

MIAMI BEACH

COMMITTEE MEMORANDUM

TO: Public Safety and Neighborhood Quality of Life Committee Members

FROM: Eric Carpenter, City Manager

DATE: March 12, 2025

TITLE: DISCUSS THE POTENTIAL DEPLOYMENT AND OPERATION OF SERVE ROBOTICS' AI-POWERED SIDEWALK DELIVERY ROBOTS IN THE CITY OF MIAMI BEACH.

RECOMMENDATION

The Administration is in support of the operation of the Serve Robots, Inc. in Miami Beach via a pilot program, contingent a contract agreement between the City and Serve Robotics, Inc. (similar to Citi Bike), based on the City's needs and regulations, including a type of insurance that would protect the City from liability.

BACKGROUND/HISTORY

On February 3, 2025 at the request of Commissioner Laura Dominguez, the Mayor and City Commission (City Commission) approved item C4F (Attachment A), a referral to the Public Safety and Neighborhood Quality of Life Committee to discuss the potential deployment and operation of Serve Robotics' AI-powered sidewalk delivery robots in Miami Beach.

Serve Robotics, Inc. ("Serve") develops advanced, AI-powered, low-emission sidewalk delivery robots that endeavor to make deliveries sustainable, reliable, and economical. Spun off from Uber in 2021 as an independent company, Serve has completed tens of thousands of deliveries (in cities including West Hollywood, Los Angeles, and San Francisco) for enterprise partners such as Uber Eats and 7-Eleven. These sidewalk delivery robots have also made their way to Miami Dade County. Commissioner Dominguez would like to discuss the feasibility of having robots operate in Miami Beach.

ANALYSIS

The City reached out to Serve to gather more data on these sidewalk delivery robots and how they would work out in the City. As it turns out, Serve robots are currently operating in Miami Beach, delivering through the Uber Eats application. There are about 20-25 robots currently operating in "hot spot" areas (areas with highest demand for Uber Eats orders). Not everyone will get their food delivered via these robots, since there is a limited amount of units, however this is expected to change in the near future. It is estimated that by June of this year, there will be about 50 robots operating in Miami Beach, and possibly more in the future, as demand increases (more robots are currently being built).

Gen3 Model Specs (model currently being used in the City):

Speed: Average speed of 3 miles per hour when driving through sidewalks and about 5-6 miles per hour when crossing the streets.

Weather: Can drive thru moderate rain (will stop in heavy weather)

Radius: 1.5 miles (as a way to keep food orders warm)

Cargo: 15 gal, or 4x16" size pizzas

Delivery: It can only be opened by a customer or the merchant via a unique passcode.

Navigation: Serve robots use a range of sensors to identify the objects around them and to avoid obstacles

Maintenance: Robots are taken once a day to a container (trailer) to have them charged, cleaned up, and data download.

Due to its speed, these robots mostly operate on the sidewalk, on their own in self-driving mode, and supervised by remote pilots. Each robot is covered by Serve's insurance policy.

Should Serve and the City agree to collaborate, a contract would need to be drafted and agreed upon (similar to Citi Bike), based on the City's needs and regulations, including insurance that would protect the City from liability.

A potential pilot may be considered, including the City facilitating a permanent parking spot, where they can operate to and from. A suggested lot is Parking Lot P27, located on Meridian Avenue and Lincoln Lane North, next to Cafecito. Should this be the case, the contract agreement between the City and Serve would include an option of revenue sharing, to compensate for loss of space to park these devices.

These robots are not considered micromobility, as they do not transport people. Since there are currently about 25 units, it would not require an immediate traffic study, however, as the number of operating robots increase, and selected areas of operation expand, a study may be required. Should the agreement between the City and Serve include a revenue share option, Serve would not need to pay a daily parking fee to use the lot. It will require a Business Tax Receipt depending on where the Serve's office is located, and City Commission approval should the threshold of the pilot exceed \$100,000, as well as a bid waiver should Serve be considered as the sole vendor. A contract would need to be drafted and agreed upon prior the start of the pilot. Public Works will work with Miami Beach Police Department to address any potential law enforcement concerns.

Serve robots produce zero emissions. By reducing our over-reliance on cars, they help lower CO2 emissions as well as traffic congestion. If they are able to take even a small fraction of food deliveries off the road, they estimate Serve can help eliminate over 1 billion car miles and more than 370K tons of CO2 annually.

Below is a photograph depicting Serve robots:



FISCAL IMPACT STATEMENT

To be determined

CONCLUSION

The Administration is in support of the operation of the Serve Robots, Inc. in Miami Beach via a pilot program, contingent a contract agreement between the City and Serve Robotics, Inc. (similar to Citi Bike), based on the City's needs and regulations, including a type of insurance that would protect the City from liability.

Applicable Area

Citywide

Is this a "Residents Right to Know" item, pursuant to City Code Section 2-17?

Yes

Is this item related to a G.O. Bond Project?

No

Was this Agenda Item initially requested by a lobbyist which, as defined in Code Sec. 2-481, includes a principal engaged in lobbying? No

If so, specify the name of lobbyist(s) and principal(s):

Department

Public Works

Sponsor(s)

Commissioner Laura Dominguez

Condensed Title

DISCUSS THE POTENTIAL DEPLOYMENT AND OPERATION OF SERVE ROBOTICS' AI-POWERED SIDEWALK DELIVERY ROBOTS IN THE CITY OF MIAMI BEACH.