



STAFF REPORT ACTION REQUIRED

State of Manufacturing in Toronto (Collaborating for Competitiveness - Implementation Action 5)

Date:	October 5, 2013
To:	Economic Development Committee
From:	General Manager, Economic Development and Culture
Wards:	All
Reference Number:	

SUMMARY

As part of its endorsement of the *Collaborating for Competitiveness* economic growth and job creation strategy, City Council has directed the preparation of an annual report on the state of manufacturing in Toronto to keep a special focus on this high value sector.

This report highlights key trends in manufacturing in Toronto and in the broader context, speaks to the significance of manufacturing in Toronto's economic and employment landscape, identifies key issues and challenges, provides an overview of current City initiatives to support manufacturing, and presents potential future directions to enhance support for manufacturing in Toronto.

While manufacturing in Toronto, as elsewhere, has experienced significant decreases both in the number of firms and the number of jobs, reflecting a variety of economic forces, it remains a crucial part of Toronto's economic landscape. Manufacturing has not left entirely. Toronto's manufacturing firms employ almost 120,000 people representing 9% of Toronto's total employment. Manufacturing creates quality jobs, has high economic multipliers, and needs to be recognized and supported as a component of a strong and balanced economy with good growth prospects.

In an increasingly competitive global economy, Toronto manufacturers face challenges and pressures that require them to have a stable yet flexible, cost-competitive and supportive operating environment, so they can survive, innovate and expand. With focussed and collaborative efforts, Toronto is well positioned to capitalize on its unique advantages and on the strengths of its diverse manufacturing sector, to build on emerging trends, to position the sector for growth and to continue to enhance the health and vitality of this important sector.

RECOMMENDATIONS

The General Manager, Economic Development and Culture recommends that:

1. City Council request the General Manager, Economic Development and Culture to convene a Toronto manufacturing business roundtable as generally described in this report, to be held in Q1 2014, focussed on identifying issues and opportunities related to enhancing Toronto's competitiveness for manufacturers, and report back to Economic Development Committee on this consultation in Q2 2014.
2. City Council request the General Manager, Economic Development and Culture, as part of ongoing business outreach activity, to proactively identify Toronto manufacturing companies seeking global product mandates, and work with the proponents, other City Divisions and the appropriate agencies, including Invest Toronto and Provincial/Federal orders of government, as required, to help accelerate these investment opportunities.
3. City Council request the General Manager, Economic Development and Culture to work in partnership with the General Manager, Toronto Employment and Social Services, the Executive Director, Social Development, Finance and Administration, and representatives from manufacturing business, labour and academia to identify Toronto manufacturing sector recruitment, skills and workforce training needs, concentrating on base skills that are transferable, and to identify a range of preliminary opportunities to connect jobseekers, educators, trainers, and employers.
4. City Council request the General Manager, Economic Development and Culture to collaborate with Invest Toronto and others to prepare a manufacturing focussed investment opportunity package, profiling Toronto's advantages for manufacturing business and identifying available sites and/or projects in Toronto along with the supporting ecosystem components.
5. City Council request the General Manager, Economic Development and Culture to report back to Economic Development Committee in Q1 2015 with the next annual report on the state of manufacturing in Toronto, in the form of a 'dashboard' report providing an update on key indicators related to manufacturing activity in Toronto and to report on the impacts of supportive measures taken in 2013 and 2014.

Financial Impact

The recommendations in this Report have no financial impact beyond what has already been approved in base operating budgets of involved City programs. The Deputy City Manager and Chief Financial Officer has reviewed this report and concurs with the financial impact statement.

DECISION HISTORY

At its meeting of February 20 and 21, 2013, City Council endorsed *Collaborating for Competitiveness: A Strategic Plan to Accelerate Economic Growth and Job Creation in Toronto*: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.ED19.4>.

This report specifically addresses two *Collaborating for Competitiveness* actions related to strengthening support for retaining and expanding manufacturing, as a strategy to boost business growth in Toronto: 1) provide an annual report on the state of manufacturing in Toronto to keep a special focus on this group of high value sectors; and 2) proactively outreach to identify and assist Toronto based manufacturers seeking global product mandates, including accelerating necessary municipal approvals and advocating to/with other orders of government.

This report also recognizes the importance of a range of other *Collaborating for Competitiveness* objectives and strategies, including: the Plan's focus on employment, job quality and growing the assessment base; improving Toronto's competitiveness; accelerating investments; workforce development; strengthening key sectors; attracting companies and investment to Toronto; and alignment of City policies, programs and activities to create an attractive climate for business and investment.

ISSUE BACKGROUND

Manufacturing cuts across many different economic sectors and provides relatively high-value jobs for a broad range of skills and education levels. As a key economic driver and wealth generator, manufacturing is a 'traded' sector that produces goods for export, and generally has large supply chains and logistics networks contributing to high economic multipliers (*Collaborating for Competitiveness*, 2013).

Over the past 25 years, the manufacturing industry in Toronto, and in Canada and internationally, has experienced significant changes as the nature of operations has evolved and some types of production have shifted to lower labour cost jurisdictions. More recently, the sharp reduction in exports to the U.S. following the economic downturn of 2008, a strong Canadian dollar and increasing energy costs have contributed to further uncertainty and have placed additional pressures on manufacturers in Toronto and elsewhere in Ontario and Canada. Although the economy has shown some recent improvements, rising land values, urban growth and pressures on employment lands will continue to present further challenges for Toronto-based manufacturers.

Despite ongoing pressures, manufacturing remains a critical component of the Toronto economy and employs nearly 120,000 people or 9% of total jobs, providing a range of job opportunities across the city for Toronto residents and the regional labour force. While manufacturing employment has declined over the past 25 years for a number of economic and structural reasons, output continues to increase through continued investment in more efficient technologies, and this productivity will continue to need

industrial space (Sustainable Competitive Advantage and Prosperity – Planning for Employment Uses in the City of Toronto, Malone Given Parsons, 2012).

In an increasingly competitive global market, Toronto’s manufacturers of all types and scales need to continually innovate through improved products and processes, capitalize on new opportunities and effectively manage their costs. Manufacturers must also continue to have a stable and competitive operating environment that supports retention, investment and attraction. Recent data have shown that the declines of the past two decades have halted, and Toronto has seen modest growth in the manufacturing sectors. One of the key challenges facing the sector today is that of a self-fulfilling prophecy taking hold by which a view that manufacturing will inevitably leave the City all together causes the sector not to be valued and thus reinforces the downward trend.

Retaining, and ideally expanding, manufacturing as a mainstay of the Toronto economy supports a number of objectives of the City’s *Collaborating for Competitiveness* economic growth strategy, and remains important to balanced and sustained economic growth. This report provides a means to understand the industry’s current state and discusses key themes related to the retention and growth of manufacturing in Toronto.

COMMENTS

Toronto’s Manufacturing Context

Toronto has a rich manufacturing history, with a diverse range of activity that has grown and evolved over time as both urban and more suburban areas comprising Toronto’s industrial fabric have developed and changed. Manufacturing figures prominently in several identified economic sectors or clusters that have emerged and are encouraged in Toronto, including food and beverage, life sciences, fashion/apparel and ICT; however, no sector dominates Toronto’s manufacturing landscape.

Toronto has historically been and continues to be the place of choice for a wide range and size of manufacturing operations. Manufacturers of solar panels, cosmetics, and specialty food and beverage products are just a few examples of the types of firms that have recently located or expanded in Toronto. Toronto is also home to head offices/Canadian head offices for a broad array of manufacturers.

Although there have been significant shifts in manufacturing employment in the Toronto context and elsewhere, the city of Toronto remains a highly competitive centre of manufacturing activity. With the appropriate alignment of collaborative strategy and action, Toronto will continue to provide a supportive environment for this key industry sector and encourage further innovation and opportunity in local manufacturing activity.

Manufacturing Trends and Opportunities

After a long period of transition in the manufacturing sector, and following the 2008 economic downturn, greater stability now appears to be in place. More recently,

economic growth in the U.S. appears to be accelerating. While the economic downturn left a lot of damage, the U.S. economy is now almost 5% larger than it was in 2008 and the national unemployment rate has been improving. Furthermore, U.S. banks have stopped contracting and are now lending again, consumer balance sheets are much healthier than they were a few years ago and the housing market seems to be recovering.

In the U.S., the outlook for manufacturing employment is expected to stabilize through this decade and employment growth is forecasted for certain types of manufacturing such as computers, electronics, furniture products, transportation and food manufacturing (NAIOP Research Foundation, 2013). Further, several factors such as increased labour and transportation costs elsewhere have encouraged some manufacturers to relocate production back to North America, known as ‘reshoring’, or to retain production onshore.

The reshoring trend should continue for the foreseeable future as manufacturers locate closer to their North American client base. According to the Boston Consulting Group, the reallocation of global manufacturing is in its very early phases and will vary from industry to industry, depending on labour content, transportation costs, China's competitive strengths, and the strategic needs of individual companies. This reallocation will become more evident over the next five years, as companies start to face decisions of where to add new capacity (Boston Consulting Group, *Made in America, Again*, 2012).

Manufacturers themselves no longer see their activities simply in terms of transforming raw materials into finished products. Today, manufacturing is a system that includes all activities required to deliver products that meet customer needs, extending from research and development, design, and engineering, through production, logistics, and supply chain management, to finance, marketing, and customer service. The future for manufacturers is one of global customers, supply chains and business networks, and the potential to source from the best companies, technologies, and skills. Growth will be driven by innovation, and will require highly skilled people to make it work (Canadian Manufacturers and Exporters, *20/20 - Building our Vision for the Future of Manufacturing in Canada*, 2005).

To be competitive in today's global economy, manufacturers must be able to move up the value chain by increasing productivity through technology to improve the process and add greater value to their products, and must be able to realize opportunities for export to new markets (Collaborating for Competitiveness, 2012). Toronto manufacturing has evolved such that a number of firms now provide very specialized, high-value products. A further potential opportunity relates to Toronto manufacturers' ability to establish a brand name for their specialty products and to tap growing demand in emerging markets.

As innovation is a key to manufacturing success, companies are expected to remain or gravitate to places where support for research and development, technological innovation and a skilled labour force are readily available. Toronto-based manufacturers that can remain competitive, leverage opportunities, connect in with key supply chains and grow their export markets will be well positioned to benefit from emerging North American trends. Going forward, with a high-quality operating environment, an adequate supply

and availability of business input essentials and appropriate supports for both operation and innovation, manufacturing firms in Toronto will be well positioned to capitalize on Toronto's unique competitive advantages, which are the subject of the next section.

Impact and Importance of Manufacturing in Toronto

While manufacturing employment and establishments in Toronto have decreased in number over time, as has occurred in many other jurisdictions, manufacturing has made productivity gains and continues to play a prominent role in the Toronto economy. As a key employer providing quality jobs in the city in a wide range of functions and locations, manufacturing activity in Toronto is essential to the city's economic prosperity and opportunity and helps support balanced and sustained economic growth.

In 2012, manufacturing industries in the city of Toronto produced an estimated \$13.5 billion of output (in constant 2002 dollars), which is 11% of the total output of goods and services produced in Toronto. In the city of Toronto, the manufacturing industry has contributed about 14%, on average, to Toronto's total GDP annually over the period 1997 to 2012. Manufacturing's GDP declined by \$2.5 billion or nearly 16% from 1997 to 2012 in Toronto, compared to an increase of \$53.8 billion or almost 80% for all industries (estimates obtained from the City of Toronto Econometric Model). While manufacturing's current GDP value is relatively lower than it was in 1997, the industry continues to provide significant support to the City's economy.

Like other industries, the manufacturing industry was hard hit by the 2008-2009 recession. Over the period of 2008 to 2009, the manufacturing GDP decreased by 7.1% annually. However, the industry has rebounded from the recession and steadily grown at 2.4% annually between 2010 and 2012. With the 2012 GDP of \$13.5 billion, the City's manufacturing GDP is slowly returning to its 2007 pre-recession level of \$14.6 billion.

As a high export-based, high economic multiplier sector, it is estimated that 1,000 jobs in manufacturing support 1,200 indirect jobs in the economy (Sustainable Competitive Advantage, 2012). The Canadian Manufacturers and Exporters estimates every dollar invested in manufacturing generates \$3.25 in total economic activity (CME 2013). Preservation of existing manufacturing employment and industrial lands is a very high-leverage strategy the City can pursue to secure its ability to generate job growth and wealth, as gains and losses in attracting or losing manufacturing employers have extremely high employment and economic impacts. Manufacturers have close linkages with a range of other firms in the area, and if a manufacturer leaves Toronto it puts a significant number of manufacturing, business services and other jobs at risk given the close linkages between firms (Sustainable Competitive Advantage, 2012).

In addition to their role as an economic driver, manufacturing firms in Toronto contribute significantly to the assessment base. In 2011, industrial properties, where Toronto's manufacturing firms for the most part are based, contributed over \$239.6 million in City and educational property taxes. Of this total, \$128.8 million or 53.8% was allocated to the City of Toronto, and the remaining \$110.8 million went to boards of education

(Municipal Affairs and Housing). Businesses in Toronto make a net positive contribution to the City’s tax revenues. Maintaining a strong industrial and commercial tax base is thus essential to providing high quality public services and programs.

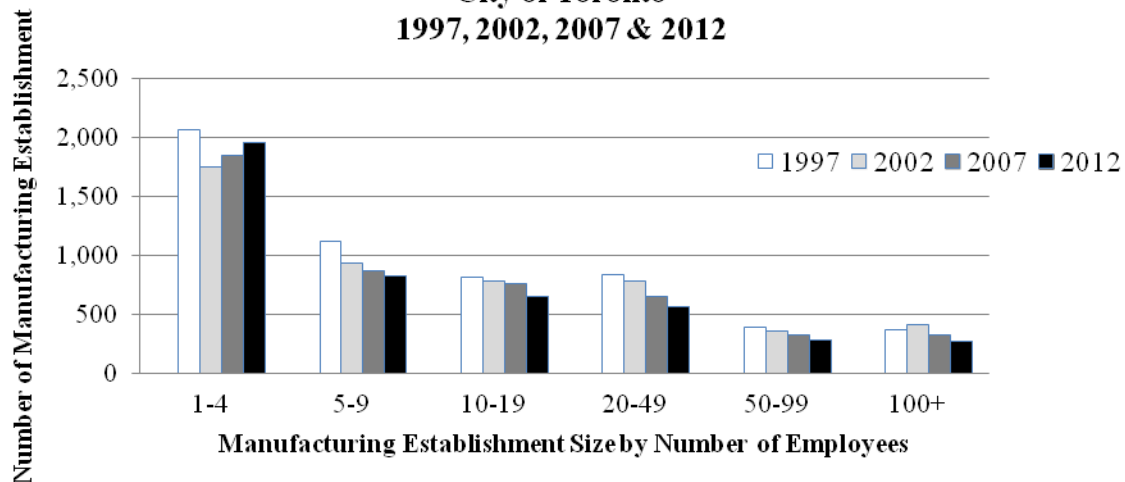
Continued support for manufacturing in Toronto will further drive employment growth, job quality, assessment growth and other *Collaborating for Competitiveness* priorities.

Manufacturing Activity in Toronto

Toronto has a very diverse range and size of manufacturing operations, which are located, primarily, throughout the City’s many employment areas. Manufacturing activities are integrated and found across various industrial sectors in the economy, including industry sectors that have a particular focus in Toronto such as food and beverage, life sciences, fashion/apparel and ICT. Attachment 1 shows the structure of manufacturing and warehousing employment by locality in Toronto, illustrating the distribution and various concentration of activity across the city.

There are currently over 4,300 manufacturing establishments operating within the city of Toronto. The total number of manufacturing establishments in the city has decreased by approximately 1,300 firms between 1997 and 2012. While the absolute number of manufacturing establishments in Toronto has decreased in almost all size categories (Figure 1), the number of manufacturing locations with 1 to 4 employees, often referred to as ‘micro’ enterprises, has been increasing over the period past 10 years both in terms of absolute number and as a percentage of total manufacturing establishments in Toronto.

Figure 1
Manufacturing Establishments by Number of Employees
City of Toronto
1997, 2002, 2007 & 2012



Source: City of Toronto, City Planning, Policy and Research, ELA Survey, 1997-2012

Despite the reduction in number of manufacturing establishments overall in Toronto over the past 15 years, remarkably, over 30% of the City's manufacturing, warehousing and related business establishments within employment localities have been at their respective locations for five years or less, demonstrating continued investment activity and vitality in these employment areas (Sustainable Competitive Advantage, 2012). Related businesses include certain office sector establishments associated with and supportive of manufacturing, as well as wholesale operations and transportation related activity.

Manufacturing Employment in Toronto

Over the past decade, manufacturing employment has seen a downward trend reflecting a similar decline nationally as the North American economy continues to shift from goods-producing to service-based (Toronto Employment Survey 2012, City Planning Division). As in Toronto, manufacturing has evolved at the national, provincial and regional levels in response to broad economic trends including the shifting of production to lower labour cost jurisdictions, consolidations, outsourcing, and a move toward more specialized, technology-driven, capital-intensive manufacturing.

Toronto's progression reflects an evolving urban economy that remains competitive in a changing regional and global market. The rate of manufacturing job loss in Toronto has slowed since the economic downturn in 2008, demonstrating continuing demand for manufacturing activities in the city (Toronto Employment Survey 2012, City Planning Division).

As shown in Figures 2 and 3, total employment in the manufacturing sector in the City of Toronto declined between each successive 5-year period between 1997 and 2012. Over the past 15 years, a downward trend in manufacturing jobs has also been observed for the Toronto CMA, Ontario and Canada. Between 1997 and 2012, total manufacturing employment in Toronto was reduced by approximately 44,500 jobs or 27%, despite overall employment in the city increasing by about 153,000 jobs or 13% during that time.

Figure 2
Employment* by Sector City of Toronto
1997, 2002, 2007, and 2012

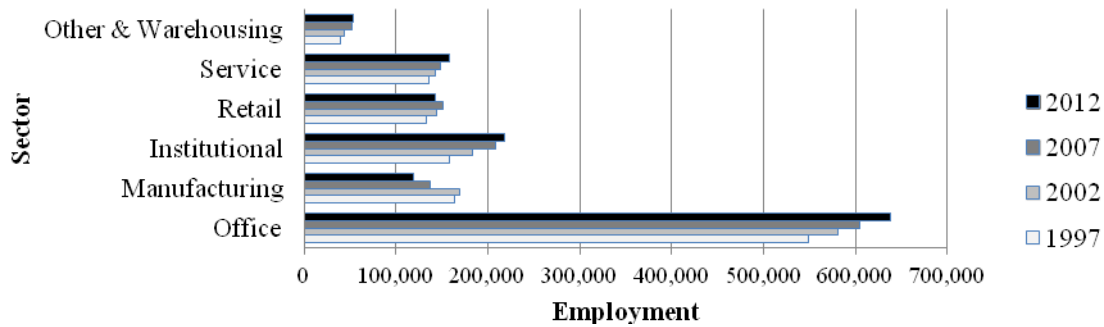
Sector	1997 #	2002 #	2007 #	2012		1997 to 2012	
				#	% of Total	# Change	% Change
Office	548,389	581,475	604,225	638,078	47.9	89,689	16.4
Manufacturing**	163,868	168,966	137,370	119,333	9.0	-44,535	-27.2
Institutional	158,447	183,330	207,810	218,422	16.4	59,975	37.9
Retail	132,920	143,911	151,527	143,312	10.8	10,392	7.8
Service	135,357	142,478	148,919	158,303	11.9	22,946	17.0
Other & Warehousing	39,520	43,148	51,768	54,030	4.1	14,510	36.7
Total	1,178,501	1,263,308	1,301,619	1,331,478	100.0	152,977	13.0

Source: City of Toronto, City Planning, Policy and Research, ELA Survey, 1997-2012

Note: *Full time and part time

**Manufacturing includes all businesses with an activity code 411 to 499 (Manufacturing) in the City of Toronto, City Planning, Policy and Research, ELA Survey. The sub-sectors of Manufacturing include energy production, raw material processing, processed goods processing, product assembly, waste treatment, research and development (laboratories), printing, reproduction, data processing & sorting, and construction. Head offices for manufacturers are not included if the employment of the office component is greater than the employment of the manufacturing component. When City of Toronto Planning reports on manufacturing employment in the annual Profile Toronto, warehouse and storage are included in the data. Warehouse and storage have been removed from manufacturing for these data to focus solely on manufacturing. For the purposes of this report, manufacturing is defined as engaging in the transformation of materials into new or modified products through fabrication, processing, assembly, packaging, producing, making, repairing, finishing or blending.

Figure 3
Employment by Major Sector
City of Toronto
1997, 2002, 2007, 2012



Source: City of Toronto, City Planning, Policy and Research, ELA Survey, 1997-2012

Despite a reduction in total manufacturing jobs in Toronto over the past 15 years, a more positive trend has been observed more recently. Over the past two years, from 2010 to 2012, employment in manufacturing in the city of Toronto has increased by over 1,000 jobs. During the same time period, employment in the city increased by about 14,000 jobs – in both cases, around a 1% increase. The manufacturing sector in Toronto is now showing improved stability from an employment perspective and, more recently, appears to be aligned with overall employment growth in Toronto.

Figure 4 shows that manufacturing jobs in Toronto are characterized by the highest percentage of full-time employment of the six major industry sectors in the city. In 2012, manufacturing full-time employment was 93.0%, compared to office at 88.6%, institutional at 67.0%, service at 64.3% and retail at 52.6%. Full-time employment opportunities are important to both individual and collective prosperity.

Figure 4
Employment in All Sectors by Full-time Employment
City of Toronto, 1997 to 2012

	1997 Full-time % of Total	2012 Full-time % of Total
Manufacturing	93.6	93.0
Office	86.0	88.6
Institutional	71.0	67.0
Retail	58.2	52.6
Service	67.9	64.3
Other & Warehousing	57.9	53.4
All Sector Total	78.9	77.3

Source: City of Toronto, City Planning, Policy and Research, ELA Survey, 1997-2012

Manufacturing Productivity in Toronto

While the number of manufacturing jobs in Toronto has decreased significantly between 1997 and 2012, showing signs of improvement and modest growth only recently as the broader economy has stabilized and begun to recover from the last re-set, the productivity of manufacturing jobs on the whole in Toronto has grown steadily and significantly over that same 15-year time period. Figure 5 below shows productivity estimates per manufacturing job in Toronto, for various sub-sectors and for manufacturing overall.

Gross Domestic Product (GDP) or output per job is a measure of productivity, the efficiency with which the economy uses labour to produce goods and services. Productivity will be higher in sectors that are more capital-intensive, and where firms exploit economies of scale, employ more skilled workers, or use advanced technologies. Productivity growth in manufacturing may occur for a number of reasons. For example, labour productivity may rise if output increases while employment levels decrease or stay the same. This phenomenon may also occur as a result of firms increasing their use of technology and capital inputs in order to become more productive.

Over the period of 1997-2012, estimated manufacturing productivity or GDP per job increased by over \$21,000, or 27.6%, to almost \$100,000. Among the major manufacturing sub-sectors, the pharmaceutical sub-sector had the largest absolute GDP growth per job at \$35,512, while the computer and electronic products subsector had the highest percentage growth of 61.5% between 1997 and 2012. Other sub-sectors that

increased during this period were food and beverage, primary and fabricated metal, motor vehicle and other manufacturing.

Figure 5
Gross Domestic Product* (GDP) per Job in Manufacturing
City of Toronto
1997, 2007, 2011 & 2012

Manufacturing Sub-Sector	1997 (\$)	2007 (\$)	2011 (\$)	2012 (\$)	\$ Change 1997-2012	% Change 1997-2012
Food and Beverage	90,187	88,847	95,322	96,034	5,847	6.5
Printing	61,108	76,877	63,429	58,618	-2,490	-4.1
Pharmaceutical	88,849	119,746	111,485	124,361	35,512	40.0
Primary and Fabricated Metal	79,785	100,878	93,136	99,568	19,783	24.8
Machinery and Equipment	109,069	103,745	115,761	98,055	-11,014	-10.1
Computer and Electronic Products	46,395	62,452	73,494	74,929	28,534	61.5
Motor Vehicle	115,278	134,910	113,373	127,257	11,979	10.4
Furniture	65,499	50,658	46,924	55,630	-9,869	-15.1
Other Manufacturing	74,334	86,364	104,571	114,464	40,130	54.0
Manufacturing Total	77,381	87,242	93,327	98,720	21,339	27.6

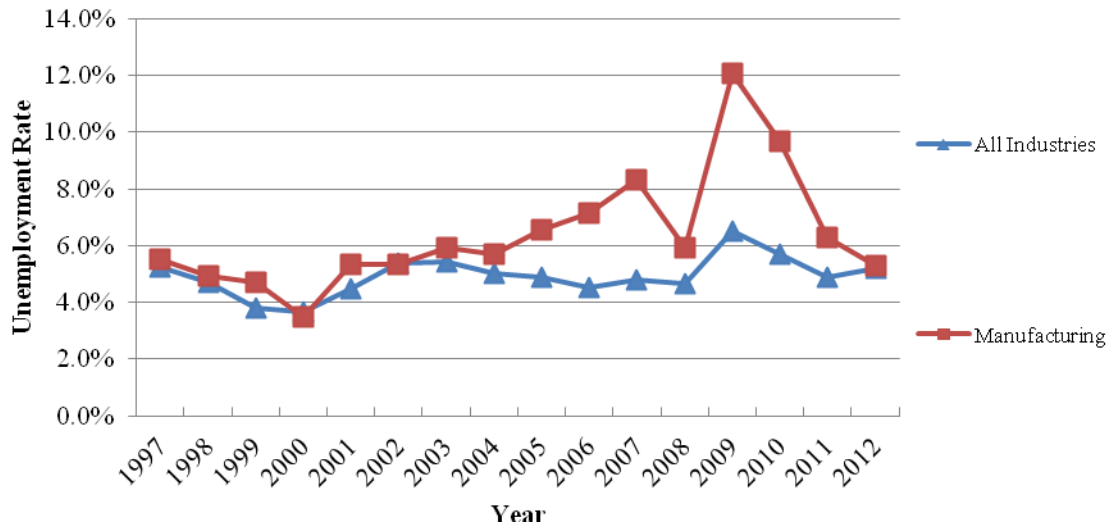
*Note: Gross Domestic Product (GDP) in constant 2002 dollars
Source: City of Toronto, Toronto Econometric Model (Version 8).

Looking ahead, manufacturing employment in the Greater Toronto Area is expected to increase marginally between 2011 and 2031, and manufacturing production in the GTA is forecasted to outpace the rate of manufacturing employment growth during this same time period. Stronger productivity growth in manufacturing is projected over the next 2-3 decades, relative to the past 15 years, reflecting successful efforts on the part of manufacturers in Ontario and the GTA to remain competitive with producers abroad (Sustainable Competitive Advantage, 2012).

Manufacturing Labour Force in Toronto

Figure 6 below shows the annual unemployment rate of city of Toronto residents between 1997 and 2012, for manufacturing and for all industries combined. While manufacturing unemployment during this 15-year period peaked at about 12% in 2009 – with a peak similarly being observed for the Toronto CMA, Ontario and Canada – the unemployment rate of Toronto residents employed in manufacturing has now appeared to reach greater stability, at 5.3% in 2012, which is consistent with the 2012 unemployment rate of Toronto residents across all industries. The spike in the manufacturing industry unemployment rate in 2009 can be attributed in large part to the global economic downturn starting in 2008, which had a particularly large impact on manufacturing.

Figure 6
Unemployment Rate* of Residents by Industry
City of Toronto, 1997 to 2012



*Note: Based on experienced labour force and does not include new entrants into the labour force. Total unemployment rate is significantly higher.

Source: Statistics Canada Labour Force Survey, 1997-2012

Looking at average annual wages earned by Toronto residents working in the manufacturing sector over the period 1997 to 2012 (Figure 7), an increase 29.6% is observed. Although wages earned by Toronto residents employed in manufacturing activity has increased by almost 30% during this time, the wages earned in manufacturing have not kept pace with the increase in the Consumers Price Index in the Toronto CMA (a general indicator of inflation) which rose by 36.2% during this period, or with the increase by 44.4% in average annual wages earned by Toronto residents working in all industries as a whole.

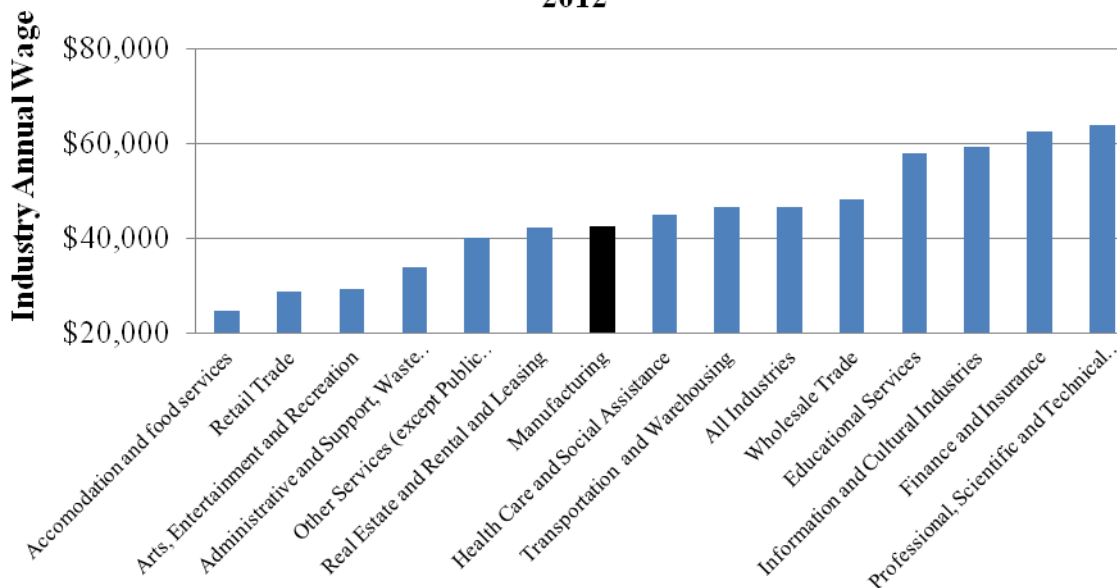
Figure 7
Manufacturing and All Industries Average Annual Wages*
City of Toronto
1997, 2002, 2007, 2011 & 2012

	Annual Wages (\$)					% Change		
	1997	2002	2007	2011	2012	2011-2012	2002-2012	1997-2012
Manufacturing	32,889	33,894	38,741	44,117	42,617	-3.4	25.7	29.6
All Industries	32,352	35,619	41,108	46,451	46,701	0.5	31.1	44.4

Note: *Employees only, does not include self-employed.
Source: Statistics Canada's Labour Force Survey, 1997-2012

At \$42,617, the average annual wages of Toronto residents who work in manufacturing exceed the wages earned in certain other sectors but remain below the average annual wages earned across all industries. Figure 8 is a snapshot showing 2012 average wages in of Toronto residents working in selected industries, comparing manufacturing average annual wages with a range of other sectors and with the average wage earned by Toronto residents over all industries.

Figure 8
Industry Average Annual Wage*
City of Toronto
2012



Note: *Employees only, does not include self-employed. Source: Statistics Canada Labour Force Survey

Figure 9 below shows the educational attainment of city of Toronto residents working in manufacturing jobs as a percentage of the total manufacturing workforce in the city in

each time period, at 5-year intervals between 1997 and 2012. The percentage of the manufacturing workforce with a university degree increased from 16.5% in 1997 to 30.7% in 2012, and increased in each successive time period, while the percentage of manufacturing workers with some high school, or less, trended downwards. The level of education of manufacturing workers living in the city of Toronto is on an upward trend. This trend in higher educational levels observed reflects, at least in part, the need for increased education and training due to advances in manufacturing technology associated with today's higher-value, more specialized and more complex production activity. While manufacturing wages are increasing, wages are not necessarily keeping pace with expected educational and training requirements of these job functions.

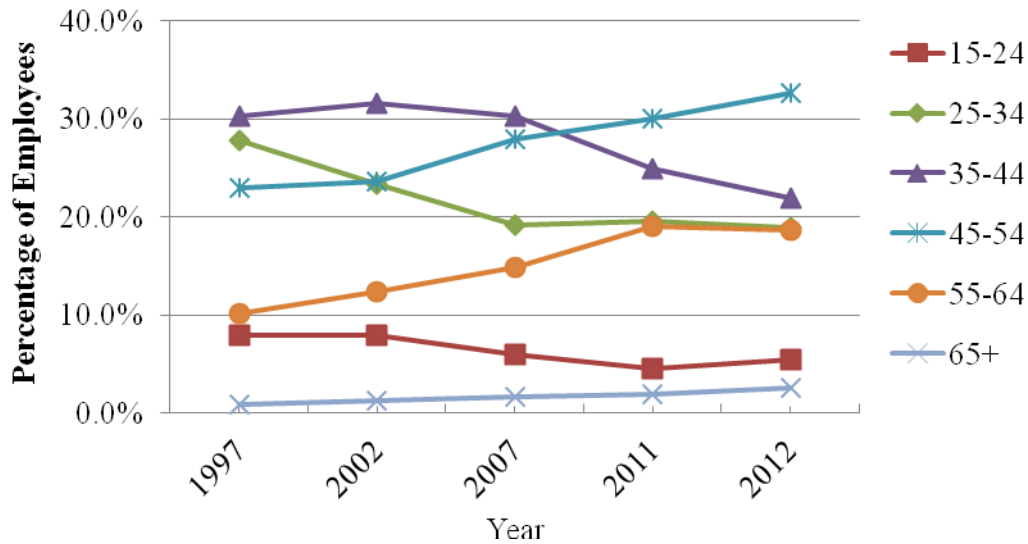
Figure 9
Educational Attainment of City of Toronto Residents
Working in the Manufacturing Sector
1997, 2002, 2007, 2012

Educational Attainment	1997	2002	2007	2012
0-8 Years	12.9%	9.4%	6.9%	5.3%
Some High School	14.6%	14.6%	9.8%	9.6%
High School Graduate	25.6%	25.6%	24.0%	24.0%
Some Post Secondary	5.5%	6.8%	6.0%	5.0%
Post Secondary Diploma/Certificate	24.9%	21.3%	25.5%	25.4%
University Degree	16.5%	22.2%	27.8%	30.7%

Source: Statistics Canada's Labour Force Survey, 1997-2012 and City of Toronto Economic Development and Culture Toronto CMA 2012 Industry Profiles. Includes total employees and self-employed individuals.

Reflecting the population of the Toronto region, the average age of manufacturing workers in the city of Toronto is trending upward, and quite significantly. Figure 10 shows that in 2012, the age group with the highest percentage of total manufacturing workers was 45-54, representing almost one-third of all Toronto residents employed in manufacturing activity. Over the period 1997 to 2012, the 45-54 and 55-64 age groups increased as a proportion of all Toronto residents employed in manufacturing, while manufacturing workers in the 15-24, 25-34 and 35-44 age brackets all decreased as a percentage of the total manufacturing workforce in Toronto. During this period, the number of Toronto residents employed in manufacturing activity increased by almost 20% in the 45-54 age group and by over 50% in the 55-64 age category.

Figure 10
City of Toronto Residents Working in the Manufacturing Sector by Age Group, 1997-2012



Source: Statistics Canada's Labour Force Survey, 1997-2012 & City of Toronto Economic Development & Culture Toronto CMA 2012 Industry Profiles

Industrial Real Estate and Building Activity in Toronto

Industrial space in the city of Toronto accounts for over 265 million square feet of space (Cushman and Wakefield), which is the equivalent of over 60 Toronto-Dominion Centres. The vast majority of Toronto's industrial space is located within the city's employment areas, which are the hotbed for innovation, providing a location for manufacturers to reside and prosper. Toronto's employment lands are home to 36% of the manufacturing jobs in the GTA, which is the third largest industrial complex in North America behind Chicago and Los Angeles (Sustainable Competitive Advantage, 2012).

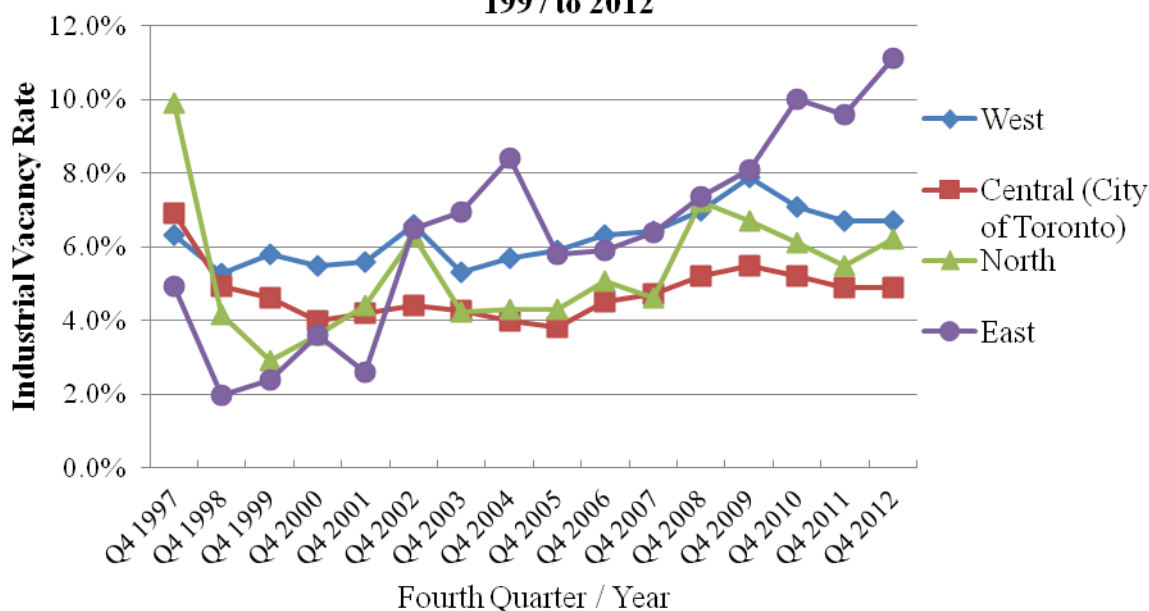
Toronto's employment areas allow like-minded businesses the opportunity to operate while minimizing potential land use conflicts with sensitive uses. Toronto's employment areas are distributed across the city, allowing many residents the opportunity to live in close proximity to their work and reduce commuting time. Toronto's employment lands have shown remarkable stability over time, providing space for a wide range of manufacturing activities. In a mature and intensifying urban environment, employment lands are in finite supply. The preservation of employment lands for manufacturing uses is paramount for manufacturing to succeed in Toronto.

As the vast majority of manufacturing activity occurs in industrial space, industrial space is used as a proxy for the strength of manufacturing space indicators in the GTA. Figure 11 below shows fourth-quarter industrial vacancy rates over the 15-year period 1997 to 2012, for four distinct GTA regions as follows:

- Central – City of Toronto
- North – Aurora, Markham, Newmarket, Richmond Hill and Vaughan
- East – Pickering, Ajax, Whitby and Oshawa
- West – Bolton/Caledon, Brampton, Burlington, Milton/Halton Hills, Mississauga and Oakville

In 2012, the city of Toronto had the lowest industrial vacancy rate in the GTA at 4.9%. Toronto has enjoyed the lowest industrial vacancy rate in the GTA over most of the past 10 years, demonstrating strong demand for a Toronto industrial location.

Figure 11
Industrial Vacancy Rate
Greater Toronto Area (GTA)
1997 to 2012



Source: Cushman and Wakefield, 1997-2012

Cushman and Wakefield real estate data include further key trends, described below, for Toronto industrial space in relation to other GTA locales. The industrial space average sale price in the city of Toronto has trended upward since 2001, indicating strong demand over the past decade. The average sale price per square foot in the City of Toronto was \$88.59 in the fourth quarter of 2012. Toronto now has the second highest industrial space average sale price of the four measured regions.

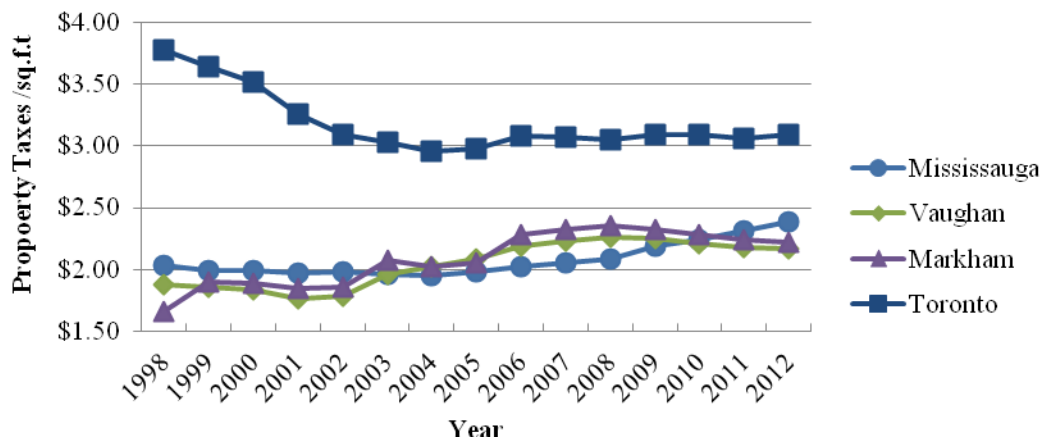
The average industrial leasing rate in the city of Toronto as a whole has remained relatively steady over the past decade and is currently at \$4.47 per square foot. Over the period 1997 to 2012, the Toronto average lease rates for industrial space have been the lowest in the GTA along with the east region. The lease rates are typically lower in Toronto due in part to landlords reducing rents to offset higher property taxes, and also

due in part to older inventory compared to the north and west regions. Newer industrial building stock tends to commands higher rents.

Taxes, maintenance and insurance (TMI) covers occupancy costs other than rent. The City of Toronto has historically had the highest TMI in the GTA due in large part to higher industrial property taxes. It is important to note, however, that industrial TMI in the City of Toronto is decreasing. The property tax gap between the 416 and 905 areas is narrowing due to City of Toronto's policy direction on commercial and industrial tax rates and to the gradual upward creep of industrial tax rates in surrounding municipalities.

The City of Toronto industrial property tax rate has decreased from 10.66% in 1998 to 3.06% in 2013. The decrease in the industrial tax rate is a response from Toronto City Council to reduce the industrial property tax rate to a ratio 2.5 times that of residential. Only one-third of a residential property tax increase can be applied to the industrial category to reach the 2.5 times ratio target. Figure 12 shows the decrease in industrial property taxes per square foot (psf) in the City of Toronto from 1998 to 2012. Industrial property taxes have decreased from an average of \$3.78 psf in 1998 to \$3.09 psf in 2012, a decrease of \$0.69 psf or 18%. While industrial property taxes psf for Mississauga, Vaughan and Markham are trending upward, they are still well below Toronto's level still putting Toronto at a competitive disadvantage in this regard.

Figure 12
Industrial Property Taxes / sq.ft.
Selected GTA Municipalities
1998-2012



Source: City of Toronto Finance, City of Toronto Economic Development and Culture, Municipal Property Assessment Corporation (MPAC)

Finally, in terms of new industrial building activity, Toronto has continued to show growth with building permits issued for over 760,000 square feet of new industrial space across the city in 2012 (City of Toronto). Manufacturers in Toronto will continue to reinvest in existing properties through building additions and renovations as well as equipment and machinery to modernize their production lines (Sustainable Competitive Advantage, 2012).

From 2010 to 2012, the Business Retention and Expansion Unit of Economic Development and Culture worked with City partners, local businesses and others to advance 44 industrial projects totalling \$364.6 million in investment, 3.6 million square feet of new or renovated space and 6,147 new and retained jobs. The majority of the 44 industrial investment projects were for manufacturing firms that were building, expanding or renovating their facilities, attesting to the ongoing viability of manufacturing activity in the city of Toronto.

Toronto's Competitive Advantages for Manufacturing Activity

Internationally and in relation to other large cities in North America, the Toronto region ranks very well in terms of its competitiveness for manufacturing activity.

The Toronto region offers a number of competitive advantages from a business attraction, retention and expansion perspective, including its relative cost competitiveness, the existing scale and diversity of industry, strong labour force, proximity and access to large North American markets and supply chains, good transportation networks and high quality of life. Further, the industrial land inventory of the Toronto area is the third largest in North America, making the Toronto region a draw for manufacturers taking advantage of existing concentrations and infrastructure.

In its Competitive Alternatives – 2012 Edition report, KPMG conducted an analysis of the relative costs of doing business in 113 cities in 14 countries in the Americas, Europe, and Asia Pacific. The study measured the combined impact of 26 significant cost components that vary by location, over a 10-year horizon. The KPMG study considered international as well as regional cost advantages, including cost advantages for manufacturing industry specifically, and also provided information on important non-cost factors that influence the business attractiveness of different locations. Aspects addressed by the study included labour availability and skills, economic conditions, innovation, infrastructure, regulatory environment, cost of living and personal quality of life factors.

Figure 13 shows the Toronto region's manufacturing cost competitiveness relative to selected other North American cities. The Toronto region fared well in cost advantage relative to the 113 international cities reviewed, ranking 32nd overall. It should also be noted that for the industry-specific activity reported as part of the study, the Toronto region ranked within the top 30 of 113 cities for electronics, green energy, chemicals, aerospace, telecommunications and pharmaceuticals manufacturing.

Figure 13
Cost Analysis of All Manufacturing Industries
Selected North American Cities, 2012

City	Index*	Rank**
Montreal PQ	96.1	22
Toronto ON	96.9	32
Winnipeg MB	97.6	47
Vancouver BC	97.7	53
Cleveland OH	98.1	64
Pittsburgh PA	98.2	66
Calgary AB	98.6	73
Chicago IL	99.0	83
Detroit MI	99.6	87
Los Angeles CA	101.0	98
Boston MA	101.2	100
New York City NY	102.7	106

Note: *United States baseline = 100.0, **Rank among 113 cities in mature and high growth markets

Source: KPMG Competitive Alternatives – 2012 Edition

Drilling down a little further, while a number of additional advantages are also regional in nature, manufacturers and the firms in their supply, customer and business support networks operating and expanding in the city of Toronto can take advantage of: the clustering of firms and activities in a range of sectors; a large, diverse and skilled labour force; access to public transit; and a concentration of academic, government, institutional networks and alliances to facilitate research and innovation.

Finally, manufacturers wishing to locate or expand in Toronto also benefit from a supportive business environment, increasingly competitive property tax rates for business, various cost savings including reduced development charges for industrial development, the Imagination, Manufacturing, Innovation, Technology (IMIT/TIEG) tax incentive for eligible projects, and a variety of additional business development and assistance programs offered by the City of Toronto and other agencies and orders of government, including support for key industry sectors.

Key Issues and Challenges for Manufacturing in Toronto

Toronto's competitive advantages for manufacturing and other business, while significant, will not alone guarantee success for manufacturing operations in the city or attract new or expanded business investment and jobs. To maintain competitiveness and to be well positioned to take advantage of emerging trends, Toronto's manufacturers must continually contain costs, maximize opportunities, and know that they can operate and expand within an environment that recognizes and supports their needs. If a company's requirements cannot be met on an ongoing basis, they will simply go to alternative locations – which may include surrounding municipalities or more distant places (Sustainable Competitive Advantage, 2012).

This report's review of key issues, challenges and potential opportunities for Toronto-based manufacturers has been informed by the ongoing work of Economic Development staff in providing support and assistance to the business community, and includes insights gained through recent discussions with partners and stakeholders familiar with manufacturing business in Toronto. In conducting research for this report, Economic Development staff engaged in preliminary discussions with representatives from: the Ministry of Economic Development, Trade and Employment (MEDTE); the Toronto Industry Network (TIN); the Leaside Business Park Association (LBPA); the South Etobicoke Industrial Employers Association (SEIEA); The Toronto and York Region Labour Council; the financial sector; and the Society of Manufacturing Engineers (SME). Economic Development staff's engagement with City-related representatives included Toronto Employment and Social Services and Invest Toronto.

In addition to needing to survive, and thrive, in an increasingly competitive global market, there are a variety of issues and challenges faced by Toronto's manufacturers, many of which stem from the need to operate in a high-density urban environment. Toronto-based manufacturers experience additional challenges associated with issues such as rising land values and operational costs, urban growth pressures, encroachment from sensitive uses, traffic congestion, older building stock and infrastructure and comparatively higher property taxes. A number of these issues are faced by other types of business, however manufacturing activity has certain operational needs for which many of these issues are particularly challenging.

The issues and considerations important to Toronto-based manufacturing businesses, or those looking to locate here, are generally related to matters including:

- initial set-up and operating costs including land values, building rents, maintenance and utility costs, fees and property taxes
- proximity and accessibility to suppliers, customers and labour and adequacy of transportation facilities for moving supplies, goods and people
- supply and reliability of infrastructure and utilities, including electricity
- a stable operating environment that minimizes conflicts or potential conflicts between manufacturers and nearby sensitive uses

- the ability to expand their operations (for example, space/land) to meet future growth needs
- availability of a large labour pool having the skills for specialized job functions
- the operating and regulatory environment as it affects current opportunities and future needs
- the ability to explore opportunities to access new markets
- a positive business and policy environment that supports retention and expansion
- an ecosystem that encourages and facilitates innovation (e.g. research, training, opportunities to introduce new products and processes, etc.)

There are a number of complex and interrelated factors that influence location and growth opportunities and decisions for manufacturing firms which, in turn, can have a large impact on the success and profitability of operations and translate into jobs, investment, additional assessment and a continued cycle of growth and expansion. These elements can also have a significant effect on a manufacturer's determination to downsize, or in extreme cases, close, operations.

Location and expansion decisions for multinational manufacturers are often made by head offices located in other jurisdictions, and manufacturers must compete with 'sister' locations for global product mandates and new product lines – or even to be able to continue operations in their current Toronto location, with costs and regulatory considerations often figuring prominently in the equation. A major element of these competitions can also be the ability to expand an existing facility to get a new production line up and running quickly and to secure any necessary approvals in a timely manner (Collaborating for Competitiveness, 2012).

While a number of decision factors are beyond the City's control, the City does have significant influence in matters such as the policy and regulatory framework, certain business costs and fees, the general business environment and the facilitation of programs and networks to support and strengthen manufacturing and related activity, and to continually enhance Toronto's competitiveness.

At a fundamental level, companies make location, investment and expansion decisions based on how well they can maintain costs and capitalize on the opportunities afforded by locating in a certain area at both a macro and a more micro level. It is important the City and others recognize how these key factors can contribute to a positive and supportive business and investment climate that can lead manufacturing firms to be more successful, which translates into increased sales, market share and expansion and employment growth.

The types of issues facing Toronto's manufacturers are significant and multi-dimensional. The challenge going forward will be to ensure that manufacturers continue to benefit from a collaborative and supportive business environment that recognizes challenges and helps businesses to capitalize on new opportunities. Toronto's manufacturing businesses will need to continually innovate as the economy moves to more high-value manufacturing, even within more 'traditional' manufacturing activity, to keep up with

modern trends and global competition. The City, with its numerous partners, has a key role in helping Toronto's manufacturing companies to maintain and enhance their competitiveness so they can continue to be an essential part of the local economy.

Current Initiatives to Support Toronto's Manufacturing Sector

The City of Toronto is committed to creating an environment for manufacturing and other businesses to thrive. Toronto Economic Development staff, along with other City and external partners, engage with and assist Toronto-based businesses through a number of collaborative City programs, services and initiatives, as well as those of other public and private sector agencies and associations and orders of government. In some instances, an initiative may provide direct cost savings, while in others it may involve the exchange of information and advice to help address an issue or advance an opportunity.

Programs and services generally fall into one or more of the following broad categories: business and competitiveness services; policy support; research, development and innovation; workforce development – hiring and training; international development including export assistance; financial incentives; and green initiatives, including energy.

The City has several key initiatives to assist the Toronto business community, including Toronto's manufacturing firms. A highlight of selected activities includes:

- Commitment to reduce commercial and industrial property tax rate to 2.5 times residential rate by 2020 (by 2015 for small business)
- Official Plan policies for the protection and enhancement of employment lands
- Imagination, Manufacturing, Innovation, Technology (IMIT/TIEG) property tax grant, providing a financial incentive for eligible development/redevelopment, with an enhanced benefit for projects in employment areas
- Development Charges rates and parks levy exemptions for industrial development
- Economic Development and Culture outreach and focus on manufacturing through targeted corporate calling and issues resolution services
- Economic Development and Culture sector development specialists working with industry and associations to support key industry sectors
- The Gold Star Service for Business, an enhanced service for eligible industrial, commercial office and institutional development and building projects
- Economic Development and Culture export development group that enhances market access through various partnerships and program introductions
- Policy, research and information support provided by Economic Development and Culture, including focus on competitiveness and on labour force development
- Business incubation support offered by Economic Development and Culture, including support for manufacturing-related businesses
- Toronto Employment & Social Services' collaboration with Economic Development and Culture, Social Development, Finance & Administration and others to connect employers and job seekers in Toronto
- Toronto Water industrial water rate and sewer surcharge rebate programs

- Efforts to market significant manufacturing/business location opportunities in Toronto through Signature Sites Collection

Federal and provincial government initiatives that benefit local manufacturers include various programs and services offered through the National Research Council, the Global Growth Fund, Sector Councils of Canada, Ministry of Research and Innovation, Ministry of Economic Development, Trade and Employment Ontario, to name a few.

The Ontario Ministry of Economic Development, Trade and Employment offers its Business Advisory Services to assist Toronto manufacturers and others to expand their business in Ontario and beyond. In January 2011, the Province of Ontario in conjunction with the Canadian Manufacturers and Exporters (CME) released its Business Sector Strategy on Manufacturing as part of Ontario’s business sector strategy. It is expected that the strategy will result in increased business consultation, a reduction of administrative burdens for business and improvements in client service.

City of Toronto staff will continue to work collaboratively on an interdivisional basis and with manufacturing business and a range of agencies such as Toronto Hydro, Invest Toronto and other government, not-for-profit agencies and private sector associations, in order to coordinate customer support for business, to advance investment and expansion projects, to ensure Toronto offers a positive business climate and to support innovation and opportunity.

Selected Strategies to Support Manufacturing – Other Jurisdictions

Based on a series of telephone conversations and web research, the following is a brief summary of key themes for supporting manufacturing, drawn from examples that include Metro Vancouver, Calgary, Chicago, Boston, New York and San Francisco.

A recurring theme is the focus on the retention, development and attraction of manufacturing as part of the business mix, and supporting and enhancing manufacturing as an important contributor to job retention and creation, both directly and indirectly, and to the tax assessment base.

A number of organizations and initiatives are associated with what is broadly termed “urban manufacturing” as a means of promoting manufacturing activity in cities, including that of the smaller-scale, collaborative type. This includes the creation of partnerships to provide or support the adaptive re-use of large industrial spaces for manufacturing and related activity, the promotion of local manufacturing business, workforce training and the facilitation of ‘green’ manufacturing opportunities.

Selected initiatives to support manufacturing either directly or indirectly include:

- Metro Vancouver – has identified best practices for optimizing industrial land potential through a variety of means related to industrial land intensification, such as better building designs, flexible zoning and incentives.

- The City of Calgary – has undertaken the preparation of local plans including those for industrial areas of the City, incorporating such considerations as the identification of a vision for the area, guiding principles (for example, a viable industrial base, balanced development opportunities within the industrial district, quality urban design, and transportation and servicing), and related policies.
- Chicago manufacturing initiatives – Chicago has a diverse range of programs to attract and retain manufacturing that include the protection of employment areas, workforce training and local government stewardship. For example, the City’s Chicago Sustainable Industries Initiative (CSI) has been created to coordinate the economic, social and environmental aspects of Chicago’s manufacturing sector as part of a comprehensive plan to promote industrial growth. Building on an industrial land inventory, this initiative includes the identification of business services priorities by sector/geographic/other focus, setting infrastructure priorities, and designing an interactive database for industrial properties.
- Boston’s “Back Streets” Program – one of the goals of this program is to protect industrial space. The program provides support to over 4,000 businesses of all types, and 100,000 jobs. Its initiatives include working with a non-profit to administer loans to businesses in Boston’s back streets, and coordinating with the real estate board and planning department to protect employment areas. The program promotes manufacturing through the City’s communication channels.
- New York City – In addition to a range of incentives (e.g. business relocation credits and utility cost incentives), a key initiative that New York supports is the Greenpoint Manufacturing and Design Centre. A non-profit industrial developer promotes affordable space to small and medium sized manufacturers, artisans and artists. Four manufacturing buildings in North Brooklyn have been rehabilitated with more than 100 businesses together employing over 500 people. City Council has also created a Small Manufacturing Investment Fund to be used for such purposes as preserving and modernizing out-of-date industrial space in the City.
- San Francisco – “SFMade” is a non-profit corporation focused on building San Francisco’s economic base by developing the local manufacturing sector. Working with strategic partners, SFMade engages with entrepreneurs and growing small manufacturing companies in San Francisco offering industry-specific education, networking opportunities and connections to local resources. SFMade also works with manufacturers directly on workforce issues, and delivers programming to heighten public awareness of manufacturing. Similar types of organizations have been established in other U.S. cities.

From the initiatives reviewed it is clear that the role of partnerships between municipalities, higher-order governments, industry and the not-for-profit sector is important to the retention, development and attraction of manufacturing, recognizing that issues and opportunities are often complex and demand collaborative effort. A more

detailed review would have to be undertaken to evaluate the potential applicability of specific initiatives or potential 'best practices' in the Toronto context.

Moving Forward – Potential Opportunities to Enhance Support for Manufacturing in Toronto

Potential Further Opportunities to Support Manufacturing in Toronto

Having identified some of the key issues and challenges facing Toronto manufacturers, with this review informed by the ongoing work of Economic Development staff and through discussions with internal and external representatives familiar with local manufacturing activity, key themes have emerged for potential focus in continuing to support and enhance the competitiveness of Toronto's manufacturing sector. These themes build on the work already being done by the City and others in coordination with many partners, stakeholders and industry representatives, and include:

Awareness, Profile and Marketing

- Increased awareness of and profile for Toronto's diverse manufacturing sector
- Enhanced marketing efforts regarding recent manufacturing location/expansions

Manufacturing Business Outreach and Engagement

- Ongoing outreach with Toronto's manufacturing businesses
- Focused engagement with Toronto's manufacturing community, including a manufacturing business roundtable

Vision and Strategic Alignment

- A clear vision of where the City wants to go in terms of manufacturing
- Alignment, coordination and collaboration of City divisions and external partners with respect to strategy and action to support business and manufacturing

Stable and Competitive Operating Environment

- Create and maintain a stable operating environment to encourage business retention, investment and expansion
- Continue to protect and enhance employment lands
- Enhance certainty and timelines in the development process
- Improve cost competitiveness through reduced costs and increased incentives
- Increase investment in transportation and other infrastructure
- Continue to build a supportive policy and regulatory environment

Site and Area-Based Support for Retention, Expansion and Attraction of Manufacturing

- Further support and enhance areas with high concentrations of manufacturers
- Review opportunities to develop area-specific studies and plans to help support and enhance opportunities for local manufacturing activity
- Identification of 'investment-ready', pre-certified sites for manufacturing
- Encourage re-use of large manufacturing buildings/sites that have become vacant

Enhanced Workforce Development to Support Manufacturing

- Enhance workforce development and training to align with industry needs through partnership with the City, business, labour and academia
- Tailor workforce development and training to the cluster

Strategic Clustering and Sector Support

- Continue to grow existing Toronto sectors and strategic clustering

Capitalize on Trends/ Opportunities in Manufacturing

- Build on Toronto's unique strengths and capitalize on trends in manufacturing (e.g. advanced, high-value, high-technology, more specialized/customized)
- Further support innovation, R&D, and commercialization through more strategic consultation with industry, academia, labour, other levels of government, NGOs

Export and Business Support

- Further support export and market-entry opportunities
- Encourage buy-local opportunities including business-to-business facilitation

Invest More in Small Manufacturing Businesses

- Invest in growing small, local manufacturing companies through business incubation, sector support, and other business support programs
- Encourage geographic clustering to support small-scale, collaborative manufacturing

Enhance Collaboration and Coordination

- City can act as a facilitator to enhance coordination and collaboration among diverse manufacturers and related businesses to leverage each other's strengths
- Encourage, nurture, support and work actively with networks and associations including geographically and thematically based organizations

Other Activities and Tools

- Prepare a clear, searchable asset map of available sites/buildings for manufacturing to facilitate rapid searches of candidate sites by criteria
- Explore the use of innovative tools and approaches including 'best practices' of other jurisdictions in supporting manufacturing

Types of Manufacturing to Attract and Grow in Toronto

As part of the outreach to internal and external representatives, 'types' of manufacturing that would be best suited to attract and grow in Toronto were also discussed. A range of ideas emerged. These included continued support for established sectors with a strong presence in Toronto, such as food and beverage, ICT, life sciences and design (including furniture), as well as the attraction of emerging sectors expected to have good growth

potential, which may include robotics, aerospace and electronics/microelectronics, 3D printing/3D manufacturing, etc. The targeting and attraction of high-value, technology intensive and more specialized manufacturing was also identified, recognizing the potential ability to capitalize on the diverse skills of the Toronto labour force and access to local research institutions.

Other possible manufacturing ‘types’ suggested for Toronto to potentially attract and grow include: light manufacturing; small and medium manufacturing operations in addition to large-scale; and manufacturing that produces high-quality, brand name products to tap a growing consumer market in emerging economies. ‘Pre-manufacturing’ services, and manufacturing supports, such as R&D, industrial design, prototyping, testing, and commercialization, tied in with local teaching institutions, were also identified. It was also recognized that it is important to build on Toronto’s diverse manufacturing base by supporting and growing a good mix of activity, and that it is important to support all manufacturing more generically to create an attractive business environment, and then modify supports for certain sectors as required.

Next steps

Many of the themes identified above are interrelated and, while by no means exclusive, represent a broad array of potential opportunities to build on and strengthen the work currently underway by the City and its partners and stakeholders in enhancing Toronto's competitiveness for manufacturing and other business. These, as well as other possible areas of further engagement and support, should be explored further, through means including consultation with Toronto’s manufacturing community, to help provide further focus to collaborative efforts in support of manufacturing in Toronto.

Building on issues, challenges and potential opportunities to enhance support for manufacturing in Toronto identified as part of this review, certain initiatives have emerged that can be undertaken in the shorter term, starting with focussed consultation with Toronto’s manufacturing community. These initiatives are outlined below and form the basis of the Recommendations of this report. It is recognized that in each case, efforts to support manufacturing in Toronto must continue to be collaborative and coordinated.

- **Focused engagement with Toronto's manufacturing community**

As outlined in this report, there are dedicated efforts already in progress for supporting Toronto’s manufacturing community, and a wide range of potential further activity to address challenges and emerging opportunities has been identified. A Toronto manufacturing business roundtable would help to focus the identification of key issues, opportunities and potential priorities for the City and its partners to pursue in creating a more competitive environment for Toronto manufacturing business. A manufacturing roundtable convened by Economic Development staff, in which other City Divisions could also participate as a resource, should include a selection of Toronto-based manufacturers from diverse sectors and industry types, geographies and size of operations, as well as stakeholders representing key business associations, agencies,

labour and academia. It is recommended that a Toronto Manufacturing Roundtable be held in Q1 2014, with a report back to Economic Development Committee on the results of the consultation in Q2 2014, to help identify objectives and potential opportunities.

- **Advancing Toronto manufacturers seeking global product mandates**

It is recognized in today's globally competitive environment that manufacturing businesses are competing for market share not only against other companies, but often with regional or international plants within the same multinational corporation competing with each other to secure global product mandates, and the jobs that go with them.

Well before a decision is made to proceed with any necessary facility expansions and hiring, manufacturers in Toronto seeking to successfully secure global product mandates need to make a business case to their corporate headquarters, often located elsewhere. These opportunities and related issues may be identified as part of ongoing activities of Economic Development staff and others in engaging with business, industry-based associations and various partners -- and viable opportunities should be supported.

As part of ongoing business outreach activity, it is recommended that Economic Development staff proactively identify Toronto manufacturing companies that are seeking global product mandates, and work with the proponents, other City Divisions and the appropriate agencies including Invest Toronto and other orders of government to help advance these investment opportunities. Once product mandates have been secured and any related investment project is initiated, Toronto Economic Development staff and others work with the proponents to facilitate development proposals and/or hiring needs as required. The City's Gold Star for Business Service and various employment initiatives support such projects.

- **Enhanced workforce development opportunities for manufacturing jobs**

In recent years, the City has developed three key strategies – *Collaborating for Competitiveness*, *Strong Neighbourhoods 2020*, and *Working as One: A Workforce Development Strategy for Toronto* – that collectively work to sustain and advance economic growth, ensure all communities share in the opportunities that are created, and better connect jobseekers and employers. All three strategies work in a complementary and integrated manner to advance the City's objectives and provide improved services to businesses and residents directly and in partnership with others.

As indicated earlier, manufacturing in Toronto provides relatively high-value jobs for a broad range of skills and education levels, with these jobs distributed across the city throughout the city's many employment areas, providing potential employment opportunities for residents living in Toronto's nearby neighbourhoods and beyond. At the same time as Toronto residents are experiencing unemployment – with Toronto's manufacturing unemployment rate of 5.3% (Statistics Canada Labour Force Survey, 2012) slightly outpacing that of the Toronto CMA, Ontario and Canada – many industries and individual manufacturing firms are having difficulties finding qualified people to fill

available positions, including such functions as machine operators, industrial electricians, lab technicians and quality assurance personnel.

Although manufacturing employment now seems to have stabilized somewhat, job growth may occur more slowly than it has in the past, in part because the nature of manufacturing itself continues to evolve in the direction of more capital versus labour intensity. Further, the types of skill sets now in demand with rapidly changing, technology-driven manufacturing are different from the manufacturing job skills required in the past and to those of displaced manufacturing workers.

With technology, computerization and more complex equipment requiring more advanced and specialized skills and experience, combined with an aging workforce that may not have had sufficient opportunities to update skills that are in increasing demand, there are a number of 'skills gaps' that need to be identified and addressed to continue to build today's and tomorrow's manufacturing workforce. In this way, jobseekers can be better matched with available opportunities in Toronto's manufacturing companies that are increasingly oriented to specialized skills.

According to the Conference Board of Canada's *Global Competitiveness Report (2013)*, while public investments in higher education are generating some economic and social benefits, Canada's private sector continues to under-invest in staff training (ranked 34th), to the detriment of innovation and competitiveness. For example, in 2010 Canadian organizations spent an average of \$688 per employee on training and development, whereas U.S. businesses spent \$1,071 on average. It is critical, however, that employers be involved in ongoing workforce training initiatives in order to help better match skill with available manufacturing opportunities.

There are a number of touch points between Toronto Employment & Social Services and Economic Development and Culture and other partners in facilitating the introduction of jobseekers to specific employment opportunities. These include corporate calling, sector-specific, and investment project activities. Building on these initiatives, it is recommended that Economic Development and Culture, Toronto Employment & Social Services and Social Development, Finance and Administration staff work with representatives from manufacturing business, labour and academia to identify Toronto manufacturing sector recruitment, skills and workforce training needs, concentrating on base skills that are transferable, and to identify a range of preliminary opportunities to connect jobseekers, educators, trainers and employers. This will help to better align industry and workforce training needs to facilitate manufacturing job placements in Toronto and, by the same token, help to ensure that post-secondary education and other skills enhancement programs recognize the types of skills now in greater demand in Toronto's manufacturing sector.

- **Preparation of a manufacturing-focussed investment opportunity package**

Globally, cities and regions are starting to compete for foreign direct investment (FDI) by going to market with a selection of turnkey investment opportunities. These value propositions include not only specific sites, but also highlight the benefits of the supporting ecosystem components including workforce, transportation systems, utility infrastructure, suppliers, partners, and potential customers, etc., along with a list of services that can be provided by the City and/or region in relation to the opportunity, such as hiring a workforce in the area, permit and approvals processes and facilitating introductions to partners and local service providers. An investment opportunity offering can also highlight the geographic location of other companies in the same industrial cluster.

As an opportunity to collaborate on a business attraction piece and to more broadly communicate the City's existing investment facilitation products and services including the City's Signature Sites Collection, the Gold Star for Business Service and the promotion of local hiring opportunities, it is recommended that Economic Development and Culture staff collaborate with Invest Toronto and others to prepare a manufacturing focussed investment opportunity package, profiling Toronto's advantages for manufacturing business and identifying available sites and/or projects in Toronto along with the supporting ecosystem components.

- **Annual report on the state of manufacturing in Toronto**

The *Collaborating for Competitiveness* economic growth and job creation strategy has directed an annual report on the state of manufacturing in Toronto to keep a special focus on this high value sector. As this is the first such report, the commentary has necessarily covered a wide range of topic areas related to manufacturing activity in Toronto. It is recommended that Economic Development and Culture staff report back to Economic Development Committee in Q1 2015 with the next annual report on the state of manufacturing in Toronto, and that these materials be in the form of a 'dashboard' report providing an update on key indicators related to manufacturing activity in Toronto.

Conclusion

Manufacturing in Toronto represents a diverse range of activities, cuts across all industry sectors and is essential to a strong and balanced economy. As an export-based sector with high economic multipliers and strong linkages to other firms, supporting manufacturing is a very high leverage opportunity to ensure sustained economic growth in Toronto.

While there have been large reductions in manufacturing employment in Toronto and elsewhere, reflecting broad economic trends and structural changes, the manufacturing sector remains a significant economic activity in the city and provides approximately 120,000 jobs in Toronto. As manufacturing becomes more competitive globally and more technology driven, Toronto's manufacturing firms will continue to benefit from the region's and City's many competitive advantages including a skilled and diverse labour

force, the clustering of activity and various program supports for business.

In an increasingly competitive global economy, Toronto manufacturers face issues and pressures that require them to have a stable yet flexible, cost-competitive and supportive operating environment, so they can survive, innovate and expand. With focussed and collaborative efforts in recognizing challenges and building on opportunities, Toronto is well positioned to capitalize on its unique advantages and on the strengths of its diverse manufacturing sector, to build on emerging trends, and to continue to enhance the health and vitality of this important sector.

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ATTACHMENTS

Attachment No. 1 – The Structure of Manufacturing and Warehouse Sector Employment
by Locality, 2011