

то:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE JUNE 19, 2012
FROM:	JOHN BRAAM, P.ENG. ACTING EXECUTIVE DIRECTOR PLANNING, ENVIRONMENTAL AND ENGINEERING SERVICES AND CITY ENGINEER
	LONDON 2030 TRANSPORTATION MASTER PLAN

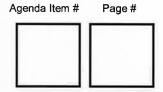
RECOMMENDATION

That, on the recommendation of the Acting Executive Director, Planning, Environmental and Engineering Services and City Engineer, with respect to the London 2030 Transportation Master Plan (the "Plan"):

- a. The Plan **BE ACCEPTED** as the new basis for road planning and capital programs;
- b. Road improvements up to 2030 in the Plan **BE APPROVED** as the basis for updating Development Charge calculations and schedules; it being noted that near term construction project schedules are unchanged and a Development Charges Background Update Study is about to begin;
- c. The Civic Administration **BE DIRECTED** to finalize a short-term Active Transportation and Transportation Demand Management implementation strategy that addresses recommendations in the Plan and focuses on activities for the near term (2013-2015), and outlines planned and proposed activities for the medium term (2016-2020);
- d. Parking recommendations of the Plan **BE REFERRED** to the 2012 Downtown London Parking Study Update; it being noted that the update study is in progress;
- e. Cycling infrastructure recommendations of the Plan **BE REFERRED** to the 2013 Capital Works Budget development; it being noted that there is an existing program for Cycling infrastructure;
- f. The Plan **BE ACCEPTED** as the new basis for transit planning and programs, subject to concurrence of the London Transit Commission; it being noted that the Commission has provided its approval of the plan in principle;
- g. An extension to the Terms of Reference of the LTC Long-Term Growth Report Working Group to include the review, monitoring and making of recommendations to the Municipal Council on Bus Rapid Transit business case development, implementation and transit route restructuring BE APPROVED;
- h. Official Plan policy recommendations of the Plan **BE REFERRED** to the Rethink London process to be incorporated into the City's new Official Plan; it being noted that a Transit Nodes and Corridors Schedule, and policies were added to the Official Plan through OPA 438; and,
- i. Monitoring program recommendations in the Plan **BE REFERRED** to the Civic Administration for consideration in future budget submissions.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- ETC-July 19, 2010; London 2030 Transportation Master Plan, "Smart Moves Update"
- BNEC-March 7, 2011; London 2030 Transportation Master Plan, "Smart Moves Status Update"
- BNEC-March 21, 2011; London 2030 Transportation Master Plan, "Endorsements and Scope Change to Project TS1028"



• <u>Strategic Priorities & Policy Committee December 20, 2011</u>, London 2030 Transportation Master Plan, "Evaluation of Growth and Intensification Factors"

BACKGROUND	
BACKGROUND	

Purpose:

This report seeks the approval of a new mobility transportation plan that covers all modes of how people and commerce move about the City. It includes a transit focused strategy that uses a Bus Rapid Transit network as the backbone for transit service enhancement, more road capacity, and policies to make transportation efficient and green while contributing to a live-able City.

Context:

The Transportation Master Plan has been underway since 2009. Progress on the development of a new Master Plan was last considered on January 10, 2012, when the Municipal Council considered a report with respect to growth and intensification rates. Council resolved that the following actions be taken:

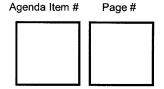
- a) A 20 year, annual population growth rate of 2% be established in the Transportation Master Plan as a Corporate target, with an annual monitoring program and triggers established to adjust to and accelerate transportation infrastructure investments as the City moves from its current growth rate to this targeted growth rate.
- b) A 20-year, annual population growth rate of 1% be utilized as the baseline for establishing transportation investments, recognizing that this schedule of investments will be accelerated as the City of London moves towards the 2% growth target.
- c) Through the upcoming Review process, Official Plan policies will align transportation goals, land use, development intensity, and built form for all nodes and corridors through an Urban Structure Plan.
- d) A minimum 40% intensification target, including targets for nodes and corridors, will be recommended to the Official Plan Review.
- e) the communication from S. Levin, Urban League of London, be referred to staff for consideration.

This report and appended Executive Summary provide a review of the Draft, Final Transportation Master Plan (TMP) based on the above directions from the Municipal Council and from comments received through public consultation conducted in May of this year.

Discussion:

Key objectives of the TMP

- Enhancing quality of life by making the existing transportation systems better
- Provide more choices to travel
- Significantly improve transit service
- Support more walking and cycling
- Reduce overall dependency on the automobile
- Meet the accessibility and mobility needs of all transportation users
- A parking strategy to support transit in Downtown
- Widen main roads needed to support rapid transit & through traffic



How does the Plan relate to the London Strategic Plan Direction?

A Strong Economy – The Plan addresses two key strategies: a significant future investment in infrastructure and also provides a focus on Downtown.

A Green and Growing City – The Plan will specifically allow Londoners to make environmentally friendly choices, including transit and active modes, and recommends responsible growth through a higher intensification target. Development of walkable, connected communities with great public spaces will be achieved through Transit Oriented Development recommendations of the Plan.

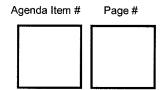
A Sustainable Infrastructure –The Plan represents an investment in strong, safe, modern and efficient infrastructure networks, and will increase the efficiency, capacity and connectivity of roads and transportation system.

Public consultation process

Extensive public consultation was a major component of the study throughout its progress. A series of four public workshops / meetings were held on November 10, 2009, May 19, 2010, January 19, 2011, and May 16, 2012 in order to provide the public with continuous updates on the study process and to encourage and incorporate public feedback into the study to ensure success of the recommended plan.

In addition to the above public workshop meetings, four Advisory Groups workshops were held on October 21, 2009, May 13, 2010, November 23, 2010, and May 9, 2012. The Advisory Groups consisted of the Sustainable Transportation Roundtable Group and the User Vision Group. These groups were made up of local stakeholders and organizations that represent a variety of transportation interests within London, and of community-based groups of London residents who represent the needs of transportation users in the City. A summary of the Key Messages heard at the public workshop meetings are listed below:

Public Workshop Set #	Date	Key Messages
1	October/November 2009	 Develop a potential vision for the plan, share and refine it with us Consider the regional context Set hard targets and deadlines Visible changes need to be made soon The TMP needs to make the case for expanded transit service Focus on creating compact, walkable communities Active transportation needs to be safe, reliable and efficient TMP needs to include an understanding of the full costs of transportation, including environmental and health costs Accessibility for transportation must be viewed comprehensively
2	May 2010	 Scenario 1: Sustaining Existing Levels of Service (10% transit) is safe but is not enough Scenario 2: A More Balanced Approach (15% transit) is a real improvement and might be enough Scenario 3: Transit Focus (20% transit) is progressive and very beneficial, but difficult to pay for Many were in favour of Scenario 3 – Transit Focus



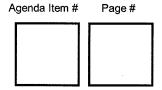
		0	Many emphasized the importance of cost and funding considerations
		0	A major cultural shift is needed to support expanded transit
		0	Move towards achieving Scenarios 2 & 3 as soon as possible
		0	Support for the two proposed rapid transit corridors
		0	Support of revising the growth plan to increase intensification in downtown and other nodes
3	November 2010/January 2011	0	Opportunities for intensification & economic development that could be brought by rapid transit corridors
		0	Marketing and education efforts are the key to overcoming opposition to London's roads to accommodate rapid transit
		0	Support of the directions for active transportation, transportation demand management, and parking strategy
		0	Overall, participants were supportive of the recommendations being made in the Draft TMP and felt it was a community driven plan
		0	Many participants liked the plan and were happy to see that the City is "recognizing the need for improved mass transit and money for mass transit"
4	4 May 2012	0	Happy with increased emphasis on intensification and transit oriented development to reduce "sprawl"
		0	Many said they were very happy with emphasis on active transportation
		0	Create a mechanism to "check in" on the progress of the TMP as it is being implemented
		0	Mixed opinions about road widenings
	1	1	

The above public consultation process provides evidence that this Plan was developed and shared with Londoners over a period of almost three years. The end results are largely supported by the participants and they look forward to seeing the TMP recommendations being implemented. The next section highlights many of the other community outreach, engagement and related research that provided opportunities for input into this Plan.

Community Outreach and Other Related Activities

In addition to the Smart Moves public consultation sessions, the Transportation Master Plan was presented and discussed at several special events including Car Free Days, the Home Show at Western Fair, and neighbourhood events. Also, input was received as part of London's Roundtable on the Environment and the Economy, where a number of questions were asked of participants that directly related to the Transportation Master Plan and how Londoners move around the city.

The Household Travel Survey data was used by the project entitled Integrated Energy Mapping (funders included the Federation of Canadian Municipalities) to show average personal transportation energy use by neighbourhood in London. These data helped inform the Plan, by showing which neighbourhoods use the least to most energy for transportation purposes and will help tailor promotion of transportation choices to these residents. Smart Moves TMP scenarios were also evaluated to determine the impact of these scenarios, along with vehicle fuel efficiency improvements, on London's future energy use and greenhouse gas emissions.



During the development of the Plan, two demonstration projects were under way in London as part of London's *Travel Wise Community – Moving TDM Forward* project. The goal was to introduce or reinforce travel options both for short trips and longer commuting trips. The project received provincial and federal support and ran between 2009 and 2011. Specifically, TravelWise Summerside developed walking, cycling, and carpooling promotion and associated incentives for residents in that neighbourhood. Incentives were tested to determine what brings about individual behaviour change. The project also included research techniques such as household telephone surveys and testing automatic counts of pedestrians and cyclists.

As part of London's *Travel Wise Community – Moving TDM Forward*, a second demonstration project called the Workforce Mobility Project engaged businesses in the Oxford Street East area (primarily between Highbury Avenue and Veterans Memorial Parkway). This project built on the City of London's Business Travel Wise Program. The goal was to engage London businesses in developing workplace-specific transportation options and promoting these options to their employees. The project allowed participating businesses to work through challenges, promote commuter options to employees, and identify opportunities to share cooperatively between neighbouring businesses.

In December 2011, the City of London in conjunction with Share the Road Cycling Coalition, Thames Region Ecological Association, London Police Services, Tourism London, Middlesex London Health Unit and the County of Middlesex held a Bike Summit at the London Convention Centre. The session covered many different aspects of cycling (e.g., safety, tourism, engineering) from a local, regional and provincial level.

Other ongoing activities have continued to provide outreach opportunities to seek direct and indirect feedback on the Plan. These include the London and Area Active & Safe Routes to School Program, Healthy Living Partnership, *in Motion*, and the London Strengthening Neighbourhoods Strategy. All have provided Londoners with opportunities to share their opinions, needs, and ideas for improving available and future transportation options.

Council Directions and Support

Since the Municipal Council approved the appointment of a consultant in April of 2009 to conduct the London 2030 Transportation Master Plan development, staff kept Council up-to-date on progress through the different phases of the study, and followed Council directions in the completion of the Final Draft Plan. A brief summary of Committee/Council meetings and resulting Council directions are listed below:

Committee / Council meeting Date	Key Staff Recommendations / Council Directions
	 The TMP Principles and Goals were approved as the basis for further public consultation in the London 2030 TMP
ETC-July 19, 2010	O An ultimate "Scenario 3" (2% growth / 40% intensification), with interim milestones denoted as "Scenario 1" (1% growth / 20% intensification) and "Scenario 2" (1% growth / 40% intensification. These milestones would be linked to the pace of intensification, prospective transit ridership, and financial affordability were approved as the basis for further public consultation in the London 2030 TMP
	 Staff recommended a number of directions for the TMP be approved at the study's "Phase 2" completion milestone. Key directions include:
DNIEO March 7	 The "Bus Rapid Transit" (BRT) concept be incorporated into the current London 2030 Transportation Master Plan update
BNEC-March 7, 2011	 The 'Transit' goal of establishing two initial BRT routes within the 20 year planning period be further evaluated through Phase 3 "Implementation Phase"
	 Road' improvement needs be identified, in consideration of both increases to overall traffic and the need to include road works

	complementary to establishing a BRT system
	 Active Transportation (AT) modes and Transportation Demand Management (TDM) programs and policies be strengthened
	 Planning policies be strengthened through the pending Official Plan Review process to be more supportive of a "Nodes and Corridors" approach that would create such intensity of development so as to better support a sustainable Rapid Transit environment.
	• Council endorsed the above, but directed staff to assess additional scenarios for the future, including testing the feasibility of rapid transit if London experiences an annual growth rate greater than 1% and if intensification was lower than 40%.
	 Staff requested that the directions for the TMP shown above be endorsed as the basis for completing "Phase 3" of the TMP study, with one additional Key direction:
BNEC-March 21, 2011	 Growth (1 to 2%) and intensification (20 to 40%) alternative rates be evaluated (including operating and capital costs) in Phase 3 of the TMP, with the results reported to the Municipal Council prior to the next Public Meeting
	 As a result of the additional assignment, AECOM asked to increase the engineering fees for the London 2030 TMP by \$77,830 from \$578,099 to \$655,929 (excluding all taxes)
	 Staff recommended that the following directions for the TMP be approved:
	o A 20 year, annual population growth rate of 2% be established in

the Transportation Master Plan as a Corporate target

baseline for establishing transportation investments

A 20-year, annual population growth rate of 1% be utilized as the

Through the upcoming Review process, Official Plan policies will

align transportation goals, land use, development intensity, and built form for all nodes and corridors through an Urban Structure

A minimum 40% intensification target, including targets for nodes and corridors, will be recommended to the Official Plan Review

This report

Agenda Item #

Page #

As shown from the above, Committees and the Municipal Council were kept up-to-date throughout the three phases of the Plan development. The recommended Plan is based on Council directions and support.

Basis for Recommendations

Strategic Priorities

& Policy Committee

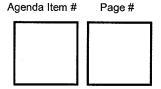
December 20, 2011

Civic Works

Committee, June 19, 2012

The TMP recommends a 12 Point Immediate Action Plan to start implementation:

- 1. Strengthen the TMP Foundations as quickly as possible;
 - i. Revise Growth Strategy
 - ii. Complete Urban Structure Plan
 - iii. Refocus Official Plan with strong supportive policies (ReThink London)
- 2. Develop a communications plan to build community support;



- 3. Develop a proposal for Provincial & Federal funding of Bus Rapid Transit (BRT);
- 4. Pursue revisions to the Development Charges Act for funding of transit, AT and TDM;
- 5. Initiate EA studies for BRT corridors to:
 - i. Finalize route alignments, station locations & terminal requirements
 - ii. Finalize preferred roadway cross-sections and property needs
 - iii. Assess transit vehicle requirements
 - iv. Refine cost estimates
- 6. Together with EA studies, conduct corridor planning studies to develop guidelines for Transit Oriented Development;
- 7. Refine and Implement a Short Term Transit Improvement Plan for BRT Corridors;
- 8. Undertake a Transit Route Re-structuring Study;
- 9. Implement Priority Cycling Routes;
- 10. Finalize a Downtown Parking Strategy;
- 11. Identify Opportunities for BRT-related Park-n-Ride; and
- 12. Finalize and Implement a short-term TDM Plan

The recommendations of this report consolidate these action items into manageable bundles based on responsibility (City or LTC), budget and/or process to implement.

Recommendation a) provides for general acceptance of the Plan as it relates to projects and programs managed by the City.

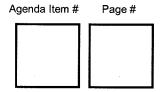
Recommendation b) directs the recommended road corridor improvements for all purposes to a Development Charges Background Study, and subsequent new By-law. Incorporating the right-of-way work of the Plan in the DC Background Study will allow for growth to pay for the growth part of the plan and a schedule to be set. Near term projects are not affected by this.

Recommendation c) allows for the finalization of a complementary AT & TDM plan that is based on the literature and empirical research already undertaken, input from the public consultation process and outreach activities over the last couple of years, and addresses the recommendations in the Plan. The AT & TDM plan will identify at a more detailed level actions that need to be taken in the near term (2013-2015) noting that these activities will fully recognize the importance of the growing community-based and collaborative actions, outline the planned and proposed activities for the medium term (2016-2020); and lay the foundation for the longer term (2021-2030).

<u>Recommendation d</u>) directs Parking recommendations of the Plan to an in-progress update study such that the Municipal Council can receive, in the near future, a wholesome view of the existing state of parking now and considerations for the future. The update study presently covers current parking utilization, future parking requirements and future parking management options.

<u>Recommendation e)</u> directs Active Transportation infrastructure recommendations of the Plan, including specific bicycle corridor development, to the Capital Budget. Staff will merge existing capital programs with the Plan recommendations as part of the next Capital Works Budget submission.

Recommendation f) provides for general acceptance of the plan as it relates to projects and programs managed by the London Transit Commission. It is noted that the Commission has



provided its approval of the Plan in principle. The Commission has provided its approval of the plan in principle.

Recommendation g) provides for a special committee of the Municipal Council to spearhead the Plan recommended transformation of transit service, including Rapid Transit. Such a committee was successfully used to advance long term planning of transit service with joint membership from the Municipal Council and London Transit Commission. The existing Terms of Reference for the LTC Long-Term Growth Report Working Group are included in Appendix 'D' If this approach is approved, staff will prepare Terms of Reference revisions that would articulate the new committee mandate.

Recommendation h) directs a number of Official Plan policy change recommendations generated by the Plan to Rethink London, such that the changes receive a broader consideration. The Plan recommends new policy directions on a number of matters:

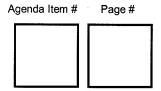
- the introduction of a nodes and corridors urban structure plan that identifies the specific nodes and corridors, downtown and destinations, with general policies with respect to the ambitions for each such corridor and location;
- growth management principles that establish the overall policy basis for specific intensification targets such as the encouragement of transit-supportive development, the efficient use of urban space, the allocation of growth between the urbanized area and the fringe areas and the concentration of development around nodes and corridors;
- the establishment of specific intensification targets for urbanized areas, the Central Area and specific nodes and corridors, and major destinations;
- the review of the need for TMP updates on a five year basis in conjunction with the results of a new comprehensive transportation monitoring program;
- use of the upper limit of Level of Service E applied on a corridor basis as the justification for roadway capacity improvements;
- the classification of individual major roads and corridors with respect to their transportation function and urban design character;
- recognition that the design of a road will set the quality of pedestrian environment and residential amenity and will have a major impact on whether an urban form of infill and intensification, as desired at important nodes and corridors, is viable;
- the recognition that each node and corridor has a distinct character and that secondary planning policies may be necessary to provide detailed guidance;
- the establishment of a positive policy framework for transit supportive development in terms of the density, scale, function and design of such development;
- the establishment of a positive policy framework for the creation of pedestrian and bicycle friendly urban design and development policies.

Recommendation i) directs staff to consider methods and resources with London Transit to meet the ongoing monitoring requirements of the Plan. Measures of changes to transportation mode shares and vehicle occupancies are proposed to track growth in travel, which in turn provides performance measures for investments. The estimated average annual cost for monitoring the Plan is \$145,000.

Funding for the Plan

Transportation is a valuable, though expensive service for Londoners. However, there are sources of funding other than City taxes that are available.

The Plan provides estimates for new infrastructure over the next 20 years totaling \$1.167B. The largest part, \$745M, is for major road improvements that qualify for Development Charges funding. By comparison, the present DC rates are based on \$655M in major road improvement projects with approximately 22% funded by the taxpayer (non-growth, a portion of institutional



and all industrial growth). Minor road improvements associated with growth will be determined through the Development Charges Background Study Update.

The effect of the proposed Plan on total DC rates cannot be accurately predicted without the substantial work to be undertaken in the DC rate study. However, based on the gross cost estimates, and taking into account other levels of government funding, it appears as though the increase in the Road DC rate will be not be insignificant. The effects have been roughly estimated at between \$2,000 and \$3,000/single family unit (as compared to an overall DC rate of approximately \$23,000 per single family unit).

The second largest component is \$378M for transit capital investment, of which \$340M is for the proposed BRT network. The experience of other municipalities is that Federal and Provincial governments invest in municipal rapid transit systems such that the municipal portion is 1/3. Preparation of a business case needs to be supported with policy changes that meet the objectives of other levels of government. This makes the recommendations of this report on business case development and Official Plan policy change referral to ReThink London critical elements in funding the plan.

Operating the London transportation system is also expected to rise under the Plan. Annual road operating costs are projected to rise from \$32M to \$36M over the next 20 years (in 2010 dollars). The 16% increase is attributed to more road surface to maintain. Annual transit operating costs (net of fare revenues) are projected to increase from \$21M to \$32M (in 2010 dollars) due to a 50% larger fleet.

Next steps

The recommendations of this report provide a variety of next steps at various stages that lead to implementation (immediate implementation through existing budgets; detailed "what/how to do" plan development; confirmation of policy changes). However, they all work toward the common goal of improving the mobility of Londoners and are intended to be acted on simultaniously.

Of particular importance is the creation of a guiding force behind the transformation of transit service – a recommendation to continue using a combined committee of the Municipal Council and London Transit Commission for both administrations to work through.

Summary

A new mobility Transportation Master Plan has been prepared over the last few years with significant public input and support. It covers directions and improvements to all modes of transportation.

A wholesome description of the Plan is provided in Appendix 'A' -- Smart Moves -- Executive Summary

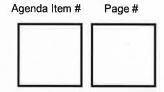
The Municipal Council has been involved in development of the Plan, confirming or setting directions at each of the three Plan development stages.

The Transportation Master Plan addresses numerous strategies of the City Strategic Plan under:

- A Strong Economy
- A Green and Growing City
- A Sustainable Infrastructure

The Plan's 12 step Action Plan is addressed within this staff report recommendations, including items critical to funding the Plan and the development of a special committee of the Municipal Council and London Transit Commission to guide the transformation of transit service.

Funding for the Plan is from many sources. Immediate actions are recommended on two of the largest sources: Development Charges and Provincial/Federal Governments.



Acknowledgements:

The preparation of the Smart Moves Plan was managed by an internal/external steering committee, the effort and dedication of which are acknowledged with thanks:

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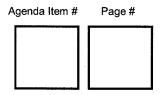
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Attach:

Appendix 'A' - Smart Moves - Executive Summary

c.c.

- J. Fleming, City Planner
- L. Ducharme GM, LTC
- J. Stanford, Director Environment, Fleet & Solid Waste



Appendix 'A' Smart Moves – Executive Summary



Executive Summary

1. The New Mobility TMP

This TMP study began in the Fall of 2009 with the mandate of updating the 2004 TMP and specifically assessing the viability of incorporating a rapid transit system consistent with the conclusions of the 2006 Transit Ridership Growth Strategy.

An initial study component was the conduct of a comprehensive household travel survey which confirmed that today in London, the main transportation mode is the private automobile which accounts for 73.5% of travel in the weekday a.m. and p.m. peak periods. Public transit carries about 12.5% and Active Transportation modes represent a further 9%, with other modes such as taxi, school bus and motorcycle making up the remaining 5%.

Throughout the study, Council has consistently supported a vision with a transit focus and a substantial part of the study has analyzed various growth/transportation scenarios in order to determine what needs to be done from both land use and transportation perspectives to achieve higher transit modal shares of 15% and 20% associated with Scenarios 2 and 3.

In its most recent deliberations on the TMP, Council further supported the following:

- A growth rate for the City of 2% be the corporate target;
- A growth rate of 1% be utilized as a more conservative baseline for the TMP;
- Transportation goals, land use, development intensification and urban form be aligned; and
- A minimum 40% intensification target be adopted for the coming Official Plan review.

In essence Council directed the TMP team to consider both 40% intensification (transit supportive) Scenarios 2 and 3 in developing this TMP: Scenario 2 would provide the 1% growth rate baseline forecasts (which from a BRT ridership perspective would be considered conservative), while Scenario 3 with its higher 2% growth rate would represent the corporate target to be pursued (and if achieved, might offer the possibility of upgrading parts of the BRT network to Light Rail Transit (LRT).











This somewhat unique TMP approach provides important flexibility in Plan implementation. Should higher rates of growth be achieved, needed additional infrastructure improvements will have been identified, costed and specifically linked to that greater growth. To the extent that this incremental growth is transit-oriented, it can increase the effectiveness of initial BRT investments, boost BRT and overall transit system ridership, and minimize the cost of additional infrastructure improvements.

The key goal of this new TMP is to provide more legitimate travel choices for those who live, work and play in London. To achieve that goal, significant improvements in transit service will be required as well as greater support for walking, cycling and carpooling. If more legitimate travel choices are available, Londoners will be more likely to change their travel patterns, resulting in overall reduced dependency upon the automobile. The following weekday peak period modal share targets have been set to provide an overall framework for this "new mobility" TMP:

- There are five main elements of this new TMP, each of which will be discussed in turn. Each of these elements supports a strong and healthy Downtown, which will remain the City's primary

economic engine and pre-eminent Centre in the emerging Centres and Corridors urban structure.

- Taking Transit to the Next Level
- Rethinking Growth to Support the TMP
- More Actively Managing Transportation Demand
- Greater Investment in Cycling and Walking Infrastructure
- More Strategic Program of Road Network Improvements

This Executive Summary concludes with brief sections on TMP Implementation and the Collaborative Approach to City Building.

2. Taking Transit to the Next Level

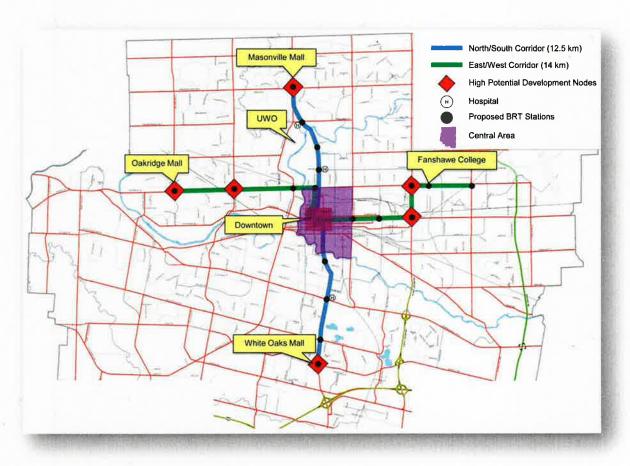
At the heart of this "new mobility" TMP is a rapid transit network (see map on following page) consisting of a north-south line in the Richmond/Wellington corridor and an east-west line in the Oxford/Dundas corridor, both serving the Downtown and broader central area. A bus based system can be supported with 1% annual growth (the recent trend) if 40% of the growth is directed to the Downtown and these transit corridors (Scenario 2). With stronger overall growth or greater than 40% intensification, the resultant higher ridership might justify parts of the network being upgraded from BRT to LRT. Rapid transit in the recommended corridors would best build upon the existing ridership base.







Figure ES-1. Recommended Bus Rapid Transit (BRT) Network



Many other transit improvements will also be required to boost ridership and transit modal share. These include more frequent service on all main routes, re-structured routes to feed the BRT (and pre-BRT) services, and generally making transit easier for riders through broader use of technology, more fare options (including Smart Cards) and expanded use of real time information.

To achieve this new mobility TMP, a significant transformation is required in how Londoners travel. Changing travel behaviour takes time – it will not happen overnight! So the City needs to start the process right-away. The best way to start is with early implementation of transit improvements, as with noticeable improvements residents and workers will be more likely to change their habits. Undoubtedly, the transit improvement with the most potential to change travel behaviour is the proposed BRT network, so efforts should be focused to have a functional network in place as quickly as possible. Recognizing that a number of road widenings will be needed to provide exclusive transit lanes, a target date of 2020 (while optimistic) is appropriate for having both lines in place with close to 100% levels of transit priority.







One of the major features of a bus based rapid transit system is its ability for phased implementation. While road widenings are being planned, designed and constructed, service improvements and priority treatments such a signal priority measures and Q-jump lanes can be put in place to speed up service and build ridership. In this regard, it is recommended that new semi-express service (similar to Waterloo Region's I Express) be put in place in both corridors within two years and that this service be steadily upgraded year by year. A preliminary analysis of both routes has identified 25 intersections where Q-jump lanes could be quickly implemented. This will involve some refocusing of capital and operating plans, both at London Transit and the City.

3. Rethinking Growth to Support the TMP

Recognizing that a goal of the transportation master plan is to provide convenient alternatives to single car occupancy movement, its success will depend on assisting such behaviour changes by fostering an urban structure and form that encourages the use of transit, walking and cycling. The city must be prepared to help people find attractive alternatives to automobile use.

That goal suggests that London must steadily encourage the emergence of a more transit-, pedestrian- and bike-friendly urban form. New growth, and other major city initiatives, must be encouraged and directed towards those locations in which they can best contribute to this mobility-driven urban structure. Analysis of Scenario 1, with its low 22% intensification rate and its focus of growth in the periphery of the City, has clearly been shown not to be a growth strategy supportive of a transit vision.

Many cities in Ontario, and around the world, are recognizing that traditional patterns of urban development are not sustainable in terms of their municipal operating costs, personal movement expenses and climate change implications. In 2006 the Ontario Government introduced comprehensive legislation in its *Places to Grow Act* to direct the pattern of urban development in the Greater Golden Horseshoe area in southern Ontario centred on the Toronto-region. This legislation and policy direction, now substantially implemented by area municipalities, sets an important precedent for London and other major Ontario cities not covered by the Act. Its primary focus is to set clear urban boundaries and targets for intensification within the existing urban area and new settlement areas. Its secondary purpose was to provide a sustainable distribution of people, jobs and destinations to support a more developed transit system.

While London must develop its own distinct growth management strategy, Places to Grow and other precedents for growth management suggest some effective strategies. Simply put they can be summarised as follows:

- Place clear limitations on urban expansion;
- Direct as much new growth as possible to locations inside the existing built area of the city;



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- Encourage growth to locations where its supports transit ridership, walking and biking;
- Locate key destinations in places where they can be served by transit; and
- Improve the quality of the built urban environment to establish attractive alternatives to city-edge living and working.

These strategic directions have structured this element of the transportation master plan and their subsequent implementation through development of policies and initiatives for the new Official Plan.

The growth management strategies identified above will be based on an Urban Structure Plan that will establish the overall intentions for the future form and function of the urban area, and identify the specific locations where growth is to be encouraged. Such an urban structure plan typically sets out both the major growth points, the 'nodes' – such as the Downtown, major intersections, major institutions and development opportunities; and the 'corridors' – the major streets that link the nodes, that have potential for rapid transit development and connect to other major elements of the City's transportation infrastructure, such as airports, transit hubs and regional expressways.

The City Planning and Transportation Divisions have been active partners in the preparation of this TMP. In its recent draft publication, *Building the Place to Be – City of London Urban Design Guidelines*, the City Planning Department prepared a 'nodes and corridors' urban structure plan for London. This plan, which reflects the parallel emerging directions of the Transportation Master Plan, identifies north/south and east/west rapid transit corridors and identifies key nodes such as the downtown, key intersections and the major educational and hospital institutions, as well as the airport and regional transportation facilities. It also acknowledges that developing these nodes will require a focus on linking development to transit and walking/cycling infrastructure.

This essential urban structure plan has been used in the deployment of the specific population and employment growth projections used to test the viability of rapid transit systems. Specifically, Scenarios 2 and 3 were examined in detail. Key conclusions were as follows:

- With a growth rate of 1%, London can only support Rapid Transit (RT) if the City's growth strategy directs more people and jobs to locations along the proposed RT routes;
- 2. If development can be intensified by about 40% and directed to two key corridors, then London would have the ridership needed to support two RT routes: one north-south and one east-west.
- 3. Increasing the use of public transit to 20% will also require other significant system-wide improvements, along with strong supportive policies and programs in the areas of Active Transportation (AT), Transportation Demand Management (TDM) and parking.









The Richmond/Wellington and Oxford/Dundas rapid transit corridors present design and development opportunities and challenges in their overall function and detailed implementation. Preliminary assessments of the corridors have been made and examples of typical transit oriented development (TOD) in each of the corridors prepared to demonstrate the viability of the corridors to accommodate significant growth. More detailed planning studies, however, will be needed in co-ordination with environmental assessments.

4. More Actively Managing Transportation Demand

As the City of London continues to grow and the importance of balancing economic, social and environmental needs is increasingly recognized, a more sustainable approach to accommodate growth and mobility has emerged. Many jurisdictions in Canada and across the world are moving away from traditional means of addressing transportation needs (e.g., investing in a new roadway infrastructure) and are instead looking to ways to reduce and manage vehicular transportation demand.

TDM incorporates a range of policies, programs and mobility services that influence whether, why, when, where and how people travel. TDM can include the following:

Education and Outreach:	raising awareness of travel issues and the benefits of sustainable transportation and changing attitudes about transportation options.
Incentives and Disincentives:	offering incentives within workplaces, schools and households to encourage sustainable travel, or introducing pricing initiatives for other modes of travel.
Transportation Supply:	improving local transit services or pedestrian and cycling infrastructure.
Supportive Land Use Policies:	.prioritizing Transit Oriented Development (TOD) or new parking policies.

Strengthening TDM efforts is another important plank in the process of transforming travel in London. The following five broad directions are proposed as a focus for City efforts:

- Strengthen policy support
- Promote sustainable travel for all time periods
- Target commuter travel
- Target school travel
- Increase investment in AT infrastructure









Within these areas, twenty specific initiatives are proposed for further development and implementation in the short term. Among these include developing a policy focus on "complete streets" and people (not just vehicles) movement, strengthening partnerships with the healthcare sector (members of which should be strong advocates of increased Active Transportation), intensifying the TDM program for City employees so as to set a strong example for other large employers, expanding the Active and Safe Routes to School (ASRTS) program to a city-wide scale, working with school boards to develop secondary school programs, and accelerating the implementation of on-street cycling routes and secure bicycle parking facilities.

The supply and pricing of parking are also important policy tools at the City's disposal, which can influence modal choice decisions and therefore aid in the transformation process. The City is currently working on short and long-term parking strategies for the Downtown and these should include pricing structures that support transit. Later, with intensification of development in the transit corridors and at specific nodes, Downtown type supply and pricing strategies should be considered for these areas. Another important parking initiative should be the implementation of park-and-ride facilities at the extremities of the proposed BRT lines. In other jurisdictions, this has proven to be an effective way of boosting transit ridership and reducing automobile travel, particularly for longer distance and downtown-oriented trips.

5. Greater Investment in Cycling and Walking Infrastructure

Active Transportation is closely linked with TDM and includes any form of human-powered transportation but, in the context of this TMP, focuses on walking and cycling. Active Transportation has substantial benefits in the following areas:

- Improved personal health and quality of life;
- Reduced travel costs;
- Availability to a broad range of individuals;
- Reliability of travel time;
- Vibrancy and security of communities; and
- Minimal environmental impacts.

More Active Transportation infrastructure will be needed to support growth in intensification areas and improve access to transit, particularly the proposed new BRT services. Specific initiatives include completing gaps in the sidewalk network, providing a more continuous and extensive network of on-street bike routes, and providing secure bike parking facilities at all key public destinations and employment concentrations.

London has a vast network of trails and off-street bike paths focused on the Thames Valley system. This network is a key contributor to the higher quality of life enjoyed by City residents. However, London's current bike lane network is relatively under-developed and discontinuous. Of the twenty identified TDM initiatives, the one considered most important to the transformation process is the upgrading of on-street cycling routes. In this regard, four priority on-street cycling



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routes have been identified (see Figure ES-2) for implementation within 3 years using bike lanes wherever possible. Two of the routes are north-south and two are east-west with one tying into the Thames Valley Parkway path west of the downtown. All serve the broader central area, key City destinations and the proposed intensification areas. To increase usage, the routes need a greater degree of recognition and thus they should be named, very well marked on the pavement, and also well signed.



Figure ES-2. Priority On-Street Bike Routes









6. More Strategic Program of Road Network Improvements

Despite the greater emphasis of this TMP on transit, Active Transportation, TDM and parking, many road improvements will still be required. Our approach, however, to defining the need for road network improvements has become more strategic (and selective) than in past TMP efforts for London. First of all, the more strategic approach reflects a reduced modal share for the automobile by 2030, consistent with our expectation that transit and AT modal shares will increase significantly from current levels. Closely related to this is the need for an increased percentage of capital and operating funds for non-auto modes – transit and walking/cycling. Secondly, roadway improvement needs have been based on a corridor level analysis, as opposed to the more traditional link by link analysis. This means, for example, that where two adjacent roadway links both show capacity deficiencies, only one improvement may be necessary to resolve the corridor deficiency.

Our approach explicitly recognizes that road improvements will be required for different purposes. In this regard, a number of widenings are required to support the BRT initiative. These are shown in green in Figure ES-3 and include Richmond Street north of the river, Oxford Street West of Richmond Street, most of Wellington Road south of Horton Street and parts of Dundas Street, Highbury Avenue and Oxford Street East. These widenings to support the BRT initiatives should be top priorities. Other road improvements labelled "Optimization/Transit Priority (shown in purple) reflect highly constrained urban rights-of-way where physical improvements will be limited and focused on transit priority measures, such as high occupancy vehicle lanes and Q-jump lanes at intersections.

Roadway extensions and widenings to support baseline growth are shown in red (future 4 lane roadways) and blue (future 6 lane roadways) in Figure ES-3. The majority of these are in more suburban locations where transit is less able to compete with the automobile.

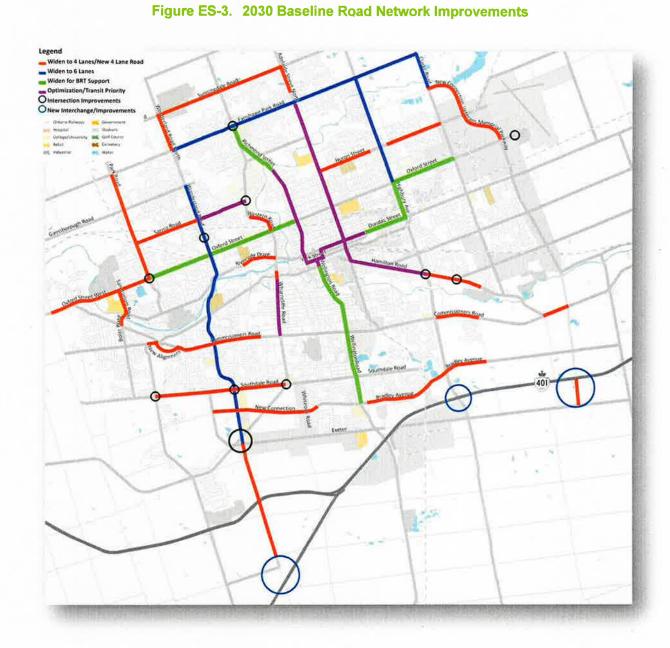
Sensitivity analysis has also been undertaken to define what further road network improvements would be needed to support a higher rate of growth (2% annually vs. 1%). Careful monitoring and review through subsequent TMP updates will be required to determine if and when these additional road improvements would be required.

Another "strategic" aspect relates to supporting the concept of "complete streets". This concept involves more fairly apportioned road rights-of-way to all users (including pedestrians and cyclists) so as to maximize the person-carrying capability of the roadway (i.e., people movement rather than vehicle movement). This concept should be the accepted policy approach to pursuing all roadway improvements within the City.















7. TMP Implementation

Capital costs associated with the baseline 2030 TMP are summarized in the table below:

Municipal Roads	\$745 M
Municipal Transit	\$378 M
AT & Parking	\$20 + 24 M
Total Transportation Capital	\$1,167 M

These capital costs are gross and do not include contributions from development charges and expected one-third subsidies from both the Federal and Provincial governments for BRT related costs. Also, increased resources should be set aside for intersection improvements and minor road widenings (estimated at \$60 M). Thus, the total transportation capital cost associated with the new mobility TMP is over \$1.2 B. Furthermore, sufficient City funding should be set aside for keeping all transportation assets in a state of good repair.

Of the \$378 M municipal transit capital, about \$340 M is estimated to be BRT related and therefore should qualify for up to 1/3 contributions from senior levels of government. However, both Federal and Provincial governments are currently under significant budget pressures and therefore it will be necessary to develop a compelling business case to secure their support.

Projected 2030 Annual Operating and Maintenance (O&M) costs (in 2010 dollars) associated with the baseline TMP are summarized below:

Total	\$75.35 M
AT, TDM & Parking	\$7.25 M
Transit	\$31.8 M
Roads	\$36.3 M

The transit figure is net of fare box revenue based on current rates of recovery.

The Official Plan is one of the basic mechanisms for implementing the recommendations of the Transportation Master Plan. The Official Plan contains City Council's objectives and policies to guide the short-term and long-term physical development of all lands within the boundary of the municipality. It provides direction for the allocation of land use, provision of municipal services and facilities, and preparation of regulatory by-laws to control the development and use of land.







To address the set of city-wide land use and transportation issues discussed above, policies with respect to the following matters should be incorporated into the new Official Plan.

- the introduction of a nodes and corridors urban structure plan that identifies the specific nodes and corridors, downtown and destinations, with general policies with respect to the ambitions for each such corridor and location;
- growth management principles that establish the overall policy basis for specific intensification targets such as the encouragement of transit-supportive development, the efficient use of urban space, the allocation of growth between the urbanized area and the fringe areas and the concentration of development around nodes and corridors;
- the establishment of specific intensification targets for urbanized areas, the Central Area and specific nodes and corridors, and major destinations;
- the review of the need for TMP updates on a five year basis in conjunction with the results of a new comprehensive transportation monitoring program;
- use of the upper limit of Level of Service E applied on a corridor basis as the justification for roadway capacity improvements;
- the classification of individual major roads and corridors with respect to their transportation function and urban design character;
- recognition that the design of a road will set the quality of pedestrian environment and residential amenity and will have a major impact on whether an urban form of infill and intensification, as desired at important nodes and corridors, is viable;
- the recognition that each node and corridor has a distinct character and that secondary planning policies may be necessary to provide detailed guidance;
- the establishment of a positive policy framework for transit supportive development in terms of the density, scale, function and design of such development;
- the establishment of a positive policy framework for the creation of pedestrian and bicycle friendly urban design and development policies.

Specific policies have been proposed under the headings of Growth Management, Integrated Transportation Planning, Public Transit, Transit Oriented Development, Complete Streets, Supporting Active Transportation, TDM and Parking. These should be considered for refinement during the preparation of the new Official Plan.

The success of this TMP will depend upon achieving a major transformation in how Londoners travel. Since changing travel behaviour will take considerable time, it will be necessary to monitor key travel indicators on a continuous basis to ensure that adequate progress is being made or, if it is not, to take appropriate actions to get back on track. A transportation monitoring program has therefore been developed to assist the City in this regard. This will allow staff to



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expand on its annual progress report to Council. One of the key indicators to be measured is travel modal share and, as noted previously, targets have been set for transit, Active Transportation and auto modes as part of this TMP. The recommended program includes conduct of household travel surveys similar to the 2009/10 survey conducted as part of this TMP), counts of person travel by all modes across pre-defined screenlines and cordons, travel time surveys by mode for pre-defined typical trips, and attitude surveys of transit riders. Reports on the monitoring program will serve as key inputs to future TMP updates and the data will allow the City's transportation model to be recalibrated to current conditions on a regular basis.

Finally, there is much work to be done over the next couple of years to move forward aggressively on the BRT initiative, to approach senior levels of government as prospective funding partners and address their requirements, and to more generally begin the lengthy process to transform transportation in London. To kick-start TMP implementation, an Immediate Action Plan for Council has been developed – comprised of the 12 points listed in Table ES-1 below. City staff will be elaborating on these items in their covering report to Council.

Table ES-1 Immediate Action Plan for Council_

	Action Plan Item	Timing	Rationale
1.	Cement TMP Foundations	2012 – 2013	A revised Growth Strategy, a Centres and Corridors Urban Structure Plan, a Downtown Master Plan, and a New Official Plan are all cornerstones for the TMP. All four initiatives are well underway but need to be completed expeditiously.
2.	Develop Proposal for Provincial and Federal Funding of BRT	2012	A compelling business case will need to be developed to secure funding commitments, so that the net cost to Londoners is affordable.
3.	Pursue Revisions to Development Charges Act	2012	The ability to secure additional development charges for transit, Active Transportation and TDM initiatives will also help to minimize costs to London taxpayers.
4.	Initiate EA Studies for BRT Corridors	2012 – 2013	Securing environmental approvals for the BRT network is the next step in the implementation process. Through EA studies route alignments, station locations, terminal requirements, roadway configurations and property needs will be finalized. Transit vehicle requirements will also be determined and cost estimates refined.
5.	Initiate Corridor Land Use Planning Studies	2012 – 2013	In coordination with the EA studies, corridor land use planning studies will identify specific opportunities and constraints for intensification and develop guidelines for Transit-Oriented Development (TOD).
6.	Refine and Implement Short-term Transit Improvement Plan	2012 – 2014	A short-term transit plan for the BRT corridors is needed so that service improvements can be realized quickly in order to start building ridership and increasing transit modal share.
7.	Undertake Transit Route Restructuring Study	2014	The future BRT network will become the backbone of the London Transit network. A route restructuring study will be needed to ensure that the effectiveness of the BRT network is maximized from a total London Transit system perspective.









Action Plan Item		Timing	Rationale	
8.	Implement On-Street Priority Cycling Routes	2013 – 2014	To bring London's on-street cycling routes up to par with its off-street rail network, four continuous on-street cycling routes have been identified for early implementation.	
9.	Finalize a Downtown Parking Strategy	2014	Short and long-term parking strategies for the Downtown should incorporate pricing structures to support transit.	
10.	Identify Opportunities for Park-and- Ride Facilities	2013	Park-and-Ride facilities at the extremities of the BRT lines will boost BRT ridership and reduce auto usage. Due to the need for property acquisition or negotiation of shared parking use with others such as shopping mall owners additional time will be required. A Park-and-Ride plan in the near term will ensure that such facilities can be put in place as quickly as possible.	
11.	Finalize and Implement a Short-term TDM Plan	2012 - 2014	Various initiatives have been recommended for short-term implementation. These need to be detailed in the context of existing programs and consolidated into a cohesive program.	
12.	Develop a Communications Plan to Build Community Support	2012	A level of momentum has been created through the TMP process, but this needs to be continued and expanded to ensure TMP success.	

8. A Collaborative Approach to City Building

Engaging and consulting the public and key stakeholders has been a critical part of the TMP work. During the course of the TMP study, four sets of meetings have been held. In each case, the initial workshops were held with the User Vision Group and the Sustainable Transportation Roundtable and those were followed up with full public workshops. Overall, these meetings have been very supportive of the TMP work and the team's willingness to listen to and address comments and concerns. At the final meetings held in May 2012, there was strong support for the draft TMP presented.

Another positive aspect of the TMP effort has been the inter-disciplinary approach taken by the City with the ongoing coordinated involvement of City Planning and London Transit under the leadership of the Engineering Department. This has ensured that all technical perspectives have been considered and that all on-going City and London Transit initiatives have both contributed to the TMP and been informed by the work of the TMP.

As the TMP moves forward to the implementation stage, this collaborative process needs to be continued. It will be particularly important for the City and London Transit to build awareness and further support for the "New Mobility" TMP and to brand the BRT initiative. As the TMP implementation process unfolds, the City should exploit all opportunities to convey the TMP new mobility themes. One such opportunity would be the recently launched Rethink London process. Marketing the Vision to build community support should facilitate the environmental and funding approval processes and demonstrate a strong local commitment to critical funding partners – the senior levels of government.



