



**Town of Arlington
Office of the Town Manager**

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To: Members of the Board of Selectmen
From: Jim Feeney, Assistant Town Manager
RE: Waze App - Connected Citizen Program
Date: February 1, 2018

The use of GPS-based navigation apps is commonplace in society today, especially in an urban-suburban environment like Arlington. With crowd-sourced event reporting, “traffic” apps such as Waze have grown immensely in popularity in recent years as residents and commuters aim to shorten drive times. The algorithms used by the apps work to redistribute traffic across the grid when off thru-way routes will improve travel times. Some neighborhoods are experiencing more thru traffic than ever before during peak periods as a result of app users dodging congestion and incidents in the roadway. These vehicular volume increases on secondary “neighborhood” side streets and the accompanying incidences of speeding and distracted/careless driving have precipitated numerous citizen complaints.

Although traffic apps present a challenge for municipal officials, they can also present opportunity. In particular, Waze relies on real-time data and field user inputs to calculate routes. This nearly up-to-the-second responsiveness results in an ever-evolving map, which is an invaluable tool for drivers. Here, the same data stream can likewise benefit transportation planners – enter the Waze Connected Citizen Program (CCP)- as well as residents and visitors alike.

The Program operates to benefit all parties. Waze and its users, some number of which are our residents, would benefit from Town personnel proactively inputting road construction and closure data, as well as detours caused by Town events, think Town Day or Patriots’ Day Parade (information the Town already shares via multiple channels). Data concerning speed limits and Town-owned assets can also be shared, in the event they have not yet been programmed into the map. In return, the Town, as a CCP partner, would gain access to real-time incident information,

including highly accurate accident and pothole location data; furthermore, transportation planners would gain insights from analyzing traffic data, such as locations with frequent congestion or hazards, as well as greater understanding of route planning.

Current, robust data would likely also prove useful in various other processes related to construction and planning. At present, the Engineering Division is evaluating bus rapid transit and prioritization, as well as planning ADA- and MUTCD- compliance upgrades to various intersections. Both are initiatives the Engineering Division believes would benefit from advanced data analysis. And, with adaptive traffic signal technology on the horizon, the same trip and congestion data has the potential to assist with signal timing and coordination along the Mass Ave corridor. Recently, other public entities have been granted entry into the CCP. The City of Boston undertook a similar signal timing endeavor in the Seaport to assess traffic flow and ease congestion, and MassDOT joined the program to access data that would assist in planning for future infrastructure improvements.

Should the Town wish to participate in this data exchange, an online Two-Way Connected Citizens Data Exchange membership application would need to be submitted. This would indicate our interest in the program and be subject to review by Waze (Google), with entry based on candidate qualifications. Applicants are notified in writing if their applications have been accepted. Please note it is not immediately clear if there is any commitment period associated with acceptance into the program. If ultimately selected for participation, we will need to evaluate our available data sources and inputs. Here, it is worth noting the FY19 budget adds a Senior Transportation Planner in the Planning Department. It would be natural for this position to coordinate the necessary data exchange.

To learn more and view case studies, please visit: waze.com/ccp