

**CITY OF MANHATTAN BEACH
DEPARTMENT OF COMMUNITY DEVELOPMENT**

TO: Parking and Public Improvements Commission

FROM: Stephanie Katsouleas, Public Works Director
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DATE: September 26, 2019

SUBJECT: Consideration of New Single-Space and Multi-Space Parking Infrastructure

BACKGROUND:

The City currently operates and maintains 1,808 single-space parking meters throughout the City. This encompasses approximately 495 on-street metered spaces, 900-metered spaces in City-owned lots, and 413-metered spaces in State and County lots.

It has been nearly 10 years since the City tested new parking meter at the Pier parking lots. The Pier test initially evaluated two companies who manufacture single space and multi-space meters. After several months of testing, it was determined that the single-space parking meters were the best solution to meet the City's parking needs, and that IPS Group, Inc. provided the best overall product. As a result, the City ultimately replaced all of its on-street and parking lot meters with IPS meters using 2G communications, which was state of the art 10 years ago but is rapidly being phased out with the advances to 4G and 5G. In the near future, 2G meters will no longer be supported by telecom companies, and other desirable meter features have since become available.

DISCUSSION:

In anticipation of upgrading all of the City's parking meters with the latest features and communications technologies, in mid-2018 staff installed and tested new IPS meters with enhanced features, such as turn-over rate, percentage of time a meter's allotted time was exceeded, vacancy rates, etc. The pilot program consisted of installing 58 single-space parking meters on Manhattan Beach Boulevard, from Morningside Drive to Manhattan Avenue, and evaluating patron usage based on the meter's feedback features. The reporting software showed the following:

- Many occupants stayed the full amount of time that was paid for;
- Some users did not feed the meter at all, typically for short-term (5 to 10 minute visits);
- Most users did not overstay the posted time limit;
- Approximately 80% of users paid by credit card (consistent with citywide usage)

IPS meters provide several enhanced features over the 2010 models, which provide the City with tools to manage its parking demand, meters and resources in new ways. This includes:

Evaluating Parking Durations for Various Areas/Zones

The occupancy of each parking space can be analyzed to determine which areas and which meters are most utilized, and for how long. This information can assist with determining if demand base pricing will work in the future, or whether time limitations should be altered. Attached to this staff report is the average occupancy turnover from August 2018 to December 2018 in the pilot area along Manhattan Beach Blvd.

Space Sensor Technology

The new meters have parking space sensors built into the head of the meter. This technology allows the meters to document the duration that each user stays, and whether the user is trying to “refeed” the meter in lieu of vacating the parking space at the end of the time limit. The meter can refuse to accept additional payment if the user is overstaying the time limit. It also has the capability to “zero out” the meter when the space is vacated so that the next user cannot use the remaining time on or add to the minutes available on the meter. The sensors can be integrated with parking enforcement handhelds to optimize ticketing and enforcement of parking restrictions.

Based on the average revenue per meter, the City could see a potential \$13,900 increase in monthly revenue by zeroing out the meter. Council should be aware that this technology is not perfect and the meter can “zero” out with a car parked in the space resulting in a citation. Should someone receive a citation, they can dispute this charge and parking enforcement can access the software to assist in determining if the citation can be waived.

Parking sensors also provide more accurate data on the availability of parking spaces through the Park Smarter app, which helps users find free parking spots on demand.

Telecommunications

The new meters use 4G LTE cellular communications. Thus far, the meters have proven to be successful in their daily communications.

Parking Availability App

IPS meters are integrated with the Park Smarter App, which provides users various benefits to improve their parking experience. Some of these benefits include:

- Parking Finder: available parking mapping
- Real-time notification alerts for expiring meters
- Ability to pay and extend parking sessions remotely if not exceeding the total time limit (the City pays a convenience fee for this option)
- Multi card and vehicle registration per account

There are also other vendors who provide mobile pay options that can be integrated with the meter’s software (see below). Typically, users who have accounts with other vendors will pay the full meter rate to the City plus a convenience fee directly to the vendor.

Mobile Payment

Near Field Communication (NFC) or mobile pay applications (apps) are becoming more widely used as a form of payment. As part of this pilot, the NFC technology was offered through Apple Pay and Google Wallet. However, with only a small pilot area deployed and given that there was no advertisement of this feature, there was minimal usage by users.

There are several companies that offer a solution at no cost to the City because they pass the convenience fee on to the user. These companies allow their customers to pay via a mobile app, which then communicates the allotted time to the parking meter. The apps can also assist users in finding parking during peak seasons and special events and they have the option to extend times without going back to the meter.

Other Benefits

The credit cards used at the meter can be correlated with its usage at downtown commercial establishments (e.g., are users shopping and/or dining in town, or are they just going to the beach).

Parking Lot Payment Options

The current meters all use solar panels for charging to extend the life of their batteries. However, this feature has performed poorly in the City's covered parking lots over the last nine years, resulting in non-functioning meters and early replacements. Lots 2, 3 and 4 are covered but receive some ambient light throughout the day. Those meters have minimal charging problems, but the batteries do not last quite as long as those exposed to full sun.

However, the 450 meters in Metlox receive virtually no ambient sunlight and the batteries degrade much faster. Therefore, staff recommends the City Council consider moving to a multi-space parking system within the structure. The 450 parking meters would be replaced with 12 multi-space units which will reduce battery replacement while providing payment opportunity at the escalators and each stair well on both levels.

There is an initial cost savings of approximately \$115,000 by switching to the multi-space units in this lot in lieu of parking meters. As part of the conversion to multi-space parking, space availability signs would be placed at each entrance to the structure and at all stairwell exit points. There are several options for centralized pay parking, which include producing a ticket that users leave on their dashboard, pay-by-spot (with assigned numbers) and pay-by-license plate. Staff would work with the Police Department's Parking Enforcement Division to determine which method is most desirable for implementation.

A License Plate Reader (LPR) system could also be installed to assist with space availability through a partnership between IPS and Vigilant. This LPR system would have the option to report back to the Police Department on stolen vehicles and other vehicle violations.

Outreach

Notifications will go out via the City website and social media regarding the new meter technology and application. Additionally, meters and signs will have a QR code allowing easy downloading.

RECOMMENDATION:

That the Commission pass a motion to recommend the following:

1. Support the replacement of the single space parking meters
2. Support the change from single space parking meters to multi-space parking meters in the Metlox parking garage

Attachments: A. Parking Sensor Data

