TRANSPORTATION COMMISSION SEPTEMBER 18, 2019
NEW BUSINESS

SUBJECT: POSTMATES PERSONAL DELIVERY DEVICES

PREPARED BY: PLANNING AND DEVELOPMENT SERVICES - LONG RANGE PLANNING
(Rachel Dimond AICP, Acting Manager)
(Bob Cheung, Senior Transportation Planner)

STATEMENT OF THE SUBJECT:

The Transportation Commission will review and provide feedback on the proposed operations of a potential pilot testing program for Personal Delivery Devices (PDD). Personal Delivery Devices are autonomous robots designed for the delivery of goods.

RECOMMENDATION:

Staff recommends the Transportation Commission reviews the information and provide feedback on aspects of the pilot program.

BACKGROUND ANALYSIS:

On May 6, 2019, the West Hollywood City Council directed staff to issue a Request for Information (RFI) to partner with a company to perform widespread community outreach on PDDs. The purpose of the outreach is to gather feedback to establish an autonomous delivery device pilot program for up to three delivery devices. Staff will return to City Council with next steps for opportunities for such devices, based on staff analysis and input from the community and the Transportation Commission.

Staff issued a RFI on May 17th, 2016. Postmates was the sole respondent to the request. Staff and Postmates have put together a Frequently Asked Questions (FAQ) to provide background on the proposed operations of their PDD including specifications and safety features. The FAQ is provided as Attachment A to this staff report.

The goal of the program is to explore the feasibility of using PDDs for deliveries instead of using cars which has negative impacts on traffic congestion and parking. The comments and feedback collected during the outreach phase will help in formulating policies and operations of the pilot program with an emphasis on safety and reliability.

ATTACHMENT:

A. Postmates PDD Frequently Asked Questions (FAQ)
B. May 6, 2019 City Council Staff Report

ATTACHMENT A
Postmates PDD Frequently Asked Questions (FAQ)

Postmates

Proposed Personal Delivery Devices (Serve) by Postmates
Frequently Asked Questions

1. **What is Serve?**

Serve is the newest member of the Postmates fleet: a groundbreaking sidewalk delivery platform that can bring you the best your neighborhood has to offer.

Serve is a semi-autonomous vehicle that can carry up to 50 lbs of cargo and travels at a maximum of three miles per hour. It weighs 160 lbs without any cargo onboard. When a Postmates app user seeks to order a meal from a nearby restaurant and the delivery meets the necessary requirements, in terms of distance and infrastructure, Postmates will dispatch Serve to the restaurant to pick up the order. The restaurant will then be presented with detailed instructions on how to interact with Serve, securely place the food items, and send Serve on its way to customers. Serve will then travel semi-autonomously to the customer, within a <1 mile radius for dropoff.

Postmates is committed to ensuring the safe and responsive deployment of emerging technologies in our public spaces. This means that we engage in extensive testing to measure how robots interact with children, pedestrians, people with special needs, and the elderly.

Since Serve also transports prepared foods, each unit is equipped with a sealed temperature-controlled cargo hold to ensure that each order meets health and safety standards.

2. **What is the goal of this pilot?**

In order to roll out sidewalk robotics at scale and to build autonomy on our devices, it is necessary that we are able to measure how people interact with sidewalk robots, whether 5G connectivity remains stable, what slopes are able to be climbed, and how these devices interact with our logistics and supply chain.

While we have previously tested in highly controlled environments such as Postmates HQ, San Francisco's Design District, and Rossmoor Senior Living Facility, this pilot will allow us to test in a truly urban environment and allow us to determine whether our learnings to date are suited for this. Postmates will not plan to operate Serve without significant oversight during the length of this program, and will take all necessary precautions to ensure that it operates safely and without incident.

3. **Where can I find Serve in my community?**

Serve is launching in Los Angeles, servicing businesses throughout Hollywood, and Postmates is seeking to create a framework to operate in West Hollywood to operate in the Sunset Strip, Santa Monica Boulevard, and Fairfax corridors. These locations will be determined using a multitude of considerations including (1) 5G connectivity, (2) infrastructure including ADA-compliant sidewalks, (3) merchant and customer density, and (4) appropriate grade and slope for Serve to operate.

4. **Can Serve tip over and damage the contents it's delivering? What happens in this situation?**

Serve has been designed to safely and stably transport its cargo to our customers, so it will only do deliveries to and from locations that have proper curb cut-outs and at grades that preserve food and restaurant orders so that your order is delivered on time.

The cargo hold is buoyed by a stabilizing chassis that allows Serve to navigate sidewalks that may have cracks or bumps in them and to do so without compromising any food items on-board the device.

5. **Will Serve be able to see me on the sidewalk (esp. for those in wheelchairs, with pets, etc.)?**

Serve safely travels alongside pedestrians, navigates around fire hydrants, and respects our sidewalks. We began testing prototypes at senior living communities in Northern California. There, Serve is learning to operate with people in mind; while refining its Social-Aware-Navigation technology to respect our elderly or disabled neighbors on sidewalks that people use daily.

We continue to iterate our design based upon input from disability advocates, pedestrians, and our senior communities to ensure that Serve is well-suited to interact with *all* people who use our sidewalks daily.

6. **Who will be providing maintenance or servicing Serve on the ground if necessary?**

Serve will have a chaperone within its operating zone that can provide immediate assistance whenever needed, and will also be remotely monitored from Postmates HQ to ensure that it is safe and properly interacting with its environment.

7. **Is Serve being controlled by anyone on the ground?**

Serve navigates both using its autonomous Socially-Aware-Navigation system as well as with a pilot at Postmates HQ who can help Serve traverse new terrain and unexpected events. Serve will also have a chaperone within the vicinity who can make immediate repairs and answer questions from pedestrians and neighbors. The chaperone will have a plugin controller that they can use to pilot the vehicle in case needed.

8. **How can I order from Serve?**

Serve will begin by delivering orders from select merchants, bringing grocery delivery to your doorstep with the push of a button. In order to receive a delivery through the platform, a customer submits their order through the Postmates mobile app and is notified that Serve will be making the delivery.

When Serve arrives either at the customer's location or at a place designated for courier pickup, the customer or courier will receive instructions through the Postmates app on how to retrieve the items within the cargo compartment.

9. **Where is Serve located when it's not out delivering?**

When Serve is completed for the day, it rests and is recharged in our Postmates offices. There, we are able to conduct routine maintenance and ensure that Serve performs to the highest safety standards.

10. **Is Serve sustainable?**

From external partnerships with automotive companies, to our own in-house robotics supply chain, we've been able to test delivery routes on sidewalks across numerous states without impacting a single Postmate, while helping retailers sell even more during peak periods and reducing car congestion. Rather than navigating a dense neighborhood searching for parking by car, Serve can transport orders a few blocks to a Postmate away from parking spaces and traffic.

11. **Can Serve be broken into?**

All cargo carried by Serve is stored in a secure compartment, which is locked until activated by a customer or Postmates Fleet member using their mobile phone or a custom key code. Serve is also equipped with an alarm system and is remotely monitored for its condition and location.

12. **Who can I contact if I have questions about Serve?**

Each unit is accompanied by an on-site handler who can answer questions for the first 3-6 months of operation. Members of the public may also reach the Postmates team at servefeedback@postmates.com.

13. **Is Serve recording me?**

We record data collected to help Serve navigate and exclusively use them for model training and diagnostics. This information can ensure that Serve is operating to our highest quality and safely navigating our sidewalks. We do not share or sell any data that can be used to identify individuals, nor make it publicly available in any way. And Serve does not record audio.

14. **How many Serves will be in my neighborhood?**

Each Serve will cater to a 1.5 mile radius and will either be continually moving, or returning home. Serve will at no point rest on the public right of way.

ATTACHMENT B
May 6, 2019 City Council Staff Report

CITY COUNCIL
CONSENT CALENDAR

MAY 6, 2019

SUBJECT: **COMMUNITY OUTREACH REGARDING AUTONOMOUS DELIVERY DEVICES**

INITIATED BY: **MAYOR PRO TEMPORE LINDSEY HORVATH**

PREPARED BY: **COMMUNITY & LEGISLATIVE AFFAIRS DIVISION**
(John Leonard, Manager) JPC
(Andi Lovano, Senior Management Analyst)

STATEMENT ON THE SUBJECT:

The City Council will consider authorizing staff to issue a Request for Information (RFI) to partner with an interested delivery company to perform community outreach and gather feedback on the use of autonomous delivery devices, and to explore the creation of a pilot program. Staff will return to City Council with next steps for opportunities for such devices in West Hollywood.

RECOMMENDATIONS:

1) Authorize staff to issue a Request for Information (RFI) to partner with an interested delivery company to perform widespread community outreach – including at relevant Advisory Board and Commission meetings – and gather feedback to establish an autonomous delivery device pilot program in West Hollywood for up to three delivery devices.

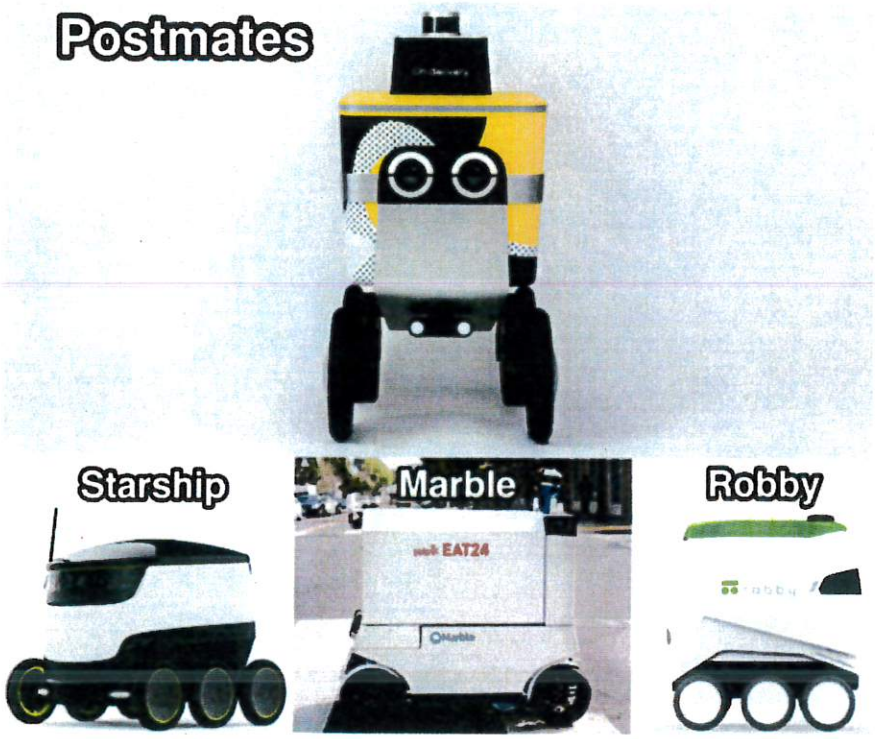
2) Return to City Council with next steps for opportunities for such devices in West Hollywood, based on staff analysis and input from the community.

BACKGROUND / ANALYSIS:

Many companies – ranging from food delivery services like Postmates to package delivery services like Amazon and FedEx – are beginning to experiment with autonomous delivery devices. The devices deliver food, groceries, medicine, and packages directly to people's homes and offices. The goal of these devices is to deliver for the "last mile" or the distance from a local depot to the final destination. The companies' goal is to use these devices in targeted regions instead of vehicles because they can be more cost effective; speed up delivery; use less energy; provide service to residents who are homebound; and reduce traffic congestion and vehicle idle time.

The devices range in size and shape, but are typically designed to move on the sidewalk at a walking pace. They are especially targeted to serve customers in dense, urban neighborhoods where they can avoid congestion and parking problems faced by vehicles while moving small objects over short distances efficiently. Customers interact

with the devices using a touchscreen, camera, or an app on their phone. The figures below show a few examples of devices that are currently being piloted in the United States and abroad.



There is a small, but growing number of autonomous delivery devices operating on college campuses, such as George Mason University and University of the Pacific, and in cities around the world, including San Francisco, London, Beijing, and other communities. In 2016, San Francisco was one of the first cities to experience the delivery devices. In response, the Board of Supervisors passed a set of regulations to allow the devices to operate on city sidewalks for research and development testing within certain parameters. Companies are allowed to apply for permits to have up to three devices operating within certain zones in the City.

The City of West Hollywood has been approached by companies that are interested in working with the City's residents and stakeholders in establishing a similar pilot program in West Hollywood. This item directs staff to take a proactive role in engaging the community on the topic of autonomous delivery devices. The intent is to educate the community on the potential use of such devices and to determine the community's interest in establishing a pilot program.

The first step in this community engagement will be for staff to issue a Request for Information (RFI) to partner with an interested delivery company to collect community feedback. This partnership will allow staff and the delivery company to gather input from Advisory Boards and Commissions that may have relevant purview (e.g. Senior

Advisory Board, Disabilities Advisory Board, Transportation Commission, Public Safety Commission, Public Facilities Commission), as well as other community stakeholders. This outreach will help staff determine appropriate options to fit the specific needs of the West Hollywood community and ensure the community's interests are taken into consideration.

Based on the community engagement, staff may consider adopting a pilot program in West Hollywood to allow the delivery company to obtain permits to deploy a limited, small number of these autonomous delivery devices – up to three – in West Hollywood. The framework for the program will enable on-demand commerce while respecting and protecting the public right-of-way. The City and the permitted company will work together to collect data on the effectiveness of the pilot program. The pilot program will help ensure the autonomous delivery devices operating in West Hollywood respect public right-of-way, keep pedestrians safe, meet community demands, and help local businesses. Items for staff to consider in their analysis include the possible dimensions of the autonomous delivery devices, location of where they can and cannot operate, the potential time frame for a pilot program, how many companies will participate and how will they be selected.

There are technology-based tools to help cities maintain the public right-of-way through a real-time data portal with the goal of enforcing, evaluating, and actively managing companies that operate within the public-right-of way, including dockless mobility providers and autonomous delivery service providers. The City plans to hire a third-party data management provider to assist with the management of the dockless bike share pilot program. Staff will determine if this data management tool may also be used to manage autonomous delivery services and their use of the public right-of-way as part of the pilot program.

ALTERNATIVE RECOMMENDATION:

Authorize staff to issue a Request for Information (RFI) to partner with more than one delivery company to perform widespread community outreach – including at relevant Advisory Board and Commission meetings – and gather feedback to establish an autonomous delivery device pilot program for up to three delivery devices per company.

CONFORMANCE WITH VISION 2020 AND THE GOALS OF THE WEST HOLLYWOOD GENERAL PLAN:

This item is consistent with the Primary Strategic Goal(s) (PSG) and/or Ongoing Strategic Program(s) (OSP) of:

- PSG-1: Maintain the City's Unique Urban Balance with Emphasis on Residential Neighborhood Livability.
- OSP-3: Promote Economic Development while Maintaining Business Vitality &

Diversity.

In addition, this item is compliant with the following goal(s) of the West Hollywood General Plan:

- LU-1: Maintain an urban form and land use pattern that enhances quality of life and meets the community's vision for its future.
- G-1: Ensure that the community is active and engaged in the decision-making process.

EVALUATION PROCESSES:

Staff will return to the City Council with the feedback from the community, including the framework for a pilot program if appropriate, which would include an evaluation process that includes data collection and analysis.

ENVIRONMENTAL SUSTAINABILITY AND HEALTH:

Autonomous delivery devices aim to reduce traffic congestion and increase energy efficiency by diverting vehicle traffic in dense, urban areas such as West Hollywood.

COMMUNITY ENGAGEMENT:

Staff will perform community outreach to ensure feedback from the community is included in the pilot program.

OFFICE OF PRIMARY RESPONSIBILITY:

PLANNING AND DEVELOPMENT SERVICES DEPARTMENT/ LONG RANGE PLANNING DIVISION

FISCAL IMPACT:

None at this time.