Provisional Ridership Growth and Asset Management Plans

Provincial Gas Tax Program

March 2006

INDEX

Page

EXECUTIVE SUMMARY

The Province of Ontario requires municipalities, and by extension transit systems, to submit a "Ridership Growth Plan" and an "Asset Management Plan" in support of the continued receipt of Provincial gas tax funding. The plans have to be approved in principle by both the London Transit Commission and Municipal Council and forwarded to the Ministry of Transportation no later than the end of March 2006.

For London Transit, the March 2006 date creates a timing issue, given the nature of various plan reviews and service strategy studies currently underway that will serve as critical input to both the Ridership Growth Plan and Asset Management Plan. Accordingly, in complying with the March 2006 submission date, the Ridership Growth and Asset Management plans, as set out in this report, for the most part, reflect short term orientations and are to be viewed as provisional in nature. The respective plans will be updated based upon the results and directions stemming from the above referenced reviews and studies.

With the above context, the report sets out:

- short term initiatives/activities that support attaining service and financial performance targets that lead to the 2024 mode share target for transit of 10% as established in the City's Transportation Master Plan
- ridership and service performance expectations for both conventional and specialized services for the period 2006-2010
- financial performance targets for each of the respective services for the operating period 2006-2010
- capital spending plans for the period 2006-2015, which are consistent with those approved by both the Commission and Municipal Council as part of the 2006 budget approval process

Further, the report identifies a number of key influences and requirements impacting the respective plan outcomes, namely:

- establishing and maintaining a dependable, predictable and sustainable level of public investment involving all three levels of government. Public investment includes both capital and operating funding.

- the outcome of London Transit's request for reconsideration/review of the Ontario Human Rights Commission decision re Para transit (specialized transit) not being a special programs as defined under the Ontario Human Rights Code

- the nature and phasing of standards, as prescribed by the Accessibility for Ontarians with Disabilities Act (AODA). The AODA requires the government to work with the disabled community and the private and public sectors to jointly develop standards, in stages of five years or less, leading to an accessible Ontario by 2025. The standards will address the full range of disabilities, including physical, sensory, mental health, developmental and learning and cover all aspects of a business operation. Transportation standards are currently being developed.

- continued development of transit service design and delivery, progressively migrating to include higher forms of transit services such as "bus rapid transit" services
- continued development and use of smart bus technology (i.e. automatic vehicle location and communication system) to enhance customer service and service efficiency

- continued work with the City of London in the development and implementation of transit priorities, recognizing that transit priorities support improving the attractiveness of the service and service efficiency
- continued work with the City of London in the development and implementation of policies and programs supporting behaviour change respecting transportation choice and that promote the environmental, social, and economic benefits of a sustainable transportation system
- effective land use planning policies and practices that support the building of a sustainable transportation system, with public transit as a key component. Focusing on effective, supportive policies and practices and acting on same recognizes that land use is a critical influence in transportation choice selection. Further, this means moving from “shall have regard to” approach to one of “shall be consistent with”.

Without commitment, investment and follow through on the above related requirements and others, the transit system will become more costly to carry the same or fewer riders, and there will be less opportunity to maximize the environmental, social and economic benefits associated with establishing a sustainable transportation system with a transit service as a critical component.

CHAPTER I

PLAN CONTEXT

Introduction

The Province of Ontario requires transit systems to submit a "Ridership Growth Plan" and an "Asset Management Plan" in support of the continued receipt of Provincial gas tax funding. The plans have to be approved in principle by both the London Transit Commission and Municipal Council and forwarded to the Ministry of Transportation no later than the end of March 2006.

For London Transit, the March 2006 date presents a timing issue, given the work currently underway on various plan reviews and planning/service studies that will serve as critical input to both the Ridership Growth Plan and Asset Management Plan. The various plan reviews and studies are either nearing completion or about to commence.

The most significant plan reviews and study developments underway are:

- review of City of London Official Plan – 2006-2007
- development of London Transit's 2007-2009 Business Plan – fall 2006
- completion of London Transit's Short, Medium and Long Term Growth Strategy Studies – spring 2006
- completion of Transit Services Integration Study – spring 2006

Accordingly, in complying with the March 2006 submission date, the Ridership Growth and Asset Management plans as set out in this report, for the most part, reflect short term orientations and are to be viewed as provisional in nature. The respective plans will be updated based upon the results and directions stemming from the above referenced reviews and studies.

City of London

London, Ontario is located in the geographic centre of south-western Ontario. It is approximately a two hour drive west to Windsor/Detroit and a two hour drive east to Toronto, Niagara Falls and Buffalo. London is a medium-sized municipality covering a large geographic area comprising 421.8 square kilometres. The current population of approximately 356,000 makes London the 5th largest municipality in Ontario and the 15th largest in Canada.

London Transit Commission

The City of London, through The City of London Act, established a principal/agent relationship between the City of London and the London Transit Commission (LTC) in respect of the delivery of public transit services. The Act empowers the LTC to exercise the operation, alteration, repair, control and management of the public transportation system on behalf of the City of London. The public transit system includes both conventional and specialized transit services. The Act, while granting the exclusive right within the City of London to provide public transit services, also sets out certain limitations to the exclusivity. The limitations cover, among other items:

- vehicles used for providing sightseeing tours
- vehicles exclusively chartered to transport a group of persons for a specified trip within the City, for a group fee
- buses owned and operated by a board of education, school board or private school, or operated under a contract with such a board or school

- buses owned and operated by not for profit organizations solely for their own purposes, without charging a fee for transportation
- the right of any person to maintain and operate buses for the conveyance of passengers within the area annexed to the City on the 1st day of January, 1993, or between that area and the City as it existed on the 31st day of December, 1992, in accordance with a valid operating licence issued to the person under the Public Vehicles Act on or before the 31st day of December, 1992.

London Transit, based on ridership, operates the fifth largest urban transit system in Ontario (excluding GO Transit).

Critical Supporting Plans and Studies

The Ridership Growth Plans (Chapters II and III) and the related Asset Management Plan (Chapter IV) take their direction from the following related plans and studies.

- City of London Official Plan
- City of London Transportation Master Plan
- City of London Long Term Corridor Protection Study
- London Transit's Transportation Demand Management Plan (includes the critical short medium and long term strategy studies currently being completed)
- London Transit's Business Plan
- London Transit's Accessibility Plan
- London Transit's Capital and Operating Spending Plans

The above referenced plans and studies serve to define:

- how the City has and is expected to continue to grow and develop
- London Transit as an organization
- how transit services are to develop in terms of service design (frequency, routing, and types of service) and delivery
- expectations (expressed as a mode share target) for public transit service as a key component of a sustainable transportation system

Critical Assumptions

In preparing the Ridership Growth and Asset Management plans, a number of critical assumptions were made which define, in broad terms, the future environment in which public transit services will operate. The assumptions deal with the following related areas:

- population growth and demographics
- population growth areas and residential development
- industry and employment
- public investment requirements
- legislative impacts re: Accessibility for Ontarians Disability Act and the Ontario Human Rights Code

Summary discussion on the specific assumptions follows.

Population Growth and Demographics

As set out in the following table, London' s population is projected to grow by an average of just under 1% per year, ranging from greater than 1% over the first 10 years to below 1% in the latter 10 to 15 years of the 25 year planning horizon. Of note, the post 65 age group accounts for the largest increase over the period, accounting for approximately 23% of the total population in 2031, up 76% from the 13% representation in 2006. The increase in the post 65 age group is expected to have a significant impact on the development and delivery of accessible conventional and specialized transit services.

Population by Age Group, City of London

Age Group	2006	2011	2016	2021	2026	2031	% Change
0 -14	62,800	61,300	63,000	65,100	66,700	67,400	7.3 %
15-19	24,300	25,100	22,700	22,800	23,600	24,600	1.2 %
20-24	28,100	29,800	30,700	28,200	28,500	29,500	5.0 %
25-54	154,900	158,500	161,200	163,500	167,400	172,800	11.6 %
55-64	38,000	45,300	50,100	53,800	51,300	47,200	24.2 %
65-84	41,900	46,900	56,400	67,100	78,100	87,000	107.6 %
85 +	5,800	7,400	8,300	9,100	10,300	12,600	117.2 %
Total	355,900	374,200	392,300	409,700	426,000	441,200	24.0 %
Acc % Change		5.4%	10.2%	15.1%	19.7%	24.0%	

Source: Clayton Research – 2003 – Employment, Population, Housing, and Non Residential Construction Projections – City of London. (as modified)

Population Growth Areas and Residential Development

Over the 2006-2031 planning period, the approximate net 85,000 increase in population is expected to occur in the following areas:

- *North of Fanshawe Park Road* - the Fox Hollow, Sunningdale, Uplands, Stoneycreek and Fanshawe planning districts are anticipated to grow by 26,400 people.
- *Southeast* - the Jackson and Bradley planning districts are anticipated to grow by 16,000 people.
- *Southwest* - The Talbot, Bostwick, Longwoods and Lambeth planning districts are anticipated to grow by 13,000 people
- *Northwest* - the Woodhull, River Bend, Hyde Park and Byron planning districts are anticipated to grow by 23,200 people.
- *Central* - the West London and Central London planning districts are anticipated to grow by 16,000 people.
- *Northeast* - the Huron Heights and Fanshawe planning districts are anticipated to grow by 10,200 people.

For all other areas of the City, there is expected to be a net decline in population with areas east of Adelaide, between Hamilton Road in the south and Fanshawe Road in the north, accounting for the majority of the decline. Exhibit I depicts the growth areas in the City of London.

Where growth occurs, the growth rate, how it occurs (timing and phasing) and the nature of growth (type of development) will have a significant impact on service design and delivery, both in terms of the new growth areas as well as the existing service areas, particularly in areas of population decline.

Of particular concern is that growth is occurring in the respective areas at the same time and in certain instances is occurring from the outside in. It is critical that growth be appropriately phased. While it would be desirable to have service provided to the new growth areas in the early stages of development,

given there is only a net overall 1% population growth and how growth is occurring, providing service in the early stages of new development is neither practical nor financially feasible given current operational and fiscal realities. Accordingly, service to the growth areas will be predicated on the process as discussed in Chapter II.

In terms of related residential development, housing structures are broken down into three categories, namely single and semi-detached (low density); row housing (medium density); and apartment and others (high density).

The demographic shifts anticipated in the population profile, along with the natural pace of urban growth, suggest a gradual shift toward higher density demand in the City of London over the next 30 years. This is reflected in the percentage of shift to medium and high density from an average of 38% of households in 2006-2011 to 42% by 2026-2031. The improved density is critical to development of an effective and efficient public transit service. The projected annual household growth from 2006 to 2031 in 5 year increments is set out in the following table. However, this said, the issue becomes is the shift sufficient to meet the transit mode share target as described in Chapter II?

Household Growth – By Type – 2006-2031

	Single & Semi		Row		Apartment & Other		Total	
	#	%	#	%	#	%	#	%
2006-2011	1,300	62	400	19	400	19	2,100	100
2011-2016	1,240	60	410	20	410	20	2,060	100
2016-2021	1,080	59	370	20	380	21	1,830	100
2021-2026	930	59	310	20	330	21	1,570	100
2026-2031	790	58	270	20	300	22	1,360	100
Total	5,340	60%	1,760	19%	1,820	21%	8,920	100%

Source: Clayton Research - Employment, Population, Housing and Non Residential Construction Projections, City of London 2003.

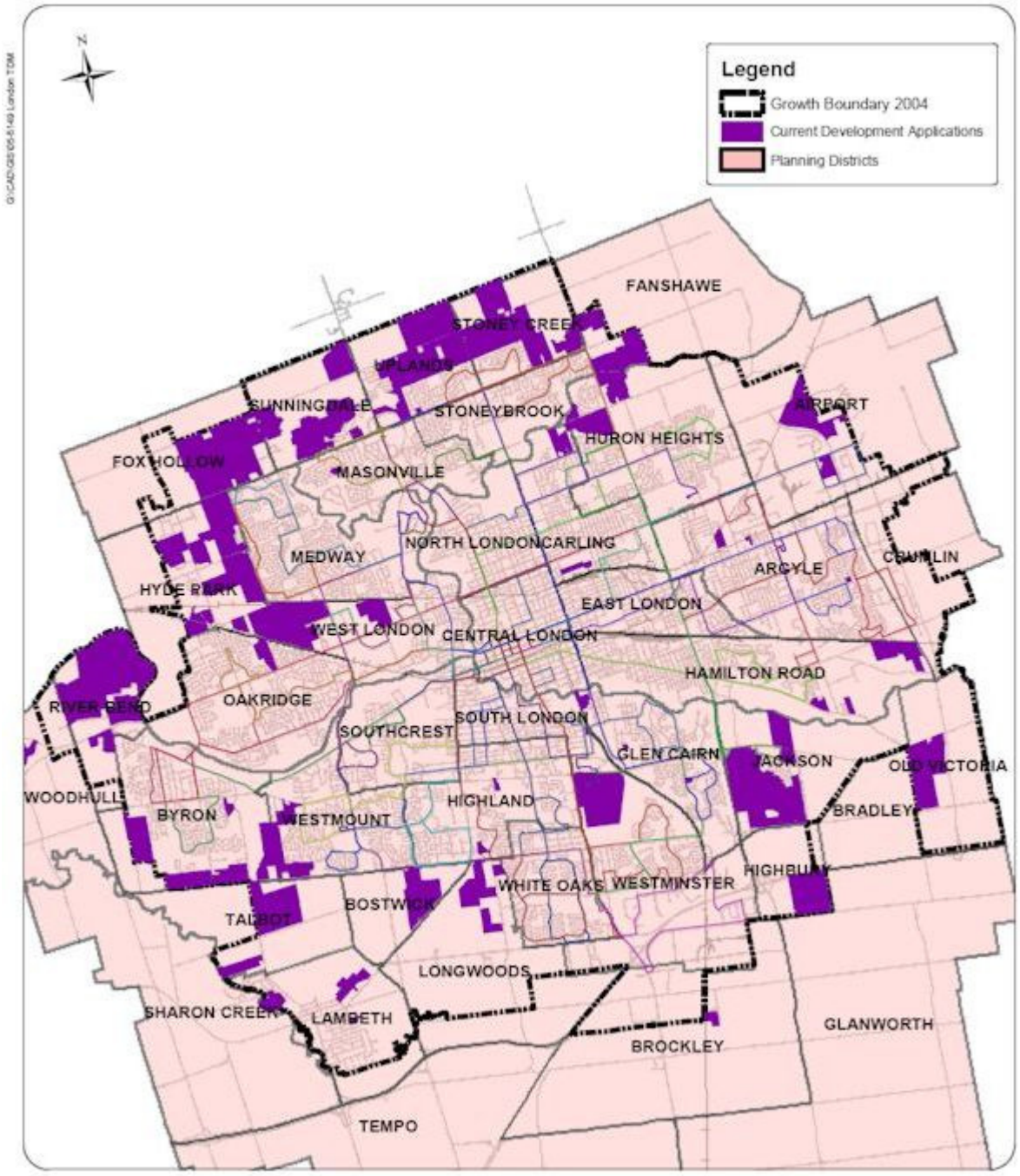


Exhibit I – City of London Growth Areas

Industry and Employment Growth

One of London's greatest strengths is the diversity of its business community. This has served London well over the years during cyclical downturns in certain sectors and provides a strong base from which to expand.

The continued development and implementation of sound economic development strategies will be critical to the City competing with neighbouring centres for employment growth. On balance, the economic environment in London is expected to be supportive of a modest growth environment.

Employment projections for the City of London for 2006 to 2031 in 5 year increments is set out below, averaging approximately 0.5% per year (ranging from a high of just under 1% per year for the first five years dropping off to less than 0.5% in the last 5 years).

Employment Levels 2006 to 2031

Year	Persons	% Growth	
		Term	Avg.
2006 – 2011	193,400 to 202,100	4.5%	0.9%
2011 – 2016	202,100 to 208,800	3.3%	0.6%
2016 – 2021	208,800 to 213,900	2.4%	0.5%
2021 – 2026	213,900 to 219,000	2.6%	0.5%
2026 – 2031	219,000 to 224,000	2.2%	0.4%

Source: Clayton Research - Employment, Population, Housing and Non Residential Construction Projections, City of London 2003.

Supporting consistent modest growth will be the diversity of employment by industry, as depicted in the following table. London's largest sector is the manufacturing industry, accounting for 16.3% of the overall workforce.

Industry Make up

Industry	Current % of Employment	Projected 2006 - 2031
Manufacturing	16.3%	(+)
Health Care Services	13.9%	(+)
Trades (Wholesale/Retail)	15.6%	(=)
Education Services	7.3%	(-)
Accommodation and Food Services	6.7%	(=)
Finance, Insurance and Real Estate	6.8%	(=)
Construction	5.7%	(=)
Professional, Scientific and Technical Services	5.7%	(+)
Management and Administration Services	4.6%	(-)
Public Administration	3.0%	(-)
Transportation and Warehousing	3.1%	(+)
All Others	11.3%	(=)
	100.0%	

(+) growth potential (-) expected to decline (=) projected to stay about the same

Source: Clayton Research - Employment, Population, Housing and Non Residential Construction Projections, City of London 2003 and Statistic Canada 2004 Data.

Impacting the employment opportunities in the London area will be the capacity to supply required labour force demand. In order to support the employment forecast, the net total migration must reflect an increase of approximately 100,000 persons, given that the required rise in the population to meet the projected rise in the labour force is much higher than projected expected population growth. Without a net total migration increase of 100,000, the economic response would include:

- higher wages - attracting more persons to the labour force
- retaining older employees longer - deferring retirement
- businesses shifting locations

The following table depicts the participation rate, by age group, over the planning period. As indicated, the participation rate by age, as well as the average makeup, male versus female, is expected to be relatively constant over the planning period.

Projected Labour Force Characteristics by Age – 2006-2031

Participation Rate Age	2006	2011	2016	2021	2026	2031
15-24	18%	19%	18%	17%	17%	17%
25-34	21	22	23	23	22	21
35-44	24	20	21	22	23	24
45-54	23	24	22	20	20	21
55-64	12	13	15	15	15	13
65 +	2	2	2	3	3	4
Total	100%	100%	100%	100%	100%	100%
Average Makeup						
Males	52%	52%	52%	53%	53%	53%
Females	48	48	48	47	47	47
Total	100%	100%	100%	100%	100%	100%

Source: Clayton Research - Employment, Population, Housing and Non Residential Construction Projections, City of London 2003.

The following table sets out the areas in which business development is expected to take place. As indicated, the north and south-east areas will have the greatest concentration of manufacturing. There is some manufacturing slated for the future in the south-west, subsequent to the pollution control infrastructure installation, which is slated for construction between 2016 and 2021 (note: currently under review which could extend construction to 2026).

Business Development Areas

	Commercial	Retail	Manufacturing	Institutional
Central	X	X		X
North-West	X	X		
South-West	X	X	X	
North-East	X		X	
South-East	X	X	X	

The location and nature of growth will impact current and future service design and delivery. By example, providing efficient and effective transit service to industrial areas has, and will continue to be challenging. The challenges relate to location (isolated destination from multiple locations), the design of the areas (i.e. large buildings on large parcels of land with ample parking generally located at the front of the building), and the nature of work times (various shift start and stop times). These challenges will impact the system's capacity to accommodate a greater number of work related trips to and from industrial areas.

Public Investment

The direction of the Ridership Growth and Asset Management plans are contingent upon dependable, predictable and sustainable levels of public investment from all three levels of government. The expectations for funding supporting the operating and capital investment plans are summarized as follows:

- Federal Government – The principal expectations in terms of funding and funding related programs include:
  - the continued receipt (made permanent) of Federal gas tax funds allocated specifically to transit. The funds would primarily be used to address capital infrastructure requirements (new and replacement) supporting reduced greenhouse gas emissions. In the short term, for 2006-07 and 2007-08 fiscal years, London is projected to receive approximately $8.4 million in transit specific funding. The allocation of the funding is discussed as part of the Asset Management Plan as set out in Chapter IV.
  - the Federal Government supporting the opportunity to expand ridership by amending the Income Tax Act to provide tax exempt status for employer provided pass programs

- Provincial Government – The expectation in terms of funding and funding related programs include:
  - continuation of the current Provincial gas tax program for transit providing transit systems with flexibility and discretion on the use of the funds, noting the principal objective would continue to be the maintenance and growth of ridership. The following table sets out the projected activity relating to the receipt and use of Provincial Gas Tax funding for the period 2006-2010.

Projected Provincial Sales Tax Reserve Fund Activity
2006-2010

Activity	Amount (millions)
Opening balance @ Dec 31/05	$ 1.495
Receipts	44.893
Allocation	
Capital (in 2006 dollars)	24.991
Operating	14.5181
Fund interest	.313
Closing balance	$ 7.192

The allocation of funds is consistent with program guidelines. The $44.893 million in gas tax funding is based on the $0.02 per litre effective October 1, 2006 generating, on an annual basis, $312 million in new moneys and London Transit's share of the funding averaging approximately 2.9%. The 2.9% is based upon progressive ridership growth over the period of 9.5% and London's population growing an average of 1% per year. Any changes (plus or minus) to the growth projections will impact the amount of funding to be received (assuming overall Provincial estimates are obtained).

  - the current "Ontario Transit Vehicle Program" continuing in effect, providing partial funding for the purchase of replacement and expansion vehicles
  - addressing, through amendments to the Development Charges Act, limitations in the calculation of available development charge funding. The three areas of concern include the requirement to offset available development charge funding by the amount of related Provincial funding received, the 10% off the top reduction in costs for "soft service" programs, and the setting of standards on a retrospective basis.

- Municipality – The expectation of the municipality is as follows:
  - support, as an investment priority, funding of life cycle maintenance projects (i.e. bus replacement) as well as growth related projects (i.e. fleet expansion). The latter investment would include funding from Development Charges.
  - support maintaining, as a minimum, operating budget funding at the current average of approximately 38.5% of the combined operating budget expenditure for conventional and specialized transit services.

Legislative Impacts

Currently there are two major "legislative" issues that will, over the short, medium and long term, impact the development and delivery of public transit services. The two items include:

- Ontario Human Rights Commission (OHRC) decision re Para transit (specialized transit) not being a special programs as defined under the Ontario Human Rights Code. The OHRC decision is subject to a request for reconsideration by the four named transit systems identified in the review and subject to the outcome of the reconsideration, subject to judicial review. The decision has the potential to significantly impact investment requirements for the delivery of specialized services at the expense of developing and providing a fully accessible and integrated conventional transit service. The respective Ridership Growth and Asset Management Plans are predicated on the status quo continuing in effect.

- Accessibility for Ontarians with Disabilities Act (AODA). The AODA requires the government to work with the disabled community and the private and public sectors to jointly develop standards, in stages of five years or less, leading to an accessible Ontario by 2025. The standards will address the full range of disabilities, including physical, sensory, mental health, developmental and learning.

  There are two basic components to the process of standards development. The first deals with establishing common accessibility standards that may address barriers that are common to all sectors, and may apply broadly to all persons and organizations in Ontario. The common standards would deal with four core areas namely:

  1. Customer Service
  2. The Built Environment
  3. Employment
  4. Information and Communications

  The second component deals with development of "sector specific accessibility standards", such as transportation. The transportation standards committee has been established, and is targeted to complete its work by the fall of 2006.

  Both the standards, which are expected to cover all aspects of a transit operation, and the related timeline to meet the standards, will have a significant influence on transit operations, ranging from service design, delivery and pricing, supporting capital infrastructure, and the delivery of support services. Accordingly, the Ridership Growth and Asset Management plans will have to be flexible, to support compliance with standards within the established time frames, as set and required by the AODA.

Chapter II
Ridership Growth Plan - Conventional Transit Services

Introduction

London Transit is responsible for the delivery of public transit services for the City of London. Public transit services are defined to include conventional and specialized transit services. While both are defined as public transit services, there are unique differences and challenges in developing and growing each service. In terms of conventional service, the objective of ridership growth strategies is to develop the service as a key component of a sustainable transportation system. As discussed in Chapter III, ridership growth strategies for specialized services focus on improving the system's capacity to meet the unmet, latent and growing demand for service in a balanced, affordable manner.

Accordingly, separate "ridership growth plans" will be prepared for each of the respective services. The following discussion covers conventional transit services.

Conventional Transit - Current Service Profile

Type of service - Fixed Route - Modified Radial Service

Hours of service

	Day	Times
-	Monday to Friday	6:00 a.m. to 12:00 p.m.
-	Saturday	6:00 a.m. to 12:00 p.m.
-	Sunday	8:30 a.m. to 11:00 p.m.
-	Statutory Holiday	8:30 a.m. to 11:00 p.m.

Notes
1. Monday to Friday – "industrial service Oxford East" – start time 5:30 a.m.
2. End times reflect last outbound trip, buses return to garage by 1:00 a.m. – Monday to Saturday. For Sunday and Statutory Holiday service buses return to garage by 12:00 midnight

Annual passenger trips - 18,652,000 (for 2006)

Annual revenue service hours - 521,600 hours (for 2006)

Annual kilometers - 10,738,100 (for 2006)

Number of routes - 32 routes, plus 3 community bus operations

Types of services
- Mainline Downtown – 10 routes – 8 of which are designated low floor bus accessible
- Mainline Crosstown – 4 routes – 1 of which is designated as low floor buss accessible
- Downtown/Suburban – 8 routes, 7 of which are designated low floor bus accessible
- Feeder/local – 10 routes, 4 of which are designated low floor bus accessible
- Community Bus – 3 routes, all of which are designated low floor bus accessible

Transit Mode Share Target

The development of conventional transit services takes its direction from the City's Official Plan and related Transportation Master Plan, which sets a goal of a 10% mode share for public transit by 2024. Linked to this objective are the mode share targets for the various other transportation modes.

2024 Mode Share Targets (versus 2004)

Mode	2004 % Share	2024 % Share	20 year Change
Total Auto	83.6%	77.0%	↓ 7.9%
Walking	6.9%	9.0%	↑ 30.4%
Cycling	0.5%	2.0%	↑300.0%
Public transit	6.9%	10.0%	↑ 44.9%
Other	2.1%	2.0%	---

Obtaining the targets or any combination thereof, recognizing the targets are not mutually exclusive, will be critical to meeting the desired objective. For this to be accomplished, the City of London, London Transit and the community will have to work collaboratively at translating the objectives into linked action plans supported by required political commitment and investment.

The following depicts the impact on service requirements and key performance indicators associated with attaining the 10% mode share target by 2024.

2024 Mode Share Targets
Impact on Service Performance

	2004	2024	% Change 20 yrs.
Population (000's)	348.2	419.5	↑ 20.5%
Revenue service hrs (000's)	505.6	705.0	↑ 39.4%
Rides (millions)	18.0	28.5	↑ 58.3%
Rides per capita	51.7	68.0	↑ 31.5%
Revenue service hrs/capita	1.45	1.68	↑ 15.9%
Rides per service hr	35.6	40.4	↑ 13.5%
Mode share (p.m. peak)	6.9%	10.0%	↑ 44.9%

Critical activities supporting attaining the 2024 mode share target and related service performance indicators include:

- the establishment of a sustainable, predictable funding model involving all levels of government
- continued development of transit service design and delivery. This includes the types of service being provided including the provision of a higher volume and level of service along key transit corridors and to and from key trip generators supported by feeder services from new growth areas to new and/or existing terminal locations
- continued growth and development as an organization as defined by successive business plans
- continued and new balanced investment in support services supporting the delivery of a quality, customer service focused transit service, e.g. vehicle maintenance
- continued development and use of smart bus technology (i.e. automatic vehicle location and communication system) to enhance customer service and service efficiency

- continued work with the City of London in the development and implementation of transit priorities, recognizing that transit priorities support improving the attractiveness of the service and service efficiency
- continued work with the City of London in the development and implementation of policies and programs supporting behaviour change respecting transportation choice and that promote the environmental, social, and economic benefits of a sustainable transportation system

- effective land use planning that supports and encourages compact urban form, which includes higher density, mixed uses and planned linkages/integration of transportation modes, such as pedestrian, cycling and park and ride facilities

Without commitment, investment and follow through on the above related activities the transit system will become more costly to carry the same or fewer riders, and there will be less opportunity to maximize the environmental, social and economic benefits associated with establishing a sustainable transportation system with a transit service as a critical component.

The following table sets out a comparison of required investment in both service hours and fleet to maintain the current 7% mode share versus reaching the 10% mode share target by 2024. In both scenarios, the figures are based upon providing not only an increase in operating and capital investment, but also in the development and implementation of policies and programs that are transit friendly.

2024 Mode Share Impact
Maintenance (7%) versus Growth (10%)

	7% Mode Share	10% Mode Share	Difference 7% vs. 10%	
Total rides (millions)	20.9	28.5	↑	7.6
Rides per capita	50.3	68.0	↑	17.7
Fleet requirements	215	283	↑	68
Revenue service hours (000's)	574.0	705.0	↑	131.0

What is omitted from the table, is the impact on the other modes, primarily in terms of auto travel which, if it stays at the 2004 level (83.6%), will have a significant impact on road maintenance and construction costs and the environment.

Ridership and Service Growth Strategies

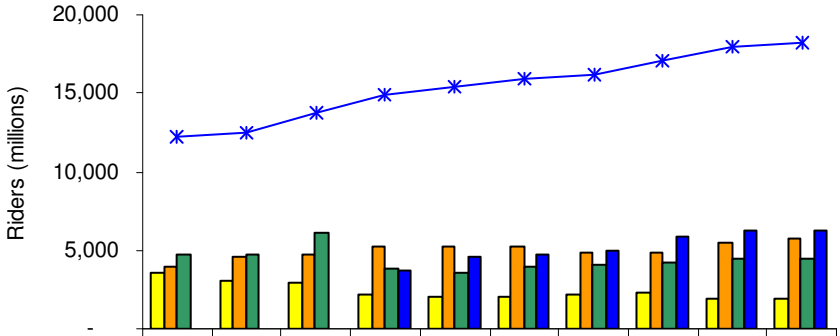
There is a cost to building and maintaining a sustainable transportation system, as there is a cost of not doing so, with the latter including the negative impact on the social, economic and environmental health of the community. The Transportation Master Plan takes into consideration both costs, and recognizes that investment, commitment and an inclusive consistent approach is required to reaching the set targets. For public transit, it is important to recognize that building the service to meet the mode share target requires time, which in turn means investment and commitment starting today. In terms of the inclusive consistent approach, London Transit has, through the establishment of a "transportation demand management" (TDM) program provided the vehicle to address the inclusiveness and consistency issue.

TDM initiatives by their nature are linked in terms of their overall objective, i.e. building transit as a key component of a sustainable transportation system. LTC groups TDM initiatives into three broad categories, namely:

- land use management strategies
- service development, delivery and incentive strategies
- education, awareness and advocacy strategies

The following graph highlights the growth in conventional transit ridership since 1996 which, by extension, highlights the progress to date of various linked TDM initiatives undertaken by LTC. The ridership growth since 1996 represents an increase of 49% or on average 5% per year.

Conventional Transit – Ridership Performance 1996 – 2005



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Cash	3,523	3,076	2,938	2,183	1,990	2,055	2,170	2,239	1,903	1,871
Ticket	3,969	4,622	4,690	5,230	5,267	5,164	4,900	4,816	5,457	5,705
Passes	4,770	4,742	6,126	3,811	3,590	3,978	4,103	4,207	4,407	4,422
Tuition Passes				3,738	4,565	4,707	5,011	5,858	6,225	6,278
Total Ridership	12,263	12,440	13,754	14,962	15,412	15,904	16,184	17,120	17,992	18,276

There is no single solution to building the service and increasing and sustaining ridership. The TDM program is predicated on undertaking a series of linked initiatives which, as a collective, will lead to:

- achieving specific objectives such as reduced traffic congestion
- savings and/or cost avoidance in road construction, maintenance and servicing
- improving mobility for everyone
- informed decisions on mode share options
- energy conservation
- environmental benefits, such as reduced pollution and protection of green space
- improving access to the community for all Londoners

As referenced in Chapter I, a study currently underway deals with the development of short, medium and long term ridership and growth strategies. The study, targeted to be completed April/May 2006, will focus on two critical linked issues, namely:

- effective land use planning policies and practices that support the building of a sustainable transportation system, with public transit as key component. The focus on effective, supportive policies and practices and acting on same recognizes that land use is a critical influence in transportation choice selection
- aggressive and progressive service design and delivery options, focusing on attaining, in a balanced, measured and affordable manner, the transit mode share targets set out in the City's Transportation Master Plan.

The ridership and growth strategies study, along with the review of the City of London Official Plan, development of London Transit's 2007-2009 Business Plan and completion of Transit Services Integration Study, will influence the development of medium and long term ridership and growth

strategies. Accordingly, the discussion which follows, while cognizant of the long term objective (10% mode share target), will focus on provisional short term goals and initiatives.

The following tables set out ridership and key service and financial performance targets for conventional transit for the five year period 2006-2010, based upon the provisional short term goals and initiatives and phasing of a number of expected medium to longer term initiatives including related capital and operating spending plans.

In terms of ridership and service performance targets, the following table indicates:

- ridership is projected to increase by 9.5%, building from 2% growth in 2007 to 2.5% in 2010 as service development initiatives are implemented and take effect
- service utilization, as measured by rides per capita and rides per revenue service hour, is projected to show steady improvement. Rides per capita will increase 5% reflecting both an increase in the number of Londoners using the service and frequency of use. Rides per revenue service hour is projected to increase by approximately 2%. The apparent disconnect between the two factors reflects the need to improve both the quality and quantity of service to attract and retain ridership. The improvement is reflected in the growth in revenue service hours.
- the amount of service, referenced by the number of service hours per capita, is projected to increase by 3.5%, reflecting additional hours associated with improving both the quality and quantity of service. The quantity of service is also impacted by the planned expansion of service to urban growth areas.

Ridership and Service Performance Targets 2006 - 2010

Description	2006	2007	2008	2009	2010
Regular scheduled ridership (in millions)	18.634	19.006	19.426	19.892	20.404
Revenue service hours (in thousands)	520.5	531.2	541.2	551.1	560.8
Service Utilization					
➢ Rides per capita	52.41	52.94	53.54	54.27	55.11
➢ Rides per revenue service hour	35.76	35.74	35.85	36.06	36.34
Amount of Service					
➢ Service hours per capita	1.47	1.48	1.49	1.51	1.52

Financial Performance Targets

The financial performance table, set out below, shows the amount of investment required (i.e. as evidenced by the increase in direct operating cost per revenue service hour and related growth in service hours), where the investment is to be applied (i.e. makeup of direct operating cost), and how the investment is to be funded (% sharing of direct operating cost).

As indicated, there is a projected increased dependency on Provincial gas tax funding to support cumulative growth related operating expenditure growing from 2.3% of total direct operating costs to 8.1%. The increased reliance on Provincial gas tax funding underscores the need for progressive and aggressive initiatives supporting the effectiveness and efficiency of the service, noting, as set out in Chapter I, the extent of available funding is predicated on attaining ridership growth. The increase in Provincial funding offsets the decline in passenger investment requirements (fares) supporting favourable pricing as an incentive to use transit services. The City of London's share remains constant at an average of 35.5%.

Financial Performance Targets 2006 - 2010

Description	2006	2007	2008	2009	2010
Direct Operating Cost per hour[1]	$ 82.04	$ 85.20	$ 90.14	$ 91.92	$ 95.47
% Make Up Direct Operating Cost					
➢ Transportation services	54.1%	53.9%	53.6%	53.2%	52.6%
➢ Fuel	12.7%	13.4%	14.2%	15.0%	15.5%
➢ Vehicle maintenance	20.2%	20.1%	19.9%	19.5%	19.2%
➢ Facility	5.4%	5.3%	5.2%	5.4%	6.0%
➢ General and administrative	7.6%	7.3%	7.1%	6.9%	6.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
% Sharing of Total Operating Cost					
➢ Passengers	58.5%	57.0%	55.1%	54.9%	53.5%
➢ Operating and reserves	3.7%	3.7%	3.5%	3.2%	3.0%
	62.2%	60.7%	58.6%	58.1%	58.5%
➢ Province (gas tax)	2.3%	3.7%	5.9%	6.5%	8.1%
➢ City of London	35.5%	35.6%	35.5%	35.4%	35.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

(1) cost and makeup based upon cost per revenue service hour

Transportation Demand Management (TDM) Program Initiatives

Discussion on specific initiatives under each of the three broad categories comprising the TDM program supporting the above referenced service and financial targets follow.

Land Use Management Strategies

The related TDM initiatives encourage and support effective land use planning that limits/reduces the amount of land required for roads and parking facilities, links transportation options and makes transportation options other than the single occupancy vehicle trip more convenient. How urban areas develop will impact, over the long term, the building of a sustainable community in terms of its economy, environment and access.

How the City of London develops is provided for in the City's Official Plan. In terms of transportation, the Official Plan sets out a series of 15 objectives that, for the most part, say the right things; the challenge is consistency in dealing with development approval that supports attaining the objectives. This means moving from "shall have regard to "approach to one of "shall be consistent with".

Key initiatives and activities supporting the "shall be consistent with" approach to be undertaken over the period 2006 through 2010 include:

- continued early participation by LTC in the planning process covering community plans, subdivision plans and the site plan approval process. Given the significant increase, the input supporting transit friendly considerations that may be unique to each development will be consistent with the City's Official Plan, Transportation Master Plan and LTC Business and Accessibility Plan. Masonville and Argyle transit terminals are successful examples of the use of site plan requirements to help achieve a sustainable transportation system with public transit as a key component. Conversely, continued low-density developments with curvilinear road designs do not support a sustainable transportation system in the long term.
- participation with the Civic Administration and transit associations in providing input at the Provincial level (via presentations and written submissions) on such issues as land use planning reform and amendments to the Development Charges Act.

- participating in the City of London's 2006 review of the Official Plan. The review will look at all aspects of the Official Plan, including the impact of the Provincial Policy Statement on land use planning reform and changes stemming from the City's Transportation Master Plan
- participating in the City of London's "place making" study - dealing with building sustainable communities for the future. The study will take place throughout 2006.
- development of transit 101 development guidelines setting guidelines for consideration in the development of urban growth areas and redevelopment of existing areas
- 2006 assessment of traffic and transit in the downtown. The assessment will look at the impact on commercial, retail and residential activity and development of current traffic and transit patterns and protocols in the downtown area
- completion of transit and parking study supporting the establishment of a firm parking policy in the Official Plan. This includes assessment/development of policies to encourage short term parking, reduce long term parking and provide favourable spots/rates for ride sharing.

Service Development, Delivery and Incentive Strategies

Building a reliable, dependable, predictable, accessible, safe and affordable service is critical to maintaining and building ridership. This category of initiatives deals with improving the range, quality and delivery of the service and options that encourage the use of transit (and other linked modes) and/or discourages the use of single occupancy vehicle trips.

Strategies under this initiative are divided into three sub categories of service development, service delivery and service incentives.

Service Development

Service development initiatives tend to be ongoing in nature and include:

- review of current standards, e.g. spacing between stops, clock face headways (the frequency in which bus times repeat each hour) and service levels
- annual service review given schedule adherence and capacity issues as well as demands for service expansion in new growth areas. The review considers service design (routing and type of services)
- integration of transportation modes (re bikes on buses - 2006 assessment)
- integration of conventional and specialized transit services – (planned assessment in 2006)

The annual service review provides one of the key mechanisms to ensure growth is accomplished in a balanced, measured and sustainable manner. The annual review looks at service growth from two perspectives, i.e. existing service area growth and expansion of service to the urban growth areas.

In recent years the priority has been to expand (or intensify) service in the existing service area, with expansion to the new urban growth areas having secondary priority. The expansion is evident by the 30,000 hours of service added to the system since 2000, with 15,000 being added since the introduction of Provincial gas tax funding in 2004. The expansion (intensification) of transit service in the existing service area focuses on:

- retention of ridership (service quality/quantity issues)
- encouraging existing riders to use the service more frequently
- attraction of new ridership from within the existing service area, where the potential for attaining such growth is higher given the nature of development and that service to the area already exists

- continued development of high transit demand nodes, such as regional malls, downtown, the University and Fanshawe College.

The focus on the existing service area relates directly to the aforementioned significant growth in ridership that has occurred since 1996.

The expansion of service to the new urban growth areas is predicated on attracting new ridership from growth areas and expanding service coverage area for all customers making the system more attractive by improving access to all areas of the community.

Expansion of service, whether it be in the existing service area or new growth areas, is supported by inputs from a number of key areas including:

- customer contacts
- annual origin destination surveys - ridership patterns current customers, noting all routes are captured over a period of three years
- operator and inspector service reports
- automatic vehicle location system reports pertaining to route performance
- periodic market research studies and rider/non rider surveys
- community focus group meetings
- participation in City of London's community, subdivision, site and zoning planning processes

In terms of the new urban growth areas, the process of assessing if and when service will go into an area begins early in the planning process. Assessment starts with participation and input at all phases of the development process, a process that includes approval of community plans, subdivisions plans, site plans and zoning changes.

The comments provided during the various stages focus on the requirements associated with introducing sustainable and timely expansion of transit service. The requirements deal with such issues as population densities, nature of the development, location of development (leap frog versus contiguous); type of development, and the need for supporting road network and pedestrian access.

The LTC monitors development of new growth areas through annual planning updates and on site (visual) observations. In assessing the introduction of service to a new growth area, a number of factors are considered, including:

- rate and nature of growth in the area including population density, residential growth (number and type of housing units) and commercial development (quantity and type)
- competing demand for capital and operating resources, both internal and external to London Transit
- the probability of the new service meeting minimum return on investment thresholds by identified service time periods as provided by LTC service standards - (currently 35% in off-peak periods and 50% in peak periods)
- service design requirements including proximity to existing transit services, which has a direct impact on the costing set out above (As part of this assessment, the impact on existing ridership is considered, that is, would it be seen as an enhancement or a detractor to continued use of the service).

There are nine major community plans currently underway. Based upon the above factors, extending service to the areas is prioritized. The current prioritized listing is as follows, noting the priorities are subject to change based upon rate and nature of growth that occurs, noting the priority is assessed on an annual basis:

Location	Projected Service Date
Stoneycreek	2006
Summerside	2006
West Beaverbrook	2007
Sunningdale	2007
Uplands	2008
Hyde Park	2008
River Bend	2009
North Talbot (including link to Lambeth)	2009
Fox Hollow	2010

Service Delivery

Service delivery deals with issues of efficiency and quality of service provided. The strategies include development and implementation of:

- transit priority measures which are defined as initiatives to improve the efficiency of the service through the use of such measures as yield to bus, turning exceptions for buses, traffic signalization and queue jumps. As the system matures, the measures would include higher end measures such as the use of high occupancy lanes and transit only lanes. In terms of initial measures, such as turning exceptions, traffic signalization and queue jumps, there exist a number of key locations that would benefit from such measures:
  - Regional Malls
  - Elgin and Western Road
  - Richmond and Oxford Street
  - Wellington Street and Queens Ave.
  - Oxford and Adelaide Street
  - Fanshawe College

- in terms of the employment of high occupancy lanes with eventual migration to transit only lanes key corridors would include Wonderland, Dundas, Richmond, Wellington and Oxford Streets, with the introduction being phased

- enhancements to and expanded employment of smart bus technology (intelligent transportation system technology) such as the Automatic Vehicle Location/Communication (AVLC) system moving to global positioning based systems. The enhancement of the existing AVLC system in addition to improving current monitoring of in excess of 500,000 annual revenue services hours, also provides use of the following innovative applications:

  - In vehicle sign and stop enunciators
  - real time service information display at major transit locations throughout the City. The information is critical to improvement of "on street" information to our customers

- improved service performance monitoring and planning through the use of schedule performance reports and automatic boarding counts. The system will allow for the assessment of more routes more frequently versus the current largely manual process.
- the system provides communication linkage with traffic signals giving buses priority. The communication would extend green light times or shorten red light times for buses only.

Directly linked to service development and delivery, is the completion of a facility requirements study in 2006. The study will provide business case assessments on three options to address facility requirements as the service continues to grow. The options include expansion of the current facility, construction of a new facility and the construction of a satellite facility.

Service Incentives

Service incentives support the use of target modes. Incentives include such items as the nature and extent of passenger amenities, such as passenger shelters, linkage to other transportation modes (e.g. walking and cycling) and effective use of fare pricing and fare media options, e.g. development of employer provided pass programs supported by gaining tax exempt status for such a program. Discussion on passenger amenities and links to other transportation modes will form part of the short, medium and long term ridership growth strategies study that is currently in progress.

In terms of fare pricing and fare media options, in 1996 the Commission adopted a fare pricing and media strategy, based upon the following objectives:

- increase revenue - i.e. meet targeted revenue requirements;
- maintain and build ridership – i.e. mitigate traditional ridership loss associated with fare increases and use fare pricing and media options to build ridership; and
- ensure that fare administration is both effective and efficient – i.e. balance fare administration cost, fare validation requirements and customer convenience

The objectives are supported by the following principles:

- passengers are sensitive to savings;
- pricing and media options can influence use and promote rider loyalty; and
- passengers will pay for service that is convenient, reliable, predictable and accessible and delivered with customer service in mind

Effective use of fare pricing and media options has and will continue to be critical to attracting and retaining ridership. Pricing supports quality service. A number of key elements of the LTC fare program is avoiding year over year fare increases and across the board fare increases. For 2006, tickets only were subject to fare increase, the first such increase in tickets in four years.

On a going forward basis, fare levels will be assessed on an annual basis, considering revenue targets, and the principles/goals of the fare pricing strategy. With respect to the fare media options, short to medium term strategies will include consideration of such options as:

- “event passes” and/or weekend family passes
- introduction of employer provided pass program
- smart card technology

Education, Awareness and Advocacy Strategies

The initiatives under this category are usually considered "ongoing" in nature and focus on:

- addressing the perception issues associated with public transit
- bringing about long term sustainable behaviour change relating to transportation choices
- building informed relationships
- gaining support for implementation of policies, programs and initiatives supporting transit

The various initiatives provide a balance between mass marketing, social marketing and the more focused target market and/or community based marketing. The initiatives, such as Clean Air Day, One Tonne Challenge and the Commuter Challenge will be undertaken in concert with the City of London's SHIFT program to:

- raise awareness/benefits of alternative forms of transportation
- encourage use of alternative forms of transportation
- inform (educate) on how to use alternate forms of transportation
- inform target key markets, i.e. students, commuters, downtown employers, etc.

Other initiatives include:

- participation in community programs such as Doors Open London. The program encourages Londoners to tour London businesses, learn of their history and expectations for the future
- publication and distribution of annual reports with the distribution including Municipal Council, community groups (Urban League, Chamber of Commerce) and local area Federal and Provincial Members of Parliament
- annual meetings with local area Federal and Provincial Members of Parliament to discuss issues of mutual concern and updating the Member on current performance trends

Monitoring, Assessment and Reporting

The monitoring and assessment of performance against expectations is critical to growing in a balanced and measured fashion. The process of monitoring, assessment and reporting process provides the means to build on successes, learn from setbacks, take corrective action and support building informed relationships and accountability. This is critical recognizing that:

- there is no single solution or initiative that will achieve the ridership growth targets;
- the strategies and initiatives are linked
- certain initiatives will not necessarily translate into immediate ridership growth. Many of the initiatives will take time to mature to yield sustainable results, e.g. land use management initiatives.
- building informed relationships is critical to gaining understanding, support and investment

Part of the monitoring/assessment process includes periodic surveys of both customers and non-customers. The survey provides an indication of the progress made and input as to where efforts should be focused in sustaining and building ridership. As an ongoing strategy, every 3 to 4 years a rider/non rider survey is completed. The results of the 2004 survey compare favourably to the survey completed in 2001 as evidenced by the following:

- the proportion of people in London stating using the bus service has increased from 35% to 50% of the population since the last survey;
- the proportion of residents stating using the LTC as their main method of transportation rose from 15% to 25% between 2000 and 2004;

The rating of service by riders is similar to the 2000 result, with almost 70% of riders rating service and performance as good or excellent. The rating is very positive given the significant supporting infrastructure challenges associated with accommodating the 17% increase in ridership (2.6 million annual trips) that occurred between 2000 and 2004. The next survey is targeted for 2007-08.

Chapter III
Ridership Growth Plan - Specialized Transit Services

Introduction

The delivery of accessible public transit services in London, like many other communities, faces considerable challenges in meeting demands for service at a time of financial constraints, competing demands for resource allocation and growing pressure to provide accessible and integrated public transit services from the Ontario Human Rights Commission (OHRC) and legislative requirements such as the Accessibility for Ontarians with Disabilities Act (AODA).

Accessible public transit services are defined to include "accessible conventional services" and "specialized transit services". Accordingly, for the purposes of this plan document, specialized transit is defined as a public transit system that provides various transportation services for persons with disabilities that meet eligibility for the respective services.

Within this context of specialized transit, "ridership growth" is viewed as improving the system's capacity to meet unmet, latent and growing demand in a balanced and affordable fashion. This means providing a service that meets the customer's needs at a fair and equitable price to the customer, and at a reasonable cost to the taxpayer.

The City of London established London's paratransit service in 1978. Initially, the service consisted of alternative transportation by way of specially equipped vans designed to be of service to people who had mobility challenges. The service was restricted to those customers with a physical disability, which precluded them from walking a specified distance, or climbing three steps. This was consistent with the standards being applied throughout the Province at the time. The City of London contracted the provision of the service to a local taxi company, which was required to meet prescribed service levels with its own vehicles, dispatch facilities and drivers.

In 1997, the London Transit Commission (LTC) assumed full responsibility for the service. The responsibility was exercised through the establishment, in June 1998, of the London Community Transportation Brokerage (LCTB), which continues to operate the service under the LTC umbrella.

In 2002, the LTC undertook an intense review of the paratransit service with the goal of assessing the challenges relating to the transportation requirements for individuals with disabilities who did not meet the existing eligibility criteria. The review involved significant public consultation.

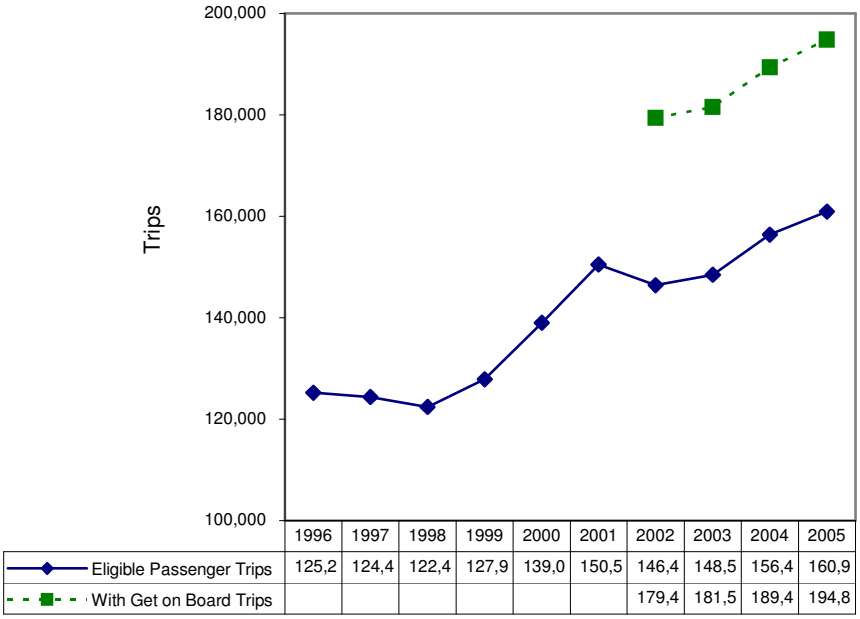
The review resulted in a significant redefinition of the services offered by LTC under its "specialized service" umbrella. The LTC expanded the mandate for the specialized services to include individuals with disabilities other than mobility challenges. The service was developed to encompass a range of service delivery options designed to meet the range of needs of the citizens of London who have a disability which prevents them, on a regular basis, from being able to use London's regular, fixed route transit service.

In the three years subsequent to the review, the following changes have been made:

- introduction of a new, more extensive application and assessment process, which includes a self assessment component. The revised application and assessment process is consistent with the expanded service eligibility.
- introduction of new service delivery models e.g. work shop shuttles and Get on Board program
- elimination of the 3 year $30.00 registration fee
- implementation of fare parity with conventional transit services i.e. same fare media and prices apply (with the exception of the use of transfers, noting all trips are single origin/destination trips)

The above changes, in concert with ongoing service monitoring, policy adjustments relating to service quality indicators, customer input and increased City of London investment, have provided for growth to occur in a progressive, balanced, measured, and affordable manner.

Specialized Transit - Eligible Passenger Trips 1996 - 2005



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Eligible Passenger Trips	125,2	124,4	122,4	127,9	139,0	150,5	146,4	148,5	156,4	160,9
With Get on Board Trips							179,4	181,5	189,4	194,8

As depicted in the above graph, eligible passenger trips have increased by 29% since London Transit first assumed full responsibility for the service. In addition, as the result of the establishment of the "Get on Board Program" in 2002, an average of 34,000 annual trips that may have had to be accommodated on specialized services were shifted to accessible conventional services. Over the same period, attendant/companion trips have grown from 10,000 trips to 17,800 trips on an annual basis, for an increase of 76%.

Current Service Profile

Type of Service - Shared Ride – Door to Door – Pre Booked Service
- Registrants are required to book trips 3 days in advance. Trips, with the exception of subscription trips, which are awarded on a first come first serve basis. There is not a guarantee of trip availability.

Hours of Service

Day	Time
- Monday to Friday	7:00 a.m. to 11:30 p.m.
- Saturday	8:30 a.m. to 11:30 p.m.
- Sunday	8:30 a.m. to 11:30 p.m.
- Statutory Holiday	8:30 a.m. to 11:30 p.m.

Registrants - 2,400

Annual eligible passenger trips - 160,900

Attendant/companion trips - 17,800

Annual service hours - 72,000 - includes both primary and secondary service providers

The delivery of the service is provided through service contracts for both a primary service provider, and secondary service providers. In all cases, the contracted rate paid to the service providers covers the provision of vehicles and drivers. The primary service provider operates 21vehicles, while the number of vehicles provided by the secondary service provider(s) corresponds directly to demand and budget. The fleet allocation for the primary service provider is set out in the following table.

Fleet Allocation – Primary Service Provider (winter schedule)

		Fleet Allocation
Monday to Friday		
Early A.M.	- 7:00 a.m. to 9:00 a.m.	16
A.M. Peak	- 9:00 a.m. to 11:00 a.m.	20
Base	- 11:00 a.m. to 3:00 p.m.	19
P.M. Peak	- 3:00 p.m. to 5:30 p.m.	17
Early Evening	- 5:30 p.m. to 9:00 p.m.	7
Late Evening	- 9:00 p.m. to 11:30 p.m.	5
Saturday		
A.M.	- 8:30 a.m. to 10:00 a.m.	4
Base	- 10:00 a.m. to 6:00 p.m.	6
Early Evening	- 6:00 p.m. to 9:00 p.m.	5
Late Evening	- 9:00 p.m. to 11:30 p.m.	3
Sunday and Statutory Holiday		
A.M.	- 8:30 a.m. to 10:00 a.m.	3
Base	- 10:00 a.m. to 6:00 p.m.	5
Early Evening	- 6:00 p.m. to 9:00 p.m.	5
Late Evening	- 9:00 p.m. to 11:30 p.m.	3

The fleet allocation reflects the demand for service and financial resources available to address service needs. The allocation is based upon winter schedules. The primary service provider carries, on average, approximately 145,000 of the 160,000 eligible trips, with the secondary service provider accounting for the balance, averaging between 10,000 and 15,000 trips.

While the service providers are responsible for the provision of vehicles and drivers, the brokerage maintains control over the service, and is responsible for the following:

- administrative support for the Accessible Public Transit Service Advisory Committee
- contract administration of primary and secondary service contracts
- contract administration of health care professional service contract (re: eligibility assessments)
- liaison with Planning Services re service integration, accessible conventional transit and customer service information re customer contacts
- service registration - includes mailing and processing applications, scheduling assessments as required, advising customers of their eligibility
- on-road service planning
- service analysis and trending, as well as budget performance
- service operations, which includes:
  - service booking - handling in excess of 200,000 calls annually for trip booking, cancellations
  - service scheduling - providing daily schedules for primary and secondary service providers consisting of between 20 and 25 vehicles per day during peak periods and providing 160,000 plus trips on an annual basis

- dispatching – deals with “real time” monitoring of service, including same day cancellations, no-shows and same day bookings

Principles for Managing Growth

In 2002, the LTC adopted a number of guiding principles relating to the development of specialized transit services as well as accessible conventional transit services. The principles are as follows:

1. There will always be a need/requirement for some form of specialized public transit services for those persons unable to use conventional public transit services (including accessible conventional transit).

2. Eligibility for specialized public transit service should be determined not only on the basis of type of disability, but also according to the type of functional limitations that result from the disability. Specialized transit services are intended for those who fall within the definition of disability according to the Ontario Human Rights Code and are not able to use conventional transit services, accessible or otherwise because of that disability.

3. Specialized transit services are to be viewed as complementary to accessible conventional public transit service. This requires ensuring as many of the disabled population as possible are able to use accessible conventional transit services.

4. The nature, design and delivery of specialized public transit service will need to reflect the needs of those it is intended to serve based upon defined eligibility criteria which, in all likelihood, means the service will be different than what we now know.

5. The development of accessible public transit services (specialized and conventional) is to be predicated on the principle of integration.

6. While recognizing diverse and potential competing community expectations, development of accessible public transit services requires a balance between fiscal realities and obligations under the Accessibility for Ontarians with Disabilities Act and the Ontario Human Rights Code (includes predecessor legislation Ontarians with Disabilities Act).

7. Development of specialized transit services requires partnership with various levels of government, agencies supporting the disabled community, and others in order to provide for a service model that supports the equitable distribution of the related financial requirements.

As set out in Chapter I Plan Context, the development and delivery of specialized transit services will be significantly influenced by:

- the final outcome of the Ontario Human Rights Commission decision that paratransit services are not “special programs” as defined under Section 14 of the Ontario Human Rights Code
- the standards requirements and time frames as established under the Accessibility for Ontarians with Disabilities Act.

With the above context, and consistent with the established guiding principles, the following service growth plan initiatives and related targets have been developed. The initiatives and targets cover the next five year planning horizon and are predicated on a process of continuous review and improvement.

Growth Initiatives and Targets

Defining the Specialized Transit Service Market

In developing the growth plan initiatives and targets, recognizing the objective of growing in a balanced affordable and sustainable manner, it is critical to understand the potential market for specialized services.

In 2002, a detailed review was completed regarding the estimated population that may be eligible and/or require some form of accessible public transit services. The assessment included input from other transit systems, local stakeholder organizations (i.e. Community Living London, the Canadian National Institute for the Blind) and from data assembled by Transport Canada. The review concluded that, on average, between 6.5% and 7.0% of the population in a municipality could be expected to have disabilities impacting their transportation.

The following table sets out the likely make up of the disabled population in London using the 6.5% average and current population estimates for 2006 and 2011. The estimates provide an indication of the need for accessible public transit services in general and specialized transit specifically. After 2011, London's population demographic forecasts indicate a substantial jump in the senior population which, in all likelihood, will impact the percentage of the population requiring some form of accessible public transit services.

Estimated Disabled Population by Functional Disability

Year	Population	Mobility Agility (3.0%)	Cognitive Mental (2.0%)	Visual (0.5%)	Other (1.0%)	Total (6.5%)
2006	355,700	10,670	7,110	1,780	3,560	23,120
2011	374,200	11,230	7,480	1,870	3,740	24,320

Current registrants for specialized services total approximately 2,400 or approximately 10% of the disabled population. The number of registrants is currently growing at a net 200 to 300 people per year. The current spread between the 2,400 and approximately 24,000 individuals with disabilities is thought to be attributable to a number of factors including:

- personal choice
- confinement to institutions
- trip requirements being provided by other means and/or sources (e.g. Boards of Education, conventional public transit, personal vehicles) and/or
- individuals not meeting the established eligibility criteria

In addition to the above potential market, there is the issue of temporary disabilities. In discussions with systems that had extended eligibility for certain temporary disabilities, it was found that registrants with temporary disabilities accounted for anywhere between 2% and 3% of the total registrants and were more frequent users of the services. Temporary registrants generally use the service for a period ranging from 3 to 12 months depending upon the disability and use the service for more than transportation to and from therapy as most of the registrants are used to a lifestyle with access to a vehicle and when recovering from an accident or major surgery try to emulate the convenience of the personal vehicle.

Ridership Growth and System Performance Targets

The following table sets out the established targets for the specialized service over the period 2006 – 2010, in terms of ridership, service efficiency and service quality.

Ridership Growth and System Performance Targets 2006 - 2010

Description	2006	2007	2008	2009	2010
Ridership					
➢ Eligible passenger trips (000's omitted)	168.9	176.0	183.5	191.0	198.5
➢ Attendant/companion travel	17.0	17.8	18.0	18.5	19.2
➢ Rides per capita	0.47	0.49	0.51	0.52	0.54
➢ Total Registrants	2,650	2,900	3,150	3,400	3,650
➢ Total trips per registrant	63.7	60.7	58.2	56.2	54.3
➢ Get on Board Trips	35,000	37,800	40,700	43,500	46,500
Service Efficiency					
➢ Trip completion (% taken vs. booked)	84.5%	85.0%	85.5%	86.0%	86.0%
➢ Trip per service hour - primary	2.2	2.2	2.2	2.2	2.2
➢ Same day bookings (% of total bookings)	5.0%	5.0%	5.0%	5.0%	5.0%
Service Quality					
➢ Non accommodated (% of total bookings)	1.5%	1.4%	1.3%	1.2%	1.0%
➢ Pick ups over 30 mins. (% of EPT)	0.5%	0.5%	0.5%	0.5%	0.5%

Ridership Targets

For specialized transit services, the strategy for growth is not simply to increase ridership, but rather to improve addressing the level of unmet, latent and growing demand in a progressive, balanced and sustainable fashion. When the number of registrants on the service grows, the demand for the service grows as well. Managing this growth has, and will continue to be a challenge.

In 2006, the eligibility criteria for the specialized service will be expanded to begin providing access to service for those customers with temporary disabilities (noting temporary disabilities are yet to be defined). The expansion is projected to be phased given the varying nature of temporary disabilities and the related needs stemming from same. Also adding to the ridership growth will be the aging population and registrants' expectation of increased access to the community.

Over the next five year period, notwithstanding the registrant base is projected to grow, the trips per registrant is projected to decline. The decline reflects the planned, continued progressive investment in London's accessible conventional service fleet (projected to be fully accessible by 2013) providing more opportunity for registrants to make use of the accessible conventional service.

Programs such as "Get on Board" will continue to encourage migration to and use of accessible conventional transit services. All registrants of the specialized service are provided with a pass that allows them free travel on accessible conventional service during off peak hours. The program has been extremely successful in terms of taking pressure off of the specialized service, particularly in the summer months. As more conventional routes become designated as fully accessible, more opportunity will be available for specialized registrants to make use of their pass. The "Get on Board" program will be augmented by a "trip planning program" to be developed in 2006 in concert with a number of community groups.

Service Design, Delivery and Efficiency

Maintaining service efficiency is critical to ensuring that the costs relating to the provision of the specialized service remain reasonable, both in terms of the fare paid by the passenger and the cost to the taxpayer, while meeting the varying and competing needs of customers. As referenced in the above table, a number of key efficiency targets have been established for each of the next five years. Comments regarding the targets follows:

- *Continuous Improvement Trip Scheduling and Dispatching*: - Consistently meeting the trips per service hour measure ensures that the service being provided is essentially a shared ride service, emulating as closely as possible the shared nature of the accessible conventional service. Maintaining the 2.2. trips per hour will require continuous review and improvement to scheduling and dispatching systems and processes and staff training.

- *Trip Completion Rate – Review of Policies and Procedures*: - Improving the trip completion rate is critical to ensuring the maximum number of trips is provided in return for the level of investment. The trip completion rate is calculated by dividing the number of trips taken by the number of trips actually booked (difference being cancellations and no-shows). Improving the completion rate will require the consistent monitoring of high rates of cancellations and no-shows and the provision of same day bookings which fill in gaps in the schedule left by cancellations and no-shows.

  Due to the nature of booking and scheduling trips on the specialized service, high rates of cancellations and/or no-shows can have a negative effect on the efficiency of the service. It is the intention of the LTC to continue to monitor and remind customers with high rates of no-shows or cancellations of the negative impact of same on the service, as well as other customers, who may have been disenfranchised due to the cancellation or no-show. The monitoring also includes review and updating of service policies relating to cancellations and no shows, noting same could be affected by the standards to be set under the Accessibility for Ontarians with Disability Act.

  The booking window (the number of days in advance a trip must be booked) may also impact the rate of cancellations and no-shows. Currently, the booking window is 3 days, but a review of the merits and issues associated with the move to a one day booking window is scheduled to take place in early 2007, with tentative implementation in the fall of 2007. The shift to a one day booking window is reflected in part in the improvement in the trip completion rate. Accommodating the shift to a one day booking window will, in all likelihood, require expanded use of technology to facilitate direct booking.

- *Service Delivery Options*: - The other aspects of service efficiency, which is not set out as a target in the above table, but plays a key role in obtaining the targets, are the various methods in which the service is delivered. The ability to employ various delivery methods, based upon both the needs of the customer and fiscal responsibility, is paramount. The workshop shuttle concept is an example of a delivery method that provides excellent customer service in a very efficient way. With the expansion of eligibility criteria to include the cognitively disabled, the requirement for transport of a large group of individuals from many locations to a single destination was created. After several trials, it was determined the most efficient and effective manner in which to provide this service is to provide a route in which all customers are picked up (at generally the same time each day) and dropped off at their destination (workshops, places of employment, etc.), similar to the method employed by school buses. Rather than making use of several lift-equipped vehicles to provide this service, a single 10-12 seat vehicle is used. The trips per service hour achieved on this service are in excess of 6 trips per hour. In the future, as the demands for service increase given such factors as demand for dialysis trips and an aging population, various methods of service delivery will continue to be assessed and implemented as appropriate. This could include “medical service shuttles” and modified “community bus” services, the latter primarily applying to areas where there is a large concentration of seniors and/or senior group homes.

The other aspect that will impact the nature of delivery of specialized services on a going forward basis will be the integration of the accessible conventional and specialized transit services. In 2006, a service integration study is to be completed. The study is to assess integration options, impacts and set out an integration strategy. The study is targeted to be completed in 2006, with implementation targeted for early 2007.

Service Quality

Every two years, a specialized service customer survey is completed in an attempt to determine which aspects of the service the customers are satisfied with and which may need improvement. In the three surveys that have been completed since 1998, customers surveyed have indicated a high rate of satisfaction with the service, but have also provided suggestions for areas of improvement.

Two areas of service quality continue to be a priority and are subject to continuous review and improvement. They are:

- on-time reliability of the service (measured as pick ups over 30 minutes). Over the next five years, the standard is to remain constant given targeted changes in other areas with respect to the service and noting improvement in this measurement may negatively impact trip availability, trip duration and costs. Notwithstanding the status quo being maintained, this issue will be subject to ongoing assessment.
- non-accommodated trips. The measure tracks trip requests unable to be accommodated within 1 hour of their original requested time. This measure is important as it provides a good indication of the unmet demand for the service from the existing registrant base. As the table above indicates, a steady progression toward a non-accommodated rate of 1.0% from the current 1.5% is planned over the next 5 years.

Financial Performance Targets

The following table sets out the financial performance targets for specialized transit service, based upon the service growth and performance targets set out earlier. As noted earlier in the report, growing the specialized service has, and will continue to require a balance between service quality, service efficiency and affordability. The financial performance targets are based upon maintaining this balance, that is, providing a service that meets the customer's need, is fairly priced for the customer, and is provided at a reasonable cost to the taxpayer.

Financial Performance Targets – Specialized Transit Services 2006 - 2010

Description	2006	2007	2008	2009	2010
Financial Performance					
Total cost per eligible passenger trip	$16.55	$17.01	$17.41	$17.83	$18.26
Total Cost Sharing					
➢ Passengers	11.1%	10.8%	10.6%	10.6%	10.4%
➢ Province (Gas Tax)	4.4%	6.5%	8.8%	9.4%	9.6%
➢ City of London	84.5%	82.7.3%	80.6%	8.0%	80.0%
	100.0%	100.0%	100.0%	100.0%	100.0%

As indicated, Provincial gas tax funding (which includes a combined capital and operating component, given the service delivery model employed) will increase to just under 10% of net growth related costs. The City of London funding is projected to decline initially and then remain constant at approximately 80%.

Chapter IV
Asset Management Plan

Introduction

This chapter sets out London Transit's "Asset Management Plan". Consistent with the expectations of the Province's Gas Tax program, the Asset Management Plan sets out objectives, programs and policies associated with the effective and efficient use of capital assets owned and/or employed in the provision of London's public transit services. Public transit services are defined to include both conventional and specialized transit services.

Capital assets are defined to include the following:

- Land
- Facilities
- Rolling stock
- Fare collection and data systems
- Communications (voice and data) systems
- Passenger amenities (shelters, terminals)
- Shop equipment
- Service and inspectors fleet
- Management information system software and hardware
- Engineering studies

The primary focus of London Transit's asset management plan is one of supporting "service development and delivery" objectives. Accordingly, the principal objective of the asset management plan becomes one of acquiring and maintaining assets to meet service objectives.

Creating a sustainable transportation system is critical to the long term social, economic and environmental health of the City. A key component of that sustainable system is an effective and efficient public transit service.

As indicated earlier in the report, setting out London Transit's "Ridership Growth Plan" (see Chapter II), building an effective and efficient public transit service for London takes its direction from (and/or is influenced by) a number of key documents, not the least of which is London Transit Commission's Business Plan.

The Business Plan and related planning process provide the basis to learn from both successes and setbacks, serving as the impetus for continuous improvement. The Plan takes its direction from a "mission statement" which is supported by six linked and often times competing objectives. The objectives cover all aspects of London Transit's operations.

One of the six related strategic objectives deals with the issue of asset management. The strategy calls for:

> *"Maintaining fleet, facilities, equipment and related support systems in a state of good repair supporting the consistent delivery of a quality service and a safe and healthy work environment."*

The objective is supported by the following related principles:

- providing a quality service is dependent upon having available, when needed, a safe, reliable, clean and comfortable fleet
- maintaining and operating a facility in a safe, clean and efficient manner is critical to supporting the delivery of the service
- maintaining capital assets in state of good repair is vital to the success of a business and to maximizing the return on the investment in such assets
- maintaining a current inventory of capital assets (i.e. giving consideration to such factors as location, age, cost, condition and need) is a critical requirement of an effective asset management program
- critical cost benefit (business case) analysis is required to support decisions regarding retention, retirement and acquisition of capital assets

Meeting the strategic objectives requires the development of an inclusive, effective asset management program. London Transit's program covers three broadly defined and related areas of asset management, namely:

- asset administration (e.g. inventory management, insurance, etc.)
- asset maintenance and servicing
- asset investment (spending) plan (re: retain, retire or acquire new)

Asset Administration

LTC asset administration policies and programs cover the following areas:

- inventory management
- risk management
- protocol/procedures for acquiring and disposing of capital assets
- parts inventory management

Capital Asset Inventory Management

Financial Reporting

Inventory records are maintained and are subject to audit and formal reporting (disclosure) on an annual basis. Capital assets, for inventory tracking and reporting purposes, are classified as follows:

- Land
- Facilities
- Rolling stock
- Fare collection and data systems
- Communications (voice and data) systems
- Passenger amenities (shelters, terminals)
- Shop equipment
- Service and inspectors fleet
- Management information system software and hardware
- Engineering studies

As part of the reporting process, detailed listings of the respective assets, as appropriate, are maintained. An example of the listing for rolling stock is set out in Appendix I. Further, the investment in capital assets

is detailed as a note to the annual audited financial statements. The accumulative investment is listed at historic costs and includes reference to the assets disposed of during the course of the year. Assets acquired during the year are reported as capital expenditure on the Statement of Operations. The related funding is listed under sources of funding on the Statement of Operations.

The following table summarizes the investment (at original cost) in capital assets at December 31, 2005.

Summary of Asset Investment

Description	2005	2004
Land	$ 260,000	$ 260,000
Facilities	16,805,739	16,334,514
Rolling stock	68,512,422	63,758,250
Fare collection and data systems	2,176,577	2,134,854
Communications systems	3,374,827	3,223,148
Passenger amenities	440,575	424,994
Shop equipment	1,387,008	1,378,984
Service and inspectors fleet	200,681	209,673
Information systems hardware/software	549,989	694,052
Engineering studies	98,206	0
	$93,797,024	$88,420,978

There are two major capital asset items excluded from the Commission's inventory records, namely:

- Specialized Transit Rolling Stock

  Specialized transit service vehicles used in the delivery of the service are owned and operated by third parties. The vehicles are provided under the terms of primary and secondary service delivery contracts.

  The capital cost of the specialized fleet, as well as the related servicing and maintenance costs, are reflected in the contracted hourly rate (primary service contract) or trip rate (secondary service contract) and as such are reported as operating expenditures.

- Passenger Amenities and Transit Terminals

  Transit passenger shelters provided under the terms of the current transit advertising contract (currently totalling 303 shelters) are not identified as capital assets owned by London Transit. The shelters are the property of the contractor and only revert to London Transit at the end of the term of the contract, assuming the contract is not renewed. The contractor supplies and installs between 5 and 10 passenger shelters per year and is responsible for maintenance and servicing of all passenger shelters in the system. Decisions on the placement of the passenger shelters are predicated on London Transit's warrant system.

  At December 31, 2005 there were a total of 383 passenger shelter locations in the system. Ownership of the shelters is summarized below.

Description	Total
LTC owned shelters	80
Advertising contract shelters -	
▪ With advertising faces	187
▪ Without advertising faces	105
Other privately owned shelters	11
Total	383

Similar arrangements apply for advertising benches and transit terminals (land, platform areas) where same are owned, constructed and maintained, under the terms of a contract by a third party (i.e. there is no public investment).

With respect to the terminal locations, there are 6 major terminal locations in the system that are operated and maintained under the terms of third party contracts. The locations include 4 major regional malls, the University of Western Ontario and Fanshawe College.

Risk Management

As set out in London Transit's Business Plan, a key principle supporting the corporate mission statement and related six strategic objectives is the acknowledgement that "calculated risk taking is essential if a business is going to succeed". The principle recognizes that "risk" is inherent in all aspects of a business operation. The challenge is how the risk is understood and managed.

In terms of risk management issues associated with this plan, the "asset maintenance and servicing" section of this chapter discusses the risk and outcomes associated with not having appropriate investment and commitment in the maintenance and upgrading of assets. Accordingly this section will deal with the risk associated with safeguarding (insuring) the investment in assets.

Insurance transfers financial risk, in whole or in part, for the loss of a capital asset. The nature and extent of insurance coverage to be purchased is based upon a number of factors, including the level of premiums, the availability of coverage and the willingness to accept part of the risk (i.e. deductible (retention) levels. The insurance issue also applies to the purchase of warranties.

Summary particulars of London Transit's respective property (insurance) coverage are set out below:

Rolling Stock

- type of loss insured: Named perils, includes fire, lightning, smoke, windstorm, hail
- insured amount - agreed upon replacement value (currently full replacement cost for buses up to 10 years of age and approximately 10% replacement cost for buses greater than 10 years of age) noting value listed on a per unit basis primarily based upon age
- includes loss of use coverage – net loss of earnings, maximum of $2.5 million, and on bus fare collection equipment at $1.8 million, $1.8 million for radio/AVL on buses and $180,000 for service fleet
- maximum catastrophic loss per occurrence $50 million – rolling stock
- loss of use (business interruption coverage)
- deductible $10,000 per occurrence

All Other Property

- blanket coverage of $33.3 million, based upon current replacement value
- all risk coverage
- loss of use (business interruption coverage)
- deductible $10,000 per occurrence

Warranties

In terms of warranty protection, London Transit, to the extent they are available and economically viable, will when purchasing new assets (and/or new components or parts as may be applicable) include in the purchase standard and/or extended warranty coverage.

The availability of warranties is seen as critical to maximizing operating and capital investment in assets, particularly where product makeup and design are subject to significant changes given such factors as technology changes and environmental considerations.

Procurement and Disposal Policies and Procedures

The procurement and disposal of capital assets is subject to the policies and procedures as set out in London Transit's Purchasing Policies and Guidelines. The respective policies and guidelines are subject to review and updating from time to time.

The policies and guidelines are predicated on the following principles, noting they are to be applied in a balanced manner, giving due regard to standard public sector purchasing practices and recognizing the principles may be competing in nature:

- to procure the necessary quality and quantity of goods and services in an efficient and effective manner which supports London Transit's business (service) objectives, safeguards Commission interest, and mitigates Commission liability
- to provide for the most open bidding process practicable in the circumstances for the acquisition and disposal of goods and services
- to procure the required goods and services with due regard to the preservation of the natural environment, i.e. due consideration to the purchase of goods that are considered pre and post use environmentally friendly
- to select successful bids subsequent to critical assessment of the respective compliant bids based upon predetermined criteria for the goods and services being acquired. Price is one such criterion, but is not the sole determinant.
- to, where appropriate, given the extent of the investment required, support the need for and the purchase of goods and services based upon a business case assessment
- to support and develop private/public business opportunities where there is shared benefit and risk to each of the parties and where there is net economic advantage versus alternatives, including consideration of timing
- to support and develop cooperative purchasing ventures with other public institutions where such ventures support all or some of the following in a balanced fashion:
    - the timely delivery of goods and services
    - the receipt of a quality product and/or services (both pre and post delivery)
    - mitigates administrative resource requirements
    - provides favourable competitive pricing
    - positive impact on inventory level requirement

The purchasing policies and guidelines set out the necessary process to be followed, including approval requirements relating to the acquisition and disposal of capital assets.

Parts Inventory Management

A well, managed parts inventory program is an essential element of a successful vehicle maintenance system. The parts inventory system currently tracks activity for some 5,000 parts. The current investment in parts inventory is approximately $1.087 million (at December 31, 2005), representing 47% of the annual direct bus maintenance parts and services expenditure.

Over the past 5 years, the investment in parts inventory has grown from 26% of annual direct bus maintenance parts and service expenditure ($743,000) to 47%. The increase in investment in inventory, as evidenced in real dollars and percent relationship to direct bus maintenance parts and services expenditure, is the result of a number of factors, including:

- the increase in the cost of parts re inflation and nature of parts purchased
- the nature and number of parts inventoried given changing bus technology, increase in fleet size (175 buses to 183 buses) and changes in fleet make up (defined by age, size of buses, fuel system and the number of make and model buses in the fleet, etc.)
- changes in how parts consumption is tracked and reported supporting a direct link to vehicle management information system
- decline in direct bus maintenance parts and service expenditure primarily relating to an aggressive fleet replacement program (resulting in a lower fleet age) including the purchase of extended warranties (sharing of risk). Inclusive of inflation, since peaking in 2002, direct bus maintenance parts and service costs have declined by 27% (from a high of $3.2 million to $2.3 million in 2004 and 2005)

The effectiveness of the parts inventory management system is measured in terms of finding the optimum balance between having parts available to effect the timely repair of the fleet, supporting availability of fleet for service and the level of investment in inventory, noting the level of investment impacts the availability of constrained resources for other purposes.

On a going forward basis, efforts to ensure the appropriate balance between parts availability investment level will focus on:

- ensuring there are no “critical stock out” occurrences – i.e. parts availability preventing meeting service
- further development of the system of warranty recovery covering both OEM warranties and vendor part warranties
- further adjustment to minimum/maximum inventory levels, for respective parts, linking the requirements to planned/scheduled vehicle maintenance
- working with parts suppliers to ensure consistency in the quality of supplied parts, timely delivery and competitive pricing
- working with vehicle maintenance department on the standardizing of fleet and/or fleet components
- monitoring and assessing (and changing as appropriate) inventory control process and procedures

Asset Maintenance and Servicing

Vehicle Maintenance Program (Rolling Stock)

LTC operates a “full service” maintenance and service facility. The various maintenance and service programs recognize that rolling stock is in service up to 18 hours a day, 7 days a week, and 52 weeks of the year. This requires the maintenance and servicing function to operate 24 hours a day, 7 days a week, 52 weeks a year.

Throughout the mid to late 1990’s, the fleet maintenance program was subject to significant cuts. The cuts mirrored the decline in ridership and cuts in public investment over the same period as Ontario experienced a recession. Commencing in 2000, the trend was reversed with a renewed commitment and reinvestment in fleet maintenance. The principal goal of the renewed commitment and reinvestment was to improve service reliability and dependability by providing, when needed, a reliable, dependable, safe, clean fleet. The investment was applied in a prioritized manner to:

- management structure
- staffing levels
- training
- facility and equipment upgrades
- use of technology
- work practices and procedures
- fleet replacement and expansion

Rebuilding the fleet maintenance program was challenging given the extent of the cuts that had been absorbed by the system, availability of new capital and operating funds to support the rebuilding, given public funding constraints and the competing demand for funding both internal and external to London Transit. The internal rebuilding initiative was occurring at a time where there was an increasing demand for service as ridership was growing at double digits, resulting in further demands on constrained resources.

Since 2000, significant progress has been made in regard to rolling stock, as evidenced by the following:

- the average age of the fleet has dropped from approximately 12 years (2000) to approximately 9 years (2005)
- in 2000, it was not uncommon to be regularly short 7 or 8 buses for peak service. In 2005, the number was reduced to between 2 and 3 buses, noting over the same period, peak requirements increased from 133 buses to 145 buses
- CNG (Compressed Natural Gas) as percentage of the fleet has declined from 26% to 19%. While the buses are only 7 to 8 years old, maintenance and servicing costs (including the requirement to maintain a CNG fuelling station) run 40% higher than the traditional diesel bus, adversely impacting bus availability, spare fleet requirements and in service reliability.
- the effective utilization of a mobile mechanic position has mitigated the nature and extent of service interruptions relating to bus failure. This includes saving resources in moving the bus to and from service.
- expansion of the number of work areas to facilitate vehicle maintenance operations (see section on facility in this chapter)
- from 2000 to 2005, London Transit maintenance costs, expressed as a percentage of total direct operating costs, declined consistent with stated goals from approximately 23% to approximately 21% of direct operating costs, noting costs peaked at 25% in 2002. The peer group average over the same period averaged 20%.

Goals and Objectives – Vehicle Maintenance Program

The goals for fleet maintenance and servicing over the short to medium term are as follows:

- improve service reliability and dependability measured by:
    - meeting peak service requirements 100% of the time
    - reducing the number of service interruptions per 1,000 hours of service, placing London Transit at the 90% percentile of transit industry in Canada by 2010
- establish and maintain over the next 10 year planning horizon (2006-2015) an average fleet age of no greater than 9 years
- establish by 2012 and maintain thereafter a spare fleet of 20%

- establish by 2010 and maintain thereafter vehicle maintenance cost (expressed as a percent of total direct operating costs per revenue service hour) at or below London Transit's peer group average. The percent is projected to be between 19% and 20% of total direct operating cost investment.
- working smarter and safer while ensuring the right number of employees and right mixture of skills are available when needed
- shifting from a reactive maintenance and servicing program to one focused on preventative maintenance. The shift supports obtaining the lowest maintenance cost over the life of a vehicle while maintaining the vehicle in an acceptable condition maximizing safety and useful life.
- ensure new replacement and expansion bus purchases support a healthier environment (through improved bus technology), are fully accessible in terms of design and features and support customer conveniences, e.g. air conditioning
- maximizing use of the fleet management information system technology to assist with all aspects of planning and scheduling of maintenance work, tracking bus performance and decisions regarding retaining, repairing, and retiring of fleet.

The projected fleet profile for 2006-2015, reflecting the above goals, is set out in Appendix II.

Action Plan – Vehicle Maintenance Programs

In order to meet the goals set out above, the following actions supporting continuous improvement in the vehicle maintenance program will be required:

- continuing with an aggressive fleet replacement program, with the remaining CNG buses to be retired by December 31, 2008
- focusing resources, as appropriate, in terms of what is done, when it is done and by whom, supporting shifting to preventative maintenance programs including meeting preventative work cycles/targets.
- engaging employees in all action steps through the use of focus groups and committees. This provides the opportunity to maximize knowledge and experience supporting more effective utilization of resources and enhancing ownership.
- continuing investment in training, including job specific training, relating to changing fleet technology and safe workplace practices and procedures
- continuing to develop the use of the automated fleet management system to assist with planning and scheduling of vehicle maintenance, tracking work and vehicle performance and to assist with fleet decisions regarding retaining, repairing and retiring of vehicles
- continuing investment in upgrading and maintenance of shop equipment, tooling, and technology.

Facility

London Transit operations are conducted primarily from a single facility owned/located at 450 Highbury Avenue North. There is a rented information/ticket office located in the downtown area, which is not listed as a Commission asset, noting the use of the facility and responsibility for maintaining the facility are set out in the lease agreement.

The approximate 261,500 square foot facility located at 450 Highbury Avenue North consists of the following:

- Bus storage – maximum 200 – 40' buses	131,000 sq. ft.
- Bus maintenance, body and paint shop	61,000 sq. ft.
- Bus servicing – service lanes	10,600 sq. ft.
- Other bus service areas	30,400 sq. ft.
- Administration	28,500 sq. ft.

The largest area of the facility (approximately 200,000 square feet) was constructed in 1950 as a manufacturing operation. In 1972/73 it was purchased by London Transit and converted to a transit garage. The body shop (approximately 4,500 square feet) was constructed in 2002/03 and the two service lanes and storage area (approximately 50,000 square feet) was constructed in 1992/93. In addition, there is a CNG compressor/fuelling station that was constructed in 1993/94. The station has the capacity to fast fill 100 CNG buses per shift. The station is targeted to be closed by the end of 2008 paralleling the retirement of all CNG buses. Investment in the station over the next three year period will focus on continuing to operate the station in a safe and effective manner.

The facility, as currently designed, anticipated a maximum storage capacity of 200 – 40' buses. The effective operating capacity of the facility (considering maintenance, servicing and storage) is between 185 and 190 buses.

With the exceptions noted above, prior to 2000, there was limited capital investment in the facility whether it be to maintain or expand the facility. The extent of the investment was limited to required maintenance in order to keep the facility operational. This left the Commission with a facility (and facility systems) that was largely dated and having space and design challenges that were not complementary to supporting the building of an effective and efficient transit service, and at effective capacity.

Goals and Objectives – Facility

In 2002, paralleling the renewed investment in the fleet, was the renewed investment in the facility and facility systems, and as a result, the facility upgrade program was established. The program is a multi year program, the particulars of which are summarized in Appendix III. The program takes its direction from the following goal:

> "*to establish a facility that supports creating a safer, more efficient and effective workplace, a workplace that supports building a public transit service that is a key component of a sustainable transportation system"*

Given the competing access to constrained fiscal resources (both internal and external to London Transit), the work to be completed under upgrade and expansion programs had to be prioritized, with the priority being determined in a balanced manner, based upon the following equitably applied criteria:

- improving operational efficiency and effectiveness (includes service expansion)
- health and safety
- life cycle maintenance – keeping facility in a state of good repair

Over the first five years of the program, much has been accomplished, as evidenced by the following, with principal focus being on the existing facility:

- expansion of the work (with hoists) area, including the addition of a 3-bay body shop from 16 to 21 or 31%.
- installation of additional yard lighting and a pedestrian walkway to improve traffic and pedestrian traffic flow and minimize the risk of accidents during the twilight hours

- upgrading road access to the facility, and implementation of building access security
- improved air quality in the maintenance and service areas with the installation of additional building exhaust ventilation systems
- installation of a standby generator for the facility to ensure the facility remains fully operational during periods of power disruption (noting in 2003 during the Province-wide blackout London Transit's facility operated at approximately 30% capacity (i.e. principally day light hours only)

Action Plan – Facility

Over the next 5 years, space for both maintenance and storage, the routing of on site traffic and the need to upgrade facility support systems will continue to be pressing issues, particularly as the service is projected to continue to grow over that period by 23 buses.

Two initiatives, to be undertaken in a balanced measured fashion, serve to deal with the issues, they are:

- continued investment in existing facility upgrade initiative as summarized in Appendix III, based upon the aforementioned criteria
- planned facility expansion as referenced in Chapter II dealing with the ridership growth plan for conventional transit services. The initial step in the facility expansion program is the scheduled 2006 study of facility expansion options, i.e. construction of a new central facility, expanding the existing facility or construction of a second satellite facility

Other Capital Assets

The Commission has invested over $93 million in capital assets. Rolling stock and facility account for approximately $85 million or 90% of the investment.

Other major areas of investment include:

- "in service" technology and communication systems - $3.3 million
- electronic fare collection and data systems - $2.2 million
- shop equipment (related to facility - $1.4 million)

As with all capital asset investments, the acquisition, employment, safeguarding and servicing of the above referenced assets are predicated on:

- the nature and extent of investment will be based on building and maintaining an effective, efficient and sustainable transit service as a key component of a sustainable transportation system
- doing the right things at the right time, in the right way, requires the availability of the appropriate supporting capital assets
- all capital assets are to be operated and maintained consistent with supplier guidelines, London Transit standing orders, and health and safety guidelines.

As discussed in Chapter II, the development of both an effective and efficient conventional transit service will increasingly rely on the investment in what is commonly referred to as smart bus technology. The 2006-2015 capital investment program (see Appendix IV) calls for investment of approximately $6.5 million in upgrading/expanding the LTC's automatic vehicle location and communication system and a further $4.0 million in transit priority measures, which in part would include linkage to buses in operation

utilizing technology. Supporting the maximum return on these investments will be the need to ensure the system(s) are appropriately maintained and serviced. This includes establishing and maintaining preventative maintenance programs, establishing critical partnerships with suppliers (software and hardware) and undertaking the necessary staff training.

Capital Investment Plan Summary

Appendix IV sets outs London Transit's capital investment (spending) plan summary for 2006-2015. The 2006 plan has been approved by the Commission and Municipal Council.

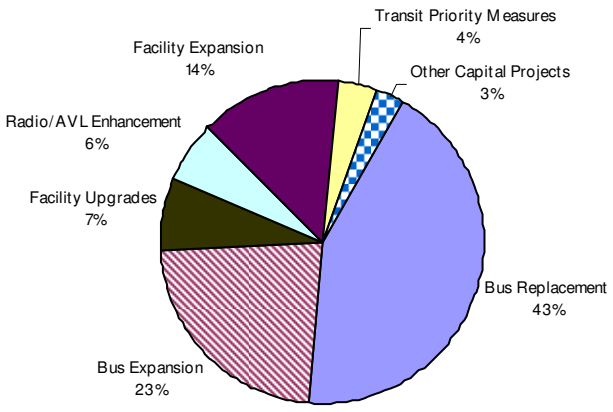
The principal objective of the plan is to define capital investment requirements necessary to build and maintain an effective, efficient and sustainable transit service. The definition of what that service is and how it is to be developed is set out in the ridership growth plan and supporting plans as referenced in Chapters II and III.

In general, in terms of the approximate $105.8 million in planned expenditure, approximately $51 million (or 48%) is for expansion programs supporting ridership and service growth, with the balance being life cycle maintenance investment. Approximately 66% or $69.8 million of the $105.8 million spending plan covers rolling stock covering both replacement buses ($45.5 million) and expansion buses ($24.3 million).

The investment in both replacement and expansion buses is based upon 2006 dollars and the purchase of diesel buses. It is expected that London Transit will move to hybrid technology (diesel/electric) as the technology becomes more market ready for medium size transit systems. The shift is projected to support a healthier environment, lower energy costs and higher capital costs. The summary of capital spending plans are set out in Appendix IV.

A summary of planned areas of expenditure and sources of funding for the period 2006 – 2015 are set out in the graphs below.

Capital Budget – Areas of Expenditure



Capital Budget – Sources of Funding