

REPORT

To the Honorable Mayor and City Council
From the City Manager

November 7, 2016

SUBJECT

Adoption of a pilot program allowing the use of autonomous robots for delivery of goods in Redwood City

RECOMMENDATION

Adopt a resolution approving the creation of a pilot program to allow the use of autonomous robots, also known as Personal Delivery Devices "PDD", for a period of nine months in the City of Redwood City and authorizing the City Manager to issue a PDD Permit to Starship Technologies, Inc. The program would be implemented through the issuance of a permit establishing the terms and conditions for a company to participate in the program and allow the use of their robots on City sidewalks and streets

BACKGROUND

Starship Technologies, a London based company founded in 2014, created and launched the use of an autonomous delivery robot also known as a Personal Delivery Device "PDD" that is being used in many cities in the United Kingdom and Germany. The PDD delivers groceries, restaurant take-out items and more. It can carry approximately three grocery bags worth of goods and weighs about 50 pounds when fully loaded. The PDD is autonomous, using nine on-board cameras to assist in its travels along the sidewalks and going no more than four miles per hour.

At street crossings, it is assisted by a human controller to ensure it is safe for the robot to cross the street and not impede traffic. The PDDs travel throughout a five-mile radius from their docking point. Customers can establish their delivery times, track their items while in transit on the mobile application at all times, and securely retrieve their items with their unique code that opens the robot. Starship Technologies plans to have two docking locations in the city and plan on serving the residential areas.

A smaller pilot program is currently underway in Washington D.C.; however, Redwood City would be the primary pilot program for Starship Technologies in the United States.

ANALYSIS

Starship Technologies is looking to launch a pilot program in the United States to thoroughly test their PDDs. They have approached Redwood City as one of those

launch locations due to the area's acceptance of new technologies, our bustling downtown, and the high rate of use of delivery services such as Munchery and Door Dash. Starship Technologies will work with these delivery business to bring goods to residents. Starship Technologies will assume all liability for the use of the PDDs on the city sidewalks and streets. The company will use the PDDs in Redwood City for an initial pilot period of nine months, and then decide whether to continue based on the results on the pilot. All of the terms and conditions for Starship Technologies to participate in this pilot program will be part of a permit issued to allow the use of the city sidewalks and streets.

The use of PDDs for delivery will have the potential to reduce traffic in Redwood City and allow for some restaurants and businesses to serve a greater number of customers. Currently, when a customer wants a delivery of goods to occur, they use a delivery service such as those mentioned above. A delivery driver will pick up the item and drive their vehicle to the drop off point. The use of the PDD will eliminate some of those vehicles on the road, as the PDD will be able to use city sidewalks and not impede traffic. In addition, staff has heard from some restaurants that they currently have to turn away some delivery orders because there are no delivery drivers available due to the high volume of deliveries being requested in Redwood City. This is particularly true in the later evening hours. The PDDs will help to fill some of this demand.

ALTERNATIVES

Council could opt not to approve this resolution and therefore not move forward with the pilot program.

FISCAL IMPACT

There is no fiscal impact to the City to participate in this pilot program. The success of this pilot program could have an ultimate positive fiscal impact on the City by increasing potential sales tax dollars from businesses that have been able to expand their delivery service through use of the PPDs.

ENVIRONMENTAL REVIEW

As the lead agency, the City of Redwood City has determined that the actions proposed in this Resolution are considered Categorical Exempt pursuant to Section 15305, Class 5 of the California Environmental Quality Act (CEQA) Guidelines. Class 5, Minor Alterations in Land Use Limitations, includes alterations in land use limitations in areas with average slope of less than 20%, which do not result in any changes in land use or density.

Catherine Ralston

CATHERINE RALSTON
ECONOMIC DEVELOPMENT MANAGER



for
MELISSA STEVENSON DIAZ
CITY MANAGER

Attachment

1. Conditions of Approval for PPD Program