

Report to Civic Works Committee

To: Chair and Members
Civic Works Committee

From: Kelly Scherr, P. Eng., MBA, FEC
Deputy City Manager, Environment & Infrastructure

Subject: Appointment of Transportation and Mobility Big Data Provider
– Irregular Result

Date: April 20, 2022

Recommendation

That, on the recommendation of the Deputy City Manager, Environment & Infrastructure, the following actions **BE TAKEN** with respect to the appointment of a transportation and mobility Big Data provider:

- (a) Streetlight Data Inc. **BE APPOINTED** the vendor to provide Transportation and Mobility Big Data per their submitted proposal, in the total amount of \$168,935, including contingency, excluding HST; in accordance with Sections 12.2 (c) of the Procurement of Goods and Services Policy, it being noted that this is an Irregular Result due to only one submission being received to the open call for proposals;
- (b) the financing for this project **BE APPROVED** as set out in 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 the City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

Executive Summary

Purpose

This report seeks the approval of the Municipal Council to appoint Streetlight Data Inc. as the vendor to provide Transportation and Mobility Big Data to be used for the Mobility Master Plan project and a range of other planning and engineering studies. With only one proposal received through the competitive process, award of this assignment is subject to review per Section 19.4 of the Procurement of Goods and Services Policy.

Context

The City is currently undertaking the development of a new Mobility Master Plan to improve the movement of people and goods for a growing city. Transportation and Mobility Big Data provides an opportunity to enhance the Mobility Master Plan and a range of other planning and engineering studies by providing information that has not been available for previous master planning processes.

Linkage to the Corporate Strategic Plan

Procurement of Transportation and Mobility Big Data will inform initiatives that advance and support numerous strategies under the City's Strategic Plan Areas of Focus:

- Strengthening Our Community
- Building a Sustainable City
- Growing Our Economy
- Creating a Safe London for Women and Girls
- Leading in Public Service
- Commitment to Anti-Racism and Anti-Oppression

Analysis

1.0 Background Information

1.1 Previous Reports Related to this Matter

- November 2, 2021, Civic Works Committee, Initiation of the Mobility Master Plan Development
- March 1, 2022, Civic Works Committee, Mobility Master Plan Appointment of Consultant

2.0 Discussion and Considerations

2.1 Project Background

The City is currently undertaking the development of a new Mobility Master Plan to improve the movement of people and goods for a growing city. The Mobility Master Plan will outline transportation and mobility policies, plans, and programs for the next 25 years. To assist this study, and a range of other planning and engineering studies, the City requires Transportation and Mobility Big Data.

2.2 Transportation and Mobility Big Data

As part of the Mobility Master Plan, transportation modelling will be used to forecast future transportation and mobility needs for the City of London. This helps inform decisions about future mobility priorities and areas of focus. The City currently has a Visum city-wide transportation model that was last updated in 2018 with a 2016 base year. The model will need to be updated, calibrated and baselined as part of the Mobility Master Plan.

To update, calibrate and baseline the model, transportation and mobility data is typically collected from traffic, pedestrian and cyclist counters. The City currently collects data on how people move using approximately 100 permanent count stations, 26 Eco-Counters in London's streets and park system, and annual location-specific count programs. Transportation and Mobility Big Data will be used to augment this data, providing significantly more data to inform transportation and mobility planning decisions. The Big Data approach provides travel data dating back to pre-2020 time periods, helping provide information on how travel patterns have changed both in the pre and post COVID periods.

Transportation and Mobility Big Data provides information on how people move using data sourced from navigation devices such as the ones located in smartphones, cars or trucks. This is an emerging field of data collection. Over the past decade, third party suppliers have started to process these datasets for use by transportation planners and engineers. For example, Big Data can provide information on:

- trip length;
- regional origin and destination patterns;
- trip purpose;
- mode choice (including walking, cycling, transit, truck, rail and automobile);

- various time period analysis settings (including weekend peaks);
- trends over time (including pre-COVID);
- mode share breakdown;
- average travel speeds;
- average trip length;
- travel time reliability; and,
- demographic information.

To protect the privacy of individuals, no real-time data is used (i.e. data is updated with a certain time delay) and the data files do not contain any personally identifiable information. Big data can efficiently help augment the City's existing traffic count information to reliably update the city's transportation model in forecasting the mobility needs of Londoners over the next 25 years.

Transportation and Mobility Big Data will be used to assist the Mobility Master Plan study as well as a range of other planning and engineering studies including potentially the Climate Emergency Action Plan, Core Area Action Plan, transportation impact assessments, traffic calming studies, transit studies, active transportation studies and the Blackfriars Bridge review of operations.

2.3 Procurement Process

The procurement process for this study has been undertaken in accordance with the City's Procurement of Goods and Services Policy. As Big Data is an emerging field, the City used this procurement process as an opportunity to determine what industry suppliers, if any, are currently able to supply transportation and mobility big data. An open and competitive Request for Proposal was issued in February 2022. There were nine plan takers. Streetlight Data Inc. submitted the only bid, with two cost subscription options. The primary difference between the two options in the Streetlight Data Inc. proposal was the number of zones available for data reporting and analysis. The review team determined that the lower cost option provided sufficient data granularity to adequately inform the anticipated analyses.

Per Section 19.4 (b) and (c) of the Procurement of Goods and Services Policy, the bid submission was reviewed by an evaluation team of staff from Transportation and Mobility with assistance of Purchasing and Supply and considering the input of other areas that provided input on the RFP. The evaluation committee reviewed the proposal against the pre-established evaluation criteria which included:

- mandatory minimum requirements such as data for travel modes (such walking, cycling, auto, transit and heavy trucks) pre and post COVID,
- privacy considerations,
- a self-serve web tool and analysis data such as trip length, travel speed and origin/destination patterns.

Staff from Information Technology Services have reviewed and authorized the procurement from an information and network security perspective. It was found that the bid from Streetlight Data Inc., with a pay-per use subscription, meets all the terms, conditions, specifications, and requirements. As per Section 8.10 (b), if the specifications of a competitive bid cannot be met by two or more suppliers; Committee and City Council must approval the award of a competitive bid greater than \$100,000.

3.0 Financial Impact/Considerations

Funds are identified in the Transportation capital budget per the source of financing attached as Appendix A.

Conclusion

It is recommended that Streetlight Data Inc. be appointed the vendor to provide Transportation and Mobility Big Data in the amount of \$168,935, including contingency, excluding HST.

The award of this assignment will provide access to the datasets required to enhance the transportation modelling for the Mobility Master Plan and project specific analysis for various initiatives. Access to this developing data source will provide London and its partners an opportunity to enhance our understanding of Londoner's movements as we plan for the future.

Submitted by: **Doug MacRae, P. Eng., MPA, Director, Transportation and Mobility**

Recommended by: **Kelly Scherr, P. Eng., MBA, FEC, Deputy City Manager, Environment and Infrastructure**

Attach: Appendix A – Source of Financing

c: Sarah Grady, Transportation Planning & Design
Jon Kostyniuk, Traffic Engineering
Fabio Rueda, Purchasing
Mobility Master Plan Internal Steering Committee