ANTICIPATED IMPACT REPORT Mobile Parking Payment Systems for Parking Management and Enforcement

Michael P. Ford Parking & Mobility Division Department of Transportation City of Oakland *August 23, 2023*

0. Definitions

Parking data

Any logbooks, records or data files used or created pursuant to a parking payment service including electronic storage media, Software, Source Code, any database and database rights, personal or personally identifiable information relating to an identified or identifiable individual, payment transaction, parking session or data transmission, including the originating and destination numbers and internet protocol address, date, time and duration, information on a vehicle, customer, location or payment media. This data may contain personally identifiable information (PII).

Personally identifiable information

Information that identifies, relates to, describes, is reasonably capable of being associated with, or could reasonably be linked, directly or indirectly, with a particular consumer or household.

Raw Parking Payment Transaction Data

A subset of Parking Data that includes parking date, start and end times for each transaction, payment amounts, transaction fees for the Providers, numbered "zones" corresponding to parking location and customer data including license plate number, customer ID or other information about the customer and their payment media. This data may contain PII.

Unprocessed Anonymized Data

A subset of Raw Parking Payment Transaction Data that only includes parking transaction date with start and stop times for each transaction, meter payment amounts, user transaction fees for the Providers, and numbered "zones" corresponding to parking location. This data does not contain any PII or data on the customer except for the vehicle's license plate number.

Aggregated Anonymized Data

A summary of Unprocessed Anonymized Data that Contains ONLY a sum of the total number of parking payment transactions that occurred on each block face during each one-hour period of each day and the total revenue received from the sum of those transactions. In any case where three or fewer transactions occurred on any given block face during any given hour, such data will be obfuscated to a default number. This will allow staff to know that a small amount of

transactions occurred and revenue was collected, but also ensure that there is no record of any individual transactions. Therefore, this data does not contain any individual transaction data or customer data. This data does not contain any PII and cannot be used to re-identify anyone or their location.

Provider

A business whose services allow individuals to pay for parking sessions through a mobile phone application (app), website, or text message in Oakland and which has all necessary licenses and registrations to conduct such business.

Third Party Data Contractor

Any business contracted by the Provider to provide any service that may include accessing, storing or viewing Parking Data generated in Oakland.

System Security Plan

A plan submitted by each Provider detailing the data security, storage, and encryption practices that meet or exceed industry standards, including Payment Card Industry Data Security Standard (PCI-DSS) and System and Organization Controls 2 [e.g., (SOC 2). DOT expects that these best practices will primarily address user payment methods to protect credit card information. The Plan must also address how the Provider plans to prevent and respond to cyberattacks, including:

- Process for keeping software up to date;
- Monitoring systems and networks for malicious activity;
- Use of secure uniform resource locators (URLs)
- Employee education and training;
- Who is responsible for reporting the attack to the appropriate authorities;
- How customers and others will be alerted;
- How Provider will discover what data and what kind of data was stolen;
- How the Provider will comply with CA Senate Bill 34; and
- Changing and strengthening passwords.

1. Information Describing the Proposed Data Sharing Agreement and How It Works

The City of Oakland (City) Department of Transportation (DOT) intends to enter into agreements with each of the five selected providers (Providers), including:

- PayByPhone US Inc. (PayByPhone),
- Passport, Inc. (Passport),
- ParkMobile, LLC (ParkMobile),
- HonkMobile USA Ltd. (Honk), and
- IPS Group, Inc. (IPS).

These Providers' services permit individuals to pay for parking sessions through their mobile phones in Oakland. With these services, parkers will be able to initiate a parking session through a mobile phone application (app), website, text message, or phone call, depending on the Providers' services. To initiate a parking session, parkers are required to enter their payment information (such as a credit card or Google Pay), "zones" corresponding to City blocks, and license plate number on the Providers' app. Oakland is implementing "demand-responsive" parking areas in which parking fees may vary from block to block in order to reflect demand. So far, this has been limited to the Montclair business District and Chinatown, but will be expanded to all commercial areas. Each block in metered areas has a unique "zone" number. In demand-responsive areas, zones will correspond to a City-provided Facility ID printed on new parking signs and will <u>not</u> differ by Provider. In all other metered parking areas prior to demand-responsive rates being implemented, the Provider-created ID per block will be used. When choosing to pay by app, customers must enter the zone number within the Provider's platform. Zones are shown in Providers' apps and on signs.

DOT uses Unprocessed Anonymized Data from mobile parking payment Providers in order to enforce parking restrictions, such as time limits and meter payments, to analyze parking revenues and demand, and to review citation disputes. License plate and zone information are pushed to DOT's Automated License Plate Readers (ALPR)¹ through an application programming interface (API) between other vendors who support the City's parking enforcement system. Parking Control Technicians use ALPR to scan vehicles' license plates and check for an active paid parking session associated with the license plate and location (numbered zone).

In addition to pushing data to enforcement technologies, the Providers also collect data from parking sessions and "publishes" these datasets to an online platform that authorized staff can access through a unique username and password. The Unprocessed Anonymized Data published to the online platform will include license plate number, parking date and start and stop times, payment amounts, transaction fees for the Providers, and "zones" corresponding to parking location. This data will include no personally identifiable information, and DOT staff will use this data for financial and parking analyses and for responding to parking citation disputes. All Unprocessed Anonymized Data will be deleted after one year. DOT staff will also have access to, or may create, Aggregated Anonymized Data to analyze and summarize historical parking data by block face, date, hour and revenue collected. Aggregated Anonymized Data may be retained indefinitely.

In receiving Unprocessed Anonymized Data, DOT can ensure that programmed parking rates and time limits are accurate and parking citations are correctly issued. For example, in an event a parker disputes a citation due to having a paid ParkMobile session, the parking payment can be properly reconciled, particularly in demand-responsive parking program areas.² In these

¹ See the Privacy Advisory Commission's approved use policy and anticipated impact report for automated license plate readers. Available online at: <u>https://www.oaklandca.gov/documents/automated-license-plate-reader</u>

² More information on ParkOakland, the Demand-Responsive Parking & Mobility Management Initiative, is available on the City's website here: <u>https://www.oaklandca.gov/topics/park-oakland</u>

areas, meter rates change by time of day and Value or Premium Rate area. DOT will ensure that zones would be visible in the transaction data in order to program these specific areas' rates or audit the accuracy of Providers' rates/revenues. The importance of this auditability recently came up regarding the demand-responsive rates at the La Salle Garage and in Montclair, where time-of-day pricing was not correctly programmed in ParkMobile's app and showed this incorrect pricing to parkers. This error had financial implications but was able to be corrected through the portal and through ParkMobile's client support services.

The professional service agreements with each Provider will allow Providers to share Unprocessed Anonymized Data, including location-based information corresponding to numbered block zones, with DOT. Importantly, the agreements will require that certain data is excluded from the portal in order to better protect individual parkers' privacy (see excerpt below). DOT staff will be able to access up to one (1) year of Unprocessed Anonymized Data in each Provider's online portal. If a contract between a Provider and the City is severed, then the Provider will be required to delete all Raw Parking Payment Transaction Data collected in Oakland. City staff will <u>not</u> have access to Raw Parking Payment Transaction Data in this portal. For additional details, see the draft "City Data Addendum" to the City's Professional Services agreement (Attachment A).

The contract term is for up to seven years, including two optional years, and in an annual amount not to exceed \$500,000 each, or \$2,500,000 total, in Providers' transaction fees collected from parkers in Oakland.

DOT staff have aimed to procure the most secure mobile parking payment system through the RFP process. The Request For Proposals (RFP) was issued in March 2022, and proposals were due in April 2022. DOT staff received seven proposals, of which six were deemed Responsive and one, Oakland Parking Solutions, has since declined to participate. When DOT staff initially presented the next-generation mobile parking payment system to the Privacy Advisory Commission (PAC) in April 2021, data security for users was a key component of discussion. The Commission's comments were adopted into the RFP, primarily through the following scope section:

- **1.4 Data Privacy Requirements.** One of the key goals of this new pay-by-phone system is to enhance user data protections. The system must comply with the City's Surveillance Technology Ordinance (Oakland Municipal Code Chapter 9.64) and subsequent system use policy and anticipated impact report in the following capacities:
- Maintain an online system portal/back-office system with <u>none</u> of the following information visible to staff at any time for any reason:
 - Personally identifiable information (PII), including but not limited to, name, phone number, home address, email address and credit card information
 - Individual user account details
- Provide a System Security Plan with data security, storage, and encryption practices that meet or exceed industry standards, including Payment Card Industry Data Security

Standard (PCI-DSS) and System and Organization Controls 2 [e.g., (SOC 2). DOT expects that these best practices will primarily address user payment methods to protect credit card information.

- Disclose any additional companies who would support or follow the Provider's System Security Plan, such as third-party cloud storage services.
- Ensure the security of user and transaction data through System Security Plan protocols per current industry standards of PCI-DSS and SOC 2.
- Provider must comply with the City's Surveillance and Community Safety Ordinance (Oakland Municipal Code Chapter 9.64), the approved use policy regarding the mobile parking payment system, and any other relevant surveillance laws relevant to Oakland, California.

Notably, parkers are <u>not</u> required to use the mobile parking payment system in on- or off-street facilities in Oakland. The California Vehicle Code requires that parking meters must be operable in order to write a defensible citation; in other words, parking payment for a space cannot only be accepted by nonphysical means like an app or website (CVC Section 22508.5(d)).³ While there is no anticipated possibility that parkers will be required to use the new mobile parking payment system in Oakland, DOT staff seek to implement a system that meets, if not exceeds, the requirements of the Surveillance Technology Ordinance.

DOT staff worked with Contract Services and the City Attorney's Office to include the requirement to comply with the approved use policy and impact report for this system in the Professional Services Agreement. By including this requirement as an addendum of the standard professional services agreement (see Attachment A), the City will have greater capability to enforce this requirement in the event of non-compliance. The agreement as edited by the City Attorney's Office can be found in **Appendix D**.

2. Proposed Purpose

Data from mobile parking payment services may help shape parking policies, plans, and practices in Oakland. Analyses of this data guide staff's active management of the parking system and access to finite, valuable curb space. Importantly, this data is also used in the issuance of citations and the review of citation disputes. Mobile parking payment services expand the available payment options for parkers, in turn increasing the convenience and ease of parking. Making parking easy and more actively managing the parking system are two of the City's Parking Principles (Resolution No. 84664 CMS) and shape a more equitable mobility system.

Under the current mobile parking payment system, a single Provider is permitted to operate in Oakland. From 2015 to 2023, parking payments made through this Provider comprised about 11 to 13% of the City's total on-street parking revenue, generating a total of approximately \$6.5 million in parking revenues. Signage promoting this Provider's brand is currently posted in the

³ This CVC section is available online here:

https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=VEH§ionNum=22508.5

public right-of-way (PROW) but given maintenance challenges, is not always readable. The City's current Provider, ParkMobile, also supports ongoing pilots at the LaSalle Garage in the Montclair District and the Telegraph Plaza Garage to integrate the City's off-street facilities into the on-street system and thus, eliminate costly one-time expenses such as traditional parking access and revenue control systems (PARCS), and ongoing expenses, such as administrative and accounting overhead, maintenance of equipment, and back-office labor. This integration was adopted by City Council in the Fiscal Year 2021-2022 Budget.

DOT has pursued an enhanced multi-vendor mobile parking payment system for several reasons: 1) increase the convenience of this service to parkers, 2) promote the use of this contactless payment method with City-branded signs in the PROW, and 3) more holistically support the active management of the parking system. A key improvement will be City of Oakland-branded signs that will direct parkers to a webpage with all available Providers and promotions, as well as supporting future pilots and innovations like the LaSalle Garage. Existing ParkMobile signs that display the zone number are currently in a state of severe disrepair, when they are still present on-street at all (see Figure 1). New City-branded signs will be printed and installed in demand-responsive project areas in phases, as meter rates are adjusted and Value and Premium Rate areas implemented (see Figure 2). Signs in Montclair and bilingual signs in Chinatown have been implemented first. Providers will contribute to the costs of installing and maintaining the system, particularly signs, through a one-time up-front fee of thirty thousand dollars (\$30,000) total, six thousand dollars (\$6,000) from each Provider, and twenty-five thousand dollars (\$25,000) total, up to five thousand dollars (\$5,000) annually from each Provider, and 10% of ongoing user transaction fees, up to five thousand dollars (\$5,000) annually per Provider (\$25,000 annually in aggregate). In addition to these fees, Providers may run their own marketing campaigns aimed at parkers in Oakland.

Figure 1: Existing Pay Here + Mobile Parking Payment Signs



Figure 2: New Approved Pay Here + Mobile Parking Payment Signs

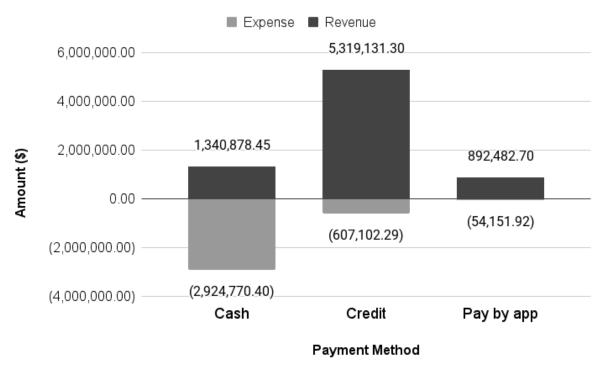


The mobile parking payment system provides several key advantages to both parkers and the City that contribute to the importance of this system. The mobile parking payment system meets rising demand for contactless payment options and supports the health and safety of consumers

by reducing touch-points.⁴ It is anticipated that positive consumer experiences with contactless payments, including the City's pay-by-app parking services, will make more individuals interested in using this payment type, even as the pandemic continues to subside. Additionally, the City pays lower fees for parking transactions made by app than transactions made by coin or credit/debit card (see **Figure 3**). In Fiscal Year 2020-2021, 6% of parking revenues paid by app were spent on fees and expenses, compared to 11% spent on credit/debit card expenses and 218% on coin expenses.

Figure 3: Revenue and Expense by Payment Method (July 2020 to June 2021)

⁴ Retail Leader. "Will Consumers Stick With Contactless Payments?" August 6, 2020. Available online here: <u>https://retailleader.com/will-consumers-stick-contactless-payments</u>



Revenue and Expense By Payment Method

July 2020 to June 2021

By accepting multiple vendors to operate in Oakland, visitors will likely not need to download any additional applications (apps) and share their information with another Provider. Rather, they are more likely to be able to use an existing app on their phone and conveniently pay for their parking session. With this variety of Provider options available to parkers, the enhanced system is intended to minimize the number of Providers with whom users, especially visitors to Oakland, must share their information to pay for parking by app and maximize parkers' choices as consumers.

Residents will also benefit from having multiple vendor options, as vendors will compete for long-term customers with lower user fees and promotions, and from new community engagement requirements that aim to make Providers' services more equitable and inclusive. Each Provider's user fee and website will be clearly shown on the City's go-to parking resource webpage (<u>oaklandca.gov/oakparkplus</u>). A QR code and the URL to this webpage are shown on the new City-branded signs to be installed in demand-responsive project areas.

Specific applications of mobile parking payment data that supports this effort will include <u>only</u> the following:

- a) Estimating parking demand, occupancy, and revenues
- b) Evaluating parking payment options

- c) Monitoring demand-responsive parking areas and compliance
- d) Reconciling payment transactions with total parking revenues received
- e) Promoting compliance and enforcing parking restrictions, permits, and payment
- f) Reviewing contested parking citations
- g) Remitting user transaction fees to Providers via invoices

3. Locations of Deployment

The data shared under this proposed agreement is user-generated within the City's parking system and therefore collected in all neighborhoods with parking meters or public parking facilities. Parking meters and public parking facilities are primarily found in commercial zones, near public transit stations, and in other areas with high demand for parking. Existing meters and Council-approved meter zones (OMC Section 10.36.140) are shown in this map: https://oakgis.maps.arcgis.com/apps/mapviewer/index.html?webmap=8fa241d70ab5494f8e50e678065d627b

Providers may begin operating in phases, such as if beta testing is required, and may start in certain geographic areas before operating at citywide scale. In this case, the geographic areas where Providers operate would be listed on the City's parking webpage to minimize any confusion to parkers and appropriately communicate how to use the mobile parking payment system.

4. Potential Impact on Civil Liberties & Privacy

DOT acknowledges the private and sensitive nature of personally identifiable information (PII) and block-level location data included in mobile parking payment data. Without mitigations, mobile parking payment data would be vulnerable to privacy risks such as re-identification, as users' names and contact information are typically collected by Providers and made available to their clients via the portal. In order to minimize, if not eliminate, privacy and surveillance risk, DOT has developed a set of guidelines based on feedback from the Privacy Advisory Commission received in March and April 2021 for how mobile parking payment data will be handled, aggregated and obfuscated to protect users' data, using mitigations outlined below. These mitigations were provided to prospective bidders in the recent competitive process for the enhanced mobile parking payment system; through their proposals, all five Providers have initially agreed to follow the mitigations below and this impact report and use policy, upon finalization and approval.

5. Mitigations

DOT recognizes the sensitive nature of parking and user data generated through mobile parking payment Providers and has developed the following guidelines for the responsible handling of this data:

- Per the draft agreement scope (see Appendix A), DOT will <u>not</u> have access to any PII of parkers who use the Providers' services. The public may access anonymized minimally-processed data available in the portal through public records requests, subpoenas, warrants, and other court orders. This data will <u>not</u> be raw, as Providers will have removed PII and individual user account details from the portal.
 - a. In the competitive process to procure the new mobile parking payment system, DOT issued the requirement below. All five proposed Providers have initially agreed to this requirement in their respective proposals. This mitigation would effectively eliminate privacy risk by anonymizing parking data.
 - *"Maintain an online system portal/back-office system with <u>none</u> of the following information visible to staff at any time for any reason:*
 - Personally identifiable information (PII), including but not limited to, name, phone number, home address, email address and credit card information
 - Individual user account details"
- DOT has sought and selected Providers whose data security, storage, and encryption practices follow a System Security Plan. All Providers currently and must continue to maintain Payment Card Industry Data Security Standard (PCI-DSS) and System and Organization Controls 2 (SOC 2) compliance. Additional privacy and security measures, such as California Consumer Protection Act compliance, differ between Providers but are available in their respective privacy policies (see Appendix B).
- 3. After each agreement has been signed and executed, login credentials to the Providers' online portals will be unique to each authorized staff who has been granted access to the mobile parking payment data. Login credentials will not be shared outside of authorized staff in DOT and Finance.

6. Data Types and Sources

In this proposed system, the Providers will "publish" Unprocessed Anonymized Data on their respective online portals that are only available to City staff. While these platforms vary by Provider, parking data available within the platform will include the following:

- Numbered zone indicating approximate parking location
- Parking date and start and end times
- Parking transaction amount
- Transaction fee (to be paid to the Provider)

Provider's portals primarily differ by aggregate data analyses, such as charts and graphs showing growth over time in Oakland parking transactions made by app. Importantly, as stated in the previous section no Provider will show PII or individual user account information in the portal at any time for any reason.

License plate number data is necessary for both enforcement purposes and for responding to parkers' citation disputes. License plates are scanned or entered by Parking Control Technicians in automated license plate readers (ALPR) to check if the vehicle has an active parking session. All citations issued require that a license plate number be inputted, and the handheld device prohibits a Parking Control Technician from issuing and printing the citation if there is an active ParkMobile session associated with the plate. In the event that a parking citation is disputed, then this request is processed and analyzed by the Parking Citation Assistance Center Staff. Currently, staff look up the license plate number in ParkMobile's portal and verify their parking session by license plate, zone number, and parking session date and start time. Without being able to view license plate information, Parking Citation Assistance Center staff would have to rely on vendors to look up this data, which would pose a significant burden on the Center's processing time and resources.

Only authorized staff in DOT and the Finance Department with unique usernames and passwords may log in and access this data, unless requested through a public records request.

7. Data Security

Each provider responded with details regarding their own unique data security protocols. Per the draft agreement section in Section 1 of this impact report, DOT is requiring that each Provider securely store, publish, and audit the data according to industry standards and best practices outlined in their System Security Plan. Providers are required to provide a fully auditable mobile parking payment service. DOT or Finance staff will audit Providers through their respective back-end online data portals, in addition to Providers going through PCI DSS audits. Audits by DOT or Finance staff will occur on an as-needed basis, such as audits of a subset of zones where meter rates were recently changed.

Upon execution of the draft Professional Services Agreements (see **Appendix A**), Providers are required to provide a current certification through the Payment Card Industry Data Security Standards (PCI DSS). All Providers currently meet these standards. Major Providers such as ParkMobile, Passport, and PayByPhone maintain PCI DSS Level 1 certification. Smaller Providers may maintain a lower level due to the smaller number of annual transactions processed through them. PCI DSS certification was the primary security requirement that the City sought when procuring mobile parking payment services in 2015 and continues to be industry standard. Procurement of the new mobile parking payment system has sought to maintain and exceed this standard through additional privacy and security requirements by disclosing data storage and encryption practices and PII protection.

Auditability was also a requirement of the 2016 agreement between the City of Oakland and ParkMobile, and ParkMobile has published information regarding account and payment security on its website: <u>https://support.parkmobile.io/hc/en-us/articles/203299650-ls-my-account-and-credit-card-information-safe-</u>.

More information on individual users' data security is available in all five of the Providers' existing user terms and conditions and privacy policies (see **Appendix B** and **Appendix C**). All Providers will be required to comply with the terms included in the "City Data Addendum" (see **Appendix A**).

Regarding data retention, staff will require that Providers store only one (1) year of Unprocessed Anonymized Data in their respective portals in order to provide sufficient time for parking citation appeal processes. Providers will store Raw Parking Payment Transaction Data parking payment transaction data collected in Oakland for no more than one (1) year. If the contract between a Provider and DOT is severed, the Provider will be required per the signed Professional Services Agreement to delete all Raw Parking Payment Transaction Data collected in Oakland (see **Appendix A**). If such an event occurs, the Provider will be asked to email the DOT Project Manager a confirmation that all raw data collected in Oakland has been deleted.

8. Fiscal Cost

Providers operate at no direct cost to the City of Oakland. Instead, parkers who use the Providers' services pay a fixed fee to the Provider per parking session, in addition to the cost generated by the meter. Currently, parkers pay \$0.25 per transaction *plus* the amount of time that they wish to park according to the meter rates.⁵

To adhere to generally accepted accounting principles (GAAP), the draft agreement requires that the City collect all revenues for all parties, including the Providers' user fees. As a result, Providers will invoice the City monthly to receive their user transaction fees. This practice is consistent with the existing agreement and practice with ParkMobile.

Staff are anticipating an increase in parkers using mobile parking payment services under the enhanced system and have thus allocated up to \$500,000 each, or \$2,500,000 total, of user fees per year in the contract amount that will be reimbursed to the Providers. The Providers will only receive the reimbursed user transaction fees and will <u>not</u> receive any payment from the City. DOT staff have estimated a total of 14,000,000 transactions generated over the total contractual period across all Providers, including in the optional extension years. The contract amount has been set based off the maximum projected transactions per year (see **Table 1**).

	FY 2022-23	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6 optional	Year 7 optional
Total Estimated Parking Revenue	\$12.6 million	\$13.4 million	\$14.2 million	\$15 million	\$15.8 million	\$16.6 million	\$17.4 million	\$18.2 million

Table 1: Estimated Parking Revenues and Transactions

⁵ The Master Fee Schedule permits that meter rates may be adjusted between \$0.50 and \$4 per hour.

Estimated Parking Payment by Phone/App	9.5%	15%	20%	25%	30%	35%	40%	45%
Estimated Average Transaction Amount	\$2.40	\$2.60	\$2.65	\$2.70	\$2.75	\$2.80	\$2.85	\$2.90
Total Estimated Transactions	575,000	987,000	1,200,000	1,500,000	1,900,000	2,300,000	2,700,000	3,100,000

Additionally, selected Providers will contribute to the City's expenses to operate and maintain the enhanced mobile parking payment system, including but not limited to installing signs and reconciling the system's funds. At the beginning of the contract term, each Provider will pay their designated portion of the one-time upfront "start-up" fee of \$30,000 (\$6,000 per Provider). Each Provider will pay \$5,000 annually (\$25,000 annually in aggregate) for maintenance costs. Each Provider will also share 10% of their user transaction fee revenues generated in Oakland with the City on an ongoing basis, up to \$5,000 annually per Provider (\$25,000 annually in aggregate).

Currently, the user fee is \$0.25 per transaction with ParkMobile. The proposed user transaction fees for each selected Provider are below (see **Table 2**). In the enhanced mobile parking payment system, user fees are expected to be a primary point of competition between Providers for parkers' business and loyalty. Providers may also compete through their marketing efforts, such as first-time user promotional codes. Per the draft agreement, the City may choose to waive user fees at any time and instead pay them on behalf of the parker.

Provider	User Fee (per user transaction)				
PayByPhone	\$0.25				
	\$0.20				
Passport	*Note: may include gateway fee				
	(+\$0.05)				
ParkMobile	\$0.40				
Honk	\$0.25				
IPS	\$0.25				

Table 2: Selected Proposers' User Transaction Fees

9. Third Party Dependence

Raw Parking Payment Transaction Data will be received and stored by the Providers on an ongoing basis and for up to one year. The City does not collect this data, nor does it have the means to store this data in compliance with industry standards. Most Providers, including the five selected Providers, rely on Third Party Data Contractors to securely store data. These detailed processes and services were provided in confidence in each Provider's proposal. However, third party authorization and use is broadly covered in the Use Policy and Data Addendum (see **Appendix B**).

10. Alternatives

The primary alternative to the proposed data sharing agreement is not enforcing any of the additional privacy or security features provided in the RFP. This may have reduced barriers to entry for Providers to Oakland's mobile parking payment system but would have resulted in a less secure mobile parking payment system. Because DOT staff received proposals from a range of Providers (large and small, local and not local) in the competitive process, this alternative may not have actually resulted in an "easier" proposal process for potential or existing Providers but certainly would have compromised the security of users' data in Oakland.

11. Track Record

Mobile parking payment services are available in cities throughout California, the United States, and the world. However, the City's 10 years of experience with mobile parking payment services is most pertinent to the purpose of this report. ParkMobile has been the City's Provider since 2011. In a typical year since 2015, about 11 to 13% (typically \$1.5 to \$2 million) of annual onstreet parking payment transactions are made through ParkMobile. In addition to procuring a system with enhanced privacy and security measures, a key challenge with this service has been the maintenance of signage showing the zone number. Thus, a renewed investment in signage, including the initial start-up fee and ongoing revenue share, was a key component of the new system's RFP and innovative for the nature of this procurement.

In March 2021, ParkMobile experienced a data breach of over 20 million users' information. In an email sent by ParkMobile on April 13, 2021, DOT staff were notified of the following: "[ParkMobile's] investigation has confirmed that basic account information – license plate numbers and, if provided by the user, email addresses and/or phone numbers, and vehicle nicknames – was accessed. In a small percentage of cases, mailing addresses were affected. No credit cards or parking transaction history were accessed, and [ParkMobile does] not collect Social Security numbers, driver's license numbers, or dates of birth." In response to community members' concerns regarding the breach, DOT provided more information and resources about the breach on the City's website.⁶ Staff did not discover any other reported data breaches from the other four Providers in their research.

Staff will not ask ParkMobile to migrate user information or data to the additional new Providers operating under the enhanced mobile parking payment system in order to avoid any compromise of the company's marketing and customer retention efforts. Rather, ParkMobile will now be competing with four (4) other Providers for parkers' business in Oakland. Providers will primarily compete through transaction fees and promotions but may also compete through their privacy policies and practices that enhance parkers' privacy.

The enhanced mobile parking payment system service supports the City's Parking Principles (Resolution No. 84664 CMS) by making parking easier and will be used as a pillar of the parking system. As cities increasingly move to multi-vendor mobile parking payment systems, the City continues to be on the forefront of innovation and data privacy standards through this next-generation mobile parking payment system. DOT staff are thrilled to be delivering a more secure system to parkers in Oakland that complies with the Surveillance Technology Ordinance and enacts the necessary mitigations to protect individual user data.

Questions or comments concerning this draft Impact Report should be directed to Michael Ford, Division Manager, Parking and Mobility Division, via email at mford@oaklandca.gov or phone at (510) 238-7670.

⁶ This response is available here: <u>https://www.oaklandca.gov/topics/parkmobile-march-2021-data-breach</u>