

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JULY 18, 2016
FROM:	JOHN BRAAM, P.ENG. MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	TRANSPORTATION NETWORK FORECAST MODEL UPDATE APPOINTMENT OF CONSULTING ENGINEER

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the London Transportation Network Forecast Model Update:

- (a) IBI Group, **BE APPOINTED** Consulting Engineers for the said project, in the amount of \$378,597.50 (excluding H.S.T.), in accordance with Section 15.2 (d) of the Procurement of Goods and Services Policy;
- (b) the financing for this project **BE APPROVED** in accordance with the Sources of Financing Report attached hereto as Appendix A;
- (c) the Civic Administration **BE AUTHORIZED** to undertake all the administrative acts that are necessary in connection with this project;
- (d) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with the Consultant for the work; and,
- (e) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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Civic Works Committee – June 19, 2012 – London 2030 Transportation Master Plan

2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus area of *Building a Sustainable City* by improving transportation mobility through the provision of convenient and connected mobility choices for all users planned through the update of the London Transportation Network Forecast Model.

BACKGROUND

Purpose

This report seeks the approval of the Municipal Council to appoint an engineering consultant to proceed with the update of the London Transportation Network Forecast Model and the related Household Travel Survey.

Context

In 2012, Council approved the City's Smart Moves Transportation Master Plan (TMP). As part of the TMP, the City's computerized travel forecasting model (TransCAD) was upgraded to become the first City's multimodal integrated land use and transportation model including transit networks. This model is used to identify transportation network capacity improvements required to support growth, manage the infrastructure gap and meet the objectives of the TMP and the London Plan.

The TMP also developed a transportation monitoring program in order to monitor future changes in travel behavior and growth, policy direction, economic conditions and other associated considerations and modify the travel forecast model accordingly. Updating the travel forecast model was one of the recommendations of the monitoring program and will serve as a key input to future TMP updates. Monitoring is key to understand how the transportation network is performing, if travel characteristics are changing and whether TMP and OP objectives are being achieved.

An update to the 2014 Transportation Development Charges Background Study (DC) is scheduled to start in 2017. The outputs of this Background Study will be used by the City to calculate the portion of development charge rates attributable to transportation works to support growth in the City of London. It is important that the updated transportation model be ready for the scheduled DC work in 2017.

DISCUSSION

Project Description

The main intent of the assignment is to update/develop a new comprehensive, integrated and balanced transportation travel forecast model. It is planned to migrate from TransCAD to VISUM software in order to meet the City's future objectives including improving and enhancing modelling capabilities, improving the ability to migrate to micro-simulation for sub-areas, and creating a future multi-model that will better integrate transit and other modes of transportation. In order to achieve this goal, the consultant is expected to meet the following objectives:

- Confirm population and employment forecasts.
- Review and refine the transportation network.
- Undertake a household travel patterns survey.
- Review/Modify network detail, Traffic Zones system, and Traffic Zones links to roadway network (make micro simulation ready), especially along rapid

transit corridors

- Develop a new multimodal transportation travel demand forecasting model using VISUM software. The new Model will include rapid transit corridors and nodes (transit villages) as recommended in the Shift Rapid Transit EA and future transportation projects to measure transportation demand and supply.
- Calibrate the model to existing and future conditions.
- City staff training on VISUM software including how to populate and run the model.

Consultant Selection

The consultant selection process has been undertaken in accordance with the City's Procurement of Goods and Services Policy. IBI Group, Dillon Consulting Limited, and WSP Canada Inc. were asked to submit detailed proposals and work plans. The three firms responded with written proposals including a summary of the project tasks, schedule, and costs. An evaluation committee reviewed the submissions for the project.

Based on the evaluation criteria and best value based selection process identified in the Request for Proposals, the evaluation committee determined that the proposal from IBI Group provides the best value to the City. IBI Group has an experienced project team that had a clear understanding of the project scope and requirements. Their past proven experience on similar projects, combined with a project proposal that confirmed a thorough understanding of the goals and objectives, demonstrated their suitability for the undertaking.

CONCLUSION

The current London transportation model software is TransCAD which was last recalibrated to 2009 conditions using the household travel survey data collected as part of the London 2030 TMP. The main intent of the study is to update and develop a new comprehensive, integrated and balanced transportation travel forecast model and migrate from TransCAD to VISUM software. VISUM software will provide better capabilities to integrate transit influences.

In accordance with Section 15.2 (d) of the Procurement of Goods and Services Policy, it is recommended that IBI Group be awarded the consulting assignment for the Transportation Network Forecast Model Update Study at an upset amount of \$378,597.50 (excluding H.S.T.).

Acknowledgements

This report was prepared with assistance from Maged Elmadhoon, Traffic Planning Engineer in the Transportation Planning & Design Division.

PREPARED BY:	REVIEWED AND CONCURRED BY:
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Attach: Appendix A – Sources of Financing

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