June 3, 2013

Chair and Members
Civic Works Committee

Re: Industrial Service Plan Report

The Commission, at its May 28, 2013 meeting,

i) *APPROVED having the assessment of industrial service changes and/or expansion being included as part of the annual service plan review process noting the annual process provides for the prioritization of all service changes and/or expansion considering:*
   - *current service performance issues;*
   - *service requests and expectations related to existing service areas and new growth areas;*
   - *medium to long term service objectives; and*
   - *resource capacity (economic and supporting infrastructure)*

ii) *DIRECTED Administration forward the Industrial Service Plan report to the Civic Works Committee for their review and consideration*

Background

Transit service to modern industrial areas is a complex issue influenced by a number of challenges, many of which are competing in nature. The complexities and challenges associated with providing transit service to industrial areas are not limited or unique to London. Most municipalities struggle to provide transit services to industrial areas whether it is a limited service (i.e. peak only – Monday to Friday) or full service (full service day – Monday to Sunday).

The challenges include:
- location, land use patterns and policies
- nature of employment i.e. various operating shifts
- economic policies i.e. Development Charge Act and City's economic policy respecting industrial areas
- service design, delivery, cost and revenue recovery
- congruence with current system and service design

The LTC Administration has, in concert with the London Economic Development Corporation (LEDC) and Civic Administration, been reviewing the issues, challenges and options relating to the provision of industrial service. The review objective is to develop a framework (or strategy) for the provision of industrial service. The review includes:
- assessment of current industrial services being provided
- employer surveys covering industrial areas currently serviced by public transit and those without public transit service
- discussion with peer transit systems on how they address the issue of industrial service given consideration to service performance, service options, etc.
- development and assessment of service design and delivery options
- timing of assessing industrial service changes/expansion (i.e. stand-alone process or part of annual service plan review process)

The development of an industrial service strategy was initially targeted for completion in 2012; however, given constraints and competing workload pressures, the development was deferred until 2013.

Location, Land Use Patterns and Policies

Modern industrial sites are often on large tracts of land on the periphery of a city. They are characterized by large buildings on large lots, very often with large setbacks from the roadways. Pedestrian amenities in terms of sidewalks are often not present or limited at best. The location of modern industrial parks, design and the lack of, or limited pedestrian amenities are not supportive of providing effective public transit.

The Provincial Transit Supportive Guidelines (2012) sets out a number of strategies to encourage more transit supportive design and development which in turn better supports transit ridership. The strategies include:

- encourage higher-density employment and a mix of uses where appropriate, along designated transit corridors within employment and industrial areas
- locate uses with lower employment densities, such as larger manufacturing firms and warehousing or truck transportation firms that require extensive land areas for buildings and storage, further from transit
- encourage employment-related services, retail and restaurants to co-locate at intersections and next to transit stops where they can be more easily accessed by local employees and discourage lunchtime automobile trips
- establish minimum density thresholds in industrial and employment areas, where appropriate
- orient buildings to front onto public streets, as close to the street line as possible
- discourage the provision of surface parking between the front of an employment building and the street. A preferable location is side-yard parking, which can be shared between uses and enables buildings to be situated closer to the street
- the coordination of access and servicing between uses can help to enable the provision of mid-block pedestrian connection providing access to companies located in the interior of industrial and employment subdivisions
- vehicular access and servicing should be shared and coordinated between adjacent developments at the site planning stage to minimize driveways
- locate transit stops and shelters in coordination with adjacent uses and building entrances to increase opportunities for natural surveillance

The above referenced strategies have been forwarded to the Re-Think London process for consideration in developing a new Official Plan for the City of London.

Nature of Employment

Defining potential ridership market associated with industrial areas is the nature of employment. Many industries within modern industrial parks often run various shifts, including employees being subject to potential rotating shifts, over 24 hours and seven days a week. With various shift times, employees travelling from various points across the city and industrial sites being located on the periphery, it is difficult to provide effective and efficient service and coverage to meet the needs of all shifts which reduces the attractiveness of transit to workers.

Economic Policies

As discussed later in this report, there are certain provisions of the Development Charges Act (DCA) that are counter-productive to the objectives of growth paying for growth and such growth being sustainable. The provisions directly impact funding transit service to new growth areas, including industrial areas. However, the effect on industrial areas is academic given the City of London's economic development policy which provides an exemption of the transit component of development charges for industrial sites. The policy, while supportive of industrial growth, compromises/constrains available capital funding to support transit service expansion to industrial areas. The city's economic policy provides the following exemption:

- if the gross floor area is enlarged by 50% or less, the amount of development charge is zero;
- if the gross floor area is enlarged by more than 50%, the amount of development charge is divided by the amount of the enlargement; and
- no development charge is payable for new industrial buildings as defined by the by-law.

The transit growth component for industrial areas accounts for 11% of the transit development charge but doesn't apply given the exemption. In effect, the entire 11% of transit growth costs attributed to industrial growth are ineligible for funding from DCA revenues

In reference to the DCA certain provisions create fiscal limitations on a municipality's ability to provide an effective transit service to serve new development including industrial development. The areas of concerns are:

- *Statutory Reduction Transit Growth Capital Cost:* The 10% statutory reduction on identified transit capital growth costs is arbitrary in nature and serves to lower available development charge support.
- *Service Planning:* The DCA states that a discounted service cannot be combined with a service that is not discounted. This means that roads (undiscounted) and transit (discounted – 10% arbitrary discount) cannot be combined into one "transportation" service even though roads and transit are inextricably linked as they are both an integral part of a municipality's transportation system (infrastructure).This creates unnecessary barriers in the way of optimal service planning.
- *Offsetting Receipt of Grants:* The requirement to offset capital growth costs by funding from the provincial and federal governments (unless the funding (grant) conditions include a clear intention that the funds be directed to the benefit of the taxpayer or system user), increases the financial

demand on the local taxpayer. The grant offset requirements create a de-facto subsidization of new development and developers versus having the grant apply to the benefit of all taxpayers.

- *10 Year Retrospective Level of Service Standard*: The existing service standard is a retrospective standard based on the average of the previous 10 years immediately preceding the preparation of a development charge background study. It would be more appropriate to have transit infrastructure requirements be prospective in nature, consistent with the heightened expectations for transit to play an increasingly critical role in a sustainable municipal transportation system.
- *Planning Period*: The 10 year mandatory planning period for transit services is too short, particularly for long-term planning of higher-order transit. Municipalities should have the discretion to establish appropriate planning periods for infrastructure planning, which typically corresponds to Municipal Official Plans, underlying Infrastructure Master Plans or full build-out timelines.

London Transit, the City of London and the Ontario Public Transit Association have, and continue to lobby for changes to the DCA to correct the above inequities.

Service Design, Delivery, Cost and Revenue Recovery

As noted earlier in this report, factors such as:

- the location of modern industrial sites (i.e. generally located at the periphery of a municipality)
- design – large buildings, significant set-backs, limited pedestrian amenities
- nature of employment – multiple shifts 24/7
- source of employment – travel from all areas of the city creating the need for passenger transfer which impacts service routing and scheduling i.e. reconciled with other routes in the system

all challenge the effective and efficient delivery of public transit services. Traditional low ridership levels resulting in low revenue returns make it more difficult to economically justify transit service in industrial areas particularly when assessed against competing demands for service and/or service performance issues.

To address current service performance issues, meeting service requests and expectations (re current and new growth areas) would require adding in excess of 200,000 annual service hours to the system at an annual operating investment of an estimated $20 million. Of the 200,000 annual service hours approximately 17,600 hours or 9% applies to industrial services. Given the extent of the service needs, the current economic climate and the pending medium to longer term re-definition of the service, the Commission, in the short to medium term has to prioritize undertaking service changes. The prioritization has the objective of balancing current service performance issues and service expectations/requests with the objective of maintaining the gains to-date and marginally growing the service.

The following tables rank the top 10 routes with the highest number of service performance contacts (issues) and the top five routes and/or areas with the highest number of service requests received over the last three years.

Current Inventoried Service Performance Contacts

Rank	Route
1	13 Wellington Road
2	2 Dundas
3	17 Oxford West
4	10 Wonderland
5	4 Oxford East
6	14 Highbury
7	19 Oakridge
8	16 Adelaide
9	6 Richmond
10	1 Kipps Lane Thompson Road

Based upon contacts re overloads, missed passenger, schedule adherence and transfers

Current Inventoried Service Requests (Routes/Area)

Rank	Route/Area	Nature of Request
1	North Talbot	Service to the area
2	30 Newbold	Add evening service
2	38 Stoney Creek	Add evening and Sunday service
3	39 Fanshawe West	Add evening and Sunday service
3	South Byron	Service to the area
4	10 Wonderland	More frequent service
4	23 Berkshire	Add evening and Sunday service
4	34 Medway	Add base period and weekend service
5	All Routes	Late evening service
5	22 Trafalgar	Add evening and Sunday service

As indicated, in terms of industrial service, adding evening service to the 30 Newbold is the only industrial area/service to make the respective list.

While the direct hourly operating cost of providing transit service to industrial areas is the same as all other areas of the municipality, the experience of lower ridership, particularly in the initial years of service generates lower revenue therefore making it difficult to meet the required minimum operating returns to maintain service i.e. 50% for peak periods and 35% for off-peak periods

Existing Industrial Transit Service

Currently London Transit operates three specific industrial service routes, noting there are also a number of smaller industrial areas that are serviced as part of the Commission's residential and/or arterial road routes. The dedicated Industrial routes include 30 Newbold, 36 Airport Industrial and 37 Sovereign Road. The three services account for approximately 1% of the daily service hours, with a combined revenue cost recovery of 54%. A summary profile of the respective routes follows.

30 Newbold

Established:	September 1994 – 19 years
Service area:	The Wilton Grove Industrial area, with employment currently estimated at between 7,000 and 8,200.
Origin:	White Oaks Mall. The Mall is in relatively close proximity to the Wilton Grove Industrial area and supports connectivity with five routes - 10 Wonderland, 13 Wellington Road and 14 Highbury at the terminal (hub), as well as the 4 Oxford East and 26 Jalna Blvd. on the west side of the mall
Routing:	The route travels south along Wellington Road, Bessemer, Newbold, Bradley, Enterprise, Hubury, Wilton Grove, Sise Rd. and Roxburgh Rd., operating north and south of the 401.
Frequency:	Monday to Friday peak service only (6:30 am to 9 am and 2:30 pm to 6 pm). The service operates on a 30 minute frequency.
Performance:	There are approximately 216 daily boarding which translates to a revenue cost ratio of 75% which is currently the best performing industrial route.

36 Airport Industrial

Established:	September 2006 – 7 years (however the 4B Oxford East serviced Oxford Street east of Fanshawe College for many years prior to the implementation of the 36 route).
Service area:	Oxford East and Industrial Road industrial areas with employment currently estimated at between 5,400 and 6,400.
Origin:	The service originates at Fanshawe College, which is in close proximity to the identified industrial areas. Further, the College supports connectivity with five routes, i.e. the 4 Oxford East, 17 Oxford West and 20 Cherryhill at the main terminal (hub) location off of Oxford Street, as well as the 25 Kilally and 27 Fanshawe College off of Fanshawe College Blvd.
Routing:	The route travels east along Oxford St. E., to Cuddy Blvd, Crumlin Rd., Page St., and Industrial Rd. The route also services the London International Airport.
Frequency:	Primarily am (6 am – 9 am) and pm (2:30 pm - 5:30 pm) weekday peak period service, there are two late evening trips between 10:30 pm and 11:30 pm to accommodate shift times. Service operates on a 30 minute frequency.
Performance:	There are approximately 208 daily boarding which translates to a revenue cost ratio of 50%.

37 Sovereign Road

Established:	September 2006 – 7 years.
Service area:	Services the Sovereign Road Industrial area with employment currently estimated at between 2,600 and 3,100.
Origin:	Originating at Argyle Mall (hub) supporting connectivity with five routes i.e. 2 Dundas, 7 Wavell, 17 Oxford East, 22 Trafalgar and 35 Argyle.
Routing:	The route travels east along Dundas St to Veterans Memorial Parkway, Admiral Drive, Sovereign Road and Neptune Crescent.

Frequency — The service is an am (6:30 am - 8:30 am) and pm (3:30 pm – 5:30 pm) weekday peak period service, operating on a 30 minute frequency.

Performance: — There are approximately 66 daily boarding which translates to a revenue cost ratio of 39% which is below the minimum standard for peak service.

Routes 30 Newbold and 36 Airport Industrial meet the minimum revenue cost ratio. Meeting and exceeding the minimum standard is thought to be attributable to the employment levels in the area. The 1998 Delcan Study "Service Planning Criteria for New Areas" suggested threshold levels for introducing new transit service (peak hour service) into industrial areas was at 4,348 employees, both areas exceed the recommended threshold. Conversely, as indicated, the 37 Sovereign Road service is well below the minimum standard for peak service as is the employment base i.e. maximum 3,100 vs. threshold of 4,348.

Service Connectivity

Given the location of the industrial parks and recognizing that employment is sourced from areas not necessarily directly adjacent or contiguous to the industrial area, the connectivity of the industrial services to the other routes in the system is important. As indicated, each of the three industrial routes connect (for the purpose of transferring) with five routes.

As indicated, the current industrial services operate for the most part in peak periods. Operating in the peaks provides the maximum opportunity for connectivity with other routes as all scheduled fixed route services operate in the peak period.

That being said, if current industrial services are to be expanded and/or new services added, connectivity with other routes in the system including hours of operation is critical. The following table provides a profile of weekday service periods based upon the current schedule. As indicated, post 9 pm, approximately one half of the service continues to operate (51%) accounting for 7% of daily service hours, noting the continuation is at extended headways. Further, there is no service operating after 12 am or before 6 am. This creates issues when implementing industrial service trying to match service to shift start times. Many shifts in the industrial areas start at 7 am and most passengers would require a transfer from another route to the industrial service at the service origin. Depending on where employees are coming from to get to work, there may be concerns with being able to arrive on time with service starting only an hour before shift times. Additionally there are many industrial shifts that end after midnight and currently London Transit does not operate after this time.

Summary Profile - Weekday Service (excludes rush hour buses)

Description	Early AM 6 am - 7 am	AM Peak 7 am - 9 am	Base 9 am - 2 pm	PM Peak 2 pm - 6 pm	Early Even. 6 pm - 9 pm	Late Even. 9 pm - 12 am
# of routes operating	32	37	32	37	25	19
% of total routes (37 routes)	86%	100%	86%	100%	68%	51%
weekday revenue service hours	91	278	532	559	186	117
% of total hours (1,761 hrs.)	5%	16%	30%	32%	11%	7%

Rush hour buses add approximately 30 hours to AM peak service, and 60 hours to PM peak service

The profile serves to explain the volume of requests for more service both in terms of coverage area and frequency as well as service performance complaints re overcrowding and missed passengers. Addressing these service issues has a direct bearing on the success of implementing industrial services.

Bike Racks

Bike racks have been installed on all LTC buses. The provision of bike racks links two forms of travel which in turn increases transit service catchment area, and provides the opportunity to complete part of the round trip when transit is not operating.

While there has not been a specific assessment on the use of the bike racks to and from the industrial areas, the 2011 survey data indicates that the bike racks were being used on all routes, with a concentration on routes operating on major corridors. Weekday usage averaged between 15 and 20 times per day.

Peer Transit System Survey – Industrial Service

Discussions have been held with seven Ontario transit systems regarding the issues, challenges and options (best practices) relating to the provision of industrial service. The seven systems are identified in the following table.

Transit Systems Surveyed

System
OC Transpo
Hamilton Street Railway
Brampton Transit
Transit Windsor
York Region Transit
Mississauga Transit (MiWay)
Grand River Transit

By way of comparison, of the seven Ontario transit systems surveyed, LTC has the:

- highest revenue cost recovery
- lowest direct operating cost per ride
- lowest municipal operating investment per ride
- 2nd highest rides per revenue service hour (OC Transpo ranked 1st)

In addition to the seven Ontario systems, discussions were held with representatives from Halifax Transit, noting the operating environment (population, size, ridership, etc.) is similar in nature to London.

The major findings of the discussions include:

- there is no "silver bullet" respecting the provision of industrial service, the provision of the service competes with other demands for service and modern industrial sites located on the periphery of the municipality present significant service challenges;

- the majority of the systems do not have a specific "industrial service strategy". In most cases, extension/provision of industrial service is evaluated as part of the annual service plan.

- the provision of transit service (including the continuation of same) is linked/reconciled with the systems':
    - service/coverage standard e.g. 90% coverage within 750 metres walking distance of a transit route; and
    - ridership return and related financial strategy (revenue/cost ratio)

- when and if service is provided to industrial parks/clusters located on the periphery of the city, such service is dedicated and limited in nature that is generally peak service tied to start and ending work times of the majority of the employers. The service originates at a hub providing connectivity to other systems routes;

- the success of the service (dedicated or part of a corridor route) is directly related to the volume of employment, the nature of employment and linking service to the customer origin;

- employment in industrial areas is evolving as the economy evolves, moving from heavy and light industrial to a combination of light industrial, warehousing/logistics and technology;

- cost shared service models (with employers) have met limited short term success. Such options have over time been cancelled as they are seen as cost burden to employers and ineffective largely because of variable customer origins and variable shift times;

- employers in industrial areas are at times more than willing to fund the cost of facilities (e.g. passenger shelters) and less likely to fund ongoing operating costs, albeit there has been examples of employers running their own shuttle services (similar in nature to carpooling);

- as municipalities max out development opportunities "in fill" occurs providing the opportunity to extend existing corridor routes to service an industrial area; and

- design and location of new industrial sites is problematic in terms of providing transit service i.e. design and location are not pedestrian or transit friendly.

Area Employer Survey

In addition to consulting with peer transit systems, two London area employer surveys were conducted. The initial survey was issued in early 2012 as a direct mailing to the businesses in each of the four new developing industrial areas defined as Gateway Industrial, Innovation Park, Forest City Industrial and the White Oaks/Exeter Industrial Area.

A total of 500 surveys were mailed to the businesses in the four industrial parks. The survey response rate was 25% (125 completed surveys were received) with many of the surveys being incomplete in terms of requested information. A further 30% of the 500 surveys were returned to LTC as a direct result of having dated contact information and/or business closures. While the completed surveys did provide some insight into shift start and end times, number of employees as well as the number of potential transit riders, the limited participation from the businesses raised concerns on being able to draw meaningful conclusions.

In early 2013, LTC staff performed site visits to each of the industrial parks to gather an updated list of businesses in order to conduct a second refocused employer survey. The second survey was conducted as a telephone survey with the expectation the approach would yield a better response rate. With the updated business information approximately 973 businesses were contacted to participate in the telephone survey, 340 of which were within the new industrial areas and the remaining 633 within the 400 metre catchment area of existing industrial service.

The overall response rate was 72% representing a significant improvement over the previous survey. The following tables set out a summary of the survey completion rate and potential customer market (number of employees) for the new and existing industrial areas.

Summary of Employer Survey - New Industrial Areas

Category	Gateway	Forest City	White Oaks	Innovation Park	Total
Total businesses contacted	39	28	264	9	340
Total surveys completed	27	23	186	6	242
Completed survey response rate	69%	82%	70%	67%	71%
Employment (based upon completed surveys)	663	2,068	2,646	465	5,842
Estimated total employment for area					
low - 85% of high	900	2,100	3,200	600	6,800
high	1,000	2,500	3,800	700	8,000

Summary of Employer Survey - Existing Industrial Areas

Category	Wilton Grove	Airport/ Industrial	Sovereign Road	Total
Total businesses contacted	411	82	140	633
Total surveys completed	289	64	109	462
Completed survey response rate	70%	78%	78%	73%
Employment (based upon completed surveys)	5,793	4,958	2,450	13,201
Estimated total employment for area				
low - 85% of high	7,000	5,400	2,600	15,000
high	8,200	6,400	3,100	17,700
Daily ridership	216	208	66	490
Percent of total employment - low	3.1%	3.9%	2.5%	3.3%
Percent of total employment - high	2.6%	3.3%	2.1%	2.8%

Based upon ridership performance of the current industrial service (average 3% of employment), the expected ridership and revenue cost recovery can be estimated, noting the estimate would only be reached after a number of years of operation. It is also likely that as the respective areas develop and service matures, the returns could be higher. As set out in the following table, the average revenue recovery for the four new industrial areas ranges from 9% to 34% with an average rate of 18%; this is well below the current standard of 50% for peak service.

Potential Ridership Return - New Industrial Areas

Category	Gateway	Forest City	White Oaks	Innovation Park	Total
Estimated total employment for area					
high	1,000	2,500	3,800	700	8,000
Daily Ridership Return - 3% of high employment	30	75	114	21	240
Revenue recovery (peak service - of 6 hrs /day)	9%	23%	34%	6%	18%

Conclusion

In discussions with peer transit systems and confirmed throughout the review process is that assessment and development of industrial transit services cannot be completed in isolation of the assessment and development of the system and service at large. As approved by the Commission, the LTC Administration will continue to look at the issue of industrial service as part of the annual service plan review process. The inclusion recognizes that the annual process provides for the prioritization of all service changes considering current service performance issues, service requests and expectations related to existing service area and new growth areas, medium to long term service plans/objectives and resource capacity (economic and infrastructure).

The LTC Administration, specific to industrial service, will:

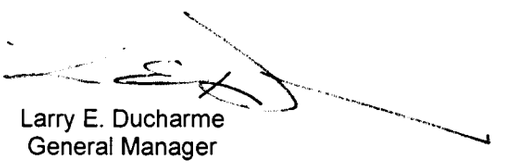
- continue to work with the Civic Administration to determine when full build-out of each area is anticipated and how many employees may be expected, noting the information is critical to determining when and if minimum revenue recovery targets can be reached.

- continue to work with LEDC and industrial area employers on service design/delivery options specific to industrial areas expected to meet minimum revenue recovery targets and with industrial area employers where targets are not expected to be reached. The service design/delivery options would include:
    - employer sponsored transit service
    - third party contacts to provide transit service
    - employers chartering transit service to provide transportation to employees
    - no service – other initiatives such as park and rides, carpooling, active transportation

- follow-up, through the Re-Think London process, on the recommendations respecting land use patterns and policies associated with industrial sites. This is particularly critical given the City of London is currently working on an industrial strategy to develop 500 hectares of industrial land within the city. At this point they are still in the public consultation phase and the area for this development has not been determined.

- Follow-up with the Civic Administration re: concerns of the City of London's economic policy associated with industrial development which provides for exemption of the transit component of development charges to such areas.

Yours truly,



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