distressed communities. EDA works with states, regions, and communities to assist in the creation of wealth and minimize poverty using capacity-building and planning techniques as well as research grants and strategic initiatives. All EDA investments must be targeted in areas that demonstrate need or economic distress and, out of those qualifying communities; assistance is directed toward those projects that will generate long-term economic growth.

EDA's programs include:

1. Public Works Program – empowers distressed communities to revitalize, expand, or upgrade their physical infrastructure to attract new industry, encourage business expansion, diversify local economies, and generate or retain long-term, private sector jobs and investment. Examples of past investments include water and sewer facilities, industrial access roads, rail spurs, port improvements, skill-training facilities, technology related infrastructure, as well as the demolition, renovation, and construction of publicly owned facilities.

2. Economic Adjustment Program – assists state and local interests in the design and implementation of strategies to adjust or bring about a change in economy due to industrial or corporate restructuring, natural disaster, reduction in defense expenditures, depletion of natural resources, or new federal laws or requirements.

3. Technical Assistance Program – often supports feasibility studies on potential economic development projects to help fill the knowledge and information gaps that may prevent local leaders in distressed areas from making optimal decisions on economic development issues. Often these studies involve evaluations of proposals for industrial parks or business incubators. Sometimes, however, these funds may be used to sponsor conferences, develop revitalization plans, or to establish Geographic Information Systems for local planning and development purposes.
**U.S. Small Business Administration (SBA)**

The SBA provides financial, technical, and management assistance to help citizens start, run, and grow their businesses. The SBA has many programs focused primarily on making business loans and providing counseling and training programs for small businesses.

SBA’s Certified Development Company (504) Loan Program provides growing businesses with long-term, fixed-rate financing for major fixed assets, such as land and buildings. 504 loans can be used to fund land purchases and improvements, grading, street improvements, utilities, parking lots and landscaping, construction of new facilities, or modernization, renovation, or conversion of existing facilities. A Certified Development Company (CDC) is a nonprofit corporation set up to contribute to the economic development of its community. The Region utilizes the statewide Wisconsin Business Development Finance Corporation to access this program.

**U.S. Department of Agriculture, Rural Development**

USDA Rural Development provides a wide range of programs to assist in community and economic development in farm and rural areas across the nation. While the USDA’s housing, empowerment, and utility programs are beneficial to the stability of communities, it is their business and cooperative programs that are the most directly applied to economic development.

1. Business and Industry (B&I) Guaranteed Loan Program - helps create jobs and stimulates rural economies by providing financial backing for rural businesses. This program provides guarantees up to 90 percent of a loan made by a commercial lender. Loan proceeds may be used for working capital, machinery and equipment, buildings and real estate, and certain types of debt refinancing. The primary purpose is to create and maintain employment and improve the economic climate in rural communities.

2. Intermediary Relending Program (IRP) – finances business facilities and community development projects in rural areas. This is achieved through loans made by the Rural Business-Cooperative Service (RBS) to intermediaries. Intermediaries re-lend funds to ultimate recipients for business facilities or community development. Intermediaries establish revolving loan funds so collections from loans made to ultimate recipients in excess of necessary operating expenses and debt payments will be used for more loans to ultimate recipients.

3. Rural Business Enterprise Grants (RBEG) Program – available to public bodies, private nonprofit corporations, and Federally-recognized Tribal groups to finance and facilitate development of small and emerging private business enterprises located in areas outside the boundary of a city or unincorporated areas of 50,000 or more and its immediately adjacent urbanized or urbanizing area.

4. Rural Business Opportunity Grant (RBOG) – promotes sustainable economic development in rural communities with exceptional needs. This is accomplished by making grants to pay costs of
providing economic planning for rural communities, technical assistance for rural businesses, or training for rural entrepreneurs or economic development officials.

**State Programs**

**Department of Administration**

The Division of Housing, within the Department of Administration, offers a broad range of financial and technical assistance to improve and expand housing, increase affordable housing opportunities and provide services to people without housing. The variety of federal and state programs it manages benefits persons with disabilities, low and moderate income residents and homeless populations. The Division of Housing partners with local governments, homeless service providers, developers and housing organizations throughout the state to improve housing conditions for low to moderate income Wisconsin residents. It distributes over $30 million annually.

Community Development Block Grant (CDBG) – Economic Development Program: Grant funds are awarded to local governments to assist businesses to create or retain jobs for individuals with low and moderate incomes. Examples of eligible projects include: business loans to expand facilities or purchase equipment, specialized employee training, or business infrastructure projects.

Community Development Block Grant (CDBG) – Public Facilities: These funds help support infrastructure and facility projects for communities. Some examples of eligible projects include streets, drainage systems, water and sewer systems, sidewalks, and community centers.

Community Development Block Grant (CDBG) – Planning Program: These grant funds support community efforts to address improving community opportunities and vitality. Grants are limited to projects that, if implemented, would meet a CDBG National Objective.

Community Development Block Grant (CDBG) – Affordable Housing Funds: These grant funds help communities improve and expand the supply of affordable housing for low- and moderate-income families. Eligible activities include housing rehab, homeownership assistance, and acquisition, demolition, or site improvements for construction of affordable housing.

Community Development Block Grant (CDBG) -- Emergency Assistance (EAP) Funds: This grant fund program assists communities that are working to recover from a recent natural or manmade disaster. Eligible activities include: repair of disaster-related damage to dwellings, assistance to purchase replacement dwellings, and repair and restoration of public infrastructure and facilities.

Customized Labor Training (CLT): The CLT program can provide grants to help cover a portion of the costs associated with training employees on new technologies, industrial skills or manufacturing processes. Eligibility is typically limited to those companies that are making capital investments new technologies that subsequently necessitate the training of existing or new employees.
Economic Development Tax Credits/Job Tax Credits: Tax credits for companies remaining, expanding or relocating.

**Wisconsin Economic Development Corporation**

The Wisconsin Economic Development Corporation is the state’s primary department for the delivery of integrated services to businesses. Their purpose is to 1) foster retention of and creation of new jobs and investment opportunities in Wisconsin; 2) foster and promote economic business, export, and community development; and 3) promote the public health, safety, and welfare through effective and efficient regulations, education, and enforcement.

Brownfield Grants: Grants to local governments, businesses, non-profits and individuals for developing commercial and industrial sites that have been adversely affected by environmental contamination.

Brownfield Site Assessment Grant: Grant funds to approved projects to assist local governments with conducting initial environment assessment and demolition activities on an eligible abandon, idle, or underutilized industrial or commercial site.

Business Opportunity Loan Fund: Financing options ranging from loans to loan guaranties for businesses making investments to expand in or relocate to Wisconsin.

Workforce Training Grants: Developed to assist businesses in workforce retention and expansion into new markets and technology, training grants provide funds to businesses planning to upgrade or improve the job-related skills of its full-time employees.

Idle Industrial Sites redevelopment Program: Highly competitive program offering grants to Wisconsin communities for the implementation of redevelopment plans for large industrial sites that have been idle, abandon, or underutilized for at least five years.

Impact Loan Program:Forgivable loans to businesses with expansion projects providing job creation or retention; capital investment; and significant impact.

The Industrial Revenue Bond (IRB) Program: The IRB program involves an allocation of Federal tax-exempt status on bonds that will be issued by a business to finance an expansion project. By classifying the bonds as tax exempt, the company is able to offer the bonds at a reduced interest rate. Although this program is heavily utilized, its use is limited to small and mid-size manufacturers with strong financial statements.

*Enterprise Zone Program:* The State of Wisconsin provides tax incentives to new or expanding businesses whose projects will affect distressed areas. The zone is "site specific" and applies to only
Projects must affect distressed areas suffering from high unemployment, low incomes, declining population, declining property values, and plant closings and that have high numbers of people on public assistance. Businesses earn credits only by creating new full-time jobs or by conducting environmental remediation on a "Brownfield" site. The Region currently has four designated enterprise zones and all are located in the central sub-region. They are: Renaissance Learning in Wisconsin Rapids; Award Flooring, and Marathon Electric in Wausau; and Lands’ End in Stevens Point.

Capacity Building Grants: Grants to assist local and Regional economic development groups to create an advanced economic development network within the state.

Certified Sites Program: Consistent standards developed for Wisconsin sites consisting of at least 50 contiguous, developable acres signaling that key approvals, documentations and assessments for industrial uses are already in place.

Capital Catalyst Program: Grants to local organizations that contribute matching dollars to locally-managed seed fund for investments in high-growth, technology-based companies.

Qualified New Business Venture (QNBV): Early stage businesses developing innovative products, processes or services may be designated as QNBVs by the Wisconsin Economic Development Corporation (WEDC). This designation allows eligible angel investors and qualified venture capital funds to receive a tax credit based on their equity investment.

Technology Development Loan Program: Flexible lending program designed to assist high-tech startup and emerging growth companies in financing the development and launch of innovative products and services.

Seed Accelerator Program: Grants to local organizations that operate mentor-driven business modeling training programs to provide funds to participating start-ups.

Export Technical Assistance: Assistance to expand the sale of Wisconsin-made products outside of the United States and to help companies develop an export strategy.

ExportTech: Export acceleration program to help Wisconsin companies expand their global market reach through targeted export strategy development and execution.

Global Business Development Grants: Grant funding to support the growth and expansion of exports by Wisconsin companies.

Main Street Program: This program helps communities organize to revitalize their downtowns. The Main Street program promotes a four-pronged approach of: organization, promotion, design, and
economic restructuring. State assistance includes training for community-based program managers, workshops, on-site visits, and on-going technical support.

Community Investment Grant Program: The Community Development Investment Grant Program will support redevelopment efforts by providing financial incentives for shovel-ready projects with emphasis on, but not limited to, downtown community driven efforts. Successful recipients will demonstrate significant, measurable benefits in job opportunities, property values and/or leveraged investment by local and private partners.

**Wisconsin Department of Workforce Development (DWD)**
DWD offers programs in vocational rehabilitation, employee training, child care establishment, and adult apprenticeship programs in construction, services, and industrial/manufacturing activities, among others.

**Wisconsin Department of Natural Resources (DNR), Bureau of Remediation and Redevelopment**
The DNR provides a comprehensive and new streamlined program that consolidates state and federal cleanups into one program (e.g., hazardous waste cleanup, underground storage tank investigation & cleanup, spill response, state-funded clean ups, and Brownfield sites). Assistance is also provided to businesses seeking to clean up and re-use existing Brownfield sites for commercial, public or green space uses. The DNR also inventories Brownfield sites through their Tracking System (BRRTS) and Geographic Information (GIS) registry. These databases connect to statewide information about contaminated sites, spills, cleanups and other data.

**Board of Commissioners of Public Lands - BCPL State Trust Fund Loan Program**
**Wisconsin Housing and Economic Development Authority (WHEDA)**
WHEDA is responsible for a number of housing and economic development functions. WHEDA works with local and state economic development professionals, businesses, and lending institutions to help an individual expand or modernize a farm or business. Loan Guarantees, direct loans, New Market Tax Credits, and interest rate subsidies are utilized within a financial package to help ensure that the project has the best chance for long term success.

**WisDOT - “Transportation Economic Assistance (TEA)” Program**

*Other state resources include:*
Impact Seven, Inc., is one of more recognizable statewide organizations that provide micro-loans for small business start-ups and expansions (Source: www.impactseven.org) The Wisconsin Women’s Business Initiative Corporation (WWBIC) also provides micro-loans to predominately women, people of color, and those with lower incomes (Source: www.wwbic.com). The Wisconsin Business Development Finance Corporation provides financial assistance and resources to business and lenders throughout the state (Source: www.wbd.org).
Regional Programs

North Central Wisconsin Regional Planning Commission (NCWRPC)
The North Central Wisconsin Regional Planning Commission is a designated Economic Development District (EDD) by the U.S. Department of Commerce, Economic Development Administration. Under this designation, the Commission maintains a continuous process of planning assistance that supports the formulation and implementation of economic development programs designed to create or retain full-time permanent jobs and income. The NCWRPC provides services such as: economic research, marketing, financial packaging, evaluation and analysis of public infrastructure needs that support private economic development activity, and works with local units of government to maintain eligibility for certain grants.

North Central Wisconsin Development Corporation (NCWDC)
The North Central Wisconsin Development Corporation (NCWDC) is a Regional organization created for the purpose of managing a two Regional revolving loan funds. Currently businesses in the following counties are eligible: Adams, Forest, Juneau, Langlade, Lincoln, Marathon, Oneida, Portage, Vilas, and Wood. The NCWDC is a non-profit organization and is staffed by NCWRPC. One fund was funded by USDA - Rural Development using the Intermediary Relending Program (IRP) and the other was funded by a grant from HUD.

Small Business Development Centers
The Wisconsin Small Business Development Centers (WSBDCs) The Wisconsin Small Business Development Center Network (WSBDC) includes 12 business assistance centers and three specialty service centers for small businesses and entrepreneurs. Associated with four year campuses of the University of Wisconsin system, the WSBDC assistance centers provide free one-on-one counseling and moderately-priced training programs designed to promote local entrepreneurship and small business growth.

North Central Wisconsin Workforce Development Board (NCWWDB)
North Central Wisconsin Workforce Development Board (NCWWDB) is a public/private partnership between government and business that plans, administers and coordinates Workforce Investment Act (WIA) employment and training programs in the nine counties of Adams, Forest, Langlade, Lincoln, Marathon, Oneida, Portage, Vilas, and Wood. This region is known as Workforce Development Area 6. The NCWWDB purpose is to provide policy, planning, oversight and funding for local workforce development programs and address workforce issues as they emerge within our region.

Central Wisconsin Economic Development (CWED)
County and local CDBG funded revolving loan funds from Adams, Forest, Lincoln, Marathon, Portage, Vilas and Wood Counties, and many local communities in those counties have consolidated their funds into one managed fund. By regionalizing the funds, numerous benefits have resulted.
including removal of some limiting federal regulations. A board of directors was established to provide general oversight. Local loan review committees work at the local level to lend these funds.

**Centergy**
Centergy serves a diverse five-county region, with a wide range of progressive, innovative businesses and industries — most notable are advanced manufacturing, emerging sustainable and bio-based technologies, and leading health care. Centergy is a non-profit organization comprising a variety of businesses, Chambers, CVBs, organizations and individuals, working together to improve the region’s business climate and civic infrastructure. Collaboration with our partnering entities provides effective synergy.

**Grow North**
Grow North is a volunteer private/public organization dedicated to the economic development in the five counties of northern Wisconsin. Recently Florence, Marinette, and Oconto Counties have joined the organization. Grow North is a membership driven organization whose partners recognize the importance and value of collaboration to ensure that the Grow North region remains competitive in the global economy.

**Higher Education**

- **University of Wisconsin-Marathon County**
  - Bachelors Applied Arts and Sciences (BAAS): This program is meant to help businesses develop the talent that they already have. The program is designed for adult learners who have already earned an associate degree from UW Colleges or a Wisconsin technical college to earn a BAAS. This degree can be completed in two years.
  - See Health Care and Social Assistance for more information on medial training initiatives.

- **Northcentral Technical College**
  - During the 2015-2016 school year, NTC enrolled 23 percent of the 2015 high school graduates in its district. 36 percent of the 2013 high school graduating class had enrolled within three years of graduating as well. In 2015, the college graduated 1,820 students in over 50 programs.
  - **Engineering Degrees:** A pact was made between NTC and Michigan Technological University in Houghton which allows a Northcentral graduate with an associate’s degree in electromechanical technology to attend Michigan Tech and earn a Bachelor’s degree in electrical engineering.
  - **Agricultural Center of Excellence:** Opened in 2011, this campus is just a few miles outside of Wausau. At the center, students can choose from four areas of study: veterinary science, agribusiness, dairy science and agequipment technician. 220 students a year attend this center for college or vocational certifications. The campus also serves as a center for adulating learning and continuing education.
• **Wood Technology Center of Excellence:** Located in Antigo, the Wood programs offered are unique to the region. NTC offers three different program options for students interested in exploring a career within the wood technology field: Wood Processes Associate Degree, Wood Technology Technical Diploma, and Basic Wood Manufacturing Certificate.

• **Public Safety Center of Excellence:** The 36-acre site is located 15 minutes north of the NTC Wausau campus in the City of Merrill, a natural environment suitable for multiple uses, including water rescue and wilderness training. The comprehensive training complex, which serves both NTC program students and those seeking continuing education training, includes many state-of-the-art facilities designed to give students both classroom experience and real world skills for law enforcement, emergency medical services, fire/rescue, emergency management, and general education.

• **School-to Career Partnership:** This is a collaborative effort with the NTC area school districts and local businesses to help primary and secondary students develop a pathway from education to employment. This partnership has produced or supported a variety of programs in the area, including:
  o **DWD High School Pupil Academy:** This program is funded by the Wisconsin Fast Forwards-Blueprint for Prosperity grant funds. The program is meant to reduce technical college wait lists in high-demand fields, enhance employment opportunities for persons with disabilities and support collaborative school to work projects by offering college credits in a certain field. NTC offered High School Pupil Academy for students to obtain a Gas Metal Arc Welding Technical Diploma, Nursing Assistant Technical Diploma, or IT CompTIA A+ certification. In 2015, there were 60 High School Pupil Academy Completers in 18 participating high schools.
  o **Youth Apprenticeship Program:** This is a rigorous one or two year elective statewide program for high school juniors and seniors. It combines academic and technical classroom instruction with mentored, paid, on-the-job learning that makes a real-world connection for students. 27 schools participated in NTC apprenticeship program which had 331 student apprentices. 80 percent of surveyed students reported they were offered continued employment with their youth Apprenticeship employer.
  o **Dual Credit Program:** The Dual Credit Program allows high school students to earn both high school and college credit. Courses are taught by high school instructors using NTC curriculum. During the 2015-16 school year, 2,056 students at 26 different high schools completed 3,015 courses at a tuition value of $1.2 million at no cost to the students or the high schools. Two other programs, Youth Options and Course Options, allow high school juniors and seniors to take courses at NTC for dual credit as well.
  o Lastly, a variety of NTC student activities gave primary and secondary students opportunities to get hands-on experience exploring NTC program options and prepare for a future career. 4,968 students participated in events during the 2015-16 school year, including the 8th Grade Career Fair and the Heavy Metal Tour:
- **The Heavy Metal Tour**: Developed in 2011, this is an annual event is a collaboration between the North Central Wisconsin Workforce Development Board in partnership with Mid-State Technical College, Nicolet Technical College and Northcentral Technical College, as well as support from the Central Wisconsin Metal Manufacturers Alliance (CWIMMA), the Portage County Business Council and fellow regional chambers. In 2015, 4,000 eighth graders through the North Central Wisconsin ten-county region experienced the many innovative career opportunities in manufacturing at over 60 different businesses. The Heavy Metal Tour is a unique solution that seeks to provide knowledge on jobs in the area for young adults as they choose their career paths.

- **UW Systems**
  - **UW Flexible Option**: This option was created for working adults with college credits or significant work experience to earn a UW degree through a competency based online format. This makes a degree more affordable and allows student to progress at their pace. With this option, students make progress by passing assessments-tests, papers, and other projects-to prove competency in a number of subjects. An Associate of Arts and Science or Bachelors’ degrees in Diagnostic Imaging, Information Science and Technology, and Nursing (BSN from a RN) can be earned through this program, as well as several other certificates.
  - **Seamless transfer**: The seamless transfer college credits between the UW-System universities as well as the two year campuses began in the 1990s. This credit-transfer guarantee makes UWMC more attractive and affordable to students. The Wisconsin Technical Colleges have forged a similar agreement with the UW system in 2014, which allowed students to transfer up to 48 core general-education credits between the two systems.

- **Windows to Work**: This initiative takes place in Wood County. It focuses on working with inmates located in Wood County Jail to increase general work skills, explain work expectations, teach financial literacy, educate about community resources, and provide job seeking and applications/resume services. It works with offenders prior to their release and up to one year post release.

**County & Local Programs**

Nine of the ten of the counties within the Region have full-time economic development organizations. These corporations were created to assist local economic development activities throughout the Region.
The nine staffed countywide development corporations are Adams County Rural & Industrial Commission, Forest County Economic Development Partnership, Juneau County Economic Development Corporation, Langlade County Economic Development Corporation, Lincoln County Economic Development Corporation, Marathon County Economic Development Corporation, Oneida County Economic Development Corporation, Portage County Business Council, and Vilas County Economic Development Corporation.

In addition to those countywide organizations listed above, many individual communities have their own development groups; some are associated with chambers of commerce, while others are local development or redevelopment corporations/authorities.

Financial assistance available at the county & municipal level includes revolving loan funds, tax incremental financing, among others. Contact your local development corporation for more information.
Chapter 6: Regional Strategy

The following goals and objectives set forth the Regional Strategy for North Central Wisconsin. There is also a discussion of the various performance indicators that will be used to gauge progress toward the strategy. Finally, an Action Plan is detailed for the efforts of the North Central Wisconsin Regional Planning Commission. Much of this work requires collaboration and partnerships with the various economic development organizations, state and federal agencies, local and county governments and the business community of the Region.

Goals and Objectives:

Goal 1:
Encourage business retention and expansion to maintain and increase employment opportunities in the Region.

Objectives:
1. Expand communication and visit regularly with existing businesses to identify opportunities and challenges.
2. Improve the Region’s competitiveness by assessing and leveraging industry clusters.
3. Educate businesses on different grant and funding opportunities available.
4. Encourage and promote business education on exporting opportunities.

Goal 2:
Create an innovative and entrepreneurially supportive environment.

Objectives:
1. Diversify the Region’s economy by fostering the development of emerging industry sectors.
2. Identify, create and promote programs, activities, and policies fostering innovation and new business reducing the risk for entrepreneurs.
3. Identify and grow angel and venture capital investments.
4. Promote a culture of entrepreneurial and innovative business development.
5. Promote and encourage the development of new business incubators throughout the Region.
6. Develop the connection between the creative industries and economic development.
7. Identify “place-making” opportunities to improve public spaces.
8. Establish a link between educational institutions and business development.
9. Support start-up and small businesses with training, market research, financial assistance, strategic planning and other assistance.
Goal 3:
Promote and attract new business to the Region.

Objectives:
1. Work with local governments, Regional partners and the state to assist with the attraction of new businesses to the area.
2. Recruit new businesses and industries that complement existing clusters, and place special emphasis on higher wage clusters.
3. Diversify the Region’s economy fostering the development of emerging and evolving industry clusters.
4. Make prudent use of government incentives to enhance business development in the Region.

Goal 4:
Encourage the reuse of existing commercial and industrial sites for more sustainable economic development.

Objectives:
1. Ensure that building and development codes and plans within the Region promote and facilitate the redevelopment of existing structures and infill development.
2. Continue to assess, remediate, and redevelop brownfield sites throughout the Region, taking full advantage of federal and state funding opportunities.
3. Work to increase the number of key, viable businesses and institutions in the downtown districts of our communities.
4. Maintain and enhance infrastructure and public facilities throughout the Region.

Goal 5:
Ensure the future availability of a skilled and flexible workforce prepared to meet the needs of both existing and emerging industries and technologies.

Objectives:
1. Work with North Central Wisconsin Workforce Development to provide training to workers of all ages and economic strata to ensure they are current in existing and emerging skills, knowledge, ability and expectations.
2. Increase the number of 4-year high school completions in the Region.
3. Increase the number of associates and 4-year degrees in the Region.
4. Develop entrepreneurial training and education at area high schools, technical colleges, and universities.
5. Work with businesses, K-12 Schools, Higher Education Schools and Workforce Development to determine and develop skill sets.
6. Enhance business-specific leadership skills in young professionals
7. Develop a plan to retain and attract a young workforce.
8. Develop a mentor program for older workers to work with new workforce.
9. Develop a training program for retiring workforce to help develop a “second career”.
10. Attract young workers to industries with high proportion of workers 55 and older, including agricultural and natural resource work.
11. Assist businesses in retaining employees, including setting appropriate expectations of jobs, enhancing employee skills, and professional development.
12. Market opportunities to become full time residents of the region to seasonal homeowners.

**Goal 6:**
*Meet the full range of business infrastructure needs with emphasis on transportation, utilities and communications.*

**Objectives:**
1. Work with WISDOT to plan for, develop and maintain the capacity of the Region’s transportation system.
2. Continue to support upgrades and repair of existing roadways.
3. Expand utility and transportation links to serve areas where they are needed for job growth.
4. Develop a reliable data infrastructure using both wireless and high speed fiber optic networks, especially in north sub region.
5. Support efforts to maintain and expand freight rail in the Region.
6. Work with Central Wisconsin Airport and the Rhinelander /Oneida County Airport to expand cargo and passenger service in the Region.
7. Explore commuter and passenger rail service to the Region.
8. Support and encourage bicycle and pedestrian transportation improvements.
10. Clarify the roles and responsibilities of each public agency and private businesses in the event of an economic shock or disruption.
11. Increase coordination between economic development agencies and emergency management agencies to: clarify and assign roles in the event of a disaster, improve utilization of communication equipment, and seek out other potential for cooperation.
Goal 7:
Improve communication between regional and county economic development, workforce development and other organizations.

Objectives:
1. Collaborate with local, county, economic development organization, surrounding regional planning commissions, state and federal agencies, as well as private business on economic development goals, objective and activities.
2. Create a unified vision of Regional growth and development needs for the Region.
3. Increase communication and collaboration at the Regional level about land use and transportation planning as it relates to economic development.
4. Coordinate economic development efforts among all entities to provide a seamless approach to maintain and diversify the Regional economy.
5. Establish and maintain partnerships to promote economic development for North Central Wisconsin.
6. Encourage collaboration between economic development and emergency management agencies to improve post disruption response.
**Regional Performance Indicators**

In an effort to monitor change over time, these ten indicators have been established. Much of this information is contained in the CEDS. These are listed in no particular order:

1. Total regional population/age by cohorts
2. Total regional employment
3. Regional employment per sector
4. Regional unemployment
5. Total regional business establishments
6. Regional Location Quotient changes/ Number of Location Quotients above 1
7. Broadband access and reliability (area change)
8. Regional education levels for high school, associates, and bachelor’s degrees
9. Acreage available for industrial/businesses development
10. Regional Per Capita & Median Household Income
11. Regional income equality (Gini Coefficient)
12. AARP Livability Index by County (See Appendix C)
Maps

Map 1: North Central Region
Map 2: North Central Sub-Regions
Map 3: Transportation
Map 4: Infrastructure and Utilities
Map 5: Business & Industrial Parks
Appendices

Appendix A: NCWRPC Work Plan

Appendix B: Regional Projects

Appendix C: AARP Livability Index Indicator

Appendix D: Community Economic Recovery Guidebook
Appendix A: NCWRPC Action Plan

The following section provides a brief summary of tasks that the NCWRPC will undertake alone or in support of members, as resources permit, to support the overall goals of the CEDS:

<table>
<thead>
<tr>
<th>Task</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepare Comprehensive Economic Development Strategy and annual performance reports.</td>
<td>Annually</td>
</tr>
<tr>
<td>Attend, at least annually, member County Economic Development Corporation’s regular meetings to provide update on NCWRPC assistance and CEDS.</td>
<td>Annually</td>
</tr>
<tr>
<td>Provide Regional demographic information using EMSI and other data to complete economic analysis</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Update County Profiles.</td>
<td>Occasionally</td>
</tr>
<tr>
<td>Assist the North Central Wisconsin Development Corporation and work with other existing loans funds in the area to support local business development.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Provide assistance to members as needed. Explore WEDC, WHEDA, DOA, EDA and other grant opportunities to complete plans/projects.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Assist local development corporation staff, county ED committees, and regional economic development groups.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Promote the retention and expansion of existing businesses.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Task</td>
<td>Timeframe</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
</tr>
<tr>
<td>Assist local communities prepare and update comprehensive plans and other related plans.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Assist preparing “downtown plans” as part of a Quality of Place effort.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Prepare feasibility studies for new business incubators, if cost sharing is available.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Assist in obtaining funding for maker spaces, fab labs, business incubators, and other resources for entrepreneurs.</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

### Goal 3: Promote and attract new business to the Region.

<table>
<thead>
<tr>
<th>Task</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and identify new business grant opportunities with DOA, WEDC, WHEDA, USDA, and EDA.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Maintain inventory and map of business (industrial and commercial) acreage in the Region.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Support communities in the recruitment of new businesses to the Region.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Research and identify emerging clusters in the Region and state.</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

### Goal 4: Encourage the reuse of existing commercial and industrial sites for more sustainable economic development.

<table>
<thead>
<tr>
<th>Task</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage and assist start-up of firms in the Region.</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

Goal 2. Create an innovative and entrepreneurially supportive environment.
<table>
<thead>
<tr>
<th>Maintain inventory and map of brownfields in the Region.</th>
<th>Ongoing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assist Brownfield planning efforts to assist communities.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Work with organizations to get properties and sites listed on “Locate In Wisconsin” website.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Pursue grant opportunities from federal agencies, such as EDA, EPA and USDA.</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

**Goal 5: Ensure the future availability of a skilled and flexible workforce prepared to meet the needs of both existing and emerging industries and technologies.**

<table>
<thead>
<tr>
<th>Task</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support the efforts of and collaborate with the North Central Wisconsin Workforce Development Board, Technical Colleges, 2 and 4-year Colleges and Universities.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Provide data related to employment characteristics and needs.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Encourage educational institutions to develop training programs needed by the area’s businesses.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Encourage educational institution and job training centers to offer “second” career training options.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Working with NCWWDB, identify grant opportunities to attract and retain young professionals in the Region.</td>
<td>2018</td>
</tr>
</tbody>
</table>

**Goal 6: Meet the full range of business’ infrastructure needs with emphasis on transportation, utilities and communications.**

<table>
<thead>
<tr>
<th>Task</th>
<th>Timeframe</th>
</tr>
</thead>
</table>

North Central Wisconsin Regional Planning Commission

Appendix A: Page 95

Comprehensive Economic Development Strategy (CEDS)
<table>
<thead>
<tr>
<th>Task</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain a listing of all business/industrial parks in Region.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Suitable areas with needed infrastructure should be available for</td>
<td>Ongoing</td>
</tr>
<tr>
<td>industrial and commercial development in the Region.</td>
<td></td>
</tr>
<tr>
<td>Promote telecommunications infrastructure and other technology</td>
<td>Ongoing</td>
</tr>
<tr>
<td>development and expansion in the Region.</td>
<td></td>
</tr>
<tr>
<td>Work with CWA and Oneida Airport as needed.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Assist efforts of the Northwood Rail Commission.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Complete and assist in implementing the North Central Wisconsin</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Regional Bicycle and Pedestrian Plan.</td>
<td></td>
</tr>
<tr>
<td>Continue to assist communities with All Hazard Mitigation Plans</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Include public transit and active transportation options into local</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Comprehensive Plans</td>
<td></td>
</tr>
<tr>
<td>**Goal 7: Improve communication between Regional and county economic</td>
<td></td>
</tr>
<tr>
<td>development, workforce development and other organizations.</td>
<td></td>
</tr>
<tr>
<td>Task</td>
<td>Timeframe</td>
</tr>
<tr>
<td>Attend county economic development corporation meetings at least</td>
<td>Ongoing</td>
</tr>
<tr>
<td>once a year.</td>
<td></td>
</tr>
<tr>
<td>Attend occasional regional economic group meetings.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Attend meetings/conferences/webinars with various state and federal</td>
<td>Ongoing</td>
</tr>
<tr>
<td>agencies and other organizations.</td>
<td></td>
</tr>
<tr>
<td>Attend EDA meetings/calls/conferences.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Use an economic development email newsletter to distribute</td>
<td>Ongoing</td>
</tr>
<tr>
<td>information about opportunities and successes in the region.</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix B: Regional Projects

Table B-1: North Central Wisconsin Regional Planning Commission

#### Critical Regional Projects:

<table>
<thead>
<tr>
<th>County</th>
<th>Community</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams County</td>
<td>Adams County</td>
<td>Feasibility/Business Incubator Facility</td>
</tr>
<tr>
<td></td>
<td>Adams County</td>
<td>Complete a Resiliency Plan to develop strategies to minimize flood impacts</td>
</tr>
<tr>
<td>Forest County</td>
<td>City of Crandon</td>
<td>Expansion of Industrial Park</td>
</tr>
<tr>
<td></td>
<td>Town of Laona</td>
<td>Creation of Industrial Park</td>
</tr>
<tr>
<td></td>
<td>Forest County</td>
<td>Feasibility/Business Incubator Facility</td>
</tr>
<tr>
<td>Juneau County</td>
<td>City of Elroy</td>
<td>Development of Industrial Park</td>
</tr>
<tr>
<td></td>
<td>City of Mauston</td>
<td>Wastewater Treatment Expansion</td>
</tr>
<tr>
<td></td>
<td>City of New Lisbon</td>
<td>Expansion of Industrial Park</td>
</tr>
<tr>
<td></td>
<td>Village of Necedah</td>
<td>Industrial Park Expansion</td>
</tr>
<tr>
<td></td>
<td>Town of Lemonweir</td>
<td>Development of Woodside Sports Complex</td>
</tr>
<tr>
<td></td>
<td>Juneau County</td>
<td>Complete a Resiliency Plan to develop strategies to minimize flood impacts</td>
</tr>
<tr>
<td>Langlade County</td>
<td>City of Antigo</td>
<td>Industrial Park Expansion</td>
</tr>
<tr>
<td></td>
<td>Village of White Lake</td>
<td>Industrial Park Expansion, including sewer &amp; water extensions</td>
</tr>
<tr>
<td>Lincoln County</td>
<td>City of Merrill</td>
<td>Development of Highway 51 Corridor Business Park</td>
</tr>
<tr>
<td></td>
<td>City of Merrill</td>
<td>Feasibility/Business Incubator Facility</td>
</tr>
<tr>
<td></td>
<td>City of Tomahawk</td>
<td>Upgrade of Industrial Park</td>
</tr>
<tr>
<td>Marathon County</td>
<td>City of Mosinee</td>
<td>Expansion of Industrial Park</td>
</tr>
<tr>
<td></td>
<td>City of Wausau</td>
<td>Northcentral Technical College Transportation Center of Excellence (TATE)</td>
</tr>
<tr>
<td></td>
<td>Village of Brokaw</td>
<td>Strategy for Redevelopment of Closed Paper Mill</td>
</tr>
<tr>
<td></td>
<td>Village of Edgar</td>
<td>Development of New Industrial Park</td>
</tr>
<tr>
<td></td>
<td>Village of Spencer</td>
<td>Upgrade of Industrial Park Infrastructure</td>
</tr>
<tr>
<td>Oneida County</td>
<td>City of Rhinelander</td>
<td>Water Tower in Industrial Park</td>
</tr>
<tr>
<td></td>
<td>City of Rhinelander</td>
<td>Extended Infrastructure in Industrial Areas</td>
</tr>
<tr>
<td></td>
<td>Town of Minocqua</td>
<td>Establish a Business Park</td>
</tr>
<tr>
<td></td>
<td>Oneida County</td>
<td>Feasibility/Development of New Industrial Park</td>
</tr>
<tr>
<td></td>
<td>Oneida County</td>
<td>Feasibility/Business Incubator Facility</td>
</tr>
<tr>
<td>Portage County</td>
<td>Village of Rosholt</td>
<td>Business Park Development</td>
</tr>
<tr>
<td>Vilas County</td>
<td>City of Eagle River</td>
<td>Industrial Park Expansion</td>
</tr>
<tr>
<td></td>
<td>Lac du Flambeau</td>
<td>Downtown Development Strategy</td>
</tr>
<tr>
<td></td>
<td>Lac du Flambeau</td>
<td>Development of New Industrial Park</td>
</tr>
<tr>
<td>Wood County</td>
<td>City of Nekoosã</td>
<td>Expansion of Industrial Infrastructure</td>
</tr>
</tbody>
</table>

Updated: 1-23-2017
Appendix C: Livability Index Indicator

The Livability Score was created by AARP. The score rates the overall livability of a selected neighborhood, city, county, or state on a scale from 0 to 100. It is based on the average score of seven livability categories—housing, neighborhood, transportation, environment, health, engagement, and opportunity—which also range from 0 to 100. Communities are scored by comparing them to one another, so the average community gets a score of 50, while above-average communities score higher and below-average communities score lower.

All scoring begins at the neighborhood level. Cities, counties, and states receive a score based on the average scores of neighborhoods within their boundaries. Most communities have a range of more- or less-livable neighborhoods, but for a community to get a high score, neighborhoods throughout it need to score well. This makes it even more challenging for a city, county, or state to get a high score: the more neighborhoods there are within a given boundary, the less likely it will be that all of them have high scores.

Creating a livable community is challenging, and so is getting a high livability score. To get a perfect score of 100, a neighborhood would have to be among the best in the country in each of the seven livability categories. Scoring highly across all categories is difficult. For example, a transit-rich neighborhood has its benefits, but it can also drive up housing prices. To help that neighborhood score highly in both categories, community leaders would have to commit to ensuring affordable housing near public transit is available.

The Livability Index appendix was added to meet the need for an indicator to measure regional livability. The benefits of using the AARP Livability Index is that the organization intends to update the data annually.

<table>
<thead>
<tr>
<th>County</th>
<th>Livability Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams County</td>
<td>42</td>
</tr>
<tr>
<td>Forest County</td>
<td>53</td>
</tr>
<tr>
<td>Juneau County</td>
<td>45</td>
</tr>
<tr>
<td>Langlade County</td>
<td>54</td>
</tr>
<tr>
<td>Lincoln County</td>
<td>55</td>
</tr>
<tr>
<td>Marathon County</td>
<td>58</td>
</tr>
<tr>
<td>Oneida County</td>
<td>52</td>
</tr>
<tr>
<td>Portage County</td>
<td>56</td>
</tr>
<tr>
<td>Vilas County</td>
<td>57</td>
</tr>
<tr>
<td>Wood County</td>
<td>58</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>58</td>
</tr>
<tr>
<td>United States</td>
<td>53</td>
</tr>
</tbody>
</table>

Source: https://livabilityindex.aarp.org/
This Guide is designed for:

- Economic Development Organizations
- Civic Leaders & Elected Officials and
- Chambers of Commerce & Business Support Groups

These core stakeholders are flanked by small business owners who could be affected by disaster and by emergency managers who provide preparedness and response leadership for the community. Coordination between them is essential for stabilization and preservation of the local economy after a natural disaster.

Without an economic recovery strategy, a disaster incident can cause a micro-recession which could negatively affect your community for years. Steps taken by local leaders in the first critical weeks can make a significant difference in offsetting this detrimental side effect of an already unfortunate situation. Provided here is a framework of discussion for local business and community leaders to develop an economic recovery strategy for their own community. This manual connects disaster management functions with economic principles to identify key issues and suggested actions before and after disaster.

For ease in applying this information to each phase of the disaster timeline, information is divided into four core functions that need to be addressed. These four core functions are:

**Building Relationships**
Identifies key stakeholders and demonstrates how they work together in each phase.

**Communicating**
Provides mechanisms for key stakeholders to communicate and coordinate other efforts in the community before, during and after a disaster.

**Financing**
Identifies sources of funding or innovative financing for disasters.

**Planning & Logistics**
Describes a plan, identifying resources and anticipating how they will change in each emergency phase.

How to use this guide

These color-coded sections are designed for use in guiding your community to economic stability before, during and after major disaster events such as floods, earthquakes and tornadoes. Each section correlates to a phase in the standard Emergency Management disaster cycle. As you move though the timeline, this booklet provides specific economic tips and insights for each phase.
The Disaster Cycle & Your Economy

The disaster cycle is a tool used by emergency management (EM) professionals and applies to the health, safety, and welfare of the general public in response to both natural or man-made disaster. Community recovery after a disaster includes maintaining a healthy economy and this requires prioritizing elements which are not always as obvious as those aimed at preserving safety and health. Therefore, disaster cycle terminology is used here to frame key business sector recovery strategies and improve economic resilience.

Why?

The frequency and cost of natural disasters has increased significantly since 2000. The cost of thunderstorms alone has increased three-fold in just ten years (Munich RE.). Stabilizing local businesses is an important but often overlooked aspect of preserving and serving human interest needs. When people are able to work, they have a better chance of putting their homes and lives back together after disaster.

In many communities, no plan exists to prepare the private sector (businesses, trade associations, manufacturers and retailers) for disaster. According to the IRS, between 40% and 60% of businesses affected by disaster may ultimately close. A well-constructed recovery plan will help prevent that from happening in your community.

Response

Response encompasses the activities that address the short-term, direct effects of a catastrophic event including immediate actions to save lives and protect property, and the meeting of basic human needs before, during and after an incident. Response also includes the execution of emergency operations plans and mitigation activities designed to limit unfavorable outcomes. Typically, immediate response lasts up to 72 hours.

Recovery

After a disaster incident, it is crucial to restore government, individual/household and economic functions in the community. Recovery involves the development, coordination and implementation of operations, services, infrastructure, facilities, and programs. Immediate recovery is typically measured in weeks or months. Long-term recovery is measured in the years following an incident.

Mitigation

Hazard mitigation breaks the cycle of damage and repair. Mitigation actions are designed to reduce or eliminate the long-term risk to human life and property from hazards. These preventative actions can be simple, such as elevating a furnace in a basement that sometimes floods. Mitigation can also be a comprehensive approach that includes relocating buildings away from the floodplain or retrofitting critical facilities to provide stronger shelter.

Preparedness

Preparedness is a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination.

What is the difference between Preparedness and Mitigation?

Mitigation involves efforts to reduce risk of damages to the environment during and after a disaster (e.g. planting lines of trees to reduce the impact of dust storms; installing breakwaters to protect a harbor, land use ordinances and building codes, etc.). These are necessary long-term actions undertaken during periods of calm and stability. Preparedness, on the other hand, facilitates immediate response actions to protect life and property with the understanding that some damage will likely need to be absorbed (e.g., Continuity of Operations Plans (COOPs); training exercises; boarding up windows before hurricanes; sandbagging before a flood; evacuation, etc.).
This guide provides a framework and introduction to actions that can prepare your local economy for a disaster. It documents just the essentials. There is an accompanying website with useful interactive tools. More details, links to other references, presentations and other downloadable content are at: [http://goo.gl/ilmjv](http://goo.gl/ilmjv)

When you see a QR Code, such as the image at the right, snap a picture of it with (most) smart-phones, and the web browser on your phone will open to a specific page with more info.

**Abbreviations**

Acronyms shown here are referred to in this booklet and used by practicing professionals in the field.

- **BID** — Business Improvement District
- **BRC** — Business Recovery Center
- **BRPASW** — Business Recovery Professionals Association of Southeast Wisconsin
- **CDBG** — Community Development Block Grant / HUD
- **CDFI** — Community Development Financial Institutions
- **COOP** — Continuity of Operations Plan
- **CRS** — Community Rating System
- **CRA** — Community Reinvestment Act
- **DNR** — Department of Natural Resources
- **DOL** — Department of Labor
- **DOT** — Department of Transportation
- **DPW** — Department of Public Works
- **DWD** — Department of Workforce Development
- **ED** — Economic Development
- **EDA** — US Economic Development Administration
- **EDC** — Economic Development Corporation
- **EDO** — Economic Development Organization
- **EM** — Emergency Management
- **EOC** — Emergency Operations Center
- **EPA** — Environmental Protection Agency
- **FEMA** — Federal Emergency Management Agency
- **GIS** — Geographical Information Systems
- **HAZUS** — GIS Based Hazard Loss Model used by FEMA
- **HUD** — Housing and Urban Development
- **HMGP** — FEMA Hazard Mitigation Grant Program
- **IEDC** — International Economic Development Council
- **JFO** — Joint Field Office
- **LEARN** — Local Economic Advisory Recovery Network
- **MOU** — Memorandum of Understanding
- **NEG** — National Emergency Grant
- **NFIP** — National Flood Insurance Program
- **PIO** — Public Information Officer
- **RLF** — Revolving Loan Fund
- **RPC** — Regional Planning Commission
- **SBA** — Small Business Administration
- **SBDC** — Small Business Development Center
- **SCORE** — Service Corps of Retired Executives
- **SWCOAD** — Southeast Wisconsin Citizens and Organizations Active in Disasters
- **USDA** — United States Department of Agriculture
- **VOAD** — Volunteer Organizations Active in Disaster
- **WEDC** — Wisconsin Economic Development Corporation
- **WEM** — Wisconsin Emergency Management
- **WHEDA** — Wisconsin Housing and Economic Development Authority
- **WIB** — Workforce Investment Boards
- **WisWARN** — WI Water Agency Response Network

**Zoom in online!**

Where in the Disaster Timeline are you?
Economic Continuity and Community Resilience

It is essential for the local groups that will deal with disaster to know each other before the chaos starts. A Local Economic Advisory Recovery Network (LEARN) group is a no-cost way to ensure that lines of communication among the key players are established before the added stress of a catastrophe.

When a disaster is unfolding, it is critically important to have an accurate roster of key entities that need to communicate on economic impacts. Use the structure below to identify potential stakeholders in your community. The collective resources of these entities can then be an efficient part of economically managed outcomes. All "Action" boxes in the following pages identify suggestions the LEARN group should consider and undertake.

The listed structure represents a roster of potential participants. Communities should customize rosters to establish a balance between committee size and efficiency.
EMs focus first on health and safety, followed by critical infrastructure and services. When the Emergency Operations Center (EOC) is activated, a single point of contact from the LEARN group relays status updates and other information needed by EMs. The LEARN group is also responsible for providing economic considerations to discussions as response and immediate recovery decisions are made.

**Suggested Actions**

- Convene or create a LEARN group (page 4) to be a resource for economic recovery strategy development. Include tourism and rural development contacts where appropriate. Addressing this pre-disaster in the ‘preparedness’ stage enhances successful deployment of this group.

- The LEARN group should provide up-to-date communication channels when needed by EMs.

- Determine what damage assessment functions and tools are best suited to anticipated recovery situations. Consider, discuss and confirm how implementation will work.

- Plan on frequent meetings immediately following the disaster to update stakeholders. Demonstrate willingness to listen and integrate new information into emerging strategies.

- Make decisions collaboratively to avoid rumors, misunderstandings, or mistrust.

- Make certain that EMs are aware of compelling business distress. The LEARN group can provide additional useful information on physical damages and projected impacts.

- Access free templates for business continuity planning from preparemybusiness.org or ready.gov.

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**FAQs**

**What do Emergency Managers do?** EMs coordinate disaster response and recovery efforts in support of local governments to minimize the loss of lives and property. The Wisconsin Emergency Management (WEM) website is www.emergencymanagement.wi.gov

**What do businesses need?** Education about disaster vulnerabilities, continuity planning, special insurance, and preparedness issues are needed for small businesses. Connect with county EM directors who may know local firms willing to provide equipment, personnel or other assistance.

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Consider This:

When a flood hit Cedar Rapids, IA, in 2008, an economic recovery team was formed within 48 hours to be the focal point for information sharing between EM personnel, corporate leaders and small business owners. By acting quickly, such teams are able to provide a central point of contact for damage assessment data and recovery strategy development.

If the EOC needs business or economic information, leadership staff from the local county Economic Development Corporation (EDC) or chamber organizations are reasonable candidates to consider. They will have the useful resource of an existing communication network and access to current information or status updates within key sectors.
Communicating

As soon as the immediate danger is past and safety is secured, EMs begin preliminary damage assessments. Data collection is limited to the information needed in determining whether or not a formal disaster declaration is warranted. The business community is responsible for communicating a comprehensive assessment of economic damages for future potential recovery assistance.

FAQs

Who should we be communicating with now? Local and individual internal continuity plans should be implemented during the response phase. This means that clear communications with staff and partners ahead of time are vital so the organization is a ready resource when needed.

What do businesses need? Businesses need to implement their own continuity plans. Their top priorities should be protecting employees, facilities and necessary information.

What is the difference between an EOC and a disaster recovery center? An EOC is where EM coordinates response activities. Disaster Recovery Centers are set up by FEMA as a resource for disaster victims (i.e., area residents affected by disaster can walk in and register).

Consider This:

Using communication channels already in place can accelerate response activities. One chamber of commerce used its member email list to send out a request to conserve water usage. Responding members helped minimize the added burden of stormwater on the local waste water treatment plant.

Until approved by appropriate authorities, business owners or employees should not attempt to return to their facilities. Dangerous conditions can persist and must be addressed before access is granted. Examples include downed power lines, water traps, weakened walls, hazardous material spills and the occasional snake.

Actions for LEARN Group

- Designate a LEARN group member to attend briefing sessions if possible.
- Find out who is the assigned PIO and coordinate with them on business sector messaging.
- Use existing member lists of organizations and businesses to promote information sharing.
- Clarify the anticipated needs and make staff assignments within the EDO or chamber, so that the organization is ready to start recovery assistance actions as soon as possible.
- Prepare media messages so business sector information can be distributed and collected through identified channels. Confirm information sharing protocols.
- Detail damage assessment functions (e.g. NEG grants) and how to implement.
- Develop a disaster specific FAQ list and update information to be posted on the central business information resource.
- Check websites of national resources with disaster recovery expertise. Groups such as the International Economic Development Council (IEDC) or the U.S. Chamber Business and Civic Leadership Center report on recent incidents and emerging best practices.

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Until approved by appropriate authorities, business owners or employees should not attempt to return to their facilities. Dangerous conditions can persist and must be addressed before access is granted. Examples include downed power lines, water traps, weakened walls, hazardous material spills and the occasional snake.
Businesses should have reserves (e.g., food, water, first aid supplies) to last for up to 72 hours without outside assistance. Recognize that many small businesses lack adequate preparedness and do not have significant operating reserves. The ways in which the community responds to this collective need can significantly impact the cost of recovery and the amount of time it takes.

Emergency microloan programs are a recognized best practice. Small amounts, low interest, simple collateral requirements, and quick lending decisions are key. Fond du Lac, WI, used EDC-developed local solutions for immediate financial assistance in the business community by re-purposing unrestricted reserve funds. The result was a rapid recovery microloan program providing $5,000 low-interest loans to 17 businesses within a matter of weeks. Even the business that eventually closed repaid the loan.

The WI Department of Commerce offered a similar program, the Flood Recovery Small Business (FRSB) fund that was used by six counties by partnering with local RLF officials.

FAQs

Who is involved in setting up emergency loans for businesses? Local or regional economic development groups likely have the most experience with revolving loan funds for your community and potentially have unrestricted reserves that could be re-purposed. The loan committee involves additional partners. In some cases, administering the loans will bring in additional partners as well.

What do businesses need? Disaster recovery is something with which most small business owners have little or no experience. Reaching out to them with resources quickly is crucial in making informed decisions.

✔️ Actions for LEARN Group

☐ Assess the impact to the business community and tailor response to their needs based on the disaster type, damage, and severity.

☐ Gather and update information that will be needed if an emergency microloan program is needed. For example, locate the appropriate application materials and appoint review committee members who are familiar with the local economy.

☐ Identify funds which could be reallocated to emergency microloans or a revolving loan fund.

☐ If possible, utilize unallocated money from local funds for fast dispersal.

☐ Choose a local agency to administer the emergency microloan program, and complete an MOU with that agency.

☐ Ensure that the “financial dashboard” of information (recovery funds available, businesses impacted, cost of damages) is included in all outbound communications.

☐ Take pictures and save receipts. SBA loans have strict requirements about duplication of benefits, so keep good records of recovery expenditures.

☐ Coordinate distribution of free clean-up kits (available through the Red Cross or health departments) to businesses.
FEMA and SBA damage assessments are designed to collect qualifying data for the federal declaration process. A separate business damage assessment tool must be deployed quickly to ensure economic considerations are included in the decision making process. This requires local coordination and effort by the LEARN group.

Consider This:

Following a disaster event, reach out to area businesses and community members as quickly as possible. Conduct a damage assessment survey to determine the extent of impact on local businesses. Frustration is more likely to occur when citizens and businesses perceive a lack of action and preparedness on the part of municipal, economic, and emergency management professionals.

In one community, Rotary Club members brainstormed how to facilitate business-to-business assistance. As part of the solution, one member with a trucking company sent unused trucks to rescue hundreds of thousands of dollars in inventory from encroaching flood waters. Twenty six businesses in an incubator and the warehouse owner were helped. Creatively include local service group member resources in your response actions.

FAQs

Are there sample surveys for review? Several downloadable damage assessment surveys are available through the companion website. Modify one to reflect the particular disaster and needs of your community keeping in mind that in disasters which hit larger regions the same data collection methods should be used.

What do businesses need? Having an accurate picture of operating capital needs is critical for the recovery period. Business owners need cash flow to cover uninsured damages and lost production, sales or other revenue sources. Saving or accessing financial records will be important.

What should businesses do first? Home and family safety must be addressed first. Clean up should start right away and, in both the home and business locations, be sure to take a lot of pictures and save receipts. Small businesses can potentially qualify for VOAD personal emergency needs assistance, thereby creating time to address immediate business needs. Remember that business owners may also be suffering personal home damage and provide support services options.

Actions for LEARN Group

- Implement the business sector recovery plan and look ahead to economic recovery strategies.
- Use a damage assessment survey to gauge business impact as soon as possible. Data will help in developing recovery programs and can simplify later grant writing.
- Keep track of recovery assistance amounts and efforts. Plan for transparency in reporting.
- Adapt existing organizations to meet needs instead of starting from scratch (e.g., SBDC, technical colleges, etc).
- Encourage business owners to relocate capital business equipment to temporary locations, and ensure that critical production line equipment is protected.
- Establish safe and stable facilities where response actions can be coordinated.
- Connect small business owners and residents with the After Disaster Family Financial Toolkit available from the University of Minnesota Extension at [http://goo.gl/akWZ6](http://goo.gl/akWZ6)

More...

Response and short-term recovery can overlap to some degree. Streets may be cleaned up and everything looks fine on the surface but in reality, small businesses may still be extremely fragile. Elected officials and economic stakeholders should encourage dialogue in the business sector to proactively identify and address economic challenges.

**FAQs**

**How long does recovery take?** Short-term recovery is usually 6-12 months and long-term recovery is generally tracked for 3 years. Rebuilding can take even longer.

**What do businesses need?** When disaster occurs, it’s important for businesses to adjust their strategies and think through alternatives for rebuilding. Invest time to engage businesses in community rebuilding discussions to develop a common vision.

**Where can I find more information?** Work with local stakeholders to adapt and implement suggestions from state or national resources such as restoreyoureconomy.org

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**Consider This:**

Use a case management system and put “boots on the ground”, if possible. Businesses need to adjust their strategies on finance, marketing, HR, and operations, so a variety of expertise is needed. After the 2010 flooding in Nashville, TN, the chamber organized volunteer teams to assist businesses in identifying needs.

Local community leaders need perseverance in seeking assistance from county, state or federal resources. Become knowledgeable about economic issues; the impact to jobs and wages can be a compelling argument when requesting aid.

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**Actions for LEARN Group**

- Within the first 72 hours of a disaster, the economic advisory/recovery team should agree on or plan the damage assessment process, evaluate the need for a Business Recovery Center (BRC) and emergency microloans.

- Bring in additional people to provide staff for those activities.

- Tap into resources like the IEDC which have current information and can access expertise from across the country.

- Connect with state and federal partners. Collaborate locally to tap into new funding sources.

- Adapt local ED plans and strategies to reflect new realities and opportunities available during recovery. Be bold!

- Reach out to nonprofits that are helping in recovery efforts— coordinate with them wherever possible in order to minimize duplication of effort.

- Accept new members in the LEARN group and continue to meet regularly as long as needed.

- Help area businesses and owners feel less isolated by hosting outreach sessions led by the LEARN group.
Communicating

Recovery

The bigger the disaster, the more important it is for a community to have a common vision of what successful recovery will look like. Future economic strength will depend on how well the vision and opportunities for recovery assistance are communicated and pursued. Maintain communications over the entire course of recovery, however long it may last.

Consider This:

In Jefferson County, WI, the EDC developed a business damages survey and accessed NEG staff assistance from their WIB. The provided staff conducted door-to-door assessments after the flood waters receded. The information helped identify needs, shape county and regional recovery strategies, and was successfully used in applying for additional state and federal assistance.

Be open to other organizations that may emerge to provide needed resources. Often, new communication channels can be used to push out messages from the LEARN group.

FAQs

What marketing messages are needed now? Two priorities need to be addressed: Communicating directly with businesses, and letting the community or visitors know that businesses are still open. This is especially true for tourism-dependent areas or when general access to businesses is affected.

What do businesses need? It’s important for businesses to manage the message with their own employees, customers, suppliers and other partners. Regular communications updates should be relayed to these groups about recovery efforts, support opportunities, and progress.

✅ Actions for LEARN Group

☐ For Business Recovery Centers (BRC), use a “one-stop shop” approach to link to all agencies and organizations providing resources for business recovery.

☐ For BRCs, establish a hotline and web presence, and post hours for walk-in assistance, etc. Use all available channels of communication to get the word out.

☐ Use relationships with other businesses, EDOs or member networks to find out and share how businesses are dealing with recovery.

☐ Promote availability of business counseling and recovery financing options through all community information channels.

☐ Continue to communicate regularly, even as media attention wanes and the community seemingly returns to normal.

☐ When businesses repay their microfinancing loans, update the community. These successes help keep progress visible.

☐ Schedule interviews with local journalists and media contacts 3, 6, 9 and 12 months after the disaster.

☐ Document techniques that are successful for future reference.
Leaders need to maintain an understanding of the economic conditions of community businesses and advocate for programs that might offer solutions. Encourage all businesses, regardless of size, to have continuity plans. Evaluate how the professional community can support those efforts.

Consider This:

FEMA does not offer business assistance. Look for local resources to fill the gap before SBA arrives, or to provide additional flexibility to federal programs.

In the Fond du Lac, WI, program referenced earlier, the funds were available and announced to the business community within a week and the first loan was made within 8 days. As more needs were identified, access to larger amounts were orchestrated through the Department of Commerce and USDA Rural Development.

In Gays Mills, WI, the Lion’s Club purchased gift cards from locally owned businesses, and gave them to the residents of the community. This helped drive traffic and purchases back into the businesses once the disaster passed.

FAQs

Are business recovery grants available? No. Federal or state disaster recovery assistance is through loans. Emergency microloans that may be available locally are smaller amounts at low interest rates. Larger, long term loans for direct or indirect damages may be available through the SBA Disaster Division.

What are indirect losses? A gas station had a booming business until traffic was diverted because of a nearby flood. For weeks, no one could go to the station, even though it was not directly affected by the disaster. This affected sales and ultimately slowed the business. It’s important to calculate these losses to help prioritize how recovery funds are allocated, and to clearly communicate that they exist.

Actions for LEARN Group

☐ Continue publicizing availability of recovery loan resources.

☐ Enlist SBDC offices, technical colleges and other business support organizations in providing disaster recovery finance counseling for affected businesses.

☐ Engage the EDA, USDA Rural Development and the SBA in discussion about the longer-term financial recovery plan.

☐ Encourage businesses to re-evaluate their business plan and redefine themselves and their markets. Recovery steps can present opportunities to change or grow, which may help shorten payback times.

☐ Urge businesses to avoid relying on credit cards to offset losses. Such strategies unfortunately mask the cost of recovery and create a larger burden in the future.

☐ Monitor progress of businesses who utilize microloans and publicize progress when they are repaid.

☐ Keep good documentation: SBA funding requires financial statements and tax returns. Keep receipts for everything purchased during recovery. It’s especially important to document these if more than one loan source is used to avoid ‘duplication of benefits’.

☐ Publicize the stories of companies that had a continuity plan in place and recovered faster because of it.
Planning & Logistics

Gather data and mapping information from the actual results of the disaster to make sure there is comprehensive information for full recovery and future mitigation. The business and economic impacts need to be fully documented in order to serve future economic interests.

FAQs

How do we plan or increase preparedness when we’re still recovering from disaster? Surviving disaster is a valuable experience for companies. When shared and utilized, the lessons learned by one business can benefit others. Discussing what could be done differently and integrating such perspective in future planning can improve disaster resilience for the whole community.

What should businesses do? Make a record of what happened, what worked and what didn’t. Use the information to adjust future response actions and modify continuity plans. Be willing to share your story to help build awareness.

What is a Joint Field Office (JFO)? Once a disaster is formally declared, and federal assistance is available, a JFO is established. In the JFO, federal agencies (FEMA/SBA) and the state coordinate local Disaster Recovery Centers and other assistance.

Consider This:

The economic multiplier for locally owned businesses is much higher than for some others. Of the money spent in locally owned businesses, 72% stays in the community, vs. 43% of the money spent in non-locally owned businesses. Therefore, targeting specific programming assistance to locally owned firms may be beneficial.

Flexibility is crucial if supplemental recovery funding is made available from federal or state government. Recognize and include the practical needs identified by the business sector. Keep in mind that large or national corporations tend to have greater continuity plans in place, whereas small companies do not.

Re-evaluate existing ED plans or CEDs and adjust priorities to better match the scope of disaster and entirety of regional common needs. When four counties in Wisconsin and 2 in Illinois were simultaneously impacted by floods and auto plant closures, a collective strategy was designed to address both issues. A template to facilitate this process can be found on the companion website at: [http://goo.gl/yi07o](http://goo.gl/yi07o)

Actions for LEARN Group

- Collaborate to create and staff one BRC. Include the local chamber of commerce, SBDC, SBA and others.
- Provide local EM Director with a list of business resources available through the LEARN Business Recovery Center so reference materials are distributed through the DRC.
- Business Recovery Centers should have regular hours at first. As needs change, the online presence and case management system will reduce the need for on-site staffing.
- Partner with local units of government to add disaster specific data from the business sector to all-hazard mitigation and response plans or maps.
- When a disaster is formally declared, share community and economic information with the Joint Field Office (JFO.) Include economic profile and or tourism guides. Encourage JFO staff to visit locally owned businesses.

More...

[http://goo.gl/dP6NE](http://goo.gl/dP6NE)
Identifying hazards that could affect the local economy is important for the whole community. Include an economic development practitioner when the county Hazard Mitigation Plan (HMP) is updated.

Building Relationships

Analyze where challenges in the communication of needs and resources occurred, and define a better system. Conduct forums to discuss hazards, vulnerabilities and mitigation opportunities.

Actions for LEARN Group

- Review the current county HMP. By 2012, all but two Wisconsin counties will have a FEMA approved plan.
- Include the local chamber of commerce or EDC on the hazard mitigation planning team.
- Attend training offered by the state in mitigation programs.
- Make sure key business infrastructure is recognized in the general mitigation plan.
- Economic considerations can be underrepresented in county HMPs. Read yours and work with EM directors when the HMP is updated so that business needs receive consideration.

Communicating

Analyze where challenges in the communication of needs and resources occurred, and define a better system. Conduct forums to discuss hazards, vulnerabilities and mitigation opportunities.

Actions for LEARN Group

- Analyze how identified hazards may impact the economic community. Conduct outreach to industry groups and public-private partnerships to promote private sector investment addressing them.
- Research and learn from other communities successes and best practices. Likewise, document and share your own successes through professional networks.
- Highlight successes in local mitigation, especially when the return on investment and planning are realized.
- Identify potential partners who have not been involved, and ensure they are available in future disaster to help with communication distribution.

Consider This:

Repeated flooding in Darlington, WI, significantly impacted downtown businesses, so the city developed a mitigation plan to identify long-term solutions. As a result, they applied for and received multiple state and federal grants to assist with relocating businesses out of the floodplain to a new business park. The vacated floodplain was developed into a park and riverwalk, boosting the local tourism economy. In addition, the city floodproofed historic downtown businesses and received numerous awards.

When the city of Milwaukee began redeveloping the Menomonee Valley industrial area, it raised the elevation by several feet before allowing new construction. This resolved past problems and ensured that new buildings would be out of the floodplain and less vulnerable to damages in the future.
**Financing**

Work with local, state, federal and non-profit agencies to identify potential funding sources to mitigate future disaster impacts in your community. Continue to track outcomes.

**Planning & Logistics**

Develop mitigation strategies based on hazard identification and economic risk assessment to reduce or eliminate future economic losses.

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**Actions for LEARN Group**

- Encourage businesses to review and update existing insurance coverage.
- Pursue participation in the National Flood Insurance Program (NFIP) Community Rating System (CRS) which will result in flood insurance discounts throughout your community.
- Ensure EM directors are aware of mitigation needs for economic drivers. Get consideration for mitigation grants when funding becomes available.
- Leverage FEMA, DOT, and other disaster-related funding to recreate infrastructure hardened for disaster.
- Work with EM directors to explore FEMA Hazard Mitigation Grant Program (HMGP) grant opportunities.

**Actions for LEARN Group**

- Enforce building codes, standards and floodplain ordinance during the building process.
- Update plans (e.g., comprehensive overview, specific operations, capital improvement, etc.) to address high-risk areas identified in the hazard mitigation plan.
- After an event, review your community’s mitigation plan to see if revisions are necessary.
- Encourage local government staff to evaluate capital improvement plans to ensure they invest in infrastructure that better protects the economy from future disasters.

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**FAQs**

*Where can chambers or EDOs get additional information?*

Check the website for links. IEDC has a specific website just for EDOs and chambers at [restoreyoureconomy.org](http://restoreyoureconomy.org).

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**For official state emergency management information visit:**


**More...**

[http://goo.gl/0svLY](http://goo.gl/0svLY)

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**Planning & Logistics**

How do you prioritize economically focused mitigation activities? Long range mitigation decisions should take future economic factors into account. EDA funded a helpful website to assist in regional economic research at [knowyourregion.org](http://knowyourregion.org)
Preparedness
Building Relationships

The chief elected official is responsible for ensuring both the health and safety of residents and the economic stability of the community. Encourage development of strong relations between stakeholders by convening meetings with economic development organizations, chambers of commerce, emergency management officials, business recovery planners and business leaders to discuss current plans and upcoming exercises or training opportunities.

Consider This:

The East Central Wisconsin Regional Planning Commission invited stakeholders from all of Calumet County to a 2.5 hour cross-training session. Attendees included the local chambers of commerce, planning staff, community development staff, elected officials, prominent businesses, county level EM and economic development staff. After sharing information, gaps in responsibilities were uncovered and began to be addressed. Everyone felt more informed and empowered together after the gathering, and thus could better coordinate preparedness efforts.

FAQs

Why would a chamber be involved in this effort? As unique as the communities they serve, chambers all have one goal in common: to foster a healthy business environment. Disaster resilience is critical to that mission. After a disaster, accurate information and leadership are needed to devise solutions. Envision the future, and contribute to long term community recovery.

Is it worth my time to foster relationships? Yes, these relationships can be critical. It’s a small investment of time that will pay dividends along the way.

What kind of time is involved? Take it one meeting at a time. Start with a 90 minute session and go from there. A sample agenda is on the companion website.

✓ Actions for LEARN Group

☐ Ask the local regional planning commission or council to facilitate in-person discussions to build relationships and prepare your business community (see Actions list on page 5).

☐ Invite EDOs and EM organizations to participate in facilitated discussions with EM leaders that create a broader understanding of response and recovery responsibilities.

☐ Link EDOs, chambers and business networks. Use discussions to form a LEARN group.

☐ Create and share a contact list of participants.

☐ Advocate for local businesses to engage in continuity planning.

☐ Form relationships beyond your immediate geographical area. Engage with SBDC and other organizations within a wider region.

☐ Arrange a regular schedule of meetings for the LEARN group to discuss preparedness.

☐ Organize business workshops to share continuity planning and insurance information. Planning templates are on the companion website at: http://goo.gl/yi07o. Make sure LEARN group members have a continuity plan.
Chambers of commerce and EDOs are essential partners in expanding private sector understanding of disaster management. They must have a structured program for communicating risk factors to businesses. Business owners that understand the concept of preparedness are a significant resource in achieving community resilience.

Consider This:

The same local government and media sources used to distribute information for individuals should be asked to include basic information for businesses. Provide to them a central website or phone number for the LEARN group to gather and share information.

Using communication channels already in place can speed up response capabilities. In Pleasant Prairie, WI, an industrial park developer and local chamber executives worked with emergency managers in a public/private partnership to plan a response strategy and update communication protocols in the event of a major train derailment. As a result, communication protocols were revised and contact lists updated.

FAQs

What are private sector responsibilities in preparedness?
All businesses are expected to have the capacity to protect their employees, infrastructure and facilities in the case of disaster. Protecting information and being able to access it remotely is also essential. For more information visit http://we-partner.org/business.

Are expectations of large corporations different from small businesses? Yes. Large corporations typically have more resources and can more effectively collaborate with EM officials. They may also be involved in local public/private preparedness initiatives. More information is available at the ready.gov website.

What about small businesses? It’s true that smaller businesses with fewer resources can be overwhelmed by disaster more easily. This is why reaching out with targeted guidance and resources is an important step for whole community recovery.

Actions for LEARN Group

- Meet with EM directors and public information officers (PIOs) to be sure that information for the business sector is included on contact lists.
- Document how messages can be sent and need to be formatted so it’s easier to implement when needed (211, municipal websites, reverse 911 etc.)
- Convene organizations that will play a role in business recovery. Designate one group to take the lead coordinating business communications in a post-disaster situation.
- Recruit a local leader who is willing to encourage and stress the importance of continuity planning within the community’s private sector.
- Publish updates, information and plans as you prepare. This helps build relationships, coordinate financing, share logistics information, and gives partners “one place to go” for information and updates.
- Compile the results of your actions into a communications plan, distribute copies to partners and publish online so businesses can reference if/when needed.
- Identify communication mediums that will be used by all partners and document formatting or content guidelines.
Preparedness
Financing

Optimally, disaster financing programs would be designed and in place prior to the disaster. Because loan funds from the SBA are available only for ‘declared’ disasters, they can take longer to obtain. Access to local sources of emergency working capital is vital. A proven national best practice is providing small, very low-interest emergency microloans.

FAQs

Does the government have grant money for this? No. Generally, federal, state, and local governments make disaster recovery loans to businesses. The more local the source of funding is, the quicker it can be made available. Federal disaster assistance for business is through the SBA Disaster Division (not the SBA district or state offices.)

Can existing RLF sources be used? Yes, but typically the funds are tied to job creation or retention, and other requirements. The process can be lengthy when time is of the essence.

What do businesses need? Adequate understanding of disaster related insurance issues is critical. Appropriate riders and continuity planning are useful education topics.

Actions for LEARN Group

☐ Provide education to the business community on important insurance issues. Flood insurance is frequently misunderstood by local agents and business owners.

☐ Identify local sources of unrestricted funding that could be re-purposed for emergency loans (e.g., EDC retained earnings, BID funds, community/foundation loans).

☐ Amend your community’s Revolving Loan Fund (RLF) manual to allow for quick processing of post-disaster loan applications.

☐ Identify organizations to be involved in approving and administering a microloan program; include funds to pay for needed personnel. Draft an MOU between groups.

☐ Identify local BID district funds that could be utilized for mitigation.

☐ Create a loan program structure that includes short applications and fast decision making time frames to provide small amounts of operating cash for immediate recovery.

☐ Research creative, successful financing options used in other areas and customize to your local need or fund availability.

Consider This:

In Florida, the Charlotte County EDO has an emergency disaster loan program ready to be used when needed. Participating banks and loan application instructions are updated annually. Agreeing to such a strategy and initially setting it up is an important first step for any community.

Encourage businesses to engage in business continuity planning. This will help them identify financial tools they will need in place to ensure a speedy recovery (e.g., insurance policies, lines of credit, etc).
Consider This:

Twenty five percent of all flood damage happens outside the floodplain. Look into the benefits of participating in the FEMA Community Rating System (CRS.) Participating communities qualify for significantly lower flood insurance premiums for all businesses and residents in the area.

In Jefferson County, WI, the interstate closed, significantly affecting businesses which were not themselves flooded. Evaluate historic risk factors and develop a plan for alternate routes, resources, and markets.

HMPs can be used to identify vulnerable businesses for a targeted outreach program. Southwestern Wisconsin Regional Planning Commission used data from their WIB to map out the businesses in a five county area, and identify which ones were vulnerable to flooding and indirect losses through damaged infrastructure.

FAQs

How do you know if a building is vulnerable to flooding? Floodsmart.gov has a free address-based risk assessment tool to help businesses and homeowners know what to expect in the event of a flood.

What do businesses need? Encourage them to do continuity planning; visit the preparemybusiness.org website for templates. At a minimum, business employees and facilities should be fully protected.
Never doubt that a small group of thoughtful committed citizens can change the world; indeed, it’s the only thing that ever has.

- Margaret Mead

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