

DATE: January 2, 2001

TO: Chairman and Members of the Planning and Development Committee

FROM: Thomas S. Mokrzycki, Commissioner of Planning and Building

SUBJECT: **Industrial Sector Study: Warehousing and Distribution**
MEETING DATE: January 22, 2001

ORIGIN: Planning and Building Department

BACKGROUND: In 1999, the Planning and Building Department initiated the first annual "industrial sector study" to develop an in-depth understanding of emerging and important industrial sectors in the city and their role in Mississauga's economy. These studies will identify trends in selected industries and explore their implications for Mississauga. Generally, they will profile an industry, examine growth prospects, future land needs, economic impacts, and future directions for City policies.

The first industrial sector study selected for study was the warehousing and distribution sector. The research interest in analysing this sector was as a result of the following observations:

- a number of large warehouse/distribution facilities have been developed recently in prominent locations in the City and it was recognized that this was a major industry in the city. Staff wanted to determine the extent of the demand to build more such facilities, and whether there is a net benefit to the City in attracting this type of development;
- in the 1997 Mississauga Employment Profile, employment in

the Transportation/ Communications/Utilities sector increased from 23,553 to 39,575; the amount of this increase that could be attributed to warehousing and distribution facilities was not determined, partly due to questions regarding the definition of this sector relative to the Standard Industrial Classification (SIC) system;

- with the opening of Highway 407 and the expansion of Lester B. Pearson International Airport (LBPIA), more warehouse and distribution activity is anticipated. The impact of this industry in terms of land absorption, building area, employment, or transportation requirements, however, was not well understood.

The growth of this sector in Mississauga, together with the information gaps mentioned above point to the need to develop a better understanding of the location requirements, industry trends and economic impacts/benefits. In addition to being of interest from a planning and development standpoint, it was also considered to be of interest both from a transportation and economic development perspective.

For the purpose of this study, the following definition of warehousing and distribution facilities examined is as follows:

An industrial facility where warehousing and distribution or other logistics role that supports the supply chain on a contract basis is the principal activity or where warehousing and distribution takes place as a major ancillary function to the core operations of the business. A key characteristic of such facilities is that they rely heavily on trucks and tractor trailers to transport, distribute or transfer goods and merchandise and therefore have multiple truck bays. The primary focus is on large scale facilities (that is, more than 10 000 m² (100,000 sq.ft.)) but does not exclude smaller examples.

In addition, *Logistics* refers to all activities involved in planning,

implementing and controlling the efficient, effective handling, storage and flow of raw materials, in-process inventory, finished goods, services and related information along the supply chain, from the point of origin to the point of consumption for the purpose of conforming to customer requirements.

The Canadian Urban Institute (CUI) in conjunction with CB Richard Ellis was retained to study the warehousing and distribution sector in Mississauga. The study titled "*Industrial Sector Study: Warehousing and Distribution*" is provided under separate cover.

COMMENTS:

The Canadian Urban Institute and CB Richard Ellis studied the warehousing and distribution sector in Mississauga and its relationship to the Greater Toronto Area (GTA) and beyond. The key findings from the study are outlined below.

- ◆ Warehousing and distribution has evolved beyond mainly storage and delivery of goods. The network of enterprises engaged in sourcing, creating, then delivering a finished product to the customer is an important new field known as, *logistics and supply chain* management;
- ◆ One of the key components in the supply chain is warehousing and distribution. This has resulted in:
 - i) a new approach to how warehouses are designed and managed;
 - ii) a new status and higher profile role for the logistics function within corporations; and
 - iii) a demand for high skill levels in terms of human resources.
- ◆ Warehousing and distribution supports the GTA's industrial base and is of major importance to Ontario's economy;

- ◆ Statistics Canada estimates that as many as 700,000 Canadians now work in occupations that relate to the supply chain. The demand for logistics specialists is growing by 100,000 per year. Two thirds of these jobs are white collar, require a high level of skill, and many are senior management positions within their organizations;
- ◆ The growth of the logistics sector resulted from deregulation of the transportation industry, the introduction of new computer software, and the desire to cut costs and improve customer service, which led to the rise of "third party" logistics specialists;
- ◆ Third Party Logistics is a reference to the outsourcing relationship that a service provider has with a primary manufacturer, wholesaler or retailer and who ships the goods to the customer;
- ◆ Mississauga has a critical mass of firms with national and international mandates engaged in both the manufacturing and distribution of products. This in turn has attracted a wide variety of smaller logistics specialists that service the supply chain;
- ◆ The new generation of warehousing/distribution facilities requires high quality locations and development to support the supply chain. Innovations in logistics methods are prompting the need for state-of-the-art facilities on large sites;
- ◆ Growth of Third Party Logistics has increased the base demand for warehousing/distribution sites;
- ◆ The warehousing and distribution needs of firms are met by a combination of speculative and design-build product. These needs are met in locations such as Mississauga where new product continues to be available at reasonable prices because

there is a mature development sector able to meet these needs;

- ◆ Cross-docking and similar concepts are resulting in a need for multiple truck bays, wider spacing between columns and taller buildings with more clear height within the facility to allow for easier forklift operations and stacking;
- ◆ The GTA industrial market dominates the rest of Canada with 62 224 300 m² (670 million sq.ft.) which is the third largest market in North America behind Chicago and Los Angeles. The GTA industrial market thrived in 1999 due largely to the strength of third party logistics and the auto parts industry. About 492 370 m² (5.3 million sq.ft.) of new space came on stream, a 43% increase over 1998. Mississauga, Brampton and Winston Park in Oakville were the most active industrial sub-markets in the GTA;
- ◆ Mississauga has the largest inventory of warehousing and distribution and logistics related space in the GTA;
- ◆ Mississauga is perceived by industry executives and real estate specialists as the industry leader in the logistics field, which includes warehousing and distribution. In the Toronto West real estate market, Mississauga has 40% of the existing industrial space and is developing 50% of new construction. One third of the firms in the GTA belonging to logistics industry associations are located in Mississauga. Logistics firms in Mississauga include Exel, Kuehne & Nagel, TNT, Tech Data and PBB Global Logistics;
- ◆ Mississauga is the largest and most desirable industrial area in the GTA due to its location in the western GTA and proximity and access to North American markets, proximity to LBPIA, accessibility to the 400 series highways, availability of intermodal facilities, an abundance of serviced industrial land, effective development approval process and competitive realty taxes;
- ◆ Warehousing and distribution activities in Mississauga are generally concentrated in four districts; Northeast, Gateway,

Meadowvale Business Park, and Dixie. These facilities typically range in size from about 3 720 m² to 111 500 m² (40,000 sq. ft. to 1.2 million sq. ft.);

- ◆ The number of people employed in warehousing and distribution space is lower than for manufacturing, however, warehousing and distribution space provides important support for the supply chain as a whole. Warehousing and distribution facilities support an extensive chain of business linkages within the city and the GTA (eg. firms supplying security services, computer and mechanical maintenance);
- ◆ The City's corporate commitment to supporting the entire supply chain, by supporting a wide range of employment activities, results in further investment in Mississauga;
*** Ingram Micro Inc. and Bombay Company have recently consolidated head offices with distribution centres in Mississauga.*
- ◆ To improve customer service and avoid peak travel times and congestion, hours of operation for warehousing and distribution facilities tend to be longer than many industrial operations - 12 to 24 hours;
- ◆ Large space users tend to locate further north and west, but with good access to the 400 highway series. Many specialist logistics firms indicate that accessibility to major highways is more important than visibility. For some firms, locational needs such as proximity to LBPIA override other factors. For the foreseeable future, Mississauga is likely to remain a preferred location for speculative and design-build industrial projects with a warehousing and distribution component. Very large logistics facilities will only likely be attracted to Mississauga under exceptional circumstances where site selection criteria warrant high value locations;
*** Evidence of this is the recent decision by Supply Chain Management (SCM) to develop a high profile site on Hurontario Street north of Highway 401 for a new 111 500 m² (1.2 million sq.ft.) distribution centre to service Walmart Canada.*
- ◆ Currently, the highest truck volumes in the GTA occur at the

intersections between major arterial roads and the 400 series highways in Mississauga. The opening of Highway 407 and the expansion at LBPIA improves accessibility to Mississauga's employment lands and helps keep Mississauga competitive. This increases the potential for attracting head offices, research facilities and other highly valued employment to Mississauga;

*** The importance of trucking was also noted in the October 1999 Planning and Building study titled "1996 Journeys to Work Affecting Mississauga". The study highlighted that trucks are responsible for the transportation of about 80% of the goods in the GTA/Hamilton-Wentworth area, and that 75% of all highway trips within the area were non-work related (commuter) trips.*

- ◆ It is in the City's interests to actively support transportation improvements to all 400 series highways, LBPIA, and intermodal facilities within Mississauga and throughout the GTA that support efficiency in the supply chain;
- ◆ Many warehousing and distribution firms arriving in Mississauga typically relocate from outmoded facilities in other parts of the GTA. Mississauga has remained competitive for industrial space because it has accommodated the needs of industry.

Impact of Changes in the Warehousing/Distribution Sector on Policies and Direction for Mississauga

The warehousing and distribution sector not only contributes significantly to economic activity in Mississauga, but the City is the dominant location for this sector in the GTA.

The City is perceived as being the industry leader and supportive of the needs of industry, particularly from a political and economic development perspective. The City's Economic Development Office regularly communicates to members of the distribution/logistics sector through industry committees and associations as well through its Corporate Call Program. Beyond the City, the GTMA is the most appropriate agency to take a lead

role in communicating with the logistics industry, and supporting and promoting their needs so that the overall efficiency of the supply chain is maintained.

To maintain this prominent position, the CUI was asked to comment on City planning policies in light of their research findings. The CUI concluded that City Plan policies for employment lands provide a suitable balance between establishing and enhancing the public interest and providing sufficient flexibility for industry to evolve.

Although City Plan policies are appropriate, the CUI pointed out that Mississauga should bring its Zoning By-law in line with recent changes in the logistics and supply chain management sector to allow this industry to continue to evolve consistently with employment area City Plan policies. Courier companies were identified as playing an increasing important role in the supply chain and, therefore, should be more clearly provided for in the Zoning By-law. In particular, zoning definitions and the parking requirements for "truck terminal" and "warehouse" and the definition of open storage as it pertains to trucks and trailer awaiting unloading or movement, should be reviewed. Some of these issues have been identified previously and changes to the zoning by-laws contemplated.

Site plan and urban design considerations are important, particularly in "prestige" business parks and in other highly visible employment locations such as along arterial roads. The unique characteristics of distribution facilities may merit special attention when applications for development are reviewed. These characteristics often include very large buildings with numerous loading bays, high volume truck movements and extended hours of operation.

Concerning their buildings, the CUI found that logistics companies are generally willing to address the quality of building materials and landscaping for developments in prominent locations. In fact, some companies are constructing to

"investment standard", a practice that involves over-investing in higher grade standards or materials to enhance future resale value. CUI suggests promoting "investment standard" design along with the range of matters currently addressed through the development review process. While the Planning Act does not provide authority for municipalities to review the material of buildings, it is the role and the practice of the Planning and Building Department to promote and provide information regarding design principles that should be incorporated into development proposals.

Large facilities with substantial truck movements provide the potential for on-site truck and automobile conflicts, particularly when employee shift changes take place. Although this occurs mainly in older developments, potential difficulties at new locations where site plan control applies are avoided. Through the site plan process, the City always requests the delineation of truck versus automobile access and circulation.

Distribution facilities often have extended hours with some working two or three shifts resulting in 16 or 24 hour operations. Where the uses locate in proximity to residential areas, special consideration is required to buffer the distribution use from the residential use. It is current practice to implement, where applicable, Ministry of Environment (MOE) Guidelines for separation distances between sensitive land uses, noise guidelines and site plan consideration, and minimum separation distance required in certain zoning by-law provisions.

Through the site plan approval process, design standards for large distribution facilities have, and will continue to be implemented. The *Design Guidelines for Industrial Uses* should be updated to reflect current practices which consider the unique characteristics of these facilities.

From a transportation standpoint, the study highlighted that one of Mississauga's key competitive advantages is the access provided by the 400 series highways and major arterial road system. The on-off ramps to the highway system in Mississauga accommodate the highest truck volumes in the GTA. Given this importance, it is in the City interest to support improvements to the highway/roadway network, particularly to and from LBPIA. The Transportation and Works Department has suggested that a review of such improvements be undertaken as part of City's Transportation Strategy update.

Economic Impact of Warehousing/Distribution Mississauga

The economic impact of the warehousing/distribution sector was examined focussing on employment, the revenue generated by new development and annual revenues from the property tax. The findings are as follows:

- employment data for 1999 showing that "manufacturing" employment has increased steadily as have "transportation and storage" and "wholesale" employment;
- the largest concentration of employment is in the Northeast District which accounts for approximately one-third of all city-wide employment. This district is heavily invested in businesses that support logistics and the rest of the supply chain;
- the actual amount of employment in dedicated warehousing/distribution facility is relatively low. A more accurate gauge of the role played by this sector is to look at the logistics related employment. The economic impacts of warehousing/distribution are extensive when reviewed in their larger context.

CONCLUSION:

The Canadian Urban Institute in conjunction with CB Richard Ellis was retained to undertake a study of the warehousing and distribution sector in Mississauga. The objective of the study was to develop an in-depth understanding of this sector, identify trends, examine growth prospects, future land needs, economic impacts, and future directions for City policies and standards.

The study reveals that warehousing and distribution (as a sub-sector of logistics and supply chain management) is a rapidly evolving growth sector that is important to the GTA/Mississauga economy and integral to the overall support of business activity of all types in Mississauga.

Mississauga is the GTA's primary location for high quality industrial development and logistics (warehousing and distribution) operations. Although the City actively maintains a dialogue with key industry representatives, the Greater Toronto Marketing Alliance is the most appropriate agency to take a lead role in communicating with the logistics industry across the GTA, and supporting and promoting industry needs so that the overall efficiency of the supply chain is maintained.

Mississauga's City Plan policies for employment lands provide sufficient flexibility for the logistics industry to evolve, but Mississauga should amend its Zoning By-law to be more responsive to trends in this sector and consistent with employment area City Plan policies, and the Design Guidelines for Industrial Uses should be updated to reflect current practices which consider the unique characteristics of large distribution facilities.

One of Mississauga's key competitive advantages is the access provided by the surrounding highway and major arterial road system. Consequently, it is in the City's interest to support improvements to the highway/roadway network, particularly to and from LBPIA. The Transportation and Works Department has recommended that a review of such improvements be undertaken as part of City's Transportation Strategy update.

RECOMMENDATION:

That based upon the findings of the study titled "*Industrial Sector Study: Warehousing and Distribution*" prepared by the Canadian Urban Institute in conjunction with CB Richard Ellis and the report "*Industrial Sector Study: Warehousing and Distribution*" dated January 2, 2001 from the Commissioner of Planning and Building, it is recommended:

- a) that a review of the Zoning By-law definitions and parking requirements for "truck terminal" and "warehouse" be undertaken with a view to better accommodating the needs of courier and logistics operations;
- b) that an update of the *Design Guidelines for Industrial Uses* be undertaken to reflect the City's current practices and design standards which are implemented through site plan control, to address the unique characteristics associated with the development of large distribution facilities; and
- c) that a review of intersection improvements and strategic highway and roadway improvements be undertaken as part of the City's Transportation Strategy update to maintain the City's competitive transportation advantage in the warehouse and distribution (logistic) sector.

Original Signed By: _____

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