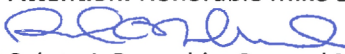


CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

Date: October 16, 2018

To: Honorable City Council
c/o City Clerk, Room 395
Attention: Honorable Mike Bonin, Chair, Transportation Committee

From: 
for Seleta J. Reynolds, General Manager
Department of Transportation

Subject: **MOBILE MAPPING APPLICATIONS / IMPACT TO NEIGHBORHOOD CITY STREETS /
REDUCE HAZARDS / FEASIBILITY REPORT (COUNCIL FILE #18-0304)**

SUMMARY

The impact of mobile mapping applications has affected travel behavior and garnered significant attention from the media and neighborhood stakeholders. This report describes the relationship between the City and mobile mapping application makers.

RECOMMENDATION

City Council RECEIVE and FILE this report.

BACKGROUND

Mobile mapping applications have changed how people travel using all transportation modes throughout the City of Los Angeles. Travelers now rely on these resources to utilize real-time information on their mobile devices about the transit and traffic patterns of the region to inform their transportation choices and routes in real-time. In order to engage with this emerging technology, the City of Los Angeles communicates regularly with the developers of these mobile mapping applications including Apple Maps, Google Maps, and Waze. The City shares up-to-date information on its traffic data to improve the accuracy of information displayed and distributed through these applications.

In 2015, Mayor Garcetti's office entered into a data sharing agreement with Waze on behalf of the City. The objective of the agreement was to provide real-time information about planned traffic impacts, such as street closures or special events, to allow Waze and other mapping applications to be more accurate and effective. In early 2018, communities and media began to attribute negative traffic impacts to routes provided by mobile mapping applications. A number of issues were raised including increased cut-through traffic on neighborhood streets, routing users to make unprotected left turns on busy arterial roadways, and directing users to drive on steep streets with which they are unfamiliar. Many attributed this to cause additional traffic congestion, drivers speeding on streets where they are unaware of the speed limit, and other unsafe driving behavior.

DISCUSSION

City Data Made Available To Makers of Mapping Apps or Software

Mapping application companies may access publicly available City data such as the Automated Traffic Surveillance and Control (ATSAC) information on LADOT's website, NavigatELA, and the Open Data Portal. Several City Departments also provide these companies with informational data, described below:

- LADOT provides updates to Apple Maps, Google Maps, and Waze regarding on-street configuration and traffic controls, such as new turning restrictions. These updates are advisory, and it is the responsibility of the companies to incorporate these changes into their maps. It is also up to the companies to determine what traffic and street characteristics contribute to directions they provide and the algorithms used to generate directions.
- LADOT also provides real-time ATSAC traffic data to LA Metro's Regional Integration of Intelligent Transportation Systems (RIITS) system, which is available to traveler information systems.
- The Port of Los Angeles communicates with Apple, Garmin, Google, TomTom, and Waze through email or each company's online portal. Information shared typically includes updates or changes to road alignments due to Port projects.
- The Department of Public Works Bureau of Engineering (BOE) publishes the Public Way Reservation System (PWRS) on their website. The PWRS includes real-time data on current and planned street closures that mobile applications can incorporate into their suggested routes. All mobile applications, like Waze, are able to access the data directly via an Application Programming Interface (API) to integrate this data into their routing tools and algorithms.

It is the role of the companies to determine what transportation and traffic data and street characteristics are used to inform the algorithms to generate routes and driving directions for their users.

Mapping Applications Do Not Have a Financial Relationship with the City

The City does not maintain any financial relationship with these companies. Multiple City Departments have entered into data sharing agreements and partnerships with no associated fees, including the Waze Connected Citizens Program (CCP). This partnership provides a channel to share best practices and ideas with other CCP cities, who also share data with Waze. The first CCP agreement was initiated by the Mayor's Office Data Team in 2015. LADOT was the primary department engaged with the CCP on behalf of the City until the agreement expired in 2017. The Information Technology Agency (ITA) also used the CCP to create an archive of Waze data on traffic congestion and collisions. Los Angeles World Airports (LAWA) independently entered into a CCP Agreement with Waze in April 2018. LAWA uses the data portal to share road closures and other publically available data, to gain access to live traffic feeds, and integrates Waze data with its own to display on the LAX website.

Data the City Receives From Mobile Mapping Application Developers

Several City Departments receive live data feeds from applications to complement their own data displays for public use. LAWA and LADOT both display live Waze data, provided through an API, alongside real-time traffic data provided by ATSAC. While ATSAC data displays traffic speeds, congestion, and queue times, the Waze data provides the location of significant congestion on streets and freeways, often resulting from incidents and collisions.

ITA and BOE also access Waze data directly via an API, downloading the data every two minutes. ITA is working to create a data archive of transportation data, while BOE displays the Waze data on the NavigateLA website.

The City does not maintain any formal or informal data sharing partnerships with Google Maps and Apple Maps, but staff may download or use publicly available data from either, typically as a reference resource for projects. The City of Los Angeles has a separate relationship with Google for the provision of City email.

Benefits the City Receives From Partnering with Mobile Mapping Application Developers

The City benefits from maintaining direct access to real-time data from mobile mapping applications like Waze for use in pilot projects or to enhance communications to residents. Partnership with applications such as Waze benefits the City when such applications preemptively reroute drivers away from street closures and special events, which further reduces congestion at that specific site. The majority of information obtained from these applications is also available to the general public. The existing agreements and informal partnerships with mapping applications companies do not allow the City to control, dictate, or designate suggested routes presented to application users, nor do they require mapping application companies to prioritize data and information provided by the City over that provided by app users or other data sources.

Efforts by the City to Engage Mobile Mapping Application Developers to Address Neighborhood Concerns

The City has heard concerns from several citizens and neighborhood groups that mobile mapping applications do not accurately reflect posted regulatory traffic restrictions and often display inaccurate information such as erroneous closure of streets. Staff continues to transmit corrections to the mobile mapping application companies to make updates and corrections. However, many applications continue the practice of incorporating edits suggested by its users through crowdsourcing or volunteer map editors to update their map information, which may or may not conflict with City data and information.

FINANCIAL IMPACT

There is no fiscal impact, as this report is provided for information only.