The Changing Nature of Manufacturing in Niagara

The mandate of the Niagara Workforce Planning Board is to lead in the creation of innovative labour market solutions by providing authoritative research, identifying employment trends, targeting workforce opportunities, initiating development projects and bringing people together.

In the first in a three-part series of policy briefs presenting findings from the “Niagara 3D: Diversity, Demographics and Density” research initiative, we examined The Changing Economic Structure of Niagara. In this second installment, we have narrowed the focus to examine the changing nature of Niagara’s manufacturing sector.

Historically the manufacturing sector has been described as the economic base of the Niagara economy. While this sector has undergone considerable changes in recent years, it still contributes significantly to our economy, with revenue exceeding seven billions dollars.

These changes are evident in the following charts and graphs that show shifts in number of jobs, revenue and changing business sizes.

Employment within the manufacturing sector has declined significantly over the past decade, with manufacturing going from employing over 34,200 people in 1999 to 20,700 in 2009. During the same time period, however, total employment in the Niagara region increased by 8,400 or 4.75% to a total workforce of 185,000 by 2009.

This significant decrease in employment within the manufacturing sector has changed the labour market profile of the region.

Figure 1. Employment in Manufacturing 1999-2009
The transportation equipment manufacturing industry remains one of Niagara’s largest employers within the manufacturing sector with approximately 7300 employees in 2008. However, the varied employment across subsequent industries within the manufacturing sector is representative of a diversified workforce.
Figure 3 shifts from a consideration of size by employment to size by revenue generated. The big leader in terms of revenue generated is the transportation equipment industry with over two and a half billion in revenue. Certainly the other industries listed make an important contribution to the Niagara economy, but each industry’s singular contribution is considerably less than that of the transportation equipment industry.
The total revenue generated by the manufacturing sector in Niagara has declined from in excess of 8.5 billion dollars in 2003 to just over 7 billion in 2008. Despite a 17% decline in revenue, manufacturing continues to represent the Niagara economy’s largest revenue generator by far. A closer inspection reveals that a few industries witnessed significant growth in revenues. Machinery manufacturing witnessed the largest growth in revenue of 76% to 738 million dollars in 2008. Both Beverage & Tobacco, and Chemical manufacturers saw revenue growth, with approximately 29% and 27% respectively. While several industries experienced revenue decline, the food and transportation industries experienced major declines.
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- Businesses by number of employees

**Figure 5. % of Businesses by Number of Employees**

Figure 5 illustrates that a significant proportion of businesses in Niagara are small and medium-sized enterprises. In every industry illustrated (except paper) a majority of the companies employ fewer than 20 employees. The level of diversification indicated in this graph is good news for the Niagara economy. The presence of a large number of SMEs demonstrates the entrepreneurial spirit of an area.
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Profiles of the Manufacturing Industry

The following section brings the manufacturing story to life, profiling the Niagara Industrial Association and two local businesses. The profiles provide a glimpse into what makes each business successful, and expose a common theme of innovation and commitment to excellence.

**Niagara Industrial Association (NIA)**

The Niagara Industrial Association (NIA) was established in 2007 with 20 members and incorporated a year later in 2008 as a non-profit. In 2010, it has almost 100 members. The NIA offers numerous one-on-one opportunities to network with fellow manufacturers in Niagara. This form of in-person networking allows for information sharing among its members regarding possible business opportunities and partnerships. The NIA tries to encourage manufacturers in Niagara to become innovative and start looking outside the Niagara region for their future. This kind of diversification away from supporting local large manufacturers will allow continued growth of Niagara’s small manufacturers. One method the NIA employs to accomplish this is a yearly trade show in Niagara Falls. The 2010 event focused on manufacturing and supply chain opportunities in the wind industry, and featured presentations and workshops by industry experts to provide information on how local businesses can become stakeholders in this growing green energy sector. [www.niagaraindustry.com](http://www.niagaraindustry.com)

**Tradewood Windows and Doors, St. Catharines**

Tradewood Windows and Doors manufactures the finest quality wood windows, French doors, entry doors and interior doors. Richard Krysiak believes in customer-driven, solution-based products, designed and manufactured with the highest standards of quality in a timely manner by a dedicated team of professionals through the use of innovative technologies. Tradewood has been affected, much like the rest of the industry, by the economic downturn that occurred in 2008.

Until that time Tradewood’s success was such that there were times it was at production capacity. Today it takes a much more selective approach to its clients and the companies it deals with. The greatest challenge facing Tradewood currently is finding suitable employees.
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Much of the manufacturing that Tradewood undertakes is so complex that individuals coming out of colleges do not have the skills necessary to fulfill Tradewood’s needs. This has led to training for employees that is quite expensive. Tradewood continues to find efficiencies in its design and manufacturing chain. For example, it purchased a 5 axis CNC machine to undertake detailed millwork. These kinds of investments make it a tech leader in its industry.

**Bosch Rexroth Canada, Welland**

Bosch Rexroth is one of the world’s leading specialists in the field of drive and control technologies. Under the brand name of Rexroth the company supplies more than 500,000 customers with tailored solutions for driving, controlling and moving.

As “The Drive & Control Company”, Bosch Rexroth develops, produces and sells components and systems in the technology fields of electric drives and controls, industrial hydraulics, mobile hydraulics, linear technology, assembly technology and pneumatics.

In 2001, Bosch merged with Rexroth to form Bosch Rexroth, integrating a large corporate perspective, while still maintaining the integrity that was present in the early roots of Basic Technologies, the original family owned business. A strong commitment to lean manufacturing practices has had substantial impact on the cost of production, resulting in lower costs that are passed on to their customers.

Like many manufacturing organizations, the recent economic downturn has affected operations; however sales have been increasing and have recently surpassed targets. In the current economic climate, the company is understandably cautious from a human capital perspective, and new hires are commonly employed in temporary or contract positions. Bosch Rexroth considers its 170 employees a fundamental asset in contributing to its business success.
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Summary

Manufacturing continues to be an important industry in Niagara, transitioning both in terms of industry size and revenue. Traditionally Niagara has been a region dominated by a small number of large manufacturers in the transportation equipment sector. The previous brief in this series showed how manufacturing is an important part of the Niagara scene, despite its recorded decline and industry transition. This brief illustrates the extent to which the manufacturing sector has been diversifying in the last few years. Transportation equipment still dominates the area as measured by revenue generated, but the picture painted by employment is much more diverse. Fabricated metal products, food, and machinery are close behind transportation equipment in terms of employment. However, only machinery manufacturing has seen a significant increase in employment in the previous six years.

The big story in Niagara is the presence of a large number of small and medium-sized enterprises across every manufacturing sector. This would seem to be the future of manufacturing in Niagara.