



Ottawa Manufacturers' Network (OMN) Report on Manufacturing 2008 Eastern Ontario / Western Quebec

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Executive Summary	1
Summary Facts.....	1
Background.....	2
The Research.....	3
Manufacturing Companies and Sectors Represented	3
Manufacturing Employment by Sector.....	4
Manufacturing Company Size	5
What Regional Manufacturers are Saying	6
Manufacturing in Canada.....	7
Discussion and Conclusions	7

Executive Summary

Recent analysis by the Ottawa Manufacturers Network indicates a modest decline in number of manufacturing companies in Eastern Ontario and Western Quebec but a stable employment level. The same analysis indicated increased concentration in Computer & Electronic Products and increased concentration of employment in the largest firms. Data was compiled between September and December 2007.

When compared to manufacturing data from the rest of Canada, Ottawa area firms continue to fare well at weathering the storm in the Canadian manufacturing environment.

Summary Facts

- There are approximately 650 manufacturers in Eastern Ontario / Western Quebec (compared to approximately 700 one year earlier)
- These companies employ well over 40,000 people, stable compared to a year earlier.
- Computer & electronic products, the top sector, represents 30% of firms and 55% of employment representing a slight increase in concentration in that sector.
- The largest 5% of companies employ 60% of the people, and the smallest 74% of companies together employ 14% of the people. This represents a more extreme concentration of employment in the largest firms than in previous years' analysis.

This is the fourth consecutive year in which the analysis yielded similar results with 2007 data showing the highest employment but lower number of firms. While Ottawa will never be characterized as a manufacturing city, it is impressive to see that every major industrial sector is represented here....from food products, to metals, to minerals, to medical products. This diversity of manufacturers producing, managing, and selling end products to industry or consumers brings certainty that supporting manufacturing services will exist, including machine shops, sheet metal fabricators, plastic injection molders, boxes & packaging manufacturers, and the like.

The past year has been one of the most challenging for many local manufacturers. The decline in the U.S. dollar has hit hardest those companies that export a majority of their output to the United States, but with input costs in Canadian dollars.. During calendar year 2007, such firms effectively experienced a price (and revenue) reduction of over 15% purely related to exchange rates. This, coupled with skilled labour shortages, high energy costs, and other challenges is making life in manufacturing difficult. 2008 looms as the most challenging year in recent memory for local manufacturers as these pressures are unlikely to ease.

But why not worse? Aren't all reports indicating near devastation of the manufacturing base in Canada and even Ontario? The saviour for local firms is the level of innovation in the region, both on the product front, and in manufacturing. Companies that are selling innovative products that are early in their product lifecycle are bucking the national trend by remaining stable and in some cases growing. A number of companies opened exciting new facilities in 2007 and are continuing to hire locally, helping to keep the employment figures stable. There have been plant closures announced over the past few years and in some cases, before the closures take place, the facilities have been sold, and are carrying on, typically with multi-year contracts from the very multinationals that had announced the closures. Firms such as Nortel and others have used this approach in selling captive plant capacity for the past decade. Two fairly recent examples, both in Arnprior are the Boeing facility becoming Arnprior Aerospace and the Pfizer facility becoming part of Keata.

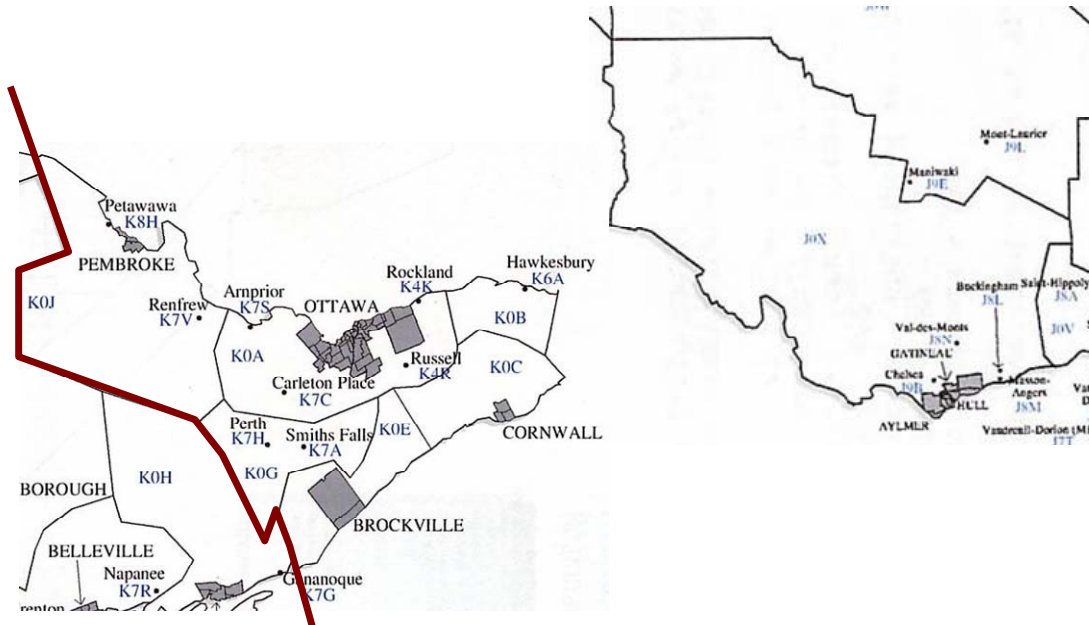
Background

In the summer of 2004, Sunstrum Hanel & Associates Inc., on behalf of the Ottawa Manufacturers' Network, explored the extent of manufacturing in the region. This work was repeated in the fall of 2005, 2006, and 2007, the later being conveyed through this 2008 report.

This report is written primarily by Roy Sunstrum, VP Operations & Product Development, DNA Genotek, with supporting research by Damian Hanel, VP Operations, Blueline Innovations. Contributions of other OMN members and leaders are acknowledged and appreciated.

For the purposes of this work, a manufacturer is defined as any company that conducts manufacturing directly, or has responsibility for manufacturing of a physical product, even if value-added production steps are outsourced. Most of these firms identify themselves as having a primary NAICS (North American Industry Classification System) code of 31, 32, or 33. Services firms such as consultants and software providers to the manufacturing sector are examples of companies not included in this data, but ones that benefit from the multiplier effect of manufacturing. Manufacturers based outside the region, with only sales or administrative offices in the region, were also excluded.

In defining our region, 79 postal codes in Eastern Ontario / Western Quebec were used, as outlined in the maps below.



The Research

A number of sources and methods were used in the assembly of the relevant data, with the primary ones identified below. These various sources sum to a view that is not highly precise but is directionally and thematically robust.

- Custom extracts from Industry Canada's Strategis 'Canadian Companies Capabilities' (CCC) data base – a repository of self-managed data.
- Manual reviews of the CCC output for legitimacy according to the previously mentioned definition of a manufacturer. This has been conducted annually using websites as the primary source of information.
- Manual inclusion of companies discovered through other means, not in the CCC extract. Sources include the OCRI/OBJ High-Tech List and lists that the Ontario Ministry of Economic Development & Trade, the City of Ottawa, and outlying communities in the region maintain.
- Annual Industry Roundtable meeting in spring of 2007, at which manufacturing leaders in the region voiced their opinions about the specific challenges faced locally.

Manufacturing Companies and Sectors Represented

This work identified over 650 manufacturing companies. Not surprisingly, Computer & Electronic Products is the most common, with nearly 200 companies. Most of these companies would also identify themselves as part of the high technology community. These companies produce computer products, telecom equipment, measurement instruments, control devices, aerospace instrumentation, and many other types of products, along with electronic contract manufacturers.

The Computer & Electronic Products sector represents 30% of manufacturers in the region. This is up slightly from 2006 and approximately on par with the 32% observed in 2005.

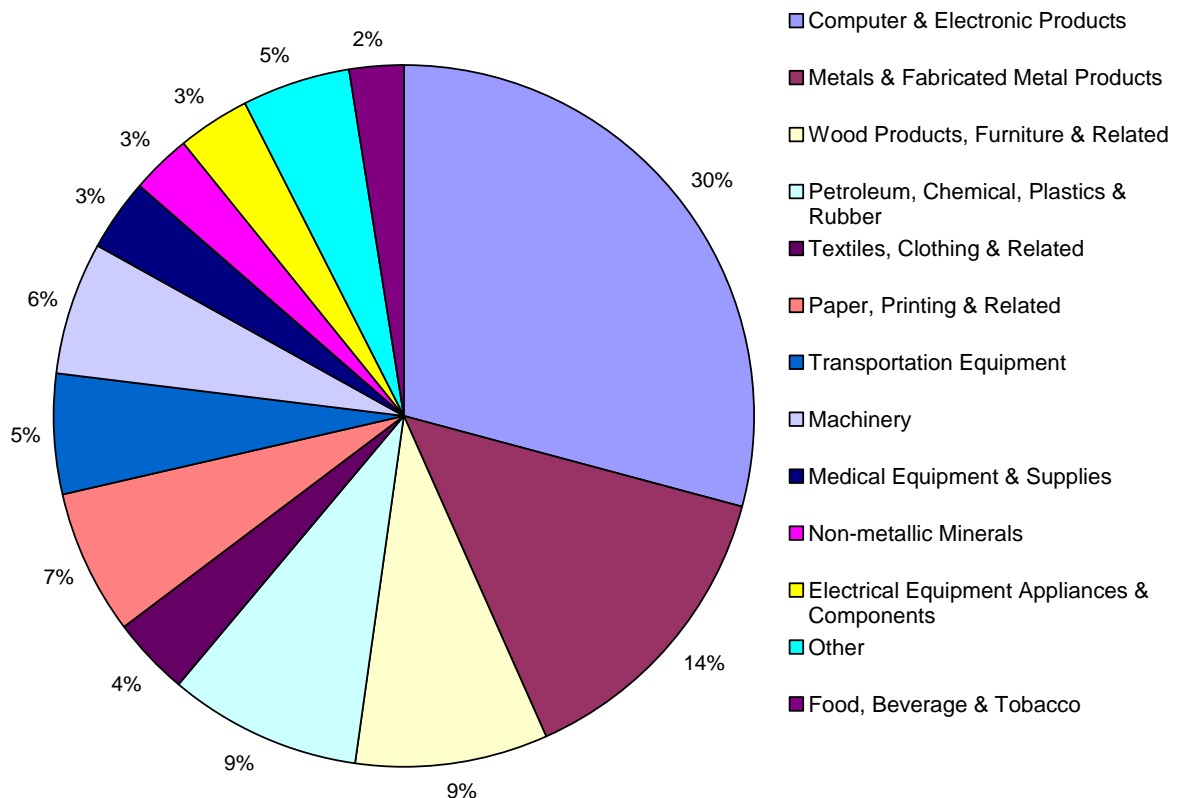
Second as a sector is Metals & Fabricated Metal Products with almost 100 identified companies. To illustrate the importance of the Computer & Electronic Products sector, many of these firms supplying fabricated metal products would identify the high technology firms of the region among their major customers. These firms include sheet metal fabricators, machine shops and other firms dealing primarily with metals. This sector represents 14% of manufacturers in the region, down slightly from last year but up from 9% in 2005.

Third is the Wood Products sector with representing 9% of manufacturers. Included in this sector are kitchen cabinets, stairs, and roof trusses.

Fourth is Petroleum, Chemical, Plastics & Rubber Products also representing 9% of manufacturers in the region. This sector is diverse with manufacturers of enzymes, injection moulded plastic components, soaps, and other products included.

These top 4 categories have remained constant since 2004. Perhaps most interesting is the fact that all manufacturing sectors recognized in the North American Industry Classification System are represented with at least 10 companies in each. This represents a substantial and diverse manufacturing sector.

The following illustrates the distribution of the 650 companies by industry.



Companies By Industry – E. Ontario / W. Quebec

Manufacturing Employment by Sector

Many companies found via the CCC data base have published employment figures. For other firms, employment was estimated, in some cases with direct interaction with the companies. It is estimated that the 650 companies represented in this report, directly employ about 43,000 people, up marginally from the 41,000 estimated a year earlier.

Of this number, the four leading sectors by numbers of companies are more dominant in employment. These four sectors represent 62% of companies, and 74% of employment, as summarized in the table below, both up slightly from the previous year.

Manufacturing Sector	Percentage of Manufacturing Companies	Percentage of Manufacturing Employment
Computer & Electronic Products	30%	55%
Metals & Fabricated Metal Products	14%	9%
Wood Products	9%	6%
Petroleum, Chemical, Plastics & Rubber Products	9%	4%
Total (Top 4 Sectors)	62%	74%

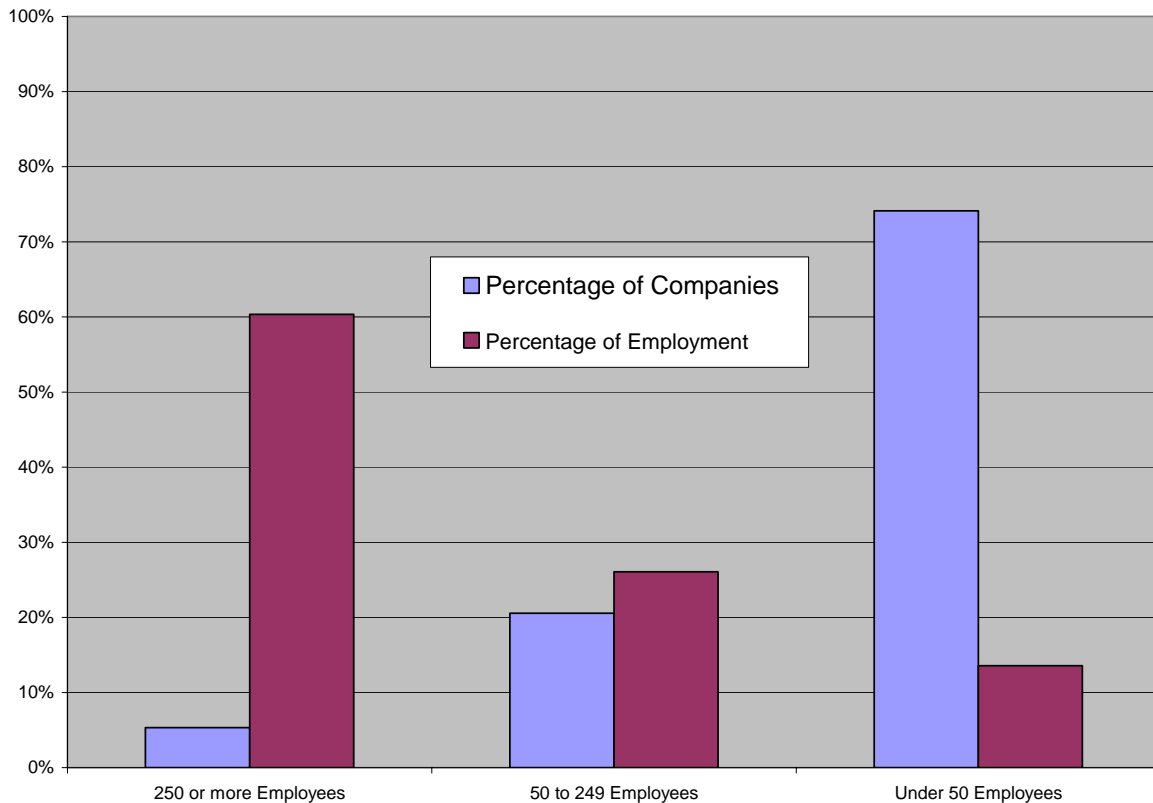
Manufacturing Company Size

Larger firms dominate the total manufacturing employment in the region. To be more specific, companies employing 250 people or more represent approximately 5% of the companies in this report, but 60% of the employment.

On the other extreme, companies employing fewer than 50 people represent 74% of companies, but only 14% of employment. This is not to imply that these companies are not important. Many of the small firms provide manufacturing services that enable the larger firms to succeed, and yet others are destined to grow into moderate and large firms that will then be substantial consumers of local goods and services.

The mid sized companies, with 50 to 249 employees represent 21% of companies and 26% of employment in the manufacturing community.

This distribution of company size is somewhat more pronounced than in previous years, with the large companies representing a more significant portion of manufacturing employment. In an era prior to this OMN analysis, the same would have been even more extreme. In 1999 and 2000, two large firms, Nortel and JDS Uniphase dominated the employment landscape to a much higher degree.



Manufacturing Companies and Employment by Size

What Regional Manufacturers are Saying

The Ottawa Manufacturers' Network hosted its 4th Industry Roundtable in May 2007, involving some of the areas most influential manufacturing leaders. As in previous years, the purpose of this meeting was to openly discuss the challenges facing them, and the kinds of programs and services that the OMN could provide to help with those challenges.

In prior years, there was a broader mix of concerns. Then and in conversations following that meeting, there are a few key challenges facing the manufacturing community

- Cost competitiveness, hit hard for those exporting to the United States by the weakness of the U.S. Dollar. Many firms have predicted \$ Canadian strength relative to the U.S. dollar for the past couple of years, only to see it become even more extreme. Soaring energy costs also contribute to the cost competitiveness challenge.
- Aging workforce with an accompanying lack of skilled labour (trades) to replace retiring workers. Insufficient young people are selecting manufacturing career paths to keep the workforce healthy.
- New product introduction – as product lifecycles continue to reduce and the pressure on time to profitability for a new product intensifies, companies need to get better at introducing and scaling new products.

Manufacturing in Canada

There is little debate about the importance of manufacturing in Canada, with some 2,000,000 Canadians employed directly in manufacturing with more than double that number somehow depending on that sector for their livelihood.

Even though there is intense stress on Canadian manufacturers, that sector remains more productive than other economic sectors. Manufacturing accounts for 12.2% of Canada's workforce, but 15.3% of the GDP.ⁱ

Canadian manufacturing job losses have been reported extensively in the media. In January 2008, the Canadian Labour Congress reported that 132,000 manufacturing jobs disappeared in Canada in 2007. This compared to 59,000 jobs in 2006.ⁱⁱ

Although December was part of a strong close to 2007 in Canadian manufacturing, confidence is low. In the most recent Statistics Canada release, production prospects were rated the weakest since January 2002. Of all manufacturing sectors, confidence was lowest in Computer & Electronic Products and Transportation Equipment. Those with positive outlooks included Petroleum & Coal Products, Primary Metals, Machinery, and Fabricated Metal Products. Manufacturers regarded order and inventory levels to be generally satisfactory, but overall saw prospects of lower overall employment in the coming three months.ⁱⁱⁱ

That same report, cited Labour shortages (Skilled and Unskilled), the high value of the Canadian dollar, and record oil prices as the most concerning issues facing Canadian manufacturers.

Discussion and Conclusions

The Future of Manufacturing in Canada

As addressed in the section on Manufacturing in Canada, there are a number of serious pressures that are addressed in the media almost daily. A weak U.S. Dollar, soaring energy and commodity costs, widespread labour shortages, and weakening demand in the U.S. market are hitting us hard. All of these are factors that are unlikely to improve in the short term, indicating that manufacturers in Canada are facing a challenging few years. It is therefore imperative that manufacturers in Canada, and in our own region, work to become stronger and better well suited to face these challenges. Productivity improvement methods, including LEAN, are key to strengthening our position, and enabling us to better weather the storms.

Fewer Local Companies but with Stable Employment - Bucking the Trend

Our region has over 650 manufacturing companies, down slightly from the previous year, directly employing well over 40,000 people, stable or even up slightly. Given the multiplier effect traditionally assigned to manufacturing, this would account for a total of 80,000 to 100,000 jobs (direct & indirect).

The products of our region differ somewhat from the national or even provincial norm. Other parts of Ontario are quite dependent on automotive products and consumer goods, products that are hit hard by the economic realities discussed in this report. Companies in our region tend to be manufacturing a diverse range of products that have one important theme – innovative products

often aimed into young high growth markets. This certainly does not eliminate competitive pressures but helps to explain why local firms have fared better on the whole.

Importance of Larger Manufacturers

Given that the largest 5% of manufacturing companies in the region are responsible for 50% of manufacturing employment, it is critical to the local economy that these larger firms remain, and that an environment in which medium sized companies can grow and remain active in the region is created.

Strength in Computer & Electronic Products

With Computer & Electronic Products representing 30% of manufacturing companies and 55% of manufacturing employment in the region, its importance is not in dispute. Further to those numbers, a substantial portion of the activity in areas such as fabricated metal products and plastic component production is tied to the production of computer & electronic products in the region.

This strength has long been regarded as sustainable due to the tremendous intellectual property and innovation potential of the region. Nationally, Computer & Electronic Products were the hardest hit in the most recent Statistics Canada Survey on production prospects.^{iv} With a substantial portion of Canada's Computer & Electronics Products exports originating in this region, this reduction in confidence is of some concern, but the fact remains true that this region should remain strong in this particular manufacturing category for the foreseeable future.

Surprising Diversity of Products

Despite the focus on computer and electronic products noted above, all manufacturing sectors are represented in the region. The diversity of products produced in our region continues to surprise many. Example products are highlighted below to demonstrate this diversity. For further information on representative companies, please contact the Ottawa Manufacturers' Network.

Here are just a few of the types of things made in the Ottawa area

- *Digital interactive whiteboards and mobile multimedia devices*
- *Metal enclosures for electronic, optical, and other integrated products*
- *Analytical cartridges for point of care (bedside) medical diagnostics*
- *Transport systems for optical networking*
- *Specialty snack bars and other food products*
- *Books and other printed products*
- *Personal protective equipment for bomb disposal and other high risk applications*
- *Collection, stabilization and analytical devices for DNA and RNA*
- *Windows, doors, stairs, cabinets and other architectural components*
- *Pharmaceutical products*
- *Energy (consumption) management products*
- *Baseball bats*
- *Injection moulded and thermoformed plastic components*
- *Circulation and commemorative coins*
- *Boats, dock systems and other recreational products*
- *Railroad switching and management products*
- *Robust supercomputers*
- *Video and broadcast control systems*

The Ottawa Manufacturers Network – Stronger Together

The manufacturers in our region are stronger when they work together. This is not to overlook the existence of direct competitors, but efforts to collectively strengthen the region are critical. That is what the OMN fosters – companies working together to learn from each other, to bring expertise to the table that would be otherwise less affordable, and to plant the seeds of new ideas with each other.

The ^{3rd} annual Manufacturing Week, February 25 - 29 is an attempt to elevate the profile of manufacturing in the region. Manufacturing in Ottawa will continue to fight misconception, and will continue to play a significant but quiet role, behind the more evident force of governments and "high tech".

ⁱ The Manufacturing Crisis, Canadian Labour Congress, Erin Weir, August 2007

ⁱⁱ Manufacturing Job Losses More than Double in 2007, Canadian Labour Congress, January 11, 2008

ⁱⁱⁱ Business Conditions Survey: Manufacturing Industries, Statistics Canada, January 29, 2008

^{iv} Business Conditions Survey: Manufacturing Industries, Statistics Canada, January 29, 2008