

<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON APRIL 17, 2018</b>
<b>FROM:</b>	<b>KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES AND CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>TRANSPORTATION INTELLIGENT MOBILITY MANAGEMENT SYSTEM WAZE CONNECTED CITIZENS PROGRAM AGREEMENT</b>

<b>RECOMMENDATION</b>
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That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to real-time travel data support for the current Transportation Intelligent Mobility Management System (TIMMS) project:

- (a) the Civic Administration **BE AUTHORIZED** to enter into, execute, and deliver an agreement with Google Inc. for its Waze Connected Citizens Program;
- (b) the Civic Administration **BE AUTHORIZED** to negotiate and approve the terms and conditions of the agreement with Google Inc. in regards to its Waze Connected Citizens Program;
- (c) the approvals given herein **BE CONDITIONAL** upon the Corporation entering into a formal contract with Google Inc.; and,
- (d) the Mayor and City Clerk **BE AUTHORIZED** to execute any contract or other documents, if required, to give effect to these recommendations.

<b>PREVIOUS REPORTS PERTINENT TO THIS MATTER</b>
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Civic Works Committee – March 19, 2018. II, 2. [Private and Public Works Impacting the Transportation Network](#)

Civic Works Committee – March 19, 2018. III, 2. [2018 Renew London Infrastructure Construction Program and 2017 Renew London Post Construction Overview Report](#)

<b>2015-19 STRATEGIC PLAN</b>
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The following report supports the Strategic Plan through the strategic focus areas of:

- **Building a Sustainable City** by providing convenient and connected mobility choices to improve travel by managing congestion and increasing roadway safety; and,
- **Leading in Public Service** by providing great customer experiences through innovative technology.

## BACKGROUND

### Purpose

This reports seeks the approval of Municipal Council to form a two-way data partnership with Google Inc. to support the needs of the new Transportation Intelligent Mobility Management System (TIMMS) by providing real-time travel data and feedback to drivers and assist in the implementation of the system.

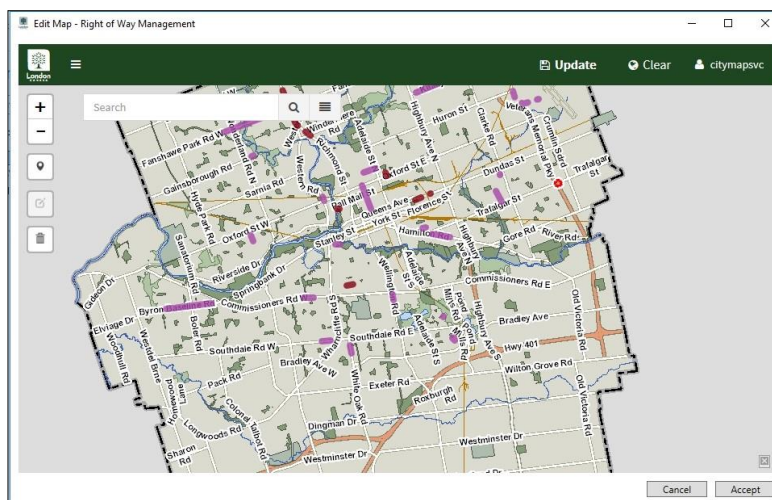
### Context

The City is currently engaged in developing and procuring a Transportation Intelligent Mobility Management System (TIMMS) with the construction of a Transportation Management Centre (TMC) to both support the ongoing Rapid Transit initiative and roadway users in general. One element of the TIMMS originally identified was to provide “real-time travel time monitoring and feedback to drivers”. In this context, strategic partnerships are required to efficiently distribute and integrate travel data both to the benefit of the end user and to the TMC to help in data driven decision making (DDDM) when travel incidents and hazards occur.

## DISCUSSION

### Renew London Application

The Renew London application is a database that is used to record all major construction projects planned for the current year. Project information is publically accessible from the City’s website under the Renew London banner which provides information including the project name, planned schedule, some project details, and contact information.



Originally developed as a way of communicating major construction projects managed by the City’s Construction Administration Division to the public, the Renew London application has since been expanded to incorporate large utility-driven and development-driven projects as well as City Operations-driven projects. It is primarily used as a coordination, scheduling, and communication tool.

A potential agreement with Google Inc.’s Waze Connected Citizens Program would complement the public communication use of the Renew London application. This is in alignment with one of the City’s Communications Division’s high-level steps to improve communications of works with the broader public to “continue to identify ways to enhance Renew London through its design, functionality, and content to be able to adapt to the changing needs of Londoners”.

Existing communication strategies are effective and should continue to be supported. However, what is currently absent in these strategies is providing real-time information to travellers while en route to their destination. The basic data to provide real-time travel information is currently present within the Renew London database and can be supported by popular navigation applications and services, such as Waze.

Utilizing real-time data feeds supported by popular navigation applications and services will help us better inform Londoners and city visitors. The latter group in particular is less likely to be familiar with the City's communication channels, such as Renew London.

### Smart City Strategy

An agreement with Google Inc. will be supportive of the City's Smart City Strategy (under development). Elements of this agreement that tie into the strategy will likely include:

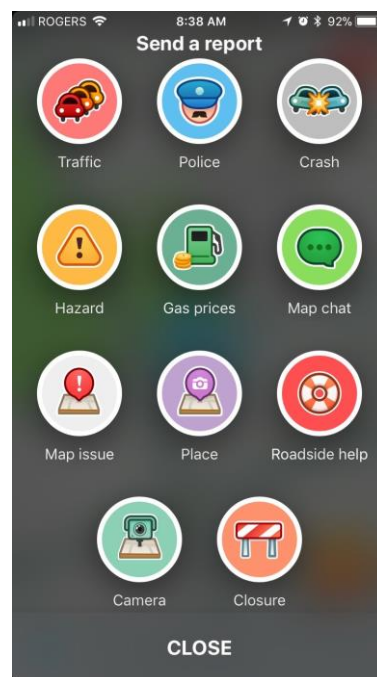
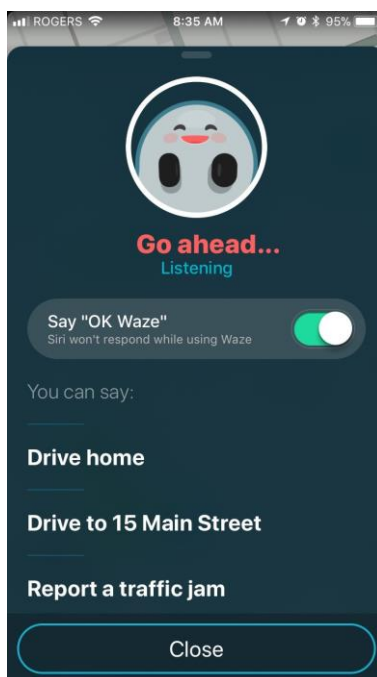
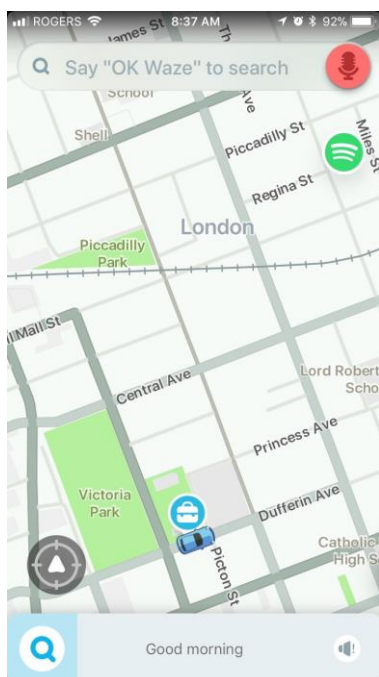
- Providing real-time transportation information to the public;
- Development of Intelligent Transportation Systems; and
- Integration and improvement of existing open data.

### Waze and the Connected Citizens Program

Waze is Google's GPS-based geographical navigation application program for smartphones and tablets with GPS support and display screens which provides hands-free turn-by-turn information and user-submitted travel times and route details, downloading location-dependent information over mobile networks.



Waze is the world's largest free community-based traffic and navigation app. As of March 2018, Waze reported over 90 million active Waze users globally per month.



Waze differs from traditional GPS navigation software in that it is community-driven: gathering complementary map data and traffic information from its users. Like other GPS software, it learns from users' driving times to provide routing and real-time traffic updates. It is free to download and use. People can report collisions, traffic jams, road and lane closures, and other hazards. By connecting drivers to one another, Waze helps people create local driving communities that work together to improve the quality and safety of everyone's daily driving.

In October 2014, Google Inc. launched its Connected Citizens Program (CCP). The CCP is a free, two-way data exchange empowering municipal decisions to achieve concrete community impact. Since launch, the program has expanded to more than 450 partners including city, state and country government agencies, non-profits, and first responders.

The City's review process of the CCP included engagement with various divisions, including the City Solicitor's Office, Information Technology Services, Records and Information Services, and Risk Management.

### **Expected Benefits**

The following are CCP's expected benefits:

- **Situational Awareness**  
Partners receive real-time incident information faster than other reporting methods and accurately pinpoints where incidents occur, creating faster response and clearing times that can potentially save lives in coordination with Vision Zero policies.
- **Two-Way Driver Communication**  
Partners leverage Waze as a two-way communication channel: Partners use Waze to inform drivers of major traffic events and drivers communicate back real-time road insights through the app. Driver reporting is accomplished through hands-free, direct voice commands, similar to Google Home and Amazon's Alexa, to the app in compliance with Provincial legislation.
- **Infrastructure Planning**  
Insights into locations with frequent congestion or hazards yields smarter urban planning.
- **Bridging Connections with Other Partners**  
Google Inc. gathers partners via in-person summits and an online forum to discuss case studies and exchange ideas to further impact communities globally.
- **Streamlining Data Inputs**  
Partners can utilize data standards designed by Google Inc. for closure and incident reporting to reduce data fragmentation and promote transport and government data aggregation.

The planned first phase of the Waze integration will be the publishing of the existing Renew London information. Information Technology Services is aware of the desired integration of Renew London into Waze and a submission will be made to the Information Technology Steering Committee (ITSC) to allocate the necessary resources to accomplish this project. Roadway incidents and hazards will be added in the future when the planned TMC is operational.

<b>CONCLUSION</b>
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**Partnership Description**

Based on our evaluation of the CPP and its benefits to the current TIMMS project, it is recommended that the City enter into a two-way, non-exclusive partnership with Google Inc. to assist in the distribution of real-time travel data without financial implications. It should be noted that the agreement with Google Inc. does not exclude the city from entering into agreements with other vendors.

**Acknowledgments**

This report was prepared by Jon Kostyniuk of the Roadway Lighting & Traffic Control Division.

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