

food industry outlook

A Study of Food Industry Growth Trends in Toronto



This study has been prepared by
WCM Consulting Inc. for the
Ontario Ministry of Agriculture and
Food and the City of Toronto
Economic Development.

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A Executive Summary

The importance of the Toronto food processing sector

Toronto's cluster is the second largest food cluster in North America. It is one of Toronto's most important economic sectors with annual sales of \$15 billion. This represents one half of all such activity in the Province of Ontario. The food cluster core activities encompass manufacturing (food processing), warehousing and distribution as well as retailing and food service. The cluster also has a significant multiplier effect due to the variety of other industries forming the cluster. Packaging and equipment manufacturing are but two of these peripheral industries. Nearly 400 food processing operations, spread across the City, comprise the heart of Toronto's food cluster.

Fully two-thirds of the food processing firms have annual sales of less than \$5 million and a market that is almost exclusively focused within the City. At the other end of the spectrum the fewer large multinational subsidiaries serve markets well beyond the boundaries of the City and Province and number their sales in the hundreds of millions of dollars.

Some 25,000 jobs are to be found in the food processing sector, representing 12% of the total industrial employment in the City. This employment has been relatively stable over the decades and has provided an income for many less skilled persons.

The food industry is a vital economic force within the City of Toronto; but it cannot be taken for granted. Jurisdictional competitiveness, the ever-changing trends in the demand for food of different origins and types, the shrinking availability of land for industrial use, more stringent regulations and the globally-based decisions of multinational corporations continue to challenge the food cluster. Thus the landscape for the food industry will also continue to change in Toronto.

Purpose of the initiative

The Ontario Ministry of Agriculture and Food (OMAF) and the City of Toronto Economic Development Department (TED) have commissioned this study and report to provide a better understanding of the physical infrastructure and spatial needs to accommodate the present and future growth of the food industry cluster in Toronto. This will better position the Province and the City of Toronto to attract and plan for new investment opportunities in the Toronto food sector.

This initiative has been envisioned as a 'pilot project' the methodology of which might serve as a model for other food business retention/attraction initiatives across the Province.



Key Issues and Conclusions

The food processing sector in Toronto is thriving but it faces some challenges in maintaining this growth. The smaller firms (less than \$5 million in annual sales) must remain in Toronto due to the location of their market and the often 'fresh' or specialty nature of their product. Such small firms cannot readily find suitable existing facilities for expansion. Financing such expansions is often prohibitively expensive and available land is a scarce commodity in the City. While these challenges will not cause these firms to fail, their growth may be curtailed and the opportunity lost that would have enabled some to grow to serve markets beyond the City boundaries with the attendant employment and cluster benefits.

To assist the smaller food processors efforts should be made to improve the availability of funds for expansion, to ensure that adequate industrial land is always available and that the sale of food processing facilities is co-ordinated to maximize the opportunity for smaller firms to expand thereto. In addition, co-operation between the smaller firms in the areas of co-packing and freezer capacity should be fostered.

Many larger firms will attempt to expand on site rather than face the costly and disruptive process of relocation. However, when all such on-site expansion possibilities are exhausted they *will* look for alternative sites and facilities. At that time, the allure of perceived 'cheaper' jurisdictions that surround the City of Toronto will make itself felt. Although the majority of these firms will prefer to remain within the City boundaries, if the jurisdictional cost of the City is regarded as too high a price to pay, then Toronto may well lose some of these larger firms to the nearby regions. The loss of any one of these larger firms represents hundreds of jobs and it is critical that activities be undertaken to secure and retain these companies.

To retain the larger food processors everything possible should be done to facilitate growth *on-site* for as long as possible. To guard against the day when such expansion modes can no longer be sustained, the City should be prepared to demonstrate the jurisdictional 'value-effectiveness' of Toronto.



B Recommendations

The consultants recommend that the Ontario Ministry of Agriculture and Food and the City of Toronto consider actions focused on four main themes:

- *Capital investment*
- *Physical infrastructure*
- *Food industry business infrastructure*
- *Communications*

1 Capital investment in the food industry

- a Consider programs and/or facilitate contacts with the financial services sector to encourage capital investment in the food industry.
- b Explore opportunities to develop better communications between the real estate and food industries with the purpose of maximizing the utilization of existing food grade facilities.
- c Raise awareness about the facility needs of the food industry and encourage the availability of food-industry-friendly zoning as well as the preservation of industrial lands in the City of Toronto.

2 Physical infrastructure

- a Ensure that measures are considered to facilitate goods transportation within the city to address the special needs of the food industry.
- b Monitor/explore methods to minimize the costs of infrastructure to ensure a cost competitive environment for the food processor within Toronto.

3 Food industry business infrastructure

- a Work closely with the industry to raise awareness at higher levels of government that will encourage the development of programs to address food industry labour training gaps, such as the shortage of equipment technicians.
- b Capitalize on co-packing opportunities by developing programs to assist smaller food entrepreneurs to grow their businesses.
- c Encourage programs focusing on the resolution of common issues, on business-to-business opportunities, on strengthening small business networks as well as on public-private partnerships to strengthen the food cluster competitive advantage.
- d Build on the innovative capacity of the Toronto food industry to create a business climate that attracts new investment.



4 Communications

- a Improve co-ordination/communication among authorities having jurisdiction over food industry regulations on food safety and facility inspection to assist in the food industry's understanding of, and compliance with, pertinent regulations.
- b Strengthen communications between government and the food industry through forums and/or other means to ensure a fluent working relationship and thereby encourage positive perceptions and permit issues to be aired.
- c Develop a business model based communications tool comparing the '*value* of doing business' in Toronto with surrounding regions. Use this as a marketing tool to promote the location advantages of Toronto in comparison to those neighbouring regions.



C Project Overview

1 Characteristics and trends of the Food Industry Cluster in Toronto

The information in this section is based upon three main sources: 'State of the Food Industry 2001', an annual review produced by OMAF (FICB), the 'City of Toronto – Business Market Guide' and extracts from various papers and projects completed by the consultants.

Toronto's food cluster is the second largest and third fastest growing in North America. It is one of Toronto's most important sectors with annual sales of \$15 billion. This represents one half of all such activity in the Province of Ontario.

Core food industry activities include food processing, warehousing and distribution, retailing and food service. While directly generating significant economic activity and employment, the Toronto food industry has a multiplier effect that generates growth in related industries serving or ancillary to the sector. These include packaging, production of food industry equipment, biotechnology, agriculture, specialized storage and transportation (i.e. refrigerated), architecture, industrial and graphic design, civil, industrial and environmental engineering, food science and others.

Food processing is a vital part of the economy of Ontario with a total value in 2000 of \$29 billion and an annual growth rate over the last five years of 4% to 5%. Within Ontario, Toronto dominates the provincial food industry with more than half of all food processing in the Province taking place within the Greater Toronto area. Employing 25,000 people, it is one of the largest industrial employers in the City and accounts for fully 12% of the total industrial employment.

Two-thirds of the total food processing companies in Toronto have annual sales of less than \$5 million. These smaller firms are nearly all owner-operator enterprises producing 'fresh product' or serving niche/specialty markets within the City of Toronto. Slightly more than a quarter of the food processing companies are in the \$5 million to \$50 million range and include firms with a broader market and some of the smaller multinationals. The largest operations, with annual sales in excess of \$50 million, are mainly the multinational subsidiaries, serving markets well beyond the boundaries of the City and often outside the Province. Toronto is also a major decision-making centre for the food industry in Canada with half of Canada's top-ranked food and beverage manufacturers being headquartered in the City.

The food industry is found throughout Toronto. This is important for local economic development, providing stable employment for relatively less skilled labour across the City. While large firms employ 8% of the total food processing industry employees, SMEs (small and medium size enterprises) employ the majority of workers in the sector. Seventy five percent of all Toronto processing firms have under 50 employees while only 6% have over 200 employees. The food industry has also proven to be stable during recessions: between 1991 and 1995, when general manufacturing's share of total employment declined, food processing's share of manufacturing employment actually increased by almost 50%.



2 Global competitiveness

Global jurisdictional competitiveness is of vital importance in determining where food processors will locate their operations. The overall determination of competitiveness is an amalgam of a variety of jurisdictional characteristics. Examples of these characteristics are the size of and proximity to the major markets of the food processor, the distance to raw materials sources and the relative transportability of both raw materials and products. Coupled with this are the availability of the required human resource skill sets at a competitive wage, services and utilities at a competitive rate and the relative cost of all local taxes.

These factors will have different degrees of weight in the decision-making processes of a company. Some impacts will vary significantly with the type of product produced and the utilities or services required by that firm. Others, such as local taxes, will affect most relatively equally.

In some cases, where the product is fresh or caters to a specific niche market and *must* be produced near to that market, the location decision-making process is moot. In these cases, the decision is whether they have a viable business rather than where it is to be located. This factor applies predominantly to the smaller enterprises.

Large multinational subsidiaries represent the other end of the decision-making spectrum. Most often these plants had their genesis prior to the Canada-US Free Trade Agreement of 1988 and were intended to specifically serve the larger local markets and overcome the then tariff barriers. The multinational operations in Toronto are no exception. In the post-free trade arena, such subsidiaries in all manufacturing sectors have endeavoured to attract regional or continental product mandates from the parent company.

Such mandates open up continental or global markets to a higher volume of focused products for the plant, permitting more economies of scale and more efficient production. These mandates have been critical to the survival of the subsidiaries since without the mandate, the market originally served by the plant can be readily served from other manufacturing locations, often in the United States. In industries other than food processing, the failure to attract the mandate has caused a considerable number of closures of manufacturing operations in Ontario.

In the food industry, the nature of the product has tended to increase the regional, rather than continental, nature of such mandates. Food has a relatively low value to weight ratio (especially where there is significant liquid content) and shipping costs are relatively high for such products. The multinational subsidiary plants in Toronto continue to service the Toronto market as in the past but also ship to many regions across Canada and, in some cases, internationally.

Often multinational plants are the largest facilities in the food industry with much installed capital equipment and supporting infrastructure. As a function of plant revenue they often employ the lowest percentage of staff, although this will number several hundred people in each case.



Global competitiveness is a multifaceted topic and a full treatment would shift the emphasis in this report from the core focus of facilities and infrastructure. In brief, in order to best demonstrate global competitiveness, a jurisdiction must have a thriving industrial base comprised of medium and large firms in the sector or sub-sector in question. *Far beyond any attractive literature extolling the virtues of the region, this single demonstrable fact is the answer to the first question asked by many companies when selecting a location for a new plant.* Consequently, every effort must be made to retain the anchors of the existing food industry and to facilitate their growth within the City of Toronto.

3 Key issues and emerging trends

One of the primary conclusions of the Toronto Competes study - a study prepared in support of the City's economic development strategy - is that the City's performance, along with the Toronto area as a region, is determined in large measure by the competitiveness of the region's economic clusters. As one of the key strategic clusters in the City and second largest in North America, after Chicago, it is important to ensure the on-going competitiveness of the Toronto food industry for the long term economic health of the City.

Technology

The development of new technologies, coupled with changes in the global marketplace, has prompted the restructuring of many "traditional" food processing companies. A typical example is the recent consolidation of Nabisco with Kraft affecting 7 plants with over 3,000 employees in Toronto. The effect of firms' mergers on employment needs to be closely monitored and strategies need to be developed as the food industry, one of the traditional sources of manufacturing jobs, responds to change.

During the last few years, a number of large food processing companies such as Redpath Sugars, Canada Bread and Nestle Canada have made substantial new investments in their operations. During 2000 and 2001 alone, there have been expansions and relocations within the food industry in Toronto that resulted in \$40 million of investment, 1,150 jobs being retained and 200 new jobs being created.

Skilled labour

The availability of trained staff is key to ensuring business retention. There are many non-transferable skills in the food industry and training venues are limited and dispersed. While large food processing companies have the ability to provide in-house training, smaller or medium size companies generally find this to be either too expensive or impractical.

In addition, due to the relatively low pay in this industry in comparison to other industries within the City, young people tend to focus their efforts on education for and careers in higher paying sectors. This trend will lead to fewer young persons entering the food industry, other than in temporary capacities. First generation immigrants, most especially those with fewer skills, will continue to form the worker backbone of the sector.



A shortage of personnel has been noted over the past two decades in the skilled fields of mechanical and electrical maintenance workers and this is not restricted to the food processing industry. Immigrant journeymen who had served their apprenticeships in Europe had filled many of these positions. Arriving in Canada in the 1950's, most have long since retired. In the same time period apprenticeships had not been a popular path for advancement in Canada. This has led to a critical shortage of such skilled journeymen in all industries employing significant amounts of automated equipment, causing such capabilities to be sought at a premium.

Start-ups

A growing demand for high quality, value added and unique products has had a positive impact on the food industry and provided an opportunity for local entrepreneurs to develop innovative new products, invest in the City and create jobs. The City's multi-ethnic/cultural communities have served as nurturing grounds to foster a rapidly growing specialty food sector. Data obtained during this study shows that the percentage of specialty food processors with respect to the total food processors in the City is 50% higher than the Ontario provincial average.

The food manufacturing industry offers a variety of start-up options and for this reason it is attractive to newcomers or entrepreneurs with limited resources. Starting points in the food business may be a home kitchen, a church kitchen and so forth. Restaurants have also been the place to nurture innovative food ideas.

Facilities and infrastructure to support growth

Last but not least, the *limited availability of food grade facilities* in the City has been identified by the industry as an impediment to growth. This situation has been exacerbated by the conversion of industrial land to other uses, i.e., commercial and residential. This increases land costs, making it difficult to launch a business in food processing. The real estate industry also refers to the phenomenon of "dysfunctional buildings" – older, vacant buildings that previously housed much older food processing operations, or had other industrial uses, and which can only be converted to *current* food grade standards at substantial cost.

Standard industrial buildings do not meet the requirements for most food processing operations. Stringent food safety regulations require higher capital investment to meet food-grade standard requirements. This represents an added financial challenge to growing food businesses. When capital is invested in a facility to upgrade to food standards, there is a limited return on that capital investment when the company changes locations to accommodate its growth needs, unless it owns the facility and can sell to another food processor.

This shortage of food grade space has implications when considering the retention and expansion of the food processing industry in Toronto. Since most standard industrial buildings do not meet food grade requirements, a major capital investment is required in order to upgrade to that standard. For those who are able to make this investment it is often lost when growth causes the firm to move again to larger quarters unless other food processing firms can be attracted to that space. It should also be noted that food manufacturing has particular needs with respect to land, facilities, hard and soft infrastructure requirements such as water, sewers and public health.



4 Project scope

The City of Toronto and OMAF commissioned this study to provide a better understanding of the critical physical infrastructure and spatial needs for accommodating the present and future growth of the food industry cluster in Toronto.

What are the impacts of these trends on both the Province and City in terms of the potential destabilization of the food processing sector and possible job losses? What are the future infrastructure needs? What are the advantages of Toronto that can be promoted to attract and retain food processing companies? What impediments must be overcome? This information will enable both OMAF and the City of Toronto to anticipate industry demand and needs for space and infrastructure while proactively developing solutions to ensure optimal business growth and retention as well as investment attraction to the food industry cluster in Toronto.

By looking at present and anticipated facility needs, historical infrastructure consumption levels, access to financial capital and mobility patterns, the study is intended to answer questions about the nature and growth trends of the food processing industry in Toronto. The value-added objectives of this project are to determine growth rates and the demand for infrastructure and investment.

This study assists in answering the following questions:

- What are the existing physical capacities of the food industry in Toronto?
- How well is the food processing sector accommodated in Toronto?
- What are the average growth rates and location patterns of food processing companies?
- What is its anticipated demand for space and infrastructure over the next 5-10 years?
- Are there certain patterns within the food industry related to investment and location factors? For example, what factors are important when a company is looking at expansion?
- What are the costs associated with that growth?
- What specialized investment opportunities are foreseen in the sector i.e., niche real estate markets and co-packing capacities?
- What program, policy and public investment gaps should be the focus of both municipal and provincial governments' attention?
- What is the baseline cost of a suitable food processing site (across all food sub-sectors)?

5 Deliverables

The deliverables of this project are divided into three categories:



- a A listing of the current food processing facilities in Toronto where they are located and the nature of these firms.*
- b An estimate of growth rates and the likely demand for food processing facilities*
 - Company growth trends and modes of expansion
 - Current and future space growth demand
 - Mobility pattern and reasons for moving
 - Capital investment required to upgrade an industrial building to a food-grade standard.
 - Anticipated water and sewer growth
- c An identification of gaps, opportunities and recommendations*
 - Growth trends (key factors driving growth)
 - Constraints to growth (zoning, access to capital, cost of land, etc.)
 - Investment opportunities (identification of real estate niche market opportunities)
 - Identification of financial gaps
 - Co-packing capacity opportunities
 - Business climate issues

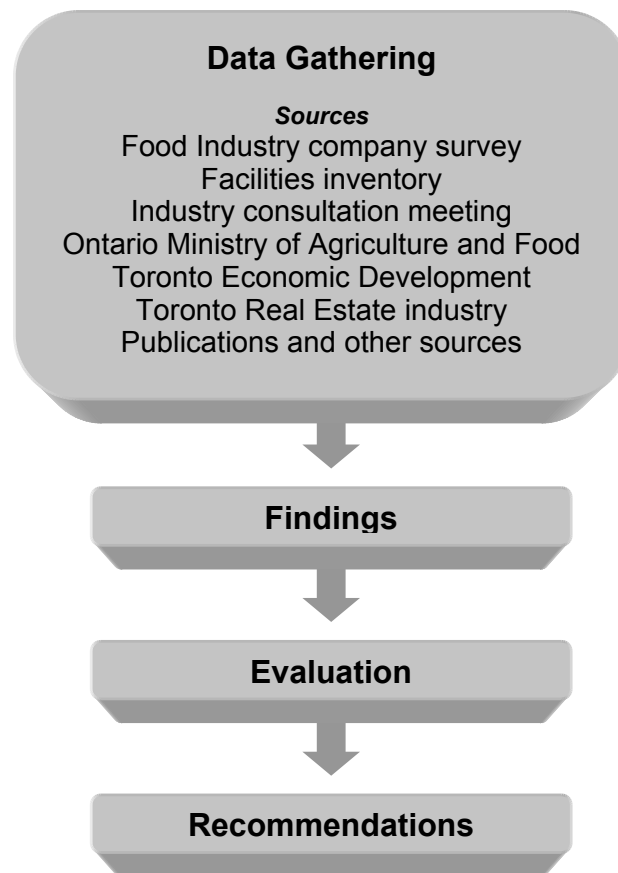


D Methodology

1 Description

To achieve the listing of the existing food processing operations in Toronto, an extensive search was made of all directories known to list such firms. These listings were compared, rationalized and verified to arrive at an accurate and current count. Then, relevant details were noted concerning each operation and the whole provided to OMAF and TED in the form of an electronic database.

To determine the growth trends, modes of expansion and similar forward-looking factors relevant to the growth of the sector, a representative sample of fifty food processing firms was selected, ensuring a cross-section by sub-sector, size and geographic location within the City of Toronto. By means of a specially developed survey instrument, interviews were conducted with these firms to obtain, in confidence, the necessary data. This data was then distilled and analyzed to provide the overall patterns and trends necessary to derive the conclusions.





With approximately 400 food processing operations in Toronto, the method employed was based upon selecting a representative sample of 50 from this population and extrapolating the results for the entire sector in the City.

Various government offices were consulted in the study. These included representatives from the City of Toronto, OMAF, the Government of Canada as well as private sector sources such as the real estate industry in Toronto. These sources provided valuable background information as well as corroboration of the findings.

See: Appendix I, List of participating companies and organizations providing input to the study

2 Facilities Inventory

This is a listing of food processing plants in the City of Toronto and is attached as *Appendix II* to this report. It includes a breakdown by the particular major sub-sector such as meat, dairy, confectionery, etc., and the geographical location in the City.

The inventory was conducted through a review and cross-reference of all existing databases related to the food processing industry, including available information from OMAF, the City of Toronto, StatsCan and Scott's directories, the Canadian Manufacturers' Index and Real Estate industry directories

Direct contact with food processing industry associations was made as well with individual food processors and real estate professionals, many of whom specialize in the food processing industry. MLS listings generated by the Toronto Real Estate Board were also referenced, in relation to the search for vacancies.

3 Industry consultation

Company survey

A comprehensive survey instrument was developed to collect information through interviews with 50 food processing companies in Toronto. This was founded upon a generic survey methodology developed over several years and then modified to focus on the specific issues of interest in the initiative. The survey instrument was used as the interviewer guide for the face-to-face sessions held with each respondent.

See: Appendix III, Sample survey format

All interview data gathered was stored in a database by category and then analyzed for patterns and trends. Strict confidentiality was maintained in the analysis and no information presented in this report is identifiable with or attributable to any one firm.



The sample of 50 food processors interviewed was developed to ensure a cross section of respondents from:

- Each major sub-sector, weighted according to their percentage appearance within the entire population of food processors
- Small, medium and large firms, according to their relative appearance in each sub-sector
- Each geographic area within Toronto

See: Appendix I, List of participating companies and organizations providing input to the study
Appendix IV, Miscellaneous findings and industry comments

Industry consultation meeting

After all company surveys had been completed and the initial findings consolidated, an Industry Consultation Forum was conducted wherein participating companies were invited to a review. This session started with an introduction by the City and OMAF, followed by a brief presentation of the company findings. The attendees were asked two questions:

- 1) *Are the findings, representative of the views of the food processing industry in Toronto?*
- 2) *What ideas do the attendees have to help address the issues?*

The outcome of the Industry Consultation was used to refine and improve the findings as well as to stimulate ideas on how the issues may be addressed. The comments of the participants lend great credibility to the results of this initiative.

See: Appendix V, Food Industry consultation forum

4 Evaluation and recommendations

In the consultants' evaluation (Section F), the composite findings were analyzed to determine factors relevant to growth trend drivers, location decision-making and the impacts of the jurisdiction on these decisions. Individual findings may not carry much significance but, when combined with other factors, clearer pictures emerge. This is most especially true when general economic development principles are applied to the findings. Based upon the evaluation, recommendations were for consideration by OMAF and the City of Toronto.



E Findings

1 Industry profile

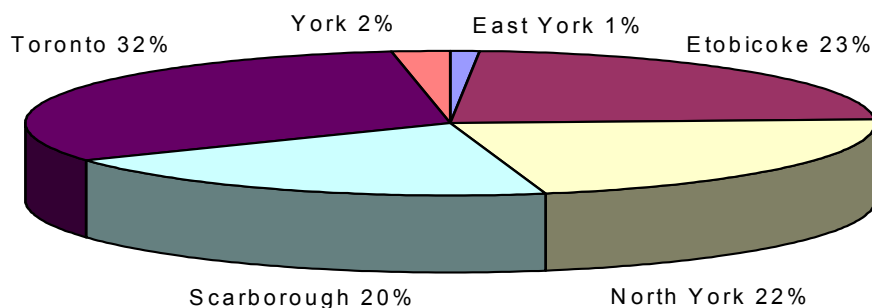
The data presented in this section have been compiled from many different sources (see Section G, Acknowledgements and References and Appendix I) and analyzed by the consultants. Comparisons with Provincial data are based upon the 'State of the Food Industry 2001' document, published by OMAF.

a Size of the Toronto food processing industry

There are slightly less than 400 food processing operations across the six geographic regions of Toronto. The following table illustrates the various results obtained from different databases and explains the reasons for the discrepancies.

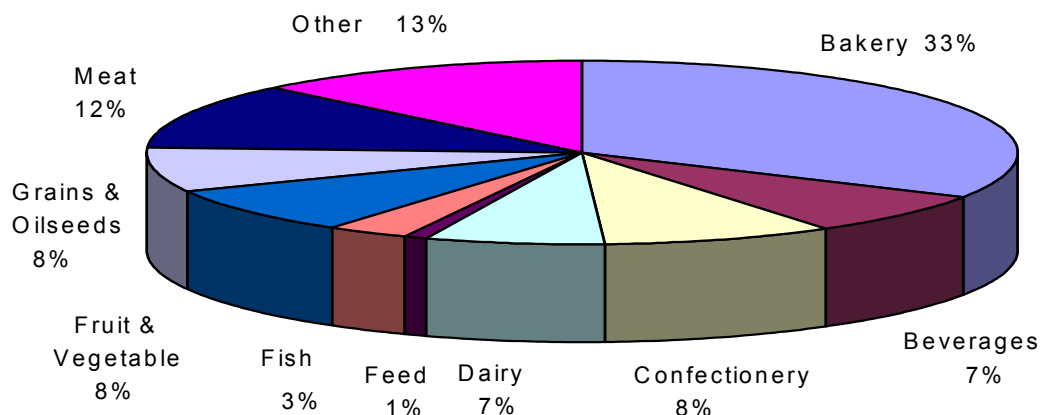
Source of information	Number of food processors identified
City of Toronto Directory	467
Scott's Industrial Directory	420
Human Resources Development Canada	430
Consultant conclusion	387
	Revised downwards from directories due to elimination of: <ul style="list-style-type: none"> ➤ Purely administrative and sales locations (no food processing carried out at that site) ➤ Repeat listings and co-located subsidiaries ➤ Singular directory listings that could not be confirmed through telephone directories or other contacts

b Location of the food processing industry in Toronto



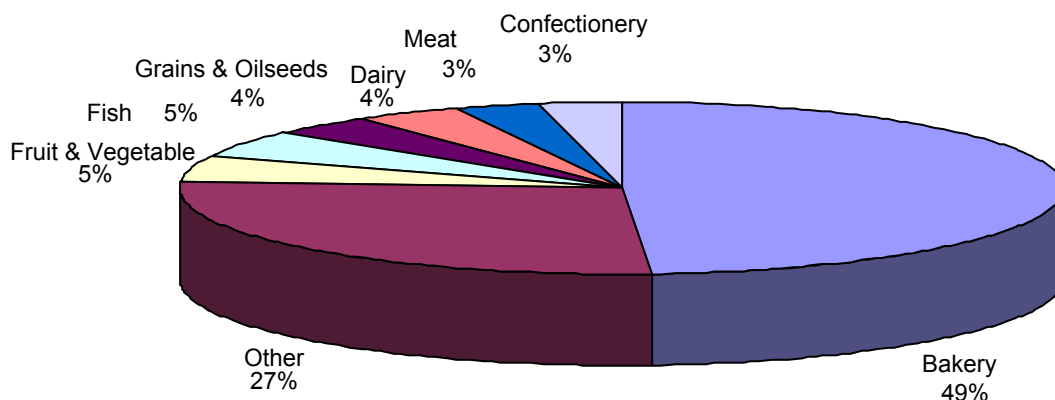
From the pie chart it can be seen that the food processing industry is spread chiefly among four geographic locations but has some presence throughout the City.

c Distribution of food processing operations by sub-sector



The distribution of food processing operations by sector closely follows that of the rest of the Province. However, several classifications are above the provincial average. Bakeries, at 33%, are almost four times the provincial average. This is not surprising since the fresh nature of the product demands proximity to the market and Toronto is, by far, the largest market in the Province.

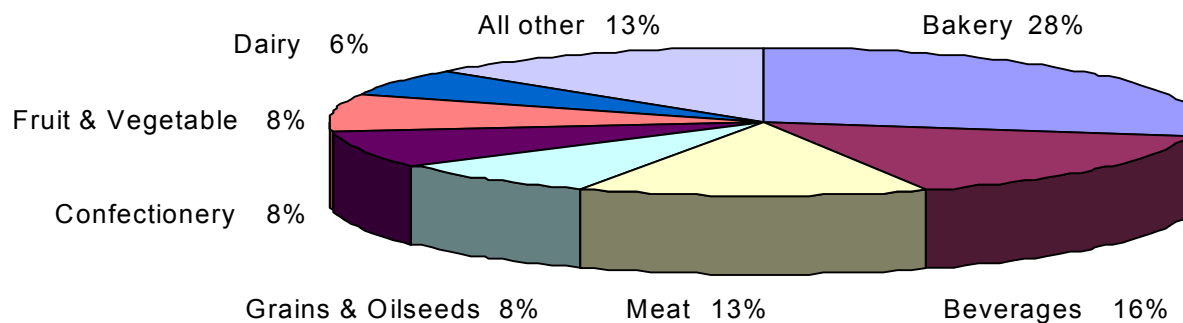
d Distribution of 'Specialty Foods' food processing operations by sub-sector



In Toronto, approximately 20% of all food processing operations are regarded as being in the specialty group. They are not a sub-sector in themselves but appear across many of the formal sub-sectors. Specialty foods are typically those targeting niche markets. Often they have a specific ethnic origin and originally target that same ethnic market. In a cosmopolitan city such as Toronto, they find a ready acceptance in a much broader market and often create significant demand for their product. Bakeries represent half of the Specialty food processors in Toronto.



e Space distribution by sub-sector

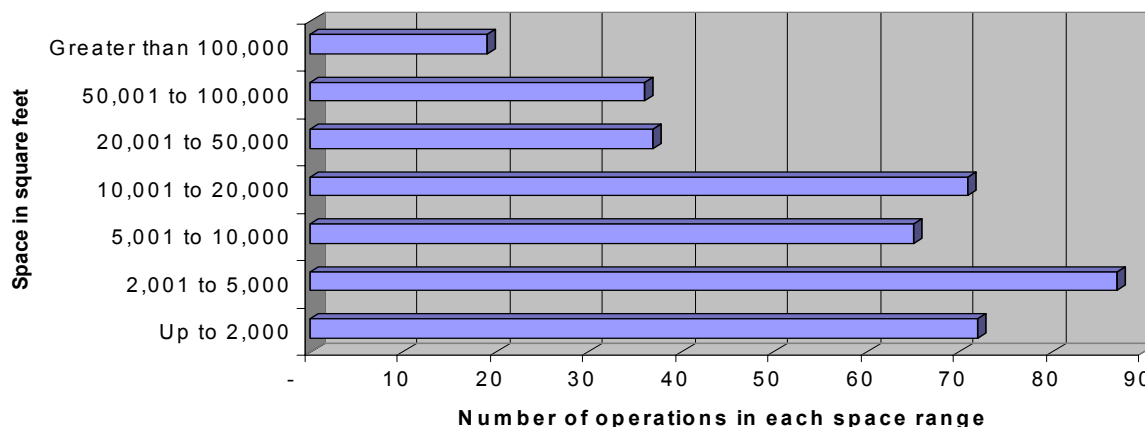


Sub-sector	Space (000's square feet)	Number of operations in sector
Bakery	2,812	127
Beverages	1,685	29
Meat	1,364	46
Grains & Oilseeds	829	30
Confectionery	797	30
Fruit & Vegetable	769	30
Dairy	576	25
All other	1,381	70
Total	10,213	387

Typical beverage plants are highly automated and require space for equipment as well as the bulk storage of materials. All other sub-sectors are a blend of large and small operations.

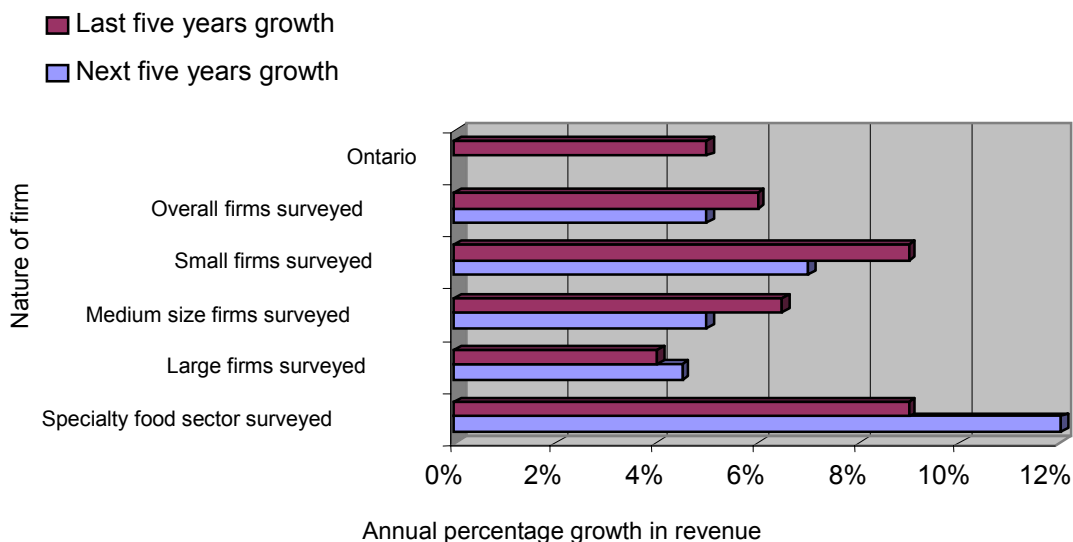


f Space distribution by size of operation



Over 75% of the food processing companies are in units of 20,000 square feet or less. The largest number of plants are in the “less than” 2,000 square foot category and in the 5,000 to 20,000 category. Together, these two categories account for over 50% of the work locations in the food processing industry in Toronto.

g Annual growth rates of the Toronto food processing sector as a percentage of revenue



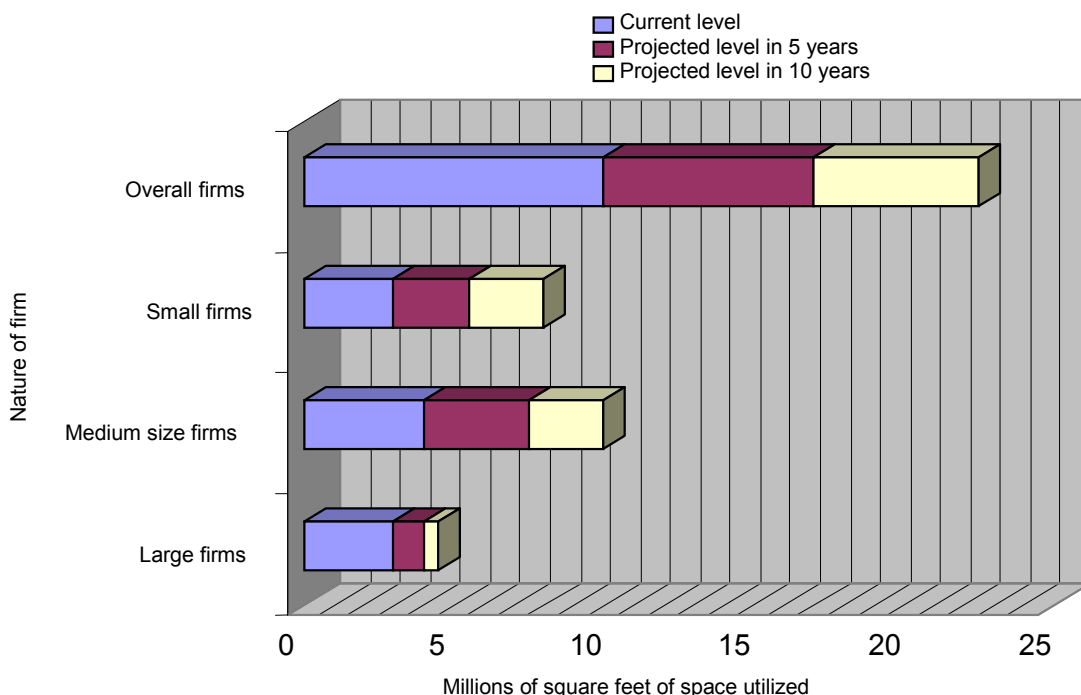
The average growth rate in this sample of Toronto firms for the last five years was 6% to 8% compared to 4% to 5% for the rest of the Province. Smaller firms and ‘Specialty Foods’ companies have, and will continue to experience, the highest percentage growth rates.



2 Physical expansion

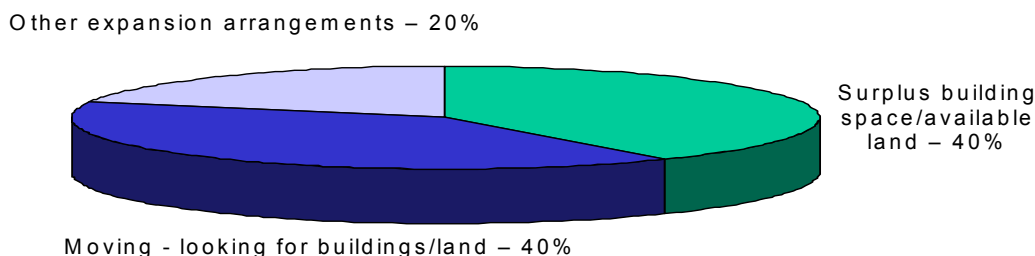
The data presented in Sections 2 through 11 are extrapolated from the survey of 50 food processing companies across the City and interviews with key food related organizations (*see Appendix I*)

Physical operations growth projections



Extrapolating from the survey, firms currently in the Toronto food processing industry occupy just over 10 million square feet of industrial building space. From the projected expansion rates of the surveyed firms, all food processing firms in Toronto would need an additional 7 to 10 million square feet of space over the next five years. A further 5 million square feet of industrial food processing space would be required over the subsequent five years. This would double the current usage in Toronto if these firms remain in the City. As a percentage of current levels the smaller food processors will grow the most but the largest absolute growth will take place in the medium size firms, especially in the next five years.

Method of physical expansion – next 5 years





Firms plan to accomplish this physical expansion in the following ways: 40% of the surveyed companies will make use of surplus space in existing new buildings or have already acquired land on which to build additional space. The same number again will be moving but do not yet have access to land or buildings; their eventual destination is not yet certain but is almost certainly within the Province and most likely within Toronto or in the surrounding regions. One third of the sample would give serious consideration to moving out of the Toronto area for their next relocation.

3 Employment

Over the years the food industry in Ontario has been characterized traditionally by low but steady growth. However, in comparison with other industries, it is a labour intensive sector. It is therefore difficult to compare the projected employment growth in the food industry with that which might occur in other industries. Sectors such as transportation equipment, electronics, information systems and plastics can, over short periods, experience many times the growth of the food industry and will often create high demands for technically trained employees. However, these industries are also more subject to economic variables such as relocating production elsewhere, severe economic downturns, etc.

An extrapolation from the company survey indicates that, over the next ten years, Toronto food processors would need an additional 7,000 to 10,000 hourly employees. In addition, between 750 and 1,000 technically trained staff for maintenance of equipment and other technical functions are likely to be required.

Respondents stated that it is easier to hire people for hourly work within the City (large concentrations of people) rather than in less developed and less concentrated locales. There is also a perception that hourly wages are higher in the Toronto area: potential employees in Toronto are often reluctant to work for under \$9.00 per hour. The range of pay within the food processing sector is \$7.00 to \$16.00 per hour for, respectively, entry level and experienced core production employees.

The average pay per company across the surveyed companies was \$12 to \$14 per hour including benefits. Most firms *outside* the Greater Toronto Area, where there are less concentrated opportunities for employment, can offer the Provincial minimum wage (\$6.85) for entry level and take longer to reach the \$16 plateau.

These rates of pay are at the low end of the overall scale in the Toronto labour market, on a par with some retail jobs (McDonald's, Tim Horton's). The food processing industry usually attracts new immigrants who, initially, often lack sufficient knowledge of the English language to be hired for retail jobs. As an advantage, many immigrants have a background and tradition in the preparation of ethnic foods and will often work with groups from their particular country of origin.

Mechanics and trades people can start at \$10 - \$12 per hour and, depending upon their experience, skills and qualifications, can easily command \$22 - \$27. This is on a par with trades jobs in most other industries.



The minimum wage across Canada hovers around \$7.00, with British Columbia and the Maritimes being the highest and lowest respectively. In terms of lower cost wages there is no tangible advantage for firms currently in Toronto or Ontario to consider relocating to other parts of Canada.

In many medium and large size companies most technical staff commute from outside the City of Toronto because of the inability to find affordable housing to suit their lifestyle requirements.

4 Markets

Most small firms (less than \$5 million in annual sales) are serving only the Toronto market with a small number serving markets in the surrounding regions, in close proximity to their facilities. Medium size firms continue to see Toronto and the immediate vicinity as their primary market but are serving some geographic regions across Ontario and past of Eastern Canada. The latter is very dependent upon the value-to-weight ratio of their products.

Large firms of greater than \$200 million in annual sales (essentially the multinational subsidiaries) serve the Canadian national market and will also distribute product within Canada that has been processed elsewhere for the parent company.

5 Location criteria and preferences

The criteria used in deciding location preferences are listed below in the order of frequency of being mentioned by the survey respondents:

Location criteria	Importance
Access to customers	70%
Access to suppliers/competitively priced raw material	65%
Access to potential employees	60%
Access to available industrial buildings at minimum cost to retrofit	60%
Access to reasonably priced land	40%
Reasonable infrastructure costs and reliable services	40%



6 Relocation history of surveyed firms

The smaller firms in the food processing industry sample had, over the last 10 years moved more than 3 times on average, with little or no expansion at any location. Medium size firms had moved an average of less than 2 times and had expanded an average of 1.3 times. No large firms in the sample had relocated within Toronto but all had expanded at least once.

7 Capital investment

Firms in the survey reported 'start-up capital to first year sales ratios' of from 1% to 20%. Absolute numbers varied from \$50,000 to \$6-\$8 million in start-up capital.

A typical industrial building leases from \$5 to \$10 per square foot. The approximate cost of retrofitting an industrial building to food-grade standards was identified in the range of \$50-\$100 per square foot. The cost of building a new food grade facility is usually a minimum of \$150-\$200 per square foot versus a basic industrial building at \$50 per square foot. In contrast, pharmaceutical grade industry facilities can vary between \$250 and \$400 per square foot.

Factors to be considered in assessing food grade building costs include:

- The type of food product handled - meat and dairy dictate higher cost facilities.
- Size of facility.
- Batch processes versus continuous flow processes.
- The useful life of the facility (i.e. 5 years versus 25 years) for the company based upon projected growth rates.
- The inspection agency involved and food-grade inspection criteria. CFIA inspected plants for export purposes have stricter criteria; therefore the cost of compliance is often higher.
- Basic elements to be included in a food grade operation include double sinks, slanting floors and drains, exhaust systems and loading doors.
- More advanced operations need appropriate floors and walls, exhaust systems, water treatment facilities, change rooms, insulation, high ceilings (30 ft+), managed air flow, elimination of rafters where dirt can gather, trucking and shipping facilities, ease of cleaning, etc.

See: Appendix VI, Sample facility investment analysis



8 'Vacant or available' food processing facilities

Extensive efforts were made to identify any listings of food grade facilities not currently in use; *no such listings were found*. Further, *there were no new food processing industry facilities identified by respondents, or on the "drawing board", and no buildings were identified which have been developed or redeveloped specifically for the food processing industry*. A unique and special exception is the Food-Share Facility, used as a "stepping stone" for temporary use only by new enterprises.

Little data regarding food grade facilities is available. Neither the real estate industry nor any level of government, or food associations maintains any data pertaining to food grade facilities availability. A sample of fifteen different industrial real estate transactions in the food processing industry indicated that *not one* made use of a former food facility. A sample of five firms in the food processing industry who had recently moved indicated that *not one* had moved into a former food establishment. The average waiting time to find a new food processing location was reported as being *one year*.

There is a strong belief held by the real estate industry and the food processing industry that there are major gaps between the attributes of older vacant food buildings and the current needs of the food processing industry. Due to the changing nature of the food processing industry over the last thirty years, there are many more small, start-up operations and fewer operating large-scale plants within the city limits.

Unfortunately, the configuration of these now vacant older buildings is often inadequate compared to current needs – large mass production factory floors are not appropriate for the firm that is doing small scale cooking, baking, catering, etc. Many older food buildings are less efficient in terms of loading and storage facilities, are multi-storied, have difficult or limited truck access, smaller doors, etc.

Finally, valuable assets are often removed from a former food facility for sale in order to make it "clean" and appropriate for all industrial uses. Certain assets, such as walk in freezers, exhaust systems, stoves, etc. are very expensive to replace and install. Often these are removed specifically to make the premises more attractive for general use, thus robbing the food processor of valuable and cost-saving legacy equipment.

9 Physical infrastructure needs over the next ten years

Respondents identified several broad areas of infrastructure that would impact on their participation in the food processing industry. However, they were unable to comment on the capacity of different infrastructure components and their ability to meet the future needs of the industry. For example, they do not know the capacity of water treatment plants throughout the City and their ability to cope with likely growth in the industry. Equally, they had few concerns that the City could cope or find a means to do so.



The respondents in the project identified the following areas as issues:

Utilities

Initial projections indicate sufficient capacity within hydro, gas and water to account for this growth within the food processing industry. Respondents appear less concerned about government ability to supply services and more concerned about the cost, especially around uncertainties related to the electricity market. All felt that the costs appear to be rising quickly in all utilities with no apparent change in service.

There was also a universally expressed concern that the deregulation of utilities will cause a rise in the cost. Some feared that this would be a very steep increase in the cost of operating their business.

Freezing capacity

More and more food is being frozen and especially so as firms expand their market boundaries. In-house freezing capacity is expensive to install. Walk in freezers of the type installed in food plants cost from \$60 to \$70 per square foot of floor space, assuming a ceiling of 14 ft. Thus a 10,000 square foot freezer would cost between \$600,000 and \$700,000. This price includes the equipment (generator and fans) as well as the walls, doors, insulation and flooring. A critical variable is a frequent need to excavate the floor in an older building in order to install piping. This could add another 10% to the cost. The major operating cost is the provision of electricity; freezers are usually the major users of electricity at a plant location.

Until the firm has reached a certain critical *sustained* size to make it economically feasible to invest in such freezer capacity, there is a major demand *for off-site rental freezer facilities*. At the same time, larger firms are using such off-site services to cope with initial expansion demands and, in some cases, smaller firms are being squeezed out.

Traffic Congestion

The on-time distribution of food items to markets is one of the core functions of any food industry cluster. Traffic congestion was mentioned universally as a major issue, especially in the downtown core. The congestion results in excess travel and late deliveries of incoming supplies and outgoing products. This is most critical where perishable deliveries are made as well as for 'just-in-time' food deliveries to restaurants and hotels.

Employee Support Services.

Many firms identified the need for low cost housing to attract and keep employees in the Toronto area. Also, as firms "squeeze" more and more out of facilities, the need to run third shifts will become more prevalent. All large firms in the sample expressed a need for revised bus schedules between the hours of 12 midnight and 6.00 am.



10 Business infrastructure

Water treatment charges

Water treatment cost was the major irritant mentioned. The food processing industry is faced with major surcharges because the waste-water that it returns contains higher-than-normal BOD counts (Biological Oxygen Demand, a measure of sugar content). Either it requires hundreds of thousands of dollars of capital expenditure to alleviate the problem *before* the water leaves their facility or it must pay a heavy surcharge for the City to treat the effluent.

The City sets an acceptable limit (currently 300 parts per million) and levies a surcharge against companies at a rate of approximately \$0.56 per kilo of BOD over this limit. The food industry faces some of the highest surcharges in manufacturing because of the higher water usage compared to most industries and the tendency to leave a far higher BOD count than in most other industries. For example, the heavy metal industry must also remove solids from wastewater but that water does not contain BOD's.

Several large food and beverage companies pay in excess of \$1 million annually as surcharges for excess BOD treatment. The biggest "offenders" are alcoholic beverage manufacturers, cheese producers and fruit and vegetable primary processors. Most large firms in these categories would average \$500,000 annually in surcharge fees. The industry average is in the \$20,000 to \$30,000 range annually.

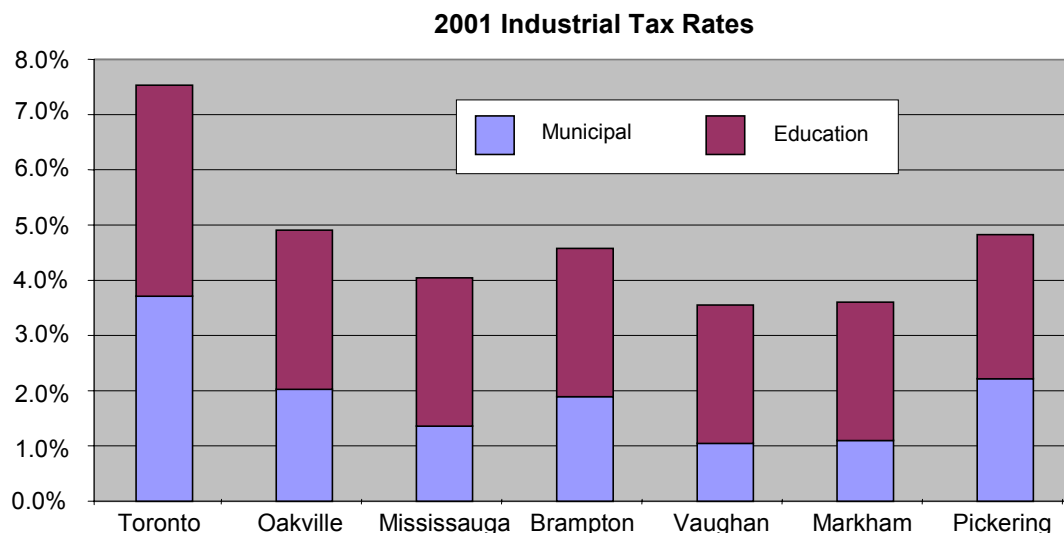
Waste Disposal

The respondents mentioned neither regular garbage disposal nor recycling as major problems. However, for those with a considerable amount of waste food to dispose of the costs of so doing were identified as being very high. This does not impact all food processing sub-sectors equally.

There are a large number of variables to consider in costing waste disposal including the frequency of pick up, size of container, tonnage, whether the service provider is municipal or private, if waste separation is required, etc. Larger firms can pay as much as \$10,000 - \$15,000 annually, while smaller businesses pay several thousand dollars a year. A critical variable is the degree of *organic* waste. Firms in the fruit and vegetable sectors may have several tonnes of organic waste per week, while firms in the confectionery sector would have very little organic waste.



Property Taxes



Source: City of Toronto Economic Development Survey, Percentage of 1999 Current Value Assessment

All respondents to the company survey argued that property taxes are significantly higher than in neighbouring municipalities of the City such as Mississauga, Brampton, Richmond Hill and Markham. This is borne out by the above comparison chart. However, as is shown in Section E5 above, the cost of business infrastructure is not the only factor that comes into play when making location decisions and other criteria often have a greater weight.

Access to capital

While this may go against the general trend for entrepreneurs in Canada, every firm contacted expressed difficulties in attracting funds for operating and capital purposes. There is a perception that banks do not ‘understand’ the food processing industry. However, this may be simply a characteristic of the food processing industry in that the relatively high cost (and perceived low liquidation value) of food processing facilities does not attract low risk capital.

On the high risk capital side, private funds look for 25%+ return on investment which is generally only achievable if the owner-operators give up some percentage of the business. This is not a popular option for many owners.

This ‘funds- shortage’ is true also of multi-national subsidiaries that act as ‘cost-centres’ and must compete for funding from their parent organizations. Only the most competitive will win such funds.

The Toronto food processing industry respondents also claimed that other jurisdictions in Canada and the U.S. offer incentives to food companies.



Regulations

The food industry is one of the most regulated industries in any jurisdiction. Concerns about food safety and changing labelling regulations will bring along further challenges as the industry strives to remain competitive. It is anticipated that new regulations for recycling will also have an impact on the industry.

New, more stringent regulations challenge all food processing companies, whether large or small. The costs can be prohibitive if extensive waste control installation is required or if significant upgrades are now necessary to the facility in which they manufacture their product. In addition, new methods of storage and standards of hygiene may need to be implemented requiring extensive re-training of staff and the development of processes to accommodate these revised standards.

There is also some overlap in jurisdiction between federal, provincial, and municipal authorities and, reportedly, interpretations of food regulations can differ from one authority to another.

11 Co-Packing

Co-packing occurs when one company, A, produces products (completely or in part) on behalf of another company, B. The product label is that of company B. The co-packing agreement usually covers all aspects of processing and packaging. It makes use of the specifications, formulation and packaging of the firm, B, having the work done. Co-packing benefits the co-packer, A, who is able to utilize more spare capacity and usually is either a lower price alternative or an expedient way to obtain products for company B.

Co-packing is also used when firm B wishes to introduce a new product line, does not yet have the processing equipment required and will not take the capital investment risk until the product is proven. Once proven in the market, the originating company will sometimes create processes specifically for this purpose and the co-packing arrangement ceases. Approximately 30% of the total sample firms are involved in co-packing for other firms and have some co-packing done for them. This is heavily concentrated in the medium size firms of whom 60% perform co-packing of one kind or another.

Firms in the medium size category (\$5 million to \$200 million in annual sales) use co-packing to help with growth. This maximizes the use of equipment when sales are not constant or in the introduction of new products. Large firms usually refrain from entering long term co-packing obligations, preferring leave capacity available for product development and for increased international mandates.

Small firms have often not made major investments in equipment so are unable to offer co-packing facilities. Several respondents suggested that smaller firms should take advantage of co-packing capacity in larger firms as a means of coping with the high capital costs associated with threshold sales levels.



Co-packing can be an important investment promotion tool. Exporting product from Europe is an expensive proposition for many European food manufacturers. Co-packing offers an opportunity for the European firm to enter the lucrative North American market without the cost-prohibitive surcharge of international shipping charges and without having to risk a major investment in North America before the market is proven. The availability of co-packing opportunities in Toronto should be a feature of every international investment mission.



F Evaluation

1 Factors driving growth

Growth rates in the Toronto food processing industry are above the Ontario food processing industry average and are likely to continue to be so. The sample of Toronto food firms estimates for the next five years are in the 5% to 10% annual growth range. Most sub-sectors also project a steady percentage growth with specialty foods projecting an annual growth rate of 9% to 12%.

Most absolute growth is projected to occur in medium-size firms (\$5 million to \$200 million in annual sales). Firms of more than \$100 million in annual sales predict stability rather than major growth.

The root causes of growth are quite consistent *within* each band of firm size. For small firms greater market penetration is the key factor usually in the local, regional market. Such firms often lack the resources, funds and time to consider the export market or to invest in technology.

For medium size firms greater market penetration in the Canadian national market is the major factor. They will also develop new products and new segments within existing markets. Some will perform technology enhancements but usually lack the resources for major investments in research and development.

Little growth from the local market is foreseen for the largest firms due to the saturation of the existing market with current products. Larger food processing companies will look further afield to promote growth while the multinational subsidiary will focus on gaining/maintaining product mandates from the parent company.

2 Modes of growth

It is important to note that physical expansion or relocation does not always accompany growth. Growth in sales can come about through the utilization of unused capacity, the production of more value-added products, higher efficiencies in the manufacturing process and the addition of shifts.

For small firms, of less than \$5 million in sales, there is often less capital equipment involved and much less that is 'firmly attached' to the existing facility. Thus the cost of relocation is often not amplified by a large loss of leasehold improvement costs. Small firms also often lack the funds to perform the actual expansion on site and it is cheaper to move to a larger facility. Small firms of up to 10,000 square feet believe that they must move to a new facility if their business is expanding. All of small firms interviewed would expand their operations through relocation with over one third indicating moving as their first preference. The exception would be where they can "take over" the unit next door and expand laterally; this requires fortunate timing with respect to adjacent unit vacancy.



To avoid the disruption of business, the distraction of the management or owner, the considerable expense of a move, the loss of supporting mechanical infrastructure and the need to hire some element of replacement staff, many medium size and all larger companies will avoid a full physical move for as long as possible. Instead they will first grow through:

- Increasing efficiency (technology and other mechanisms).
- Adding shifts.
- Physically expanding in place

Half of the total sample of firms and most of the medium size firms are able to expand in their current facilities or could “add on” from other units in the building. In some cases, they own the building and had built in some spare space while others had taken an option on additional space to be ready for expansion and to protect the leasehold improvements made to date. When all of these options are exhausted *then* relocation is considered.

3 Location criteria and preferences

Location criteria

This is a key issue for consideration. When relocation is essential, certain criteria are used to assist in determining the optimum location. Although these criteria will vary from firm to firm and from time to time, general rules can be applied, as described in the table in section E-5.

Access to customers, suppliers and raw material are the most important criteria, in that order. Coupled with the availability of employees, these three criteria alone are sufficient for the smaller enterprises to remain in Toronto. The medium and larger firms tend to look to room for expansion and economical infrastructure costs as the next key criteria.

Location preferences

Over 80% of small and medium-sized firms interviewed stated they would prefer to expand/relocate within Toronto. The reasons given for expanding/relocating within Toronto are typical of the small and medium size food processing companies sampled.

For example, Toronto represents their sole or major customer base. Many have fresh product that does not travel well or are “just in time” businesses (for example, one company delivers product to hotels and airlines three times a day). Many of the specialty food firms are owned and operated by people with a Toronto background who wish to maintain their lifestyle and for whom a cosmopolitan market is the very key to success. Also it is easier to attract employees due to a large population concentration in relatively close proximity with adequate public transportation. Avoiding the expense of moving to another municipality as well as the implied daily travel of the owner is another factor important to the owner operator.



The longer the life of the product the less critical it is to be near the market and the less likely that the company will need to remain in Toronto. The higher the value-to-weight ratio of the product the less expensive it is to ship compared to product value and the less important it is to be close to the market. Examples are products containing little water and high value commodity products.

Growing medium size firms are expanding their markets and becoming less dependent upon the local City market while large companies are already supplying markets beyond Toronto. For the larger firms, where the Toronto market represents a less significant factor, the drive for globally competitive cost efficiency will greatly broaden the geography considered, *when a physical move is inevitable*.

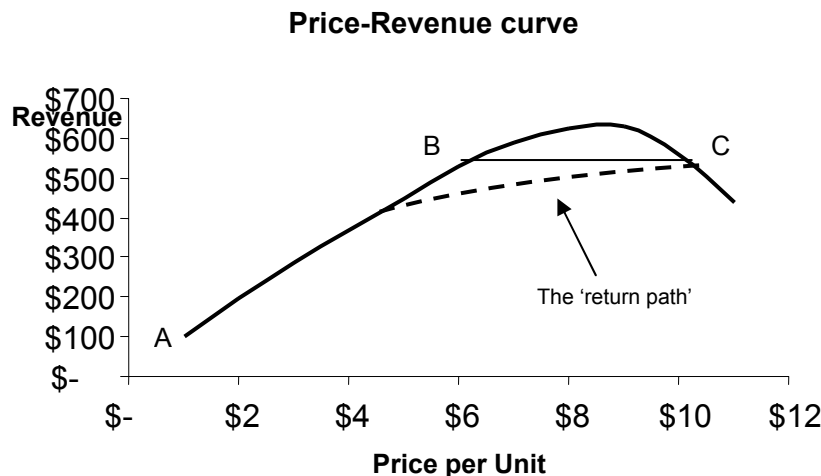
Multinational subsidiaries often deal in product mandates with markets well beyond the immediate locale. A centre of gravity in Toronto is less much critical in either case. Further, larger firms are also much less dependent upon the local City suppliers, employ more automation and, frequently, staff who need less training and who are, consequently, more readily replaced.

Such subsidiaries were originally founded in a time of tariff barriers; these no longer exist and it is often simple inertia that currently prevents the move to other locations. With the overall benefit to the parent company as the deciding factor, such location decisions will most often be made at the corporate headquarters of that parent company, well outside of the four walls of the local Toronto plant and often in another country. This will include consideration of jurisdictions outside Toronto, Ontario and, possibly, Canada.

Winning and retaining product mandates is a vital goal of multinational subsidiaries. The mandate gives them the production rights for a product or line of products on behalf of the parent company. Often this mandate is continent wide or, in some cases, global in nature.

4 The jurisdictional competitiveness challenge: an analogy drawn from private sector product price positioning

Once a relocation decision is made, jurisdictional competitiveness becomes the core issue in the relocation decision. A useful analogy to jurisdictional competitiveness is found in the retail market. The Price-Revenue curve is often used by companies to determine an optimum price-point for their product in the market. The example shown is exaggerated to illustrate the point. Revenue is the multiple of 'Price per Unit' and 'Number of Units sold'.



Starting at point A on the solid line, as the price per unit rises, the volume sold drops off slightly but this is more than overcome by the increase in price. Hence revenues continue to climb with only a slight downward 'bending' of the curve. This means that the market as a whole perceives value and is prepared to pay for it.

At point B the market starts to consider the price to be too high and the volume of sales begins to drop off more rapidly. This results in a flattening of the revenue curve as the increased price is offset by the falling unit sales. To some extent the effect is masked by this quid pro quo and companies often fail to recognize that they have entered this critical and unstable area. If the price *continues* to rise then volumes will drop off very rapidly, overcoming the higher price per unit and causing revenues to fall – point C.

This is often the *first* clearly noticeable indication that the company has gone too far. Unfortunately, simply lowering the price in response does not always cause the path to be retraced. While this retracing can occur in commodity exchange transactions it almost never occurs in the general selling and buying arena, where alternatives abound. Customers feel gouged, look elsewhere for solutions and do not come back readily. This results in a 'return path' with less revenue for the company.

Ideally companies want to operate in the critical zone between B and C - this maximizes their revenue. Unfortunately, it is also an unstable zone so the preference is to be closer to B than C, even if the revenues are essentially the same. *The challenge is to know when B is reached. Many companies do not realize that they have passed it until they hit point C when the indicators can no longer be ignored but, essentially, it is then too late.*

The same is true for any jurisdiction when retaining or attracting companies. If a jurisdiction is attractive to companies due to the market or other factors then it is reasonable that they be expected to pay a price for that privilege. *How much of a price?* That can only be decided by the company and that will vary from industry to industry, company to company and what is happening in that market and other jurisdictions at that time. Unfortunately, jurisdictions also often react only when 'point C is reached' and, to make matters worse, such a trend is not quickly reversed. Having once left the jurisdiction companies may be loathe to return since what is to stop the jurisdiction 'making the same mistake again' most especially after the company has committed effort and capital to the new location? While this is not unique to the retention and attraction of food processing firms neither are such firms immune from the same considerations.

5 Land, facility and physical infrastructure needs

Upgrading older facilities to current food-grade standards can be expensive at over \$80 per square foot of space. It is regarded by many as a poor investment, especially with the more stringent regulations required for dairy, meat and similar processing and new facilities are much preferred. However, for some applications, older buildings can be converted but at considerable cost. *Appendix VI* provides a reference for the investment required.

Suitable commercially available land is regarded as scarce and expensive in Toronto. The food processing industry is in competition with the commercial and retail sectors for desirable space; the latter two sectors can attract two to three times the rate for a commercial or retail client. This current perception of a lack of reasonably priced land, if not changed, will drive firms to consider looking elsewhere when relocation is essential.

A steep increase in the demand for utilities is not likely in the foreseeable future. All indicators show that sufficient sewer, water, electricity and information technology capacity is available or can readily be made available throughout the City. Further, if less and less land is available for industrial usage then the relatively heavy water consumption and effluent of some sub-sectors of the food processing industry will be even less significant. Firms that grow within their current facilities will consume more electricity and natural gas as they expand on site but the addition of shifts does not require an increase in supporting infrastructure since it is presently idle during the off-shifts.

External freezer storage capacity is at a premium and becoming more so every year. The trend towards frozen foods continues and is one of the methods by which firms can increase the radius of their market. The lack of freezing capacity is a constraint to growth for the smaller companies attempting to broaden their markets.



An efficient and readily accessible transportation system is a key component in the growth of the food industry. The traffic density in some areas of the City is an impediment to goods transportation within the area and, consequently, tends to hamper such growth. 'Just-in-time' deliveries to hotels and restaurants are constrained and the larger, more efficient tractor-trailer carriers simply cannot access some of the food processors in the older, more heavily built-up areas.

6 Employment

Job growth follows sales growth only at certain times of the growth cycle. For a given firm, the growth pattern of the work force usually parallels the growth of sales until "automation kicks in." At that point, work force growth tapers off and may even fall. However, the remaining jobs are often 'upgraded' to reflect the elevated skills needed to operate automated equipment.

Clearly, the job creation potential for the next decade described in the Findings, Section E3, will occur *only if the existing firms remain in the City*. This represents over 10,000 new skilled and semi-skilled jobs. For every facility that moves out, some portion of these jobs is likely to be developed in the new location. Encouraging and facilitating the retention of expanding firms within the boundaries of the City is critical to achieving the maximum benefit from this growth potential.

7 Access to finance

Food processing industry characteristics make it very difficult for firms to get past the start up stage. A highly competitive environment, low margins, a highly regulated industry, a need to purchase major assets at the outset, as well as acquiring sufficient space, are attributes which place individual small operations in a vulnerable position.

Obtaining financing for new facilities is a major barrier. Banks find the industry unattractive; lending for facility construction is difficult to arrange without significant additional collateral due to the perceived low liquidation value of bricks and mortar. This is exacerbated when the higher cost of food-grade improvements is considered. Venture capitalists demand a significant share of the enterprise, which owners are not prepared to surrender.

To maintain the viability of the food cluster it is important for government to facilitate links between the food industry and the financial sector. Government needs to actively support and 'make-the-case' for the food industry as a viable investment vehicle.

8 Prospects, challenges and opportunities for the food industry in Toronto

Toronto presents many advantages for maintaining and strengthening the food industry cluster. Toronto is a major market, a centre for innovation and easy access to the most densely populated regions of the United States. The City also boasts a well-educated work force and excellent infrastructure.



It is clear that that any perceived barriers or issues in the Toronto market are not impeding the overall growth of the food processing sector. There is nothing discernible that will act as a primary motivator to cause a food processing firm to leave the City per se. When a move is inevitable then the smaller firms are likely to behave differently than the larger enterprises and this is detailed below.

Small size and specialty food firms

Most *new* facility growth will come from small and medium size firms. When relocating from one facility to another, these companies will stay within the City if at all possible.

The Toronto market is the imperative to remain within the City, which is emphasized when the product is 'fresh'. As in any cosmopolitan city, specialty food firms are and will continue to flourish due to a demand for diverse new products, many of which are fresh. These firms need to be in the core of the City to be able to service clients quickly and directly. Those in the gourmet products food service businesses have to be able to react within minutes.

Existing employees are important to the future growth in the smaller firms. The more hand-crafted or customized the product the greater the reliance upon experienced and skilled employees and the more likely the company will remain in Toronto to capitalize on that 'investment' in experience. There is also a large pool of potential employees in Toronto.

The smaller firms rely heavily upon the cluster of raw material suppliers. Also, many owner-operators live in Toronto and want to be close to home. Lifestyle and familiarity play a major role as do schooling, hospitals, social services, etc.

As a group, the growth of the smaller companies will increase at least with the size of the local market. This growth will exceed that of the Toronto market as the trend for new, fresh and innovative products continues. The question is whether the existing small food processors will have the physical facilities into which to expand and the financial capacity to meet that demand or whether new firms operating from small facilities will fill that need.

Without the availability of facilities at a reasonable cost into which to expand, the growth of *individual* companies will be constrained. This will not cause these companies to fail per se and the owner-operators may be content with the smaller size of their business. The market will continue to grow causing yet more small food processing companies to be created to meet that demand, initially working out of homes or very small spaces. These will continue to grow until the same constraints take effect.

Although such a process may limit the growth of *individual* small companies, others will emerge to fill the gap and the net effect on the City of Toronto should be a net zero sum. What is lost is the opportunity for some of the smaller enterprises to expand sufficiently to broaden their markets, thus bringing in wealth from other jurisdictions and translating this into employment and other gains both directly and into other arms of the cluster in Toronto.



Efforts to promote retention and growth in smaller firms should address:

- The lack of capital funding to finance growth
- Improving communications between the food and real estate industries to avoid the loss of valuable plant infrastructure when a building becomes available for sale
- Land availability for growth
- The encouragement of co-packing as a means to foster growth
- Determining how to improve freezer availability through the use of shared capacity in smaller firms

Medium size, larger and multinational firms

Medium size firms (\$5 million to \$200 million in annual sales) will expand on their existing site as long as possible but would prefer new facilities, most often within Toronto, when a move is necessary. With the perception that land is not available at a reasonable price, such firms will readily consider a move outside of the City to surrounding cities, thus staying close enough to service their major Toronto market.

With significant markets further afield, the larger food processing companies (greater than \$200 million in annual sales) have the least reason to remain within the City, *once a move is contemplated*. However, in this case the factor of inertia acts greatly in favour of the City. Moving is a very expensive proposition for larger firms and constitutes a major interruption in operations and this will be put off as long as possible.

None of the firms sampled would choose to relocate solely due to the perceived high cost of doing business in Toronto. That is, these costs are not considered to be so high that they would, in themselves, offset the overall cost of relocation. However, this latent threat may materialize in the future. Many large size and some medium size food processing plants may consider relocating outside of Toronto. This will likely not be a sudden mass exodus but will be manifested by the diminishing number of larger (and some medium size) food processing companies in the City. The dilemma comes when growing firms, through having exhausted all other avenues to accommodate growth, *must* expand through relocation *somewhere*. Then the cost of relocation itself is more or less the same whether the chosen site is Toronto or a nearby surrounding region. At the same time, the cost of doing business comes into play in the selection of the new site. This may cause the company to move outside the City, in particular because suitable land is becoming scarce.

Ironically, the natural desire of the City to have food processors grow in order to increase employment and cluster spin-off benefits, makes those same food processors less dependent upon the Toronto market. Then, when a growth driven move is created, unless Toronto compares well against other jurisdictions from a location-cost perspective, the chances of the firm relocating *within* the City is diminished.



The growth of the company will be the primary motivating factor to consider relocation. However, most companies will take all other available steps before committing to a move. Adding shifts, automation and expansion on site will likely be executed as temporary measures to avoid the costly and disruptive impacts of a move. This is especially so for the larger food processors with much capital invested that must either be relocated or left behind. To maximize business retention in the food cluster it is imperative that the City identifies specific firms to monitor and target these for retention-focused activities.

In any case the availability of suitable land and facilities may become the decisive factor when deciding to relocate outside the City.

Efforts to promote retention and growth in the medium and large firms should address:

- Finding mechanisms to facilitate expansion *on-site for as long as possible*
- Demonstrating that Toronto is a 'value-effective' jurisdiction. That is, the benefits of a Toronto location outweigh the costs.

In addition to improving the overall cluster performance and encouraging the retention of those firms that, regardless of size, must relocate somewhere, the following issues need to be addressed:

- Access to capital
- Special transportation needs of the food industry
- Provision and cost of critical infrastructure, i.e.: waste water treatment and solid waste disposal
- Business infrastructure
- Co-ordination between the various authorities having regulatory jurisdiction over the food industry, in particular food safety and facility inspection
- Cost of doing business

Conclusions

The food industry in Toronto is thriving. The City is a good location for the food industry due to the large market size, a broad ethnic diversity, a ready supply of well-educated staff and excellent infrastructure. However, to ensure the continued growth of this vital sector as well as to retain the existing businesses, there *are* challenges to be addressed.

The consultants recommend that the City of Toronto and the Ontario Ministry of Agriculture and Food consider actions focused on four main themes: capital investment in the food industry, physical infrastructure, food industry business infrastructure and communications (see 'Recommendations' in Section B of this report for a full description).



G Acknowledgements and References

Acknowledgements

The consultants wish to acknowledge the valuable contribution to this study and report of all of the participating companies and organizations (*see Appendix I, List of participating companies and organizations providing input to the study*). The insight gained from these participants formed the core data for this work and was fundamental to the preparation of this report. This applies most especially to the co-project managers of this initiative, representing the Ontario Ministry of Agriculture and Food and the City of Toronto Economic Development Division, both of whom provided insightful guidance and assistance.

Periodicals and Reports

- Aligning Action: An economic development strategy for Toronto - Toronto Economic Development
- An Inter-jurisdictional Review of Investment Marketing Priorities. Tom Ticknor & Associates. 1997.
- An Investment Marketing Strategy for the Ontario Food Processing Industry. Tom Ticknor & Associates. 1996.
- Benchmarking for Success. (Fifth annual survey of Canadian and U.S. food processing industries). Deloitte Touche. 2000.
- City of Toronto, Staff report February 2002 - Toronto, the second largest food industry cluster in North America: Implementing Toronto's Economic Development Strategy
- Food in Canada. MacLean Hunter. Periodical. 1997-2002
- Food Processing. Warner Publications. (U.S.) Periodical. 1998-2002
- Grocery Products Review. George Morris Center – Kevin Grier Editor. 1999-2002
- Investment in the Canadian Food Industry. Deloitte Touche. 1999.
- Site Selection. Conway Publishers. (U.S. and international). Periodical. 1998-2002
- Toronto Economic Development Strategy, 2000

Web Sites

A large number of web sites in Canada, the U.S. and other international locations were consulted. These included sites sponsored by governments, food associations, food companies and universities. In particular, many sites pertained to Statscan, Agriculture Canada and the United States Department of Agriculture. The following is a representative sample of these sites:

- Agriculture Canada – Investment. Agr.ca/public/htmldocs/E2176.html
- Agriculture Canada food market information. www.aceis.agr.ca/food/markets-c.html
- Agri-Food Trade Service. (Agriculture Canada and Foreign Affairs and International Trade. www.atn-riac.agr.ca
- DFAIT. Export reports on opportunities in food industry. www.infoexports.gc.ca
- Enterprise Ireland. idba@estaclear.ie.
- Food Institute of Canada. www.foodinstitute.com
- Food Processing - www.foodprocessing.com
- National Food Processors Association (U.S.) www.nfpa-food.org
- New Zealand Dept of Agriculture and food. www.mafgovt.NZ
- Prepared Foods. Periodical. www.preparedfoods.com
- U.S. Dept of Agriculture. www.fas.usda.gov
- U.S. Food Institute. www.Foodinstitute.com



Appendices

- I List of participating companies and organizations providing input to the study
- II Facilities inventory
- III Sample survey format
- IV Miscellaneous findings and industry comments
- V Food Industry consultation forum
- VI Capital investment required for a sample food processing facility



Appendix I List of participating companies and organizations providing input to the study

Food Processors

Ace Bakery	Good For You Desserts	Patty Palace
Bayhill Impex	Grain Processing Enterprises	Peter the Chef Fine Foods
Beech Grove Country Foods	Heartbeets	Portuguese Cheese
Bramic Sales Inc	Java Roasters	Pride Pak Canada Ltd.
Campbell Soup	Kama Sushi	Renee's Gourmet Products
Canada Bread	Kerr Bros	Santa Maria Foods
CanAmera Foods	Lee's Food Products	Select Food Products
Caribbean Ice Cream	Mannarino's Creative Foods	Sequel Brands Products
Carol's Cheesecake	Marsan Foods	Siena Foods
Chicago 58	Mary's Gourmet	Sweet City Bakery
Coby's Cookies	Mediterranean Bakery	Thyme & Truffles
Continental Noodles	Molson Brewery	Tiffany Gate Ltd.
Culinary Destinations	Morrison Lamothe Fine Foods	Tradition Fine Foods
Del's Pastry	Nealanders International	W.T. Lynch Foods
Dufflet Pastries	Nestle Canada Ltd.	Wildly Delicious
Genesis Meat Products	Pak Fok Food Products	Wrigley Canada Ltd.
Golden Age (Soy City)	Parmalat	

Food Industry Related Organizations

Ontario Ministry of Agriculture Food	City of Toronto	International Sources
Food Industry Competitiveness Branch	Economic Development Division	Canadian Embassy, Germany
Export Development Unit	Works and Emergency Services	Canadian Embassy, Netherlands
Food Inspection Division		
Investment Development Unit		Enterprise Ireland
Market Development Branch		Food Institute, New Jersey.
	Food Associations and Groups	
Industrial Real Estate	Canadian Specialty Food Association	Giacomo Mezzera, Milan, Italy
Bosley Real Estate Ltd.	Food and Consumer Products Manufacturers of Canada	IDASCA
CB Richard Ellis	Food Share	Italian Trade Commission, Toronto
Inducite Real Estate	Guelph Food Technology Centre	Netherlands Foreign Investment Agency, Chicago, Illinois
Royal Lepage	Ontario Food Terminal	Peter Day & Associates, London, U.K.
Toronto Real Estate Board	Toronto Kitchen Incubator	Site Selection Magazine



Appendix II Facilities inventory

The data listed below is derived from an analysis of existing databases (principally databases maintained by the City of Toronto, OMAF, and Scott's Directories) and has not been verified for currentness or completeness unless these firms were interviewed as part of the company survey.

Food processing operation	Location	Sub-sector
333 Meat Products Corp.	Scarborough	Meat
A Bisket A Basket Inc.	Toronto	Fruit & vegetable
A.P.C Fine Foods Inc./Beverleys	North York	Bakery
Ace Bakery	North York	Bakery
Adams Brands	Scarborough	Confectionery
Agro Meats	Toronto	Meat
Akaba Fine Foods	Scarborough	Other
Akropol Bakery	Toronto	Bakery
Albert's Bakery & Sweets	North York	Bakery
Alexander's Dessert Products Inc.	Etobicoke	Bakery
All-Nut Popcorn Inc.	Etobicoke	Grains & Oilseeds
Altitude Baking	Toronto	Bakery
Altobello Bakery	Scarborough	Bakery
Ammmazing Donuts Inc.	North York	Bakery
Amorosa Chocolates	Toronto	Confectionery
Amoy Foods	Scarborough	Bakery
Annabelle's All-Butter Shortbreads	Scarborough	Bakery
Annette's Donuts Ltd.	Toronto	Bakery
Aqua Life International	Scarborough	Beverages
Aqua Vera Real Water Bottled Co. Ltd.	Etobicoke	Beverages
Arz Bakery	Scarborough	Bakery
Asia Bakery Ltd.	Toronto	Bakery
Associated Brands/Chocolate Products Co. Ltd.	Etobicoke	Confectionery
Bagel Basket	Scarborough	Bakery
Bagelworks	Toronto	Bakery
Bagelworks Bagel Bakery	Toronto	Bakery
Baird John Scottish Bakeries Ltd.	Etobicoke	Bakery
Bake Works	Toronto	Bakery
Baker Street Bakery	Toronto	Bakery
Banner Rendering Inc	Toronto	Meat
Baskin-Robbins	Etobicoke	Dairy
Bayhill Impex	Scarborough	Other
Beaver Bread (1968) Ltd	Toronto	Bakery
Beechgrove Country Foods	Scarborough	Meat



Food processing operation	Location	Sub-sector
Best & Fresh Co Ltd	Toronto	Other
Best Dressed Corp	Toronto	Fruit & vegetable
Beta Brands Ltd.	North York	Confectionery
Beverly Hills Pasta Inc.	North York	Bakery
Billy Bee Honey Products	Toronto	Other
Blue Danube Sausage House Ltd.	Etobicoke	Meat
Bologna Pastificio Ltd.	North York	Grains & Oilseeds
Bona Foods Ltd.	North York	Meat
Borden Co. Ltd.	Etobicoke	Other
Bramfield Restaurants (Amsterdam Brewing)	Toronto	Beverages
Bread Factory	Scarborough	Bakery
Bread King Bakery	Scarborough	Bakery
Breadsource Corporation	North York	Bakery
Brews Brothers Coffee Company Inc.	Etobicoke	Beverages
Brick Brewing Co Ltd	Toronto	Beverages
Brisa Do Liz Bakery	Toronto	Bakery
British Columbia Packers Ltd.	Etobicoke	Fish
Bunn Time	Toronto	Bakery
Burns Philip Food Ltd./Specialty Brands Division	Etobicoke	Other
Buskett Co Ltd.	Toronto	Bakery
Cadbury Chocolate Canada Inc	Toronto	Confectionery
Cafenucci Bakery Ltd.	North York	Bakery
California Wine Juice Corp	Toronto	Beverages
Cameron's Brewery	Etobicoke	Beverages
Campbell Soup Company Ltd.	Etobicoke	Other
Canaan Bakery Inc.	North York	Bakery
Canada Bread Co Ltd (Central Bakery)	Toronto	Bakery
Canada Bread Co Ltd (Dempster Bread)	Toronto	Bakery
Canada Bread Co. Ltd./Dempster Bread Division	Etobicoke	Bakery
Canadian Natural Casings Ltd.	Toronto	Meat
Canamera Foods	Toronto	Grains & Oilseeds
Cargill Foods	Etobicoke	Meat
Caribbean Ice Cream Co. Ltd./Tropical Treats	North York	Dairy
Carol U (Bagel Boys)	Toronto	Bakery
Carole's Cheesecake Company	North York	Bakery
Central Valley Wines	Toronto	Beverages
Central-Epicure Food Products Ltd.	North York	Fish
C'Est Sweet	North York	Confectionery
Chianti Food Processors Inc.	Toronto	Fish
Chicago 58 Food Products Ltd	Toronto	Meat
China Brand Food Products Inc.	Etobicoke	Fruit & vegetable
Choco Coffee Corp	Scarborough	Beverages
Chocolate Charm Limited	North York	Confectionery



Food processing operation	Location	Sub-sector
Chocolate Pix Canada	North York	Confectionery
Chocolate Signatures Inc.	Etobicoke	Confectionery
Chocolaterie Bernard	Etobicoke	Confectionery
Chrysoberyl Food Products Ltd.	North York	Meat
Cinnagard Inc (Cinnabon)	Toronto	Bakery
Clear Ice Solid Blocks Inc.	York	Other
Coby's Cookies Inc.	North York	Bakery
Coca-Cola Bottling Ltd	Toronto	Beverages
Coca-Cola Bottling Ltd	North York	Beverages
Colosseo Bakery Ltd.	North York	Bakery
Commercial Bakeries Corp.	North York	Bakery
Commisso Brothers & Racco Italian Bakery Inc.	North York	Bakery
Confectionately Yours Inc.	Etobicoke	Confectionery
Continental Noodles Ltd.	York	Other
Corsetti Meat Packers Ltd.	Toronto	Meat
Cott Corporation	North York	Beverages
Cra-Vac Industries Inc.	Toronto	Feed
Crystal Ice Mfg. Co.	Scarborough	Other
Culinar	Scarborough	Bakery
Culinary Destinations Ltd	Etobicoke	Other
Curry King Canada	Etobicoke	Other
Custom Industries Canada Ltd.	North York	Confectionery
Cynar Dry Company Ltd.	Etobicoke	Beverages
Czechowski J Polish Sausage Inc.	Etobicoke	Meat
Daily Seafood Inc.	Toronto	Fish
Dare Foods Candy Division	North York	Confectionery
Delcorp Foods Inc.	Toronto	Meat
Delfresh Foods Inc.	Etobicoke	Meat
Del's Pastry Ltd.	Etobicoke	Bakery
Derry Foods Ltd.	Etobicoke	Dairy
Designer Bakery & Pastryart	Toronto	Bakery
Dessertcraft Food Products	Etobicoke	Other
Destination Products of Canada Ltd	Toronto	Other
Devro Teepak Industries	Scarborough	Meat
DHD Food Products	Toronto	Grains/Oilseeds
Diana Products Co.	Toronto	Bakery
Dimpflmeier Bakery Ltd./Viking Bakery	Etobicoke	Bakery
Ding Ho Best Foods	Scarborough	Fish
Dough Delight (Pita Delight)	Scarborough	Bakery
Dufflet Pastries	Toronto	Bakery
Dynaquest 2000 Ltd.	Etobicoke	Other
Edelcon Inc./French Oven	Etobicoke	Bakery
Eden Manufacturing Co. Ltd./Gibbons Foods	Etobicoke	Other



Food processing operation	Location	
Eitelbach Baumkuchen	North York	Bakery
Elizabeth's Delicatessen & Meat Market Ltd.	Toronto	Meat
Embassy Food Specialties Ltd.	Etobicoke	Other
Etobicoke Noodles Inc./Queen's Pasta	Etobicoke	Grains & Oilseeds
Europa Bakery Inc.	York	Bakery
Eurovintage International	North York	Beverages
Exact Nutrition Canada	East York	Feed
Exclusive Smoked Fish Ltd	Toronto	Fish
Fairlee Fruit Juice Ltd.	Etobicoke	Fruit & vegetable
Fan Fair Inc	Scarborough	Other
Feature Foods Ltd.	Etobicoke	Fish
Fermentations Your Personal Brewery & Winery Inc.	East York	Beverages
Fiera Foods Inc.	North York	Bakery
Filicetti Foods Inc.	North York	Meat
First Spice Mixing Co. (Canada) Ltd.	North York	Other
Fleer Ltd.	North York	Confectionery
Florentina Pasta Ltd.	North York	Grains & Oilseeds
Food Directions Inc.	Scarborough	Grains & Oilseeds
Forest Hill Bakery	Toronto	Bakery
Franks, Emelia Foods Inc.	Toronto	Fruit & vegetable
Fred's Bread	North York	Bakery
Fresh 'n Easy Yogurt Inc	Etobicoke	Dairy
Full Fortune Foods	Scarborough	Other
Furama Cake & Dessert Garden Ltd.	Toronto	Bakery
Furlani's Food Corp.	Etobicoke	Fruit & vegetable
Future Bakery Ltd.	Toronto	Bakery
Future Bakery Ltd.	Etobicoke	Bakery
Gay Lea Foods Cooperative Ltd.	North York	Dairy
Gelato Fresco Inc.	North York	Dairy
Genesis Meat Packers Inc.	Toronto	Meat
Germantown (Canada)	Scarborough	Other
Global Egg Corp.	Etobicoke	Dairy
Golden Age Food Ltd. (Soy City Foods)	Toronto	Other
Good Food Co. Inc.	North York	Bakery
Good For You Desserts	Scarborough	Bakery
Good Taste Food Product	Scarborough	Fruit & vegetable
Graceful Food	Scarborough	Bakery
Grain Process Enterprises	Scarborough	Grains & Oilseeds
Grainfields Bakery	Toronto	Other
Grand Pasta Inc.	Etobicoke	Grains & Oilseeds
Granowski Bakery	Toronto	Bakery
Great Canadian Bagel Ltd	Toronto	Bakery
Great Canadian Bagel Ltd	Toronto	Bakery



Food processing operation	Location	
Great Canadian Bagel Ltd	Toronto	Bakery
Great Canadian Bagel Ltd	Etobicoke	Bakery
Great Canadian Bagel Ltd	Etobicoke	Bakery
Great Lakes Brewing Co. Inc.	Etobicoke	Beverages
Green Man Horticultural Products Inc.	Toronto	Grains & Oil
Greystone Bakery	Scarborough	Bakery
Griffith Laboratories	Scarborough	Other
Hai Nam Wholesales Bakers	York	Bakery
Hajeess Halal Meat Products	Toronto	Meat
Handi Foods Ltd./Mediterranean Bakery	North York	Bakery
Hans Dairy Inc.	Etobicoke	Dairy
Harcan Kingsoya	Scarborough	Fruit & vegetable
Health Bread Bakery	North York	Bakery
Heartbeets Inc.	Scarborough	Fruit & vegetable
Hermes Bakery	North York	Bakery
Hoi Tin Food Products	Scarborough	Other
Honey Crust Bakery	Scarborough	Bakery
Honeyman's Beef Purveyors	Etobicoke	Meat
Hong Kong Bean Sprout Co Ltd	Toronto	Grains & Oilseeds
Hostess Frito-Lay Canada	Scarborough	Other
Hung Wang Foods Inc	Toronto	Other
Intercorp Excelle Foods Inc./Renee's Gourmet Products	North York	Fruit & vegetable
International Cheese Co. Ltd.	Toronto	Dairy
J A C Creative Foods	Scarborough	Fish
J&F Gourmet Fine Foods	Toronto	Bakery
J.J. Derma Meats Ltd	Etobicoke	Meat
Joriki Inc.	Scarborough	Fruit & vegetable
K C Meats Intl Exp Brokers	York	Meat
Kalaya International	North York	Meat
Kama Sushi	Toronto	Fish
Kerr Bros Ltd./Kerrs	Etobicoke	Confectionery
Kingsmill Food Company	Scarborough	Other
Kissan International	Scarborough	Other
Kraft Canada	Scarborough	Grains & Oilseeds
Kraft Canada	North York	Grains & Oil Seeds
Kretschmar Inc./Karl Kramer	North York	Meat
Kristapsons Inc.	Toronto	Fish
Kwinter, J Gourmet Foods Inc.	North York	Meat
Labatt Brewing Co. Ltd./Labatt Ontario Breweries Div.	Etobicoke	Beverages
Lakeshore Bakery	Etobicoke	Bakery
Lallemand Distribution Inc.	Etobicoke	Grains & Oil
Lantic Sugar Ltd.	Etobicoke	Sugar/Confectionery



Food processing operation	Location	
Latour Alimentation	Scarborough	Grains & Oilseeds
Lee Valley Foods	Scarborough	Fruit & vegetable
Lee's Food Products Ltd.	Toronto	Other
Lee's Noodles (Toronto) Ltd.	Toronto	Grains & Oilseeds
Lesters Foods Ltd.	Etobicoke	Meat
Lipton/U L Canada Inc.	Etobicoke	Grains & Oil
Longlife of Canada Co Ltd/Gay Lea Foods Co-op	North York	Dairy
Lounsbury Food Ltd./Cedarvale Food Products	Toronto	Fruit & vegetable
Lowe's Food Products Inc	North York	Fruit & vegetable
Lynch, W T Foods Ltd	North York	Bakery
Mac Twins Natural Foods Inc.	North York	Other
MacGregor Meats & Seafoods	Toronto	Meat
Magnotta Winery Corp	Scarborough	Beverages
Mah Kwan Kadeek	Scarborough	Other
Mannarino's Creative Foods Inc.	North York	Other
Manoucher Fine Foods Inc.	North York	Bakery
Maple Leaf Foods Inc./Principal Marques	Etobicoke	Meat
Maple Leaf Foods Inc./Shopsy's Foods Div.	North York	Meat
Maple Leaf Foods Inc./Shure-Gain Feed Service	North York	Feed
Maple Leaf Foods Inc./York Farms	Toronto	Meat
Marmike Trading Co. Inc./Nafta Foods & Packaging Div	Etobicoke	Bakery
Marsan Foods Ltd	Scarborough	Other
Martha's Garden	Toronto	Fruit & Vegetable
Mary's Gourmet	Toronto	Confectionery
Maypole Dairy Products Ltd.	Etobicoke	Dairy
McCain Foods Ltd./Sunny Orange Div.	Etobicoke	Fruit & vegetable
Metropolitan Ice Cream Inc.	North York	Dairy
Michel's Baguette French	Etobicoke	Bakery
Milan Wineries Inc.	Etobicoke	Beverages
Millies Chips/Cosmic Food	Toronto	Fruit & vegetable
Minute Maid Co. Canada Inc.	North York	Beverages
Mmmarvelous Mmmuffins	Toronto	Bakery
Mmmuffins Canada Corp.	Toronto	Bakery
Mohan Sweets	Scarborough	Confectionery
Mokito Coffee Industries Inc.	North York	Beverages
Molson Canada/Molson Breweries	Etobicoke	Beverages
Montmarte Bakery	Scarborough	Bakery
Morrison Lamothe Fine Foods	Scarborough	Bakery
Morrison Lamothe Fine Foods	Etobicoke	Fruit & vegetable
Mosto Vinho	Toronto	Beverages
Mr. Sujuk Sausages	Toronto	Meat
Nabisco Brands Christie Brown	Scarborough	Bakery



Food processing operation	Location	
Nabisco Brands Christie Brown	Etobicoke	Bakery
Nabisco Brands Christie Brown Peek Freans	East York	Bakery
Nabisco Ltd.	Etobicoke	Bakery
Nabisco/Primo Food Products Plant	North York	Grains & Oilseeds
National Baby Formula Service	Scarborough	Dairy
National Dry Co. Ltd./Wishing Well Beverages	North York	Beverages
National Home Bakery	Scarborough	Bakery
National Meats Inc.	Etobicoke	Meat
National Noodle Ltd.	North York	Grains & Oilseeds
Natrel (Ontario) Inc./Sealtest Dairies-Ontario	North York	Dairy
Navroz Enterprises Ltd.	Scarborough	Bakery
Nealanders Intl. Inc.	Etobicoke	Grains & Oilseeds
Neighbours Bakery & Deli Ltd.	North York	Bakery
Neil's Soup Kettle Inc.	Toronto	Fruit & vegetable
Neilson, Wm. Ltd.	Etobicoke	Dairy
Nestle Canada	Scarborough	Confectionery
Nestle Canada/Confectionery Div.	Toronto	Confectionery
New York Pork & Food Exchange Ltd.	Toronto	Meat
Niru Enterprises	Scarborough	Other
Norma Sue Bakery	Scarborough	Bakery
Normerica Inc.	Etobicoke	Meat
North Pole Bakery	Toronto	Bakery
Nu Way Potato Products	Toronto	Fruit & vegetable
Oak Leaf Confections	Scarborough	Confectionery
Ocean Food Co Ltd	Scarborough	Fish
Olde Fashion Bagel Factory	North York	Bakery
Olde Fashioned Bagel Factory & Bakery	North York	Bakery
Ontario Bread Co. Ltd.	Toronto	Bakery
Oriental Classic Canada Ltd	Scarborough	Beverages
Original Tortilla Co.	Etobicoke	Bakery
Pak Fok Food Products	Scarborough	Dairy
Pane Vittoria Bakery Ltd.	Toronto	Bakery
Paradise Foods Ltd	Scarborough	Other
Parmalat Canada (Astro Dairy Products)	Etobicoke	Dairy
Pastaco Inc.	North York	Grains & Oilseeds
Patty King	Scarborough	Bakery
Patty Palace	Scarborough	Other
Penne From Heaven	Toronto	Grains & Oilseeds
Pepes Mexican Foods/Signature Brands Ltd.	Etobicoke	Bakery
Peter The Chef Fine Food Ltd.	Etobicoke	Other
Planway Poultry	Etobicoke	Meat
Pop-Ins Frozen Foods Ltd.	North York	Bakery
Portuguese Cheese Co. Ltd.	Etobicoke	Dairy



Food processing operation	Location	
Posca Foods Inc.	North York	Bakery
Prime Foods Processing Inc./Pasta Kitchen	North York	Grains & Oilseeds
Progress Bakery & Daily Co.	Toronto	Bakery
Pyung Hwa Food Company	York	Bakery
Quality Cracker & Cookie Co. Ltd.	North York	Bakery
Quality Meat Packers Ltd./Town Club Products	Toronto	Meat
Rebel Fire Foods Inc.	Toronto	Other
Reckitt & Colman Canada Inc.	Etobicoke	Grains & Oilseeds
Redpath Sugars/Tate & Lyle North America Sugar	Toronto	Sugar/Confectionery
Regina Noodle Products Ltd.	North York	Grains & Oilseeds
Rex Pak Ltd.	Toronto	Meat
RFG Canada Inc.	Etobicoke	Other
Riviera Bakery	Toronto	Bakery
Rondo Specialty Foods	Toronto	Bakery
Royal Food & Beverage Products	Scarborough	Dairy
Royal Sweets	Scarborough	Confectionery
Rubicon Food Products	Scarborough	Fruit & vegetable
Rudolph's Specialty Bakeries Ltd.	York	Bakery
Sabatini, U. Gourmet Foods Ltd.	North York	Other
Sable & Rosenfeld Foods	Toronto	Other
Saint Cinnamon	Toronto	Bakery
Saint Mary Fine Foods	Scarborough	Dairy
Samson Int'l/Nancy's Chocolates	Toronto	Confectionery
Santa Maria Foods Corp.	Etobicoke	Meat
Sapori Foods Inc.	Etobicoke	Grains & Oilseeds
Saskatchewan Wheat Pool/CSP Foods Div.	Etobicoke	Bakery
Saxon Chocolates	Toronto	Confectionery
Saxson Chocolates	Etobicoke	Confectionery
Scarboro Meat Packers	Scarborough	Meat
Scott's Restaurants Inc./Sequel Brand Foods	North York	Fruit & vegetable
Select Food Products Ltd./Duthie Food Manufacturing	North York	Meat
Shah Trading	North York	Other
Shandiz Trading Inc	Scarborough	Confectionery
Shasha Bread	Toronto	Bakery
Shelmac Brand Products Ltd.	North York	Dairy
Shirini, Sara Pastry House Ltd.	North York	Bakery
Sicilian Ice Cream Co. Ltd.	Toronto	Dairy
Siena Foods Ltd.	Etobicoke	Meat
Silverstein's Bakery Ltd.	Toronto	Bakery
Siopao Factory Ltd.	Scarborough	Bakery
Smucker J M (Canada) Inc.	Etobicoke	Fruit & vegetable
So Delicious	Toronto	Fruit & vegetable
Spectrum Foods	Scarborough	Other



Food processing operation	Location	
Splendid Chocolates	Toronto	Confectionery
Sports Snacks Holdings Inc.	Toronto	Grains & Oilseeds
St. Clair Ice Cream Ltd.	Toronto	Dairy
St. Helen's Meat Packers	Toronto	Meat
Steam Whistle Brewery	Toronto	Beverages
Stone County Specialties Inc.	North York	Fruit & vegetable
Stonemill Bakehouse	Scarborough	Bakery
Stronex Company	Scarborough	Bakery
Stubbe Chocolates & Pastries Ltd.	Toronto	Confectionery
Suki Suki	Etobicoke	Grains & Oilseeds
Sunlike Juice Limited	Scarborough	Fruit & vegetable
Sunrise Bakery	North York	Bakery
Superior Sausage & Meat Products Ltd.	Toronto	Meat
Surati Sweet Mart Ltd/	North York	Bakery
Sweet City Bakery Inc.	East York	Bakery
Sweet Maple Candies Co.	North York	Confectionery
Tai Wan Pork Inc.	North York	Meat
Tastefully Done	Toronto	Confectionery
Tempo Bakery & Deli Ltd.	North York	Bakery
Thyme and Truffles	Toronto	Bakery
Tiffany Gate	Etobicoke	Other
Timothy's Coffees of the World Inc.	North York	Beverages
Tofu Superior Co.	Toronto	Other
Tomek's Natural Preserves Inc.	Etobicoke	Fruit & vegetable
Toronto Coffee Roaster	Scarborough	Beverages
Toronto Luen Hop Trading	Toronto	Other
Tradition Fine Foods Ltd.	North York	Bakery
Tre Mari Bakery	Toronto	Bakery
Trebor Allan Inc./Dominion Candy	North York	Confectionery
Tyne & Tees Investment Ltd./Greg's Ice Cream	Toronto	Dairy
Unilac Ltd.	Scarborough	Dairy
Universal Flavours Canada Inc.	Etobicoke	Other
Upper Canada Brewing Co. Ltd	Toronto	Beverages
Upper Crust Production Co. Inc.	North York	Bakery
Urban Baker	Toronto	Bakery
Varano's Foods Inc.	Etobicoke	Other
Vevi Bakery Inc.	Scarborough	Bakery
Victory's Kitchen Ltd.	Toronto	Other
Vienna Meat Products Limited	Scarborough	Meat
Vlasic Foods Canada Inc.	Etobicoke	Other
Wagener's Meat Packers	Toronto	Meat
Warren Rosalind Assoc. Ltd.	Toronto	Fruit & vegetable
Weston Bakeries Ltd./Avalon Bakery	Etobicoke	Bakery



Food processing operation		Location
Weston Bakeries Ltd./George Weston Ltd.	Toronto	Bakery
Wild Birds Unlimited	Etobicoke	Feed
Wildly Delicious Preserve Co. Ltd.	North York	Fruit & vegetable
Wing Hing Lung Ltd./Wing's Food Products	Toronto	Grains & Oilseeds
World of Cake Decorating Ltd.	York	Bakery
Wow Factor Desserts	Etobicoke	Bakery
Wrigley (Canada) Inc.	North York	Confectionery
Y.F. Seafood Inc	Scarborough	Fish
Yet Sing Foods Ltd.	Toronto	Other
Yin On Food Products Inc.	Scarborough	Grains & Oilseeds
Yung Sing Pastry Shop	Toronto	Bakery



Appendix III Sample survey format

Ontario Ministry of Agriculture and Food Toronto Economic Development

Toronto Food Processing Industry Survey

1.00 Company Identification Code (to maintain confidentiality in the report)

- 1.01 Interview/Visit Date
- 1.02 Interviewer
- 1.03 City Zone

2.00 Identification

- 2.01 Company name
- 2.02 Address
- 2.03 Postal code
- 2.04 Telephone number
- 2.05 Fax number
- 2.06 Web-site
- 2.07 E-Mail
- 2.08 Contact names
- 2.09 Ownership - private, public, multinational subsidiary
- 2.10 If a multinational subsidiary plant what is the nationality of parent plant

3.00 Facilities & Infrastructure

- 3.01 Previous facilities history of company
- 3.02 Last expansion or move
- 3.03 Cost to upgrade to food grade if applicable
- 3.04 Type of construction
- 3.05 Square footage of plant
- 3.06 Major processes in the manufacturing facility
- 3.07 Other company owned facilities and location
- 3.08 Facility food grade rating
- 3.09 Inspecting authority
- 3.10 Major utility usage (hydro, gas, water)
- 3.11 Sewage requirements
- 3.12 Solid waste disposal needs
- 3.13 Problems with the facility?
- 3.14 Capital invested in facility
- 3.15 Capital invested in equipment
- 3.16 Ideas and comments on base-line costs to upgrade a regular building to food grade



4.00 Sales Revenue

- 4.01 Total sales
- 4.02 Total domestic sales
- 4.03 Total export sales
- 4.04 Export plans and growth
- 4.05 Annual growth projection

5.00 Employment

- 5.01 Total employment
- 5.02 Total employment five years ago
- 5.03 Total employment projection in five years
- 5.04 Total employment projection in ten years
- 5.05 Causes for changes in employment
- 5.06 Average hourly wage for production workers

6.00 Products & Purchases

- 6.01 Major product (s)
- 6.02 Percentage of sales which are manufactured by the company (distributor issue)
- 6.03 Total annual material purchased dollars
- 6.04 Largest annual purchase
- 6.05 Do you co-pack for others; where are they located
- 6.06 Do others co-pack for you; where are they located

7.00 Customers

- 7.01 Customers
- 7.02 Largest customer
- 7.03 Main physical distribution method(s) - Own truck? Common carrier? Customer pick-up? Truck? Rail? Air?

8.00 Regional/provincial/country competitive advantages and disadvantages

- 8.01 Raw material
- 8.02 Taxation (specify)
- 8.03 Government legislation (specify)
- 8.04 Labour costs
- 8.05 Utility costs
- 8.06 Transportation costs
- 8.07 Market location
- 8.08 Availability of skilled people
- 8.09 Performance of local people
- 8.10 Literacy of local people
- 8.11 Other



9.00 Projections

- 9.01 Given the opportunity how would you progress your organization - your ideal vision
- 9.02 New markets
- 9.03 New technologies and processes
- 9.04 Capital equipment purchases
- 9.05 New products
- 9.06 Co-packing opportunities (incoming and outgoing)
- 9.07 Factors, in order of importance, when considering expansion or relocation.
- 9.08 New facilities - expansion
- 9.09 New facilities - move
- 9.10 Projected facility needs over the next five to ten years.
- 9.11 Projected infrastructure needs over the next five to ten years.
- 9.12 Capital investment required to upgrade industrial buildings to food standards.
- 9.13 If move planned - where
- 9.14 Locations examined and why
- 9.15 If planning to move out of Toronto, why
- 9.16 What would it take to stay in Toronto if planning to move out
- 9.17 Other

10.00 What are the constraints to growth and what could Governments (all levels) do realistically to help you realize your growth plans?

- 10.01 New facilities assistance and in what form
- 10.02 Bank guarantees for working and long term capital
- 10.03 Lack of land
- 10.04 Land costs
- 10.05 Zoning constraints
- 10.06 Effluent issues
- 10.07 Waster disposal issues
- 10.08 Improve the infrastructure - how
- 10.09 Investment incentives
- 10.10 General business climate
- 10.11 Other

11.00 Multinational subsidiary only

- 11.01 Mandates
- 11.02 At what percentage of your capacity are you running
- 11.03 Your sales compared to five years ago
- 11.04 Is your product a 'commodity' or customized
- 11.05 High or low capital intensive business
- 11.06 High or low labour intensive business
- 11.07 Low or high product transportation cost factor
- 11.08 Currently expanding or contracting? By how much?
- 11.09 Likelihood of closing this location/moving elsewhere

*Narrative comments are placed in single separate Word file, with each comment tagged with **Company Identification Code**. These will be used to provide 'colour' to the report.*



Appendix IV Miscellaneous findings and industry comments

The following facts and remarks were noted in the course of the company survey. These are simply listed and the consultant commentary is minimal.

Sales revenue

The total annual revenue for the surveyed firms total \$4.5 billion. Seven multinationals were included in the survey, each with an average of at least \$500 million in annual revenue and the data is greatly influenced by their inclusion.

Total domestic sales of the surveyed companies are \$3.6 billion or approximately 80% of total sales, leaving 20%, or almost \$1 billion, being exported. The multinational subsidiaries account for most of the exports but medium firms also export a quantity of product, in some cases as much as 30%.

Export plans and growth

The total projected annual increase in exports across the surveyed companies is between 10% and 15%; this is expected to hold for at least three years. This represents approximately a \$100 million to \$150 million annual increase in exports. Some new firms will be entering the export market and many of the medium size firms have predicted major increases. Multinational subsidiary exports can change dramatically, depending on the corporate mandates in effect.

Largest annual purchases

Raw materials and packaging together represent the single largest purchases across the surveyed firms and this is an average 40% to 45% of annual sales. The range is approximately \$100,000 for a smaller firm to \$250 million for a major multinational subsidiary. The largest outlays were for protein (meat), vegetables and sugar. Across the survey, 60% of the purchases can be made in Ontario and Canada, although the off-season purchases of vegetables skews the number towards imports.

Physical distribution methods

The Greater Toronto Area is the location of the single largest customer of all of the firms surveyed. Small food processors use small trucking firms to distribute product on an as needed basis. Medium and large size firms use their own trucks, customer trucks and common carriers on an almost equal basis.



Facility Food Grade Rating

Of the surveyed firms, 60% had HACCP or ISO designations or were working towards them. Such ratings are a given among the large multinational subsidiaries and a high priority among medium size firms pursuing chain or export accounts. All others, mostly the smaller enterprises, meet the rating criteria demanded by the particular level of inspection to which they are subject.

Capital Invested in Equipment

Start up and small firms' outlay for capital equipment ranged from \$10,000 and \$500,000 on a one-time basis. Annual outlays varied widely and follow no particular pattern other than increasing generally with the growth in sales.

The multinational subsidiaries segment of the company survey reported one-time capital outlays of between \$1 million and \$30 million and a range of 3% to 5% of revenue for annual capital outlays. One large multinational, with annual revenues of \$600 million, estimated that it had spent over \$30 million in the last five years to upgrade equipment and to add some lines from a plant in another jurisdiction.

Perceived location advantages and disadvantages of Toronto

Advantages

a Market Location

- Diversity – different cultures and the opportunities to serve market niches
- A large population of potential buyers
- Close to the market for “just in time” and fresh markets
- Easier to network with food processing industry due to the cluster
- Excellent location with which to access the North American market
- 70% of Canadian food headquarters are located in Toronto

b People

- Ontario in general, and Toronto in particular, are perceived as more stable sources of employees
- People living in the City are better educated. Many of those applying for hourly jobs have one or more degrees from other countries
- The Transit system is key factor in the mobility of people around the City of Toronto (especially for lower paid hourly employees)



c Raw Material

- Smaller firms can access suppliers and supplies easily in the Toronto area. This would be a major inconvenience if located outside the Toronto area
- This close access is somewhat less important for medium size and larger firms who often access supplies outside of the City

d Industry Stability

- The food processing industry has long history in the City, with some plants dating back eighty years
- Many different cultures and families have become attached to certain plants and have provided a sense of stability for employees and employers alike

Disadvantages

a Overlapping inspection jurisdictions

Many firms complained of having “one inspector come in right after the other”. Firms that are federally inspected do not understand why any other government inspectors have to visit as they already have to meet the highest federal standards.

b Rising utility costs

Perception among most of the respondents that all utilities (hydro, gas, water) are consistently rising in cost but that they do not observe any differences in services.

c Facility Costs.

Most firms considering expansion and relocation believe that Toronto is not competitive with facility costs in outlying areas: cost of land, cost of buying and retrofitting buildings, property taxes, housing for employees, etc.

d City services such as Building Permits, Zoning issues, etc.

All firms having experience in this area complained of ‘slower than residential’ service in terms of addressing their needs



Some points were raised that are not unique to Toronto:

e Cost of materials versus U.S.

Certain key inputs into the food processing industry such as meat, poultry and vegetables, can be more cheaply accessed from the U.S.

f Export

Several firms told of irritants in trying to get products across the border. U.S. clients claim they can get similar products locally in the U.S. without the hassles.

g Transportation Surcharge

Most respondents with trucks on the road complained about the surcharge that does not reduce when gas prices reduce.



Appendix V Food Industry Consultation Forum

The following resulted from a Food Industry Consultation Forum held on March 20, 2002 after the survey findings from the 50 food industry firms had been compiled. The intent of the meeting was to verify the findings with representatives from the Toronto food processing industry and to gain additional insights from the participants.

This meeting was very valuable in refining and establishing the credibility of the preliminary findings. Also, ideas were put forward by the attendees as to possible solutions for some of the issues, which are included in this report.

Summary of Findings based upon a survey of 50 Toronto based food processing companies

1. The demand for food-grade facilities is likely to double in the next ten years.
2. At the same time, over 10,000 new skilled and semi-skilled jobs will be created to service this demand.
3. Most new facility growth will come from small and medium size firms while the larger companies will grow through add-on expansions to their existing sites.
4. When relocating from one facility to another, most medium-small companies would prefer to stay within the City.
5. The Toronto market is the major pull to remain within the City, which is emphasized when the product is 'fresh'.
6. Due primarily to higher property taxes, the 'cost of doing business' in the City of Toronto is perceived to be higher than in major surrounding cities such as Mississauga, Brampton, Richmond Hill and Markham.
7. Existing employees are also important to future growth, especially in the smaller firms or where a high level of technical knowledge is required to service production equipment in larger companies. They are worth the slightly higher pay than outside of the City.
8. The smaller firms nearly always have to move to achieve the next level of growth. This is a major commitment with cost and risk attached, especially since long term, committed contracts are far less common today than in the past.
9. Medium size firms will expand on their existing site, if feasible, but would prefer new facilities – these are very hard to come by ready-built and building is the more likely method. Such firms will readily consider a move outside of the City to surrounding cities, thus staying close enough to service their major market.



10. Very few vacant food grade facilities are available at any given time.
11. Upgrading older facilities to current food-grade standards can be an expensive process. It is regarded by many as a poor investment, especially with the more stringent regulations required for dairy, meat and similar processing – new facilities are much preferred. However, for some applications, older buildings can be converted.
12. Obtaining financing for new facilities is a major barrier. Banks find the industry unattractive; lending for facility construction is difficult to arrange without significant additional collateral due to the perceived low liquidation value of bricks and mortar. This is exacerbated when the higher cost of food-grade improvements is considered. Venture capitalists demand a significant share of the enterprise, which owners are not prepared to surrender.
13. Less and less land is available for industrial development and expansion as the demand for residential zoning increases.
14. There is a need to establish a better understanding between the food industry and government inspectors to achieve a more positive business climate.
15. There is some overlap in jurisdiction between Federal, Provincial, and Municipal authorities and interpretations on food regulations can differ from one authority to another.
16. External freezer storage capacity is at a premium and becoming more so every year.
17. Infrastructure needs such as utilities are not perceived to be an issue. However, sewer surcharges are regarded as excessive and some firms are concerned that the cost of electricity may rise steeply.
18. The traffic density in some areas of the City is an impediment to goods transportation within the area.

These key findings were well received by those firms attending the Food Industry Consultation Forum. The outcome of the forum was used to refine and improve the findings as well as to generate ideas to address the issues. This provided a valuable yardstick as to the efficacy of the sampling method chosen.



Appendix VI Capital investment required for a sample facility

Purpose

To provide and compare estimated costs for building or retrofitting a food grade building in the Toronto area. Estimates obtained in company survey interviews determined general overall costs to be \$150 - \$200 per square foot for a new building, including land, and \$50 - \$100 per square foot for a retrofit.

This information was researched and analyzed by the consultants with significant input from the company survey participants.

General Specifications:

- A 65,000 square foot food grade facility with appropriate parking allocation. (60,000 square feet of production, including shipping.) Land cost could include more than the presently required space to provide for some future expansion. Given as 10 acres.
- Thirty-foot ceilings
- Suitable for any food product, with the exception of meat and dairy, which would be more expensive.
- Products are exported
- The plant is CFIA inspected and meets the HACCP requirements of customers.
- Useful plant life is at least twenty years.
- The estimate does not include equipment since this is highly variable with the nature of the product produced.



Building Cost Estimates

Item (65,000 square foot building)	New Build	Retrofit	New LESS Retrofit
Walls/Ceilings including insulation	\$ 660,000	\$ 150,000	\$ 510,000
Plumbing including washrooms, change rooms, special piping, etc.	\$ 2,400,000	\$ 1,900,000	\$ 500,000
Office area	\$ 750,000	\$ 300,000	\$ 450,000
Miscellaneous	\$ 250,000	\$ 110,000	\$ 140,000
Cleaning systems or design elements to facilitate cleaning	\$ 120,000	\$ 80,000	\$ 40,000
Exhaust and Air Systems	\$ 60,000	\$ 30,000	\$ 30,000
Electrical Equipment/ Hook ups	\$ 600,000	\$ 600,000	
Architectural Services/Plans	\$ 60,000	\$ 60,000	
Water Treatment Facilities	\$ 60,000	\$ 60,000	
Public/Legal Costs		Minor	
Shipping/Receiving		Included	
Floors and Drains	\$ 420,000	\$ 600,000	\$ (180,000)
Demolish/Clean Old Building	\$ -	\$ 1,100,000	\$ (1,100,000)
Total	\$ 5,380,000	\$ 4,990,000	\$ 390,000
Cost per square foot	\$ 90	\$ 83	\$ 7
Land Acquisition	\$ 3,500,000	\$ 1,000,000	\$ 2,500,000
Including land acquisition	\$ 148	\$ 100	\$ 48



Detailed Assumptions:

1. **Land Costs** - \$300,000 - \$350,000 per acre. Cost of old building and land based on real estate industry estimates.
2. **Demolish/Clean Old Building** - \$20 per square foot.
3. **Architectural Services/Plans** - \$1 per square foot.
4. **Public/Legal Costs** - Minor
5. **Electrical Equipment and Hook Ups** - Includes wiring and engineering. Number of hook ups and power capacity will depend on actual machines used. \$10 per square foot.
6. **Floors & Drains** - \$7 per square foot for new building; \$10 per square foot for retrofit. (Need to break existing concrete to install services versus new building in which services installed BEFORE concrete is poured.)
7. **Walls and Ceilings** - \$200 per linear foot for new building. \$45 per linear foot of retrofit.
8. **Water Treatment Facilities** - \$1 per square foot for new buildings or retrofit.
9. **Plumbing, including all piping, pumps, washrooms, change-rooms, etc.** - \$40 per square foot for new or retrofit.
10. **Exhaust and Air Systems** - \$1 per square foot for new building. About \$.50 per square foot for retrofit operation.
11. **Shipping & Receiving** - Doors and docks costs built into overall wall and floor charges.
12. **Cleaning Systems or Special Design elements to facilitate cleaning** - \$2 per square foot for new and retrofit.
13. **Office Area (5,000 square feet)** - \$150 per square foot for new building; and \$60 per square foot for retrofit.
14. **Other** - Contingency funds of \$250,000 for new building and \$140,000 for retrofit.