



City of Arts & Innovation

Transportation Committee

TO: TRANSPORTATION COMMITTEE MEMBERS DATE: JULY 13, 2017

FROM: PUBLIC WORKS DEPARTMENT WARDS: ALL

**SUBJECT: PUBLIC AGENCY PARTNERSHIPS WITH NAVIGATION SERVICES TO
REDUCE TRAFFIC CONGESTION ALONG NEIGHBORHOOD ROADWAYS**

ISSUE:

Consideration of partnerships with navigation service providers such as Apple, MapQuest, Waze, and Google to reduce traffic congestion along neighborhood roadways.

RECOMMENDATION:

That the Transportation Committee receive and file information regarding partnerships with navigation service providers.

BACKGROUND:

On April 13, 2017, the Transportation Committee requested that the Public Works Department investigate the potential to partner with popular navigation service providers such as Apple, Mapquest, Waze, and Google with a goal of achieving reductions in instances of cut-through traffic along neighborhood roadways and encouraging use of primary arterials.

DISCUSSION:

The Traffic Division researched and reached out to several popular navigation services, successfully making contact with Apple, Google Maps, and Waze (a company owned by Google, currently operating as a largely independent navigation service). Each of these companies is considered to be amongst the most popular providers of navigation services, largely through use of their smartphone applications.

Of the three companies, Waze has the most widely publicized program for partnering with government agencies. Apple's development services representative noted that the focus of their government agency partnerships is in providing transit data. Similarly, Google Maps has an established route for government agencies to participate in a Google Transit Partner Program, and for private companies to partner in development of applications using Google's maps. Neither of these programs are focused on providing general traffic operations data back to the public agency.

Waze's Connected Citizens Program, detailed in the attached fact sheet (Attachment 1), provides the public agency with real time incident information, the ability to broadcast closures and major traffic events to Waze users, and access to recorded traffic patterns. The goal of Waze's connected citizens program is to both reduce congestion and allow municipalities to make better informed capital improvement decisions. The recorded traffic data can be used for the planning of infrastructure such as roadways and traffic signals, as well as for the optimization of traffic signal timing plans.

Waze provides several examples of case studies demonstrating its Connected Citizens Program's positive impact on congestion. Waze's objective, however, is not to consolidate traffic along arterial and collector roadways but to spread traffic on all streets in a manner providing maximum efficiency for users of their application. Waze's approach to traffic routing was further documented in the attached USA Today article (Attachment 2), wherein the following key discussion topics are raised:

1. Waze and other navigation services all compete for users, thus it is in their best interest to provide their users with the most expedient travel path regardless of routes that may pass through neighborhoods. A navigation company that deletes a route which may be the fastest risks losing its customers to a competitor.
2. Agencies that are part of Waze's Connected Citizens Program can report posted turning movement restrictions to Waze allowing routes to be appropriately modified to avoid these restrictions. Not all roads that experience cut-through traffic should have turning movement restrictions posted as they may be impactful to residents. Roadways with turning restrictions may also have a cascading effect onto nearby streets.
3. Roads without turning restrictions will still remain 'in the system' and Waze will continue to route traffic to best minimize a motorist's commute.
4. Agencies that wish to discourage use of a particular route have turned to traffic calming measures to extend the travel time along a road that was previously a shortcut. Traffic circles, diverters, and on-street parking all contribute to traffic calming, but it is possible that after traffic calming efforts a shortcut is still the most effective route. Excessive traffic calming can also have a negative impact on residents.

While a public agency may benefit from the operational insight provided by participation in Waze's Connected Citizens Program, it is clear that Waze's intent is to not directly further a community's goal to reduce cut-through traffic. USA Today's article, which contains commentary from Waze's head of brand and global marketing, further states, "Waze believes that public roads are intended to be used by all citizens, including to alleviate gridlock."

FISCAL IMPACT:

There is no fiscal impact associated with this update.

Prepared by: Kris Martinez, Public Works Director
Certified as to
availability of funds: Scott Miller, PhD, Chief Financial Officer/City Treasurer
Approved by: Al Zelinka, FAICP, Assistant City Manager
Approved as to form: Gary G. Geuss, City Attorney

Attachments:

1. Waze Connected Citizens Program Fact Sheet
2. "Waze and other traffic dodging apps prompt cities to game the algorithms," USA Today
3. Presentation