



Economic Prosperity (Unemployment)

Formerly Indicator # 7043

Overall Assessment

Trend: Undetermined

Rationale:

Between 1976 and 2010, the overall unemployment rate fluctuated in response to socio-economic conditions, therefore identifying an expected but “undetermined” long-term trend. The short-term trend (2005 to 2010) is an increasing unemployment rate. Throughout the thirty-five year bracket, with the exception of 2008-2009 where it experienced a 3.0% increase, the annual rate of change has consistently remained within an approximate 2.0% difference.

Lake-by-Lake Assessment

Trends were not made on an individual lake basis.

Purpose

- To provide unemployment trends in the Great Lakes Region, as a representation of economic prosperity in the Great Lakes Region.
- The Economic prosperity indicator is used in the Great Lakes Indicator Suite as a driving force indicator under the economic/social category.

Ecosystem Objective

Economic prosperity in the Great Lakes region should be pursued with full regard to the purpose of the Great Lakes Water Quality Agreement, to restore and maintain the chemical, physical and biological integrity of the Great Lakes Basin Ecosystem.

Ecological Condition

The unemployment rates are based on data extracted from Statistics Canada and the United States Department of Labour (Bureau of Labour Statistics). The unit of analysis in this report is the unemployment percentage rate. This is the number of unemployed persons expressed as a percentage of the labour force. Estimates are in percentages, rounded to the nearest tenth. The data only considers persons in the civilian non-institutional population 15 years of age and over. The unemployment rate is reported for the whole of Ontario and the whole of each of the eight Great Lakes States, and is not limited specifically to the watershed of the Great Lakes.

As seen in Table 1, the unemployment rate ranges from a low of 4.2% (in 2000) to a peak of 10.6% (in 1983). Since 1976, unemployment in the Great Lakes region has experienced multiple periods of fluctuation in growth and decline (Figure 1). The short-term trend indicates that unemployment has been rising. In particular, from 2008 to 2009, the region experienced its largest fluctuation in growth yet of 3.0%, from 6.1% to 9.1% (Figure 2). Between 1976 and 2010, the Great Lakes Region has had an average unemployment rate of 6.6%. Other than the 2008 to 2009 unemployment change of 3.0%, the annual change in unemployment did not change by more than 2.0% in any other year.

Ontario and the eight U.S. Great Lakes States have experienced similar unemployment rate trends. As seen in Figure 3, the region has experienced wide fluctuations of unemployment. Specifically, in the eight U.S. States, the official unemployment rate in 2010 was 9.5%. These fluctuations mirror the region’s overall pattern, whereby its annual rate of change is within an average of approximately 1.5%.

The United States reached a peak of official unemployment rate of 11.2% in 1982 and experienced its lowest unemployment rate of 4.0% nearly two decades after in 2000. During the Great Lakes region’s highest unemployment year of 1983, the unemployment rate of the eight Great Lakes states was higher than the overall unemployment rate in the United States (Table 2 and Figure 4). However, as seen in Figure 4, the eight States have since managed to keep the official unemployment rate to equal or less than the overall national statistic. In 2000, the

unemployment rate of the eight States was the same as the United States. Moreover, in the most recent 2010 unemployment data, the region was 0.1% less than the overall national unemployment figure.

Ontario also experienced wide fluctuations in its unemployment rate over the years. Ranges included a high unemployment rate of 10.9% in 1993, a low unemployment rate of 5.0% in 1988 and 1999, and a total unemployment in 2010 of 8.7%. In a national context, during the Great Lakes region's highest unemployment year of 1983, Ontario had a slightly lower number than the overall unemployment rate in Canada (Table 3 and Figure 5). This comparison was similar in the regional lowest unemployment rate year of 2000 wherein Ontario's unemployment rate was lower than Canada's overall. In the most recent unemployment data, however, Ontario has a slightly higher unemployment number than all of Canada.

As seen in Table 4 and Figure 6, there is no discernible unemployment rate pattern associated amongst the Great Lakes province and states (Table 4 and Figure 6). States which consistently scored a high unemployment rate, particularly in 1983 and 2000, did not have a high unemployment rate in 2010. However, within the Great Lakes Region, Minnesota is consistently within the lower bracket of unemployment rates whereas Illinois frequently remains in the high end of the unemployment range. Michigan experienced the widest range of unemployment rates during low and peak periods contrasting with New York which experienced the smallest range of unemployment rates.

Linkages

The Great Lakes underpin regional economic prosperity and quality of life for the millions of residents in the eight U.S. States and Ontario. A significant fraction of the U.S. gross domestic product and over \$150 billion in goods are generated annually in the Great Lakes region (Gesl 2006). Moreover, the lakes serve as commercial waterways, and supply water for agricultural and municipal uses (Gesl 2006). Unemployment is a key economic indicator when measuring an economy's strength and sustainability. Economic prosperity is a driving force behind most pressures on the environment, and can be considered as both a positive and negative force.

When the economy is performing well, there tends to be less conflict between economic development and maintaining the integrity of the environment (McGill Redpath Museum). Under a healthy economy where the unemployment rates are low or decreasing, there will be greater economic capabilities to provide research to monitor anthropogenic impacts and to develop and implement new methods for mitigating the associated consequences.

At the same time, when the economy is performing well, there tends to be increased use and development of natural resources. When economic prosperity is high there tends to be higher levels of consumer spending and home buying (Thorp, Muir and Zegarac 2000). These activities can increase pressures on the ecosystem through household and business waste generation, increased air pollution from transportation sources and accelerated land use changes (Thorp, Muir and Zegarac 2000). Residential development is the key category of land use change and its environmental impacts are widely recognized. Moreover, the proliferation of international trade treaties in support of increased economic prosperity over the last few decades has led to an increase in the global movement of goods. Increased transportation, particularly with Great Lakes and oceanic shipping traffic, has placed a strain on natural systems by facilitating the immigration of non-native species to new habitats, introducing pollutants into the aquatic ecosystem and altering and destroying coastal habitats (McGill University Redpath Museum).

Management Challenges/Opportunities

There are many linkages between economic prosperity and stresses to ecosystem health. Decision makers in the Great Lakes community should aim to maximize the positive and minimize the negative pressures of economic prosperity on the chemical, physical and biological integrity of the Great Lakes ecosystem.

Comments from the author(s)

Alternative and/or additional measures of economic prosperity should be examined for use in the SOLEC process. Unemployment is linked to economic prosperity; however, it may not be sufficient to represent other important aspects of economic prosperity, such as the level and distribution of income and wealth, poverty rates, income volatility and disparity, and economic security (Canadian Index of Well-Being).

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Assessing Data Quality

Insert “x” under the statement that best corresponds with each data characteristic

| Data Characteristics | Strongly Agree | Agree | Neutral or Unknown | Disagree | Strongly Disagree | Not Applicable |
|--|----------------|-------|--------------------|----------|-------------------|----------------|
| 1. Data are documented, validated, or quality-assured by a recognized agency or organization | X | | | | | |
| 2. Data are traceable to original sources | X | | | | | |
| 3. The source of the data is a known, reliable and respected generator of data | X | | | | | |
| 4. Geographic coverage and scale of data are appropriate to the Great Lakes basin | X | | | | | |
| 5. Data obtained from sources within the U.S. are comparable to those from Canada | X | | | | | |
| 6. Uncertainty and variability in the data are documented and within acceptable limits for this indicator report | X | | | | | |
| Clarifying Notes: | | | | | | |

Acknowledgments

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Source:

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Source:

Last Updated

State of the Lakes Ecosystem Conference (SOLEC) 2011

| Year | Unemployment Percentage Rate in Ontario | Average Unemployment Percentage Rate in the Eight Great Lakes States | Unemployment Percentage Rate in the entire Great Lakes Region |
|------|---|--|---|
| 1976 | 6.1 | 8.0 | 7.8 |
| 1977 | 6.9 | 7.2 | 7.2 |
| 1978 | 7.2 | 6.4 | 6.5 |
| 1979 | 6.6 | 6.4 | 6.3 |
| 1980 | 6.9 | 8.4 | 8.2 |
| 1981 | 6.6 | 9.1 | 8.8 |
| 1982 | 9.8 | 11.2 | 10.5 |
| 1983 | 10.4 | 11.0 | 10.6 |
| 1984 | 9.0 | 8.6 | 8.5 |
| 1985 | 7.9 | 8.0 | 7.8 |
| 1986 | 7.0 | 7.3 | 7.2 |
| 1987 | 6.1 | 6.3 | 6.4 |
| 1988 | 5.0 | 5.5 | 5.5 |
| 1989 | 5.0 | 5.3 | 5.3 |
| 1990 | 6.2 | 5.7 | 5.9 |
| 1991 | 9.5 | 7.0 | 6.9 |
| 1992 | 10.8 | 7.6 | 7.5 |
| 1993 | 10.9 | 6.8 | 6.8 |
| 1994 | 9.6 | 5.8 | 5.8 |
| 1995 | 8.7 | 5.2 | 5.3 |
| 1996 | 9.0 | 5.1 | 5.3 |

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| | | | |
|------|-----|-----|-----|
| 1997 | 8.4 | 4.8 | 4.9 |
| 1998 | 7.2 | 4.4 | 4.6 |
| 1999 | 6.3 | 4.2 | 4.5 |
| 2000 | 5.7 | 4.0 | 4.2 |
| 2001 | 6.3 | 4.8 | 4.9 |
| 2002 | 7.2 | 5.8 | 5.9 |
| 2003 | 6.9 | 6.2 | 6.1 |
| 2004 | 6.8 | 5.8 | 5.9 |
| 2005 | 6.6 | 5.4 | 5.6 |
| 2006 | 6.3 | 5.0 | 5.1 |
| 2007 | 6.4 | 5.1 | 5.2 |
| 2008 | 6.5 | 6.0 | 6.1 |
| 2009 | 9.0 | 9.6 | 9.1 |
| 2010 | 8.7 | 9.5 | 9.2 |

Table 1. Unemployment Percentage Rate Table in Ontario, Eight Great Lakes States and the Entire Great Lakes Region

| Year | Unemployment Percentage Rate | | |
|-------------------------------|------------------------------|-------------------------|----------------|
| | 1983 (peak unemployment) | 2000 (low unemployment) | 2010 (current) |
| United States | 9.60 | 4.0 | 9.6 |
| Eight U.S. Great Lakes States | 11.0 | 4.0 | 9.5 |

Table 2. Unemployment Percentage Rate in the United States and the Eight Great Lakes States
Source:

| Year | Unemployment Percentage Rate | | |
|--------------------------------|------------------------------|-------------------------|----------------|
| | 1983 (peak unemployment) | 2000 (low unemployment) | 2010 (current) |
| Canada | 12.0 | 6.8 | 8.0 |
| Great Lakes Province - Ontario | 10.4 | 5.7 | 8.7 |

Table 3. Unemployment Percentage Rate in Canada and the Great Lakes Province (Ontario)

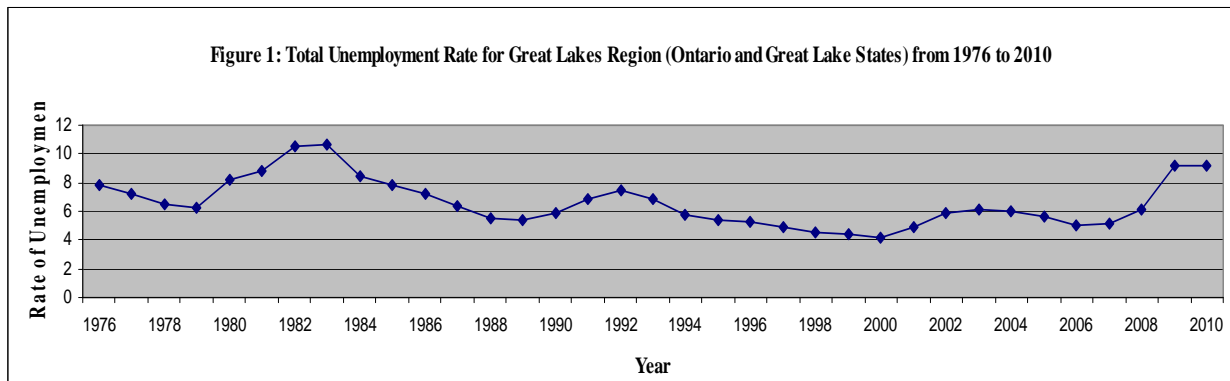


Figure 1. Total Unemployment Rate for the entire Great Lakes Region (Ontario and the eight U.S. Great Lakes States) from 1976 to 2010
Source:

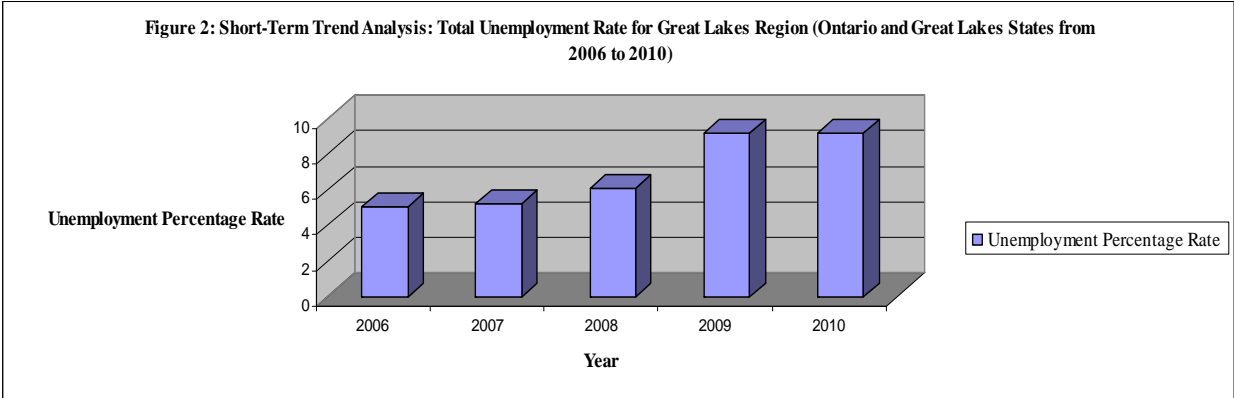


Figure 2. Short-Term Trend Analysis: Total Unemployment Rate for Great Lakes Region (Ontario and the Eight Great Lakes States from 2006 to 2010)
Source:

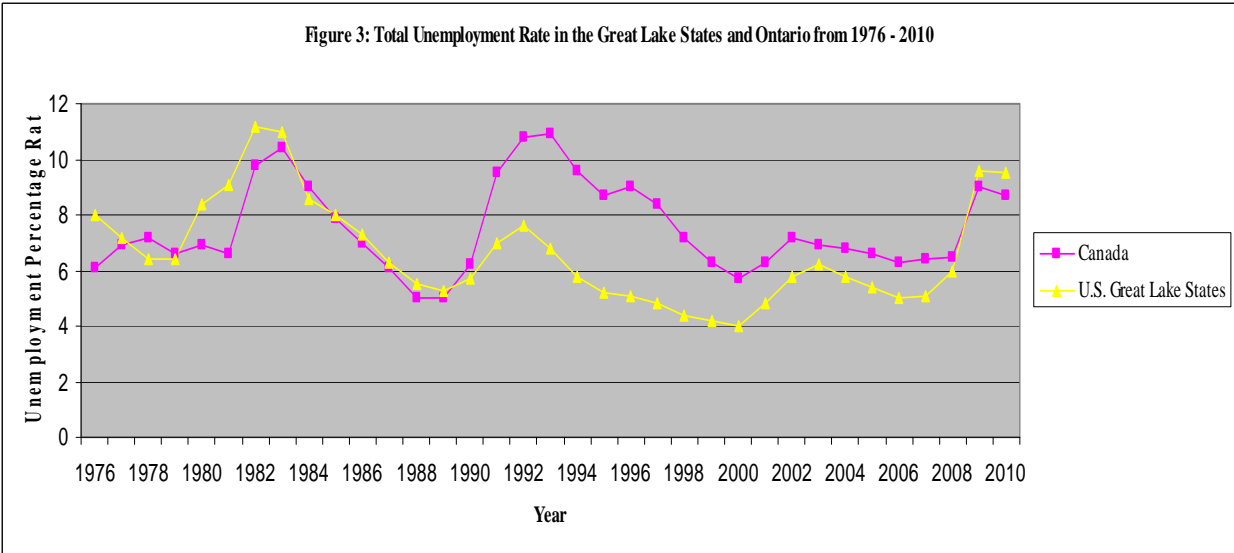


Figure 3. Total Unemployment Rate in the Eight Great Lakes States and Ontario from 1976 – 2010
Source:

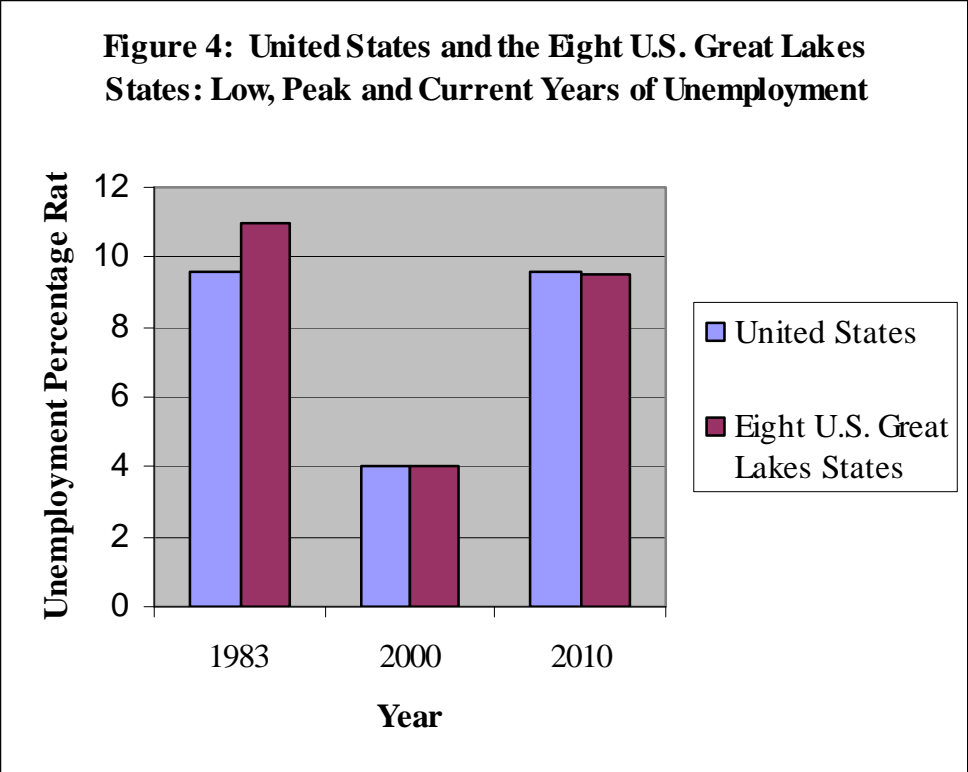


Figure 4. United States and Eight U.S. Great Lakes States: Low, Peak, and Current Years of Unemployment
Source:

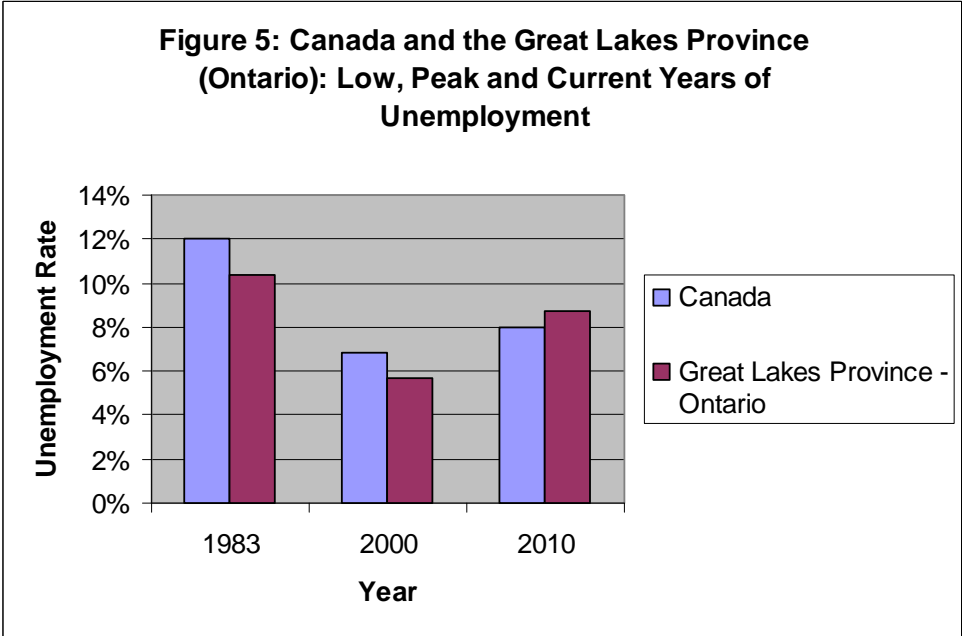


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Source:

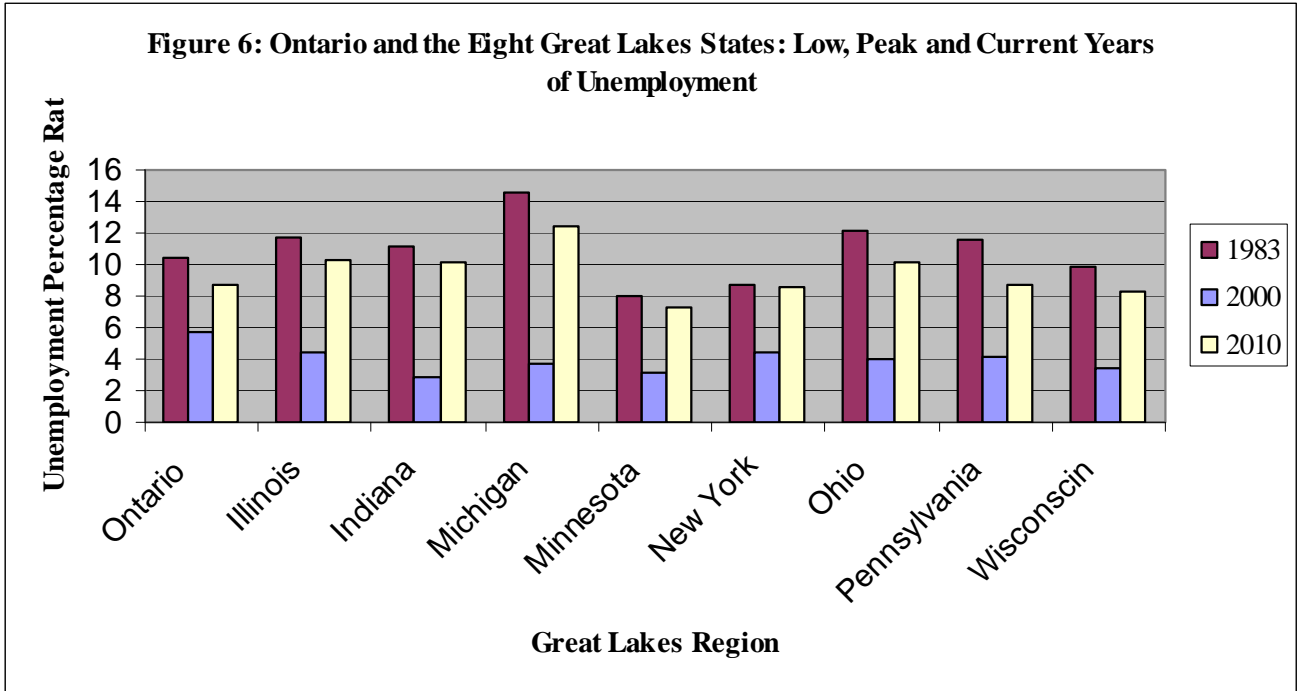


Figure 6. Ontario and the Eight Great Lakes States: Low, Peak, and Current Years of Unemployment
Source: