Parking Access and Revenue Control System (PARCS)
RFP#16-627094-MW

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*By: 3:00 P.M., Pacific Time

Return Response to:
Via email
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The University of California Davis, Medical Center Web address for downloading this Document and any updates until the submittal due date is:
http://www.ucdmc.ucdavis.edu/matmgt/
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- Attachment 7 - University Terms and Conditions for Purchase dated 02/23/16
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- Attachment 9 – Capabilities Matrix
- Documents to review, not necessary to complete until Demo phase and will be required of the top 1 to 3 candidates (See Section VI. Basis of Award, pg 35):
  - Attachment 10a Technology Evaluation Checklist.pdf
  - Attachment 10b Technology Questionaire v2.4.docx
  - Attachment 10c Technology Evaluation checklist.pdf

Deviations from specifications: Any deviation from the specifications shall be identified and fully described. The right is reserved to accept or reject quotations on each item separately, or as a whole, and to waive any irregularities in the quotation; irregularities may, however, render the quotation non-responsive.

Public disclosure: Responses to Become Public Records:
All materials submitted in response to this solicitation become a matter of public record and shall be regarded as public record.

Designation of Confidential Information:
The Regents will recognize as confidential only those elements in each response, which are trade secrets as that term is defined in the law of California and which are clearly marked as ‘TRADE SECRET,’ ‘CONFIDENTIAL,’ or ‘PROPRIETARY.’ Vague designations and blanket statements regarding entire pages or documents are insufficient and shall not bind The Regents to protect the designated matter from disclosure.

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I. INTRODUCTION

University of California at Davis Health System Profile

The University of California, Davis Health System (UCDHS) provides the organizational framework that enables the University of California, Davis to fulfill teaching, research, patient-care and public service missions. It consists of the School of Medicine (SOM), the UC Davis Medical Center (UCDMC), the UC Davis Medical Group and several specific centers such as the UC Davis Cancer Center, the UC Davis Children’s Hospital and the UC Davis M.I.N.D. Institute. Together they deliver primary, secondary and tertiary care throughout inland Northern California. The UC Davis Medical Group, the health system’s physician network, includes over 500 physicians and 150 areas of medical specialty geographically dispersed in 25 locations.

UCDMC is one of five teaching hospitals operated by The Regents of the University of California. UCDMC is a 619-bed, fully accredited hospital, which serves as the main clinical education site for the UCD School of Medicine. Prior to its acquisition by The Regents in 1973, the hospital was owned and operated by Sacramento County and served as the primary provider of health care to Sacramento’s medically indigent population.

UCDMC is the sole Level 1 trauma center serving the Sacramento-Sierra area and the primary tertiary care referral center for a 32-county area of more than five million residents. Each year UCDMC admits approximately 32,000 inpatients, while its 150-plus clinics log more than 828,000 outpatients and emergency visits.

UCDHS Parking and Transportation Services department

The Parking and Transportation Services department (hereafter also referred to as “Parking,” “Parking Services” or “PATS”), Sacramento is located at:

4800 2nd Avenue Suite 1100
Sacramento, CA 95817

Parking Services manages four access-controlled parking locations (approximately 2,700 stalls total):

1. Parking Structure 1 – is a 5 level garage with a total of 590 spaces. Current use is designated for mixed transient and monthly parking.
2. Parking Structure 2 – is a 4 level garage with a total of 768 spaces. Current use is designated for mixed transient and monthly parking.
3. Parking Structure 3 – is a 7 level garage with a total of 1181 spaces. Current use is designated for mixed transient and monthly parking.
4. Parking Lot 4 – is a flat surface lot with 180 spaces. Current use is designated for mixed transient and monthly parking.
II. OVERVIEW/PROJECT GOALS

Project Scope

See attached Statement of Work

This project requires SB854 Prevailing wage compliance. You must be registered with the state Department of Industrial Relations (DIR). To register, go to https://efiling.dir.ca.gov/PWCR/. You must renew annually (fiscal year runs 7/1 – 6/30). Base your quote on the appropriate prevailing wage rates, go to http://www.dir.ca.gov/opri/DPreWageDetermination.htm. The University will file a PWC-100 form and will include the DIR Project ID number on the Purchase Order. You must post the prevailing wage rate at the jobsite. Please review Article 24 for the University of California Terms and Conditions of Purchase, Attachment 1, as it applies to this RFP award.

Needed Features / Functionality

Where possible, proposals should attempt to provide a complete solution which matches the features and functionality requirements as detailed in this section. Alternatives and omissions should be noted and explained.

1. Objective

The Parking Access and Revenue Control System (PARCS) should be a complete system to manage the needs for off-street, mixed usage, Medical Center parking facilities. The PARCS shall be a combination of equipment, subsystems, and supporting infrastructure that allows the Parking Services department to accurately calculate, collect, track, and report revenues for parking within multiple facilities. The PARCS shall also monitor and control entry and exit to and from those facilities.

Specifically, the PARCS system will control four parking locations (approximately 2,700 stalls) owned and operated by the Medical Center, as follows:

<table>
<thead>
<tr>
<th>Facility</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Structure 1</td>
<td>monthly parkers only</td>
</tr>
<tr>
<td>Parking Structure 2</td>
<td>mixed: transient and monthly parkers, includes nested parking</td>
</tr>
<tr>
<td>Parking Structure 3</td>
<td>mixed: transient and monthly parkers, includes nested parking</td>
</tr>
<tr>
<td>Parking Lot 4</td>
<td>mixed: transient and monthly parkers</td>
</tr>
</tbody>
</table>

2. General Functionality

In accordance with common industry standards and best practice, the PARCS system should be able to account for all revenue, by facility, lane, employee, customer, event, program, payment method, and time period, with complete audit trails (any transaction shall be completely auditable from start to finish) for all actions. The furnished PARCS system should meet the following expectations:

1. Increase efficiency of operations and maintenance.
2. Minimize theft and loss of revenue, with accounting for lost or stolen tickets.
3. Ensure flexibility for any future need to update, upgrade, and/or expand the system readily (either additional lanes or additional facilities).
4. Provide an intuitive and user-friendly interface for customers and operating personnel.

3. FMS Software

The PARCS shall include a real-time Facility Management Software system that shall be designated as the FMS.

The FMS shall include the following features or modules:

1. System Monitoring & Control.
2. Revenue Management.
3. Access Control.
4. Validations.
5. Reporting & Statistics.
6. External System Integration.
7. License Plate Recognition.
8. Space Counting & Signage.

Rates

1. The FMS shall allow the following rate structures:
   a. Pay per use
   b. Flat rates
   c. Rate increments
   d. Flexible Rates (by credential, facility, date/time, etc.)
2. The rate structures shall be configurable by the garage operator without need for a programmer to modify code and accommodate the following:
   a. Unlimited number of rates.
   b. Automatic adjustment for daylight savings time and leap year in fee calculations.
   c. Twenty-four (24) hour maximums.
   d. Grace periods. Provide a configurable Grace Period that has a zero (0) amount charge for customers exiting within the grace period. These transactions shall be coded in PARCS as grace period transactions and shall be included in the transaction reports.
   e. Lag time period. Provide a configurable Lag Time Period that has a zero (0) dollar charge for customers exiting within the lag time period. Lag time is defined as the time a ticket is paid at a POF station until the vehicle exits the parking facility.
3. The FMS shall be able to set up at least 100 different price lists that each of them can be utilized with conditions as – Early birds, Evening Special and weekend specials.
4. The rate structures shall be available to be utilized by either:
   a. Transient customers: Rate structure is assigned to regular transient parking tickets.
   b. Discount Validations: Validated parking ticket that is assigned to a different rate structure then the default rate.

Customer Management (General)

1. The PARCS shall support an unlimited number of customer groups with an unlimited number of customers per group.
2. User groups and individuals within the user groups shall each be assigned access privileges based upon facilities, lanes, entry/exit, date, days of week, time of day, or any combination.

Transient Customers

1. Transient entry shall be granted by either:
   a. Pressing and pulling a time/date stamped ticked from an entry lane terminal.
   b. Presenting a 1 or 2 dimensional barcode issued from an external reservation system that has been associated with a pre-payment transaction.
   c. Presenting a 1 or 2 dimensional barcode issued from the PARCS system that has been associated with a pre-payment transaction.
   d. Presenting a value card issued from the PARCS system that has been associated with a pre-payment transaction.

2. Transient exit shall be granted by either:
   a. Payments shall be made with credit card, cash or validated ticket.
   b. Pay to a cashier at a centralized location and then insert the paid ticked at an exit lane terminal. Payments shall be made with pre-paid value card, credit card, pin-less debit card, cash or validated ticket.
   c. Pay at an automated Pay-On-Foot (POF) station and then insert the paid ticked at an exit lane terminal. Payments shall be made with pre-paid value card, credit card, cash, chaser ticket or validated ticket.
   d. Pay at an automated non-cash exit lane terminal. Payments shall be made with pre-paid value card, credit card, pin-less debit card or a validated ticket.
   e. License Plate Recognition (LPR): The ticket will able to be associated with the vehicle license plate and once the ticket is validated, the system will recognize the ticket via LPR and provide option to allow for automatic completion of the transaction and exit upon detection of the vehicle.

Monthly Customers

1. Entries or Exits shall be granted by either:
   a. Present a valid proximity card at a lane terminal.
   b. Present a value card at a lane terminal
   c. Present a valid AVI credential while driving through an entry or exit lane.
   d. Valid vehicle license plate number captured by LPR system upon entry or exit lane.

Exception Transactions

The FMS shall support the following exception transactions:

1. Lost tickets.
2. Back out tickets.
3. Unreadable entry media.
4. Unreadable POF prepaid ticket.
5. Swapped ticket.
6. Insufficient funds transactions.
7. Towed and impounded vehicles
8. Each exception transaction type shall be recorded as a unique type in the FMS so that data by each exception transaction type is available.

9. The FMS shall provide the capability to report on all exception transaction data for a selectable time by transaction type and device ID.

10. If a transaction is cancelled in the exit lane, the ticket or a copy of the entry ticket shall be issued to the user and shall not be voided.
   a. After a successful exit, the validation amount and type is recorded in the PARCS database for reporting purposes.
   b. The FMS shall allow each type of promotional discount to be assigned a unique validation account number so that the number of discounts generated and used at exit are recorded by the unique account number and reported in the same manner as other PARCS validations.
   c. The FMS shall have the ability to offer and track multiple promotions simultaneously.

**Bankcard Processing**

The PARCS shall include a real-time Bankcard Card Processing solution (CCS)

1. All CCS components, systems, software, subsystems and third party systems or services shall comply with all PCI security standard council regulations in effect at the time of the installation.

2. The CCS shall meet or exceed all requirements as defined in University of California Appendix – Data Security and Privacy

3. A matrix of responsibility shall be supplied to Parking Services.

4. The CCS shall provide online real-time authorization for bankcard payments made at all of the garage’s point of sale devices.
   a. Bankcard processing time shall be no longer than 5 seconds for non-EMV transactions for most common major credit cards, regardless the amount of equipment that resides on the parking system network.

5. The CCS shall not retain any bank card sensitive CHD (Card Holder Data) in accordance with PCI Security Standards guidelines for PCI certified applications.

6. The CCS shall comply with processing requirements for bankcard processing, including, but not limited to, applicable requirements and operating regulations of card brand associations, card issuers and clearinghouses.

7. The PARCS equipment shall be integrated with the CCS, however no CHD shall touch the PARCS system. PARCS system shall be validated as out of scope.

8. No part of the Health System’s LAN or WAN shall be used for payment processing. The Health System’s network shall be validated as out of scope.

9. PARCS equipment shall be validated as out of scope.

8. The CCS shall support acceptance (based on customer determination) the following methods of payment media at all point of sale devices for parking access and payment (If supporting hardware is installed), as follows:
   a. Magnetic-stripe bankcards.
   b. EMV Chip bankcards.
   c. Contactless bankcards.
   d. NFC-based payment from smart phones (Apple Pay, Google Wallet).

9. The CCS shall support acceptance (based on customer determination) of all bankcard types (i.e. credit, debit and prepaid) and the following card brands - American Express, Discover, MasterCard, Visa and for payment.
10. For all approved bankcard authorization requests, the PARCS shall be capable of providing a bankcard transaction receipt.
11. The CCS shall provide online real-time authorization for bankcard payments made at all of the garage’s point of sale devices.
12. For payments, bankcard data shall be read and transmitted to the CCS /acquirer (“clearinghouse”). The clearinghouse shall provide authorization for all bankcard purchase transaction request.

Communications

1. The CCS shall provide communication with credit card processing service provider / clearinghouse for the purposes of obtaining authorization to complete a transaction with a bankcard.
2. The CCS shall be able to simultaneously process bankcard transactions from all PARCS devices to the clearinghouse.
3. The CCS shall support the logging, storage, backup, and retrieval of information regarding all data transmissions, including timing of the transmission, data transmitted, and status of the transmission, for both individual transactions and entire files, such as settlement files.
4. The future ability for the garage operator to change clearinghouses, shall be supported.
5. The PARCS shall include a notification method of communication failures at any point in the data transmission from device to bankcard server to clearinghouse.

Funds Settlement

1. The CCS shall generate on a daily basis an electronic settlement data file and transmission with the appropriate financial institution, or have the service provider / processor settle the transactions for the merchant account.
2. The PARCS shall provide report data that displays:
   a. Bankcard revenue by card type, amount, individual parking device and parking facility and in total for a selectable time.
   b. The data shall be able to be displayed by total for each card brand and grand total of all brand subtotals.
3. All funds shall be deposited directly into University account(s). Contractor may not collect funds on behalf of the University.
4. Payments should be processed through First Data Merchant Services (FDMS), North Platform.

The PARCS shall be able to handle the following payment methods:

1. Banknotes.
2. Credit/debit bankcards (including contactless, mag stripe, EMV chip).
3. Value payment cards.
4. Pay by Mobile.
Technologies

1. **Optical Bar Code**

1. Transient tickets must be on-the-fly printed tickets, with QR codes, bar codes, or other mechanism for encoding information that can be photographed or otherwise viewed (no mag stripe).
2. PARCS should include support for visual, bar code-based prepayment coupons, vouchers and validations.
3. The bar code or QR code shall be generated by the system or another system integrated with the PARCS.
4. The system shall read, at the entry, exit or POF station, a bar code or QR code that is printed on paper or plastic (i.e. self-printed validation stickers).
5. The system shall read, at the entry, exit or POF station, a bar code or QR code that is displayed on a smartphone.
6. If the bar code or QR code was issued for one-time access, the system shall reject additional attempts to use the same bar code or QR code.
7. Encoded on the bar-code shall be the entry date and time and a unique identification number for each ticket. Also printed in human readable format shall be applicable ticket details.
8. The ticket’s barcoded data shall be sent to and saved by the FMS.
9. Transient tickets and the barcode reader systems shall include sufficient redundancy or error correction should allow accurate reading in the event that up to 25% of the bar code is damaged, missing, covered or otherwise obscured.

2. **Payment Acceptance Devices**

Any device which accepts payment should conform to the following requirements:

1. All PARCS equipment shall be based on multi-slot technology. Credit card reader shall be non-motorized card-reader, and separated from the ticket issuing / reading device.
2. Receipt shall be optional at time of transaction, with configurable default per payment device/station.
3. System shall offer ability to generate a receipt after the fact.
4. Only print last four numbers of all bankcards.
5. Information to be printed on receipt shall include:
   a. Facility name and address.
   b. Receipt#/Transaction #.
   c. Entry ticket no. associated with the receipt.
   d. Time, date, and lane in.
   e. Time, date, and lane out.
   f. Type of credential.
   g. License plate number.
   h. Length of stay.
   i. Parking fee.
   j. Total amount.
   k. Method of payment.
   l. Amount paid.
   m. Change Due
n. Breakdown of charges by time and rate.
o. Discounts applied.
p. Tax breakdown.
q. Signature line.
r. Cashier/Lane ID#.

6. All receipts shall be printed on off-the-shelf roll paper.

3. License Plate Recognition (LPR)

The PARCS shall include an integrated License Plate Recognition (LPR) subsystem to read and record the license plates of each vehicle passing the facility’s entry and exit lanes.

PARCS must include integrated license plate recognition (LPR) with in/out functionality for both monthly parkers and transient tickets

The LPR subsystem shall have the following general specifications:

1. Every entry and exit lane in each facility shall have LPR functionality, including nested lanes.
2. The LPR subsystem shall consist of all hardware and software necessary to provide a complete license plate reading subsystem that does not adversely affect any function of the PARCS.
3. All entry and exit transactions shall utilize LPR. The PARCS shall allow the garage operator to deactivate LPR functionality for any select entry media type.
4. All LPR processing shall occur in parallel with other functions occurring within the PARCS and shall not increase the processing time for vehicle entry.
5. The LPR system shall capture an image of the lane upon entry and exit transaction regardless of whether a license plate was detected, and associate that image with any corresponding transaction number.
6. In the unlikely event of total LPR subsystem failure, it shall be possible for the garage operator to “turn off” the LPR subsystem so that continued normal operation of the base PARCS is maintained.
7. Once the LPR subsystem comes back online, the garage operator shall have the ability to “turn on” LPR functionality.
8. The LPR subsystem shall support pre and post capture configuration, meaning that the LPR system must include cameras positioned to capture plates as vehicles approach, prior to gate vend.
9. The LPR subsystem shall be able to support use of multiple cameras in a single lane. For instance:
   a. One camera positioned to capture the front of a vehicle and a camera to capture the back of the same vehicle. Multiple camera images should be attached to a single entry/exit record.
   b. Cameras in a reversible lane must operate according to the direction in use.
10. The LPR system shall include a monitoring/dispatch station with alerting functionality, capable of producing real-time alerts for the following conditions:
    a. User-customizable BOLO (Be On Look Out) hit list
    b. California Department of Justice Stolen plates/watch lists

LPR Database

The LPR shall contain a License Plate Database (LPD) with the following features:

1. The capacity to automatically backup all LPR data for at least one (1) year.
2. The databases shall purge orphaned LP’s after a programmable number of days.
3. LPR workstations shall provide the ability to do the following:
a. Review and zoom images.

b. Search the LPR database by date, time, location, ticket number (for entries and exits associated with a license plate) and by plate number, including the use of wildcard characters, fuzzy searches (e.g. Letter “O” and number “0”) and partial plate matching.

4. Exit transactions shall be given higher priority than entry transactions for review. A vehicle may not exit until the entry review alarm has been processed or the alarm timeout period has been reached.

5. Provide images of the license plate and also a broader image that includes the full back or front view of the vehicle.

6. Send user configurable/selectable alarms to the LPR workstation when the following events occur:
   a. Entry plate not successfully read.
   b. Exit plate not successfully read.
   c. The entry record data does not agree with the exit record data.

**Exception Transactions**

1. Record each type of LPR exception transaction so that they are uniquely identified and sortable by type for reporting purposes.

2. No Plate Found on Entry - During an entry LP review, if the entry LP image is not available to input into the LPR, the PARCS shall record the image as a ‘No Plate on Entry’ and shall link it to the entry media to create an entry record that shall be stored in the PARCS database.

3. No Plate Found on Exit - During an exit LP review, if the exit LP image is not available to transfer into the LPR system, the PARCS shall record the exit LP image as a ‘No Plate on Exit’. The PARCS shall use the entry media date/time presented in the exit lane to compute the parking fees. The transaction is processed and recorded in the PARCS database as a ‘No Plate Found’ on Exit transaction. The LP entry image and associated entry media used at exit are closed in the PARCS database.

4. Swapped ticket – A Swapped ticket transaction occurs when the entry media presented at the exit does not match the entry media recorded for the LP that is in the exit lane.

5. No Plate Match on Exit – During an exit LP review, if a matching entry image is not found, the PARCS shall search the License Plate Inventory database for a match. The station will hold the ticket preventing the driver to cancel the transaction and retrieve the ticket - the FMS will alert and prompt the operator with the LP OCR data and pictures found which are associated with the ticket held at exit station and the actual LP presented at the exit lane. Based on the displayed information, the operator can select one of the following options:
   a. Mismatch due to incorrect LP OCR data in the system, in comparison to the actual LP presented at the exit. The operator can then select the correct LP to match the exit transaction. This will allow the patron to complete exit process.
   b. Mismatch due to swapped ticket – the operator will have the option to calculate the fee due based on the LP data from time of entry that is associated with the LP presented at the exit. The operator shall have the option log this violation and tag this vehicle in blocked listed LP numbers.

**Occupancy Counting**

PARCS system must include a robust, accurate counting module. The PARCS is expected to meet the following:

1. All entries and exits shall be recorded with 99.9% accuracy
2. In addition to standard vehicles, system must be able to handle less common entries and exits such as tow trucks, tailgating, motorcycles, neighborhood electric vehicles, etc.
3. System should maintain accurate (99.9%) real-time occupancy of each location and sub location. Additionally occupancy counts should be reportable by population type (transient, monthly).

Non-Resettable Counters

All gates shall have two non-resettable counters, independent of the PARCS system, that increment each time one of the two following events occur; these devices will also be tamper-proof:
1. A gate vend is generated by a monthly credential
2. Vehicle detection loop detects an exit.

The PARCS system shall also have non-resettable counters that increment each time the following events occur:
1. When a ticket is dispensed.
2. AVI transponder is read.
3. Proximity card is read.
4. Credential is read.
5. A payment is received
6. Validated or grace period ticket is processed.
7. A gate vend is generated.
8. Loop-based counts for the Space Count Sub-System increments in the PARCS when loops are activated including directional logic for reverse (i.e. illegal parking facility entry and exit lanes).
9. Loop counts shall continue when the FMS is offline or when a gate remains up.

Access Control
The FMS shall include a fully integrated Access Module to manage monthly parking services.

The FMS shall provide the following tag management functionality:

1. Securely activate and personalize an Access Credential.
2. Handles an unlimited number of tag holders per local parking facility.
3. Allow authorized users to create accounts (companies & Sub-companies) and activate/deactivate credentials.
4. Allow account settings to be changed for a credential.
5. Allows credentials to be preprogrammed to be activated/deactivated for specific date ranges.
6. Retain credential account and activity history after the credential is deactivated and re-issued to a different user.
7. Shall be capable to distinguish between different parking zones and apply restrictions accordingly.
8. Provide ability to have master account (companies), subaccounts (sub-companies).
9. Set access restrictions by facility, master account, sub account, and individual credential for time of day and day of week parameters.
10. Assign pass back setting by master account (companies), subaccounts (sub-companies), individual credential, and by facility.
11. Provide the ability to reset the access credential status for individual access credentials, by group and by facility.
12. Credential status options shall include: in, out, and neutral.
13. Be able to check credential validity at the time of entry.
14. Record all card usage including the lane ID, entry/exit date/time, credential number, and passback status.
15. Generate a record of all activity related to a master account or an individual credential in the FMS database for a selectable time.
16. Troubleshoot faulty credentials. Allow quick look-up the credential status, credential lane activity and payment history to determine if the gate is not vending due to passback violation, inactive status, or payment issues.

The FMS shall have, the following data input fields available for each credential account:

1. Unique credential number.
2. Customer ID number.
3. Account number.
4. Contract/agreement number
5. “Bill to” account number
6. Credential holder name.
7. Credential validity period.
8. Credential holder organization.
9. Credential holder department.
10. Credential holder telephone number.
11. Credential holder email address.
13. Credential fee/rate.
14. License plate number.
15. Driver’s license number.
17. Capable of setting different access privileges for an entire group or for an individual tag holder.
18. Able to distinguishing between different parking zones and apply restrictions accordingly.

The FMS shall provide the following tag management functionality:

1. New Tag holder: Record Tag holder details such as identification details, tag number, monthly fee, expiration date and group or sub-group association.
2. Renew Tag: The expiration date can be changed for an existing monthly tag holder or for a temporarily blocked tag to allow access to the facility again.
3. Block a Tag: Change the status of a tag to “blocked” without altering its associated tag details.
4. Unblock a Tag: Change the status of a blocked tag to “normal” without altering its associated tag details.
5. Cancel a Tag: Cancelation of a tag in the system shall cancel the tag but not the tag history.
6. Be able to assign each tag a certain number of units. Once these units are used the tag shall not be accepted at the entry/exit terminals.
7. Be able to assign each tag with a monetary amount. Once the amount has been exhausted, the tag shall not be accepted at the entry/exit terminals.

The FMS shall have the ability to add the following restrictions to individual tag holders:

1. Anti-Pass back: In the event a tag is “passed back” to allow an additional vehicle entry into the facility the tag shall be denied access.
2. Loop Presence: Prevents a pedestrian to present a tag without a vehicle.
3. Access restriction: Prevents the tag holder to pass through certain lanes
4. Company Full: Prevents the tag holder to access a nested area or the garage when the total available parking slots assigned to the particular tag holder group has been occupied.
5. Granting facility access by particular tag holder group who have been assigned special pricelist or when certain rules apply.
6. Anti-passback across multiple credentials. E.g. A monthly account with two or more vehicle license plates associated to the account should be allowed only one vehicle at a time.

Extended Guest Parking (Ticket based):

1. If a patient decides to purchase multiple days of parking, the parking representative will charge them accordingly, then scan the entry ticket in an encoding device to change the ticket privileges to allow multiple sequential Anti-passback, in and out passes, which expires upon the date purchase.
   a. The transaction and ticket information shall then be logged in the parking management system.
   b. This functionality should be available at Pay-On-Foot stations via a special menu, available only to parking representatives.

Credentials (Ticketless)

1. For LPR Customers who are assigned LPR as the primary access credential, the PARCS shall have the ability to also assign one or more backup or matching credentials such as:
   a. AVI transponder.
   b. Bar Code or QR code (printed or mobile phone display).
   c. Proximity card:
      i. The PARCS shall use commercially available RFID cards available through any source.
      ii. All proximity cards shall have a mill thickness equal to that of a standard credit card.
      iii. Cards may be issued by other parties (such as employee IDs) or specific customer groups.
      iv. Each proximity card shall have a unique ID that allows the card to be administered remotely; e.g., with the card number, a customer service rep should be able to access and change the account profile.
      v. Each proximity card shall be associated with an account, whereby the account’s profile controls the allowable use of the card.
      vi. The PARCS shall provide the appropriate tools to program and administer proximity cards from any workstation that can access PARCS, assuming the user has the correct privileges.

2. For LPR Customers who share vehicles, the PARCS system shall allow association of the same credential to multiple accounts (e.g. husband and wife who each purchase a credential buy may swap cars from time to time).

Credentials (Ticketed)

1. The PARCS shall be able to track an open or closed parking ticket. The tracked ticket shall provide the payment information that is associated to that ticket.
2. The PARCS shall allow customer service personnel to submit single payment requests to Pay-on Foot or Pay-In-Lane Stations.
3. The PARCS shall use on-the-fly printed tickets, with QR codes, bar codes, or other mechanism for encoding information that can be photographed or otherwise viewed.
4. When a ticket is issued, it shall contain:
   a. A unique serial number for the transaction.
   b. Complete date and entry time.
   c. Lane number or equipment ID (optionally printed on ticket).
   d. The PARCS shall be able to generate multi-use (limited duration or quantity) bar-coded ticket
      stickers or vouchers.

**The PARCS shall have the following nested parking area capabilities:**

1. Accommodate the use of nested areas in the parking facility with separate entry/exit gates, requiring a
   pre-authorized credential to gain access.
2. Track customers or vehicles into and out of any nested parking area via the following authorization
   credentials:
   a. Proximity card,
   b. AVI cards.
   c. Encoded QR/Bar Codes.
   d. LPR matching recognition.
3. Support dedicated price rates for nested parking areas.
4. Prevent unauthorized access in or out of the nested areas.
5. Employ anti-passback functionality to control nested areas.
6. The system shall support handling violations with the following options:
   a. Request payment at a payment enabled exit station. Request for payment shall be made to a
      registered card holder (Monthly) that exceeded their permitted time in a non-authorized parking
      area. Upon payment the vehicle will be grated to leave the lot.
   b. Request payment via report populated by the FMS. Request for payment shall be made to a
      registered card holder (Monthly) that exceeded their permitted time in a non-authorized parking
      area. The vehicle will always be granted to leave the lot – any exceeding time will be calculated
      by the FMS after the card holder exited the lot.
   c. **Real-time alerting** functionality for nest violations, such as “failure to enter nest within allotted
      time” or “Attempted exit without entering nested area.”

**Validations**
The FMS shall include a fully integrated Validation Module to support the implementation and tracking of
discount programs and other special purpose parking fee reduction transactions.

The validation system shall allow transients customers to change the default rate calculation of their parking
ticket by:

1. presenting the ticket to a validation device,
2. presenting the ticket to a merchant (clinic), who may apply a validation via web interface
3. placing a barcode stamp or sticker that is electronically readable in the PARCS equipment.

**The Validation Module shall have the following capabilities:**

1. All transient parking transactions shall allow for use of a validation and shall be able to be associated to
   many different merchants or user groups.
   a. Validations can be generated by different users or by the permitted user only.
   b. Restrict the validations to certain dates & times or to particular days of the week.
   c. All parking devices in the lot shall recognize the validation, calculate the new parking fee and
      update the balance accordingly.
2. Validations shall include the following:
   a. Validations Encoded on Issued Paper Ticket – shall be processed at Exit Stations, Cashier Station or Pay-on-Foot Stations.
   b. Separate Validation Chaser Coupon – shall be processed at Exit Stations, Cashier Stations or Pay-on-Foot Stations.
   c. QR code validations processed at exit or other payment station:
      i. Printed on paper.
      ii. Presented on a smart phone.

3. PARCS should include support for visual, barcode-based prepayment coupons, vouchers and validations (e.g. Self-printed Stickers, QR code displayed on mobile device). The FMS shall allow approved users to create barcoded Promotional Discounts that can be printed, published in 3rd party materials, and/or transferred to an approved website.
   a. Promotional discounts can be printed by the operator or transferred to an approved website.
   b. Both the validation and ticket shall be voided after exit is complete.

The PARCS shall be capable of supporting the following discounts:

1. Full discount with no maximum.
2. Full discount with selectable maximums.
3. Fee discounts allowing a specified monetary amount to be subtracted from:
   a. The total calculated parking fee.
   b. Monetary value discount per time increment (i.e. discount per minute, per day, per week, etc.).
   c. Percentage discount allowing a percentage to be deducted from the total fee amount.
   d. Discounts that use a different rate structure to compute the parking fee.
   e. Entry time discounts allowing an amount of time to be subtracted from the sequence of time intervals defined in the fee table, beginning with the entry time.
   f. Exit time discounts allowing an amount of time to be subtracted from the sequence of time intervals defined in the fee table, beginning with the exit time.
   g. Surcharge fees allowing a fixed fee that is charged in addition to the parking fee.
   h. Discounts can be issued with start and/or expiration dates.
   i. Discounts can be valid based on time and location restrictions.

The Validation Module shall be capable of supporting the following different types of validations:

1. Flat Rates.
2. Discounted rates.
3. Percentage discounts.
4. Hourly discounts.
5. Change price lists.
6. Change ticket to allow multiple entries and exits.

The Validation Module shall support the following types of validation methods:

1. Discount Stickers
   a. Validations stickers shall be a bar-coded serialized label and shall be printed on standard label sheet.
   b. The validation label shall be able to be placed on the parking ticket.
   c. Special equipment shall not be required to create validation labels.
d. Validation labels design shall be able to be modified by the operator for each event.

2. Chaser Tickets (Coupons). Chaser tickets shall be pre-printed from the management software. The chaser ticket shall be used at a Pay-On-Foot or exit station.
   a. Pre-Paid.
   b. Off-Line Validations.
   c. On-Line Validations.
   d. eValidations.
   e. iValidations.
   f. Prepaid eVouchers.

The Validation Module shall have the following monitoring & control abilities:

1. The ability to modify or terminate existing validations at any time.
2. Support the production of validation tickets directly from the FMS
3. Allow the encoding of various values of coupons.
4. Shall support a minimum of 500 validation accounts with unlimited validations associated with each account.
5. The ability to generate and print validation reports from remote FMS work stations
6. Shall support for a Web interface for merchants that can validate parking tickets without the need for chaser tickets, stamps, or punches.
7. Support a variety of online and off-line PARCS devices for the real-time validation of parking tickets.

Field Devices
All devices should meet the following criteria as applicable:

1. Field devices should be of modular construction with all components mounted for easy access. Key components should be mounted on slide rails as appropriate to facilitate access.
2. Employ tamper-resistant, auditable, electronic locking mechanism(s) preventing un-authorized personal to open access panels or doors.
3. Capable of left or right-hand operation with equal dexterity.
4. Outdoor devices should be rated IP-55 or better.
5. Automatically sends all transaction data to the central controller and to the FMS for generating reports.
6. Should be connected by hard-wired network communication.
   a. Ethernet (TCP/IP) based connections are preferred for all devices
7. Customizable graphics for operating instructions, identification or other notices
8. Height between the highest and lowest interaction area on devices, should be designed in such a manner that will support a convenient in-lane access from the driver’s window.
9. Stations which dispense case should have a separate cash dispenser integrated housing.
10. All devices should support full remote management and remote cashiering capabilities
11. Should be built in such a manner as to discourage vandalism and tampering by design and use of durable materials.
12. All PARCS equipment shall be operated with a self-conditioning power supply.

PARCS shall accept, at a minimum, the following discount types at all PARCS point of sale devices:

1. Encoded on dispensed paper tickets.
2. Validation label applied on ticket.
3. Each discount shall have a unique identification number to track activity and discount values processed.
4. Chaser tickets
5. Each discount shall have a unique identification number to track activity and discount values processed.
   a. Both the chaser coupon and ticket shall be voided after exit is complete.
   b. If a transaction is cancelled in the exit lane, the copy of the entry ticket shall be issued to the user and shall not be voided.
6. Barcode and QR code printed on paper or presented on a smart phone.
7. Manually processed discounts using a key or code on the Cashier Stations.
8. Electronic validations where a discount is applied via a workstation or phone by entering the entry media number and discount code that is sent to the FMS and applied to the entry media at exit.

The Bankcard Payment Station shall have the following capabilities:

1. Shall accept, read and validate barcode encoded roll or fanfold paper parking tickets for use at an exit station.
2. Performs parking fee calculations based upon rate structure.
3. Shall process discount validations for fee reduction purposes.
4. Accepts all major credit/debit bankcards for payment.
5. Supports EMV Chip and Pin credit cards for payment.
6. Accepts value card and monthly card holder payments
7. Supports access payments via proximity card

1. **Barrier Gates**

Barrier gates shall be a high speed and high performance barrier gate operator with the following components & capabilities:

1. Barrier open/close time under 2 seconds, based on boom length of 8 to 12 feet.
2. Include fixed or articulating arms as needed.
3. Direct drive operation resulting in condensation/corrosion resistance and extended service life – no belts, pulleys or chains.
4. Built-in position sensors (no limit switches) providing precise arm position status and a self- learning control unit to guarantee optimum braking and no boom arm bouncing, sagging or rotating out of position.
5. Can be raised manually or automatically in the event of loss of power.

2. **Ticket Spitters**

Push-button issues a bar-coded parking ticket to each transient customer.
   a. No pre-printed bar-coded tickets shall be used.
   b. Encoded on the bar-code shall be the entry date and time and a unique identification number for each ticket. Also printed in human readable format shall be applicable ticket details.
   c. The ticket’s barcoded data shall be sent to and saved by the FMS.
   d. Supports fan-folded or roll paper tickets.
3. Exit Verifiers

Exit Verifiers should meet the following criteria:

1. Non-motorized Push/Pull Bankcard Reader.
2. Motorized ticket reader/encoder (roll paper or fan fold stock).
3. Heavy duty thermal receipt printer.
4. Supports EMV Chip and Pin credit cards for payment.
5. QR/Bar-code scanner to read paper, plastic cards, or smartphone displays.

4. Proximity Card / AVI Readers

Proximity Card / AVI Reader system(s) should meet the following criteria:

1. The PARCS shall use commercially available RFID cards available through any source.
2. All proximity cards shall have a mill thickness equal to that of a standard credit card.
3. All proximity cards shall be passive, not requiring batteries or recharging.
4. System should be compatible with cards may be issued by other parties (such as employee IDs) or specific customer groups.
5. Each proximity card shall have a unique ID that allows the card to be administered remotely; e.g., with the card number, a customer service rep should be able to access and change the account profile.
6. Each proximity card shall be associated with an account, whereby the account’s profile controls the allowable use of the card.
7. The PARCS shall provide the appropriate tools to program and administer proximity cards from any workstation that can access PARCS, assuming the user has the correct privileges.
8. Readers should be able to accurately detect proximity cards swiped near a card reader panel or at a distance (AVI).
9. Readers must be capable of accurately isolating read range to only the intended lane, when surrounded by adjacent Proximity Card / AVI Reader equipped lanes.

5. LPR Cameras

LPR Cameras shall be a part of the License Plate Recognition (LPR) subsystem to read and record the license plates of each vehicle passing the facility’s entry and exit lanes.

LPR Cameras should meet the following criteria:
1. Night (1 lux) or day operation
2. Operation should not incorporate a visible flash
3. Shall be triggered by loop detection for non-reflective license plates
4. Weatherproofing: LPR cameras should be rated IP-55 or better.

6. Two-Way Intercom With Video

All entry, express exit, unattended cashier exit, and pay-on-foot stations shall have an intercom available for customer use.
1. The intercom shall consist of a microphone, speaker and a camera.
2. Activation of the intercom shall initiate both two-way audio and one-way video (from the device to the answering point).
3. The audio shall function as a full-duplex speakerphone, to allow two way conversation between the customer at a facility and the person processing the call.
4. The intercom shall be activated by push button on front of unit.
5. The intercom shall allow activation by a remote station with an authorized user, to monitor and record all activity on any intercom device.
6. The intercom shall allow automatic activation of the intercom during specific transactions, recording video, audio, or both as part of the transaction record.
7. The intercom shall allow continuous activation, recording video, audio, or both, to a medium such as a DVR.
8. The intercom shall be fully integrated into entry/exit stations, cashier stations, and pay-on-foot devices; the intercom shall not be a separate device attached to the PARCS equipment.
9. The PARCS shall allow direction of intercom calls to any IP-capable device (computer, tablet, smartphone) or group of devices.
   a. The system shall also allow the calls to be distributed between multiple remote attendants.
10. The answering device shall display to the operator the physical location of the calling device.
11. The operator’s control panel shall display any information the PARCS has at that time regarding the transaction, such as the vehicle’s license plate (the recognized LPN along with the context photo), the entry time, the calculated fee, any validation(s) that has been presented, etc., credential presented for entry or exit, along with explanation if the PARCS has denied the entry or exit, to give the operator information that may assist in resolving the situation.
12. Once answered, two-way communication shall be possible and the intercom line shall remain open until the operator terminates the call.
13. If the answering device is on an intercom call and one or more additional calls arrive, the operator shall be able to put the current call “on hold” and take the additional call, and the operator shall be able to switch between calls as needed.
14. Each device shall be able to place intercom calls independent of other devices; in other words, a call from one device shall not block other devices from making intercom calls, even devices in adjacent lanes in a facility.
15. The intercom camera shall have sufficient resolution to allow an operator to read a ticket, validation, or customer’s driver’s license when held in front of the camera.
16. The video and audio from each session shall be recorded digitally.

7. Desktop Validation Units

The Desktop Validation Unit shall enable merchants to validate parking tickets with real-time verification by the FMS.

1. Desktop Validation Units shall be available in either Online or Offline configurations
2. Reads and validates parking tickets, validation stickers and validation coupons.
3. Supports at least 4 merchant configurable discount types:
   a. Flat or discounted rates.
   b. Time based discounts.
   c. Percentage based discounts.

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d. Special pricelist assignments.

4. For On-Line Versions:
   a. Sends equipment status, events & transactions data to the central controller and to the FMS.

8. Mobile Assistance Devices

Parking Staff (“Parking ambassadors”) roaming the parking area shall have 3G/4G cellular-connected mobile devices (e.g. iPad) which allows them to log into the system and provide real-time support to customers. Features should include:

1. Ability to look up a customer ticket by manually entering a ticket number
2. Ability to look up a customer ticket by manually entering a license plate number
3. Ability to use the device camera to scan an optical barcode on the ticket.
4. Apply a validation, alternate rate structure or other adjustment to the ticket
5. View the ticket status, entry time, entry location, validations applied, rate applied, license plate number associated upon entry, current balance due and other transaction details.
6. Record a comment associated with the ticket.
7. Process IOU transactions
8. All actions shall be by unique, individual login only.
9. All actions shall be recorded and fully auditable.
10. Mobile devices must be capable of full data encryption
11. Devices will be subject to UC Davis Medical Center mobile device security management.
12. Apple iPad device (iOS) highly preferred.

Entry Lanes

The Entry Lane Station shall be a fully automated ticket dispenser and access reader and authorization verifier that controls entries into the parking facility.

Grants entry into the facility to monthlies, guests and prepaid transients that present valid transaction authorizations from:

a. Proximity, mag-stripe or AVI cards.
   b. QR/Bar-coded validations.
   c. LPR pre or post capture.

When an LPR camera is connected to the access card reader, the vehicle tag number shall be sent to the management software along with the transaction data.

The Entry Lane Station shall be equipped with the following components:

1. Ticket Spitter
2. Proximity card reader / AVI Reader
3. LPR Camera
4. QR/Bar-code scanner to read paper, plastic cards, or smartphone displays.
5. Barrier Gate
6. In-ground loops or other directional vehicle detection mechanism
7. Two-way audio intercom with video
The Monthly-Only Entry Lane Station shall be equipped with the following components:

1. Proximity card reader / AVI Reader
2. LPR Camera
3. Barrier Gate
4. In-ground loops or other directional vehicle detection mechanism
5. Two-way audio intercom with video

The Entry Lane Station shall have a customer interface with the following features:

1. Illuminated ticket request push button.
2. Hi-res color display for customer guidance that is visible in all lighting conditions. Supports the usage of pictographs, custom logos and text.
3. Intercom audio/ visual sub-station with call button.
5. Integrated Voice annunciator with played messages in accordance to the different events occurring at the station. The customer shall have the ability to customizing the voice messages.
6. Switches to stand-alone mode when network communication is lost:
   a. Have sufficient local memory storage to cache at least 2,000 transactions.
   b. Automatically uploads all transaction data to the FMS and the central controller once communication is restored.

Exit Lanes
The Pay-In-Lane Exit Station shall be a fully automated access reader, fee computation and authorization verifier; cash/cashless payment device that control entries into an exit out of the parking facility.

When an LPR camera is connected to the access card reader, the vehicle tag number shall be sent to the management software along with the transaction data.

The Entry Lane Station shall be equipped with the following components:

1. Exit Verifier
2. Proximity card reader / AVI Reader
3. LPR Camera
4. QR/Bar-code scanner to read paper, plastic cards, or smartphone displays.
5. Barrier Gate
6. In-ground loops or other directional vehicle detection mechanism
7. Two-way audio intercom with video

The Monthly-Only Entry Lane Station shall be equipped with the following components:

1. Proximity card reader / AVI Reader
2. LPR Camera
3. Barrier Gate
4. In-ground loops or other directional vehicle detection mechanism
5. Two-way audio intercom with video
The Exit Lane Station shall have a customer interface with the following features:

1. Hi-res color display for customer guidance that is visible in all lighting conditions. Supports the usage of pictographs, custom logos and text.
3. Receipt request push button.
4. Two-way audio/video intercom sub-station with call button.
5. Integrated Voice annunciator with played messages in accordance to the different events occurring at the station. The customer shall have the ability to customizing the voice messages.

The Exit Lane Station shall have the following capabilities:

1. Accepts, validated roll or fanfold paper parking tickets and grant exit from the facility, if ticket presentation is within the programmed ‘grace time’ for exit after payment.
2. Accepts and reads barcoded roll or fanfold paper parking tickets.
3. Performs parking fee calculations based upon rate structure.
4. Accepts all major credit/debit bankcards for payment.
5. Processes discount validations for fee reduction purposes.
6. Sends all transaction data to the central controller and to the FMS for generating reports.
7. Supports EMV Chip and Pin credit cards for payment.
8. Prints customer receipts upon receipt of cash or bankcard payments.
9. Grants exit from the facility to monthlies, hotel & event guests and prepaid transients that present valid validated authorizations from Proximity, mag-stripe or AVI cards.
10. QR/Bar-coded validations.
11. LPR matching recognition.
12. Supports barrier gates, vehicle presence loops, lane status signs and other I/O devices.
13. Provide 2-way audio/video intercom stations options.
14. Switches to stand-alone mode when network communication is lost:
   a. Have sufficient local memory storage to cache at least 2,000 transactions.
   b. Automatically uploads all transaction data to the FMS and the central controller once communication is restored.
15. Alerts all operational exceptions including “Receipt Stock Low” &“Receipt Stock Out” conditions
16. Supports hard-wire network communication
17. Integrated PCI Compliant PA-DSS Credit card processing software connection.

The PIL Station shall have the following capabilities:

1. Shall accept validated transient tickets and grant exit from the facility, if ticket presentation is within the programmed ‘grace time’ for exit after payment.
2. Shall accept bankcards for in-lane fee payment.
3. Shall process discount validations for fee reduction purposes.
4. Accepts banknote cash payment and includes:
   a. A bill acceptor unit, which shall read, verify and store bills. Bills shall be read in any direction of insertion.
b. A 600 bill storage cassette.
c. A bill dispenser unit to dispense bills for change. The Pay-In-Lane shall be capable to dispense 2 different denomination bills, with an option for a 3rd bill type.
d. Cash payment related alerts and transaction shall be monitored by the FMS.

5. Supports EMV Chip and Pin credit cards for payment.
6. Grants exit from the facility to monthlies, guests and prepaid transients that present validated authorizations from Proximity, mag Stripe or AVI cards.

7. QR/Bar-coded validations.
8. LPR matching recognition.
9. Supports barrier gates, vehicle presence loops, lane status signs and other I/O devices.
11. Automatically sends all transaction data to the central controller and to the FMS.
12. Switches to stand-alone mode when network communication is lost:
   a. Have sufficient local memory storage to cache at least 2,000 transactions.
   b. Automatically uploads all transaction data to the FMS once communication is restored.
13. Alerts on all operational exception conditions, including “Receipt Stock Low” and “Receipt Stock Out” conditions.
14. Bill dispenser (two or three banknote configurations).

**Pay on Foot Stations**
The Pay-On-Foot Station shall be a centralized, unattended device that provides automated cash and bankcard payment services to parking customers.

**The POF Station shall have the following capabilities:**

1. Shall accept, read and validate barcode encoded roll or fanfold paper parking tickets for use at an exit station.
2. Performs parking fee calculations based upon rate structure.
3. Shall process discount validations for fee reduction purposes including chaser tickets.
4. Accepts all major credit/debit bankcards for payment.
5. Supports EMV Chip and Pin credit cards for payment.
6. Accepts value card and monthly card holder payments.
7. Supports access card payments via proximity card.
8. Accepts banknote cash payments and includes:
   a. A bill acceptor unit, which shall read, verify and store bills. Bills shall be read in any direction of insertion.
   b. A 600 (1,000 optional) bill storage cassette.
   c. A bill dispenser unit to dispense bills for change in 2 different denominations, with an option to add a 3rd bill type.
   d. Bill recycler unit as an option in lieu to a bill acceptor and dispenser.
   e. Cash payment related alerts and transaction shall be monitored by the FMS.
9. Provides audio/visual intercom station options.
10. Switches to stand-alone mode when network communication is lost:
    a. Have sufficient local memory storage to cache at least 2,000 transactions.
b. Automatically uploads all transaction data to the FMS once communication is restored.

11. Alerts for all operational exception conditions, including “Receipt Stock Low” and “Receipt Stock Out” conditions.


13. Should include a special parking representative menu, which would allow parking representatives to:
   a. Assist with current transaction, such as applying a validation/coupon, applying an alternate rate structure.
   b. Print an IOU contract on the receipt printer and accepting it as a payment method.
   c. Sell a 5-day pass
   d. Confirm ticket is validated
   e. View/print machine summary

14. Special parking representative menu should be accessible by presenting various credentials such as:
   a. RFID/proximity card
   b. 2D/3D barcode generated by a mobile device

**The POF Station shall have a customer interface with the following features:**

1. Illuminated front panel.
2. Hi-res color display for customer guidance that is visible in all lighting conditions. Supports the usage of pictographs, custom logos and text.
3. Two-way audio/video intercom sub-station with call button.
5. Illuminated user selection buttons.
   a. Help Button.
   b. Language select.
   c. Receipt request.
   d. Cancel.
6. Integrated Voice annunciator with played messages in accordance to the different events occurring at the station. The customer shall have the ability to customizing the voice messages.

**The POF Station shall be equipped with the following components:**

1. Direct motor ticket reader/encoder (handles roll paper or fan fold tickets).
2. High-speed thermal receipt printer
3. Two-way audio/video intercom station with call button.
5. Supports Proximity, Mag-Stripe and AVI readers.
6. QR/Bar-code scanner to read paper, plastic cards, or smartphone displays.
7. A real-time clock (with battery backup) that is updated from the FMS.
8. Single pocket for receipt & change.
Attended POS Station
The Cashier Terminal shall be a computerized revenue control stations for parking attendant cashier applications in mid and large-sized parking facilities.

Description
1. The Cashier Station shall support an integrated credit card reader (For non-EMV credit card processing), barcode scanner cash drawer and remote fee display.
2. Small facilities shall be able to deploy the Cashier Station in a stand-alone configuration.
3. Large facilities shall be able to deploy additional Cashier Stations in a master slave configuration, remotely managed through the FMS.
4. Each Cashier Station shall also support a direct connection to proximity card readers, access keyboards, magnetic card readers or barcode scanners in support of entry/exit lanes.

The Cashier Station shall be capable of:
1. Processing a parking ticket.
2. Accepts renewal payments from monthly customers.
3. Reads bar-coded tickets and vouchers that contain transient payment information.
4. Provides automatic fee calculations based upon pre-programmed rate structures.
5. Option to automatically print credit card and cash payment receipts.
6. Entry, Exit, Central payment, Valet Operation or combined operating modes.
7. Accepts cash, credit card, check and store discount coupon payments.
8. Operates in standalone mode or as a component of a complete PARCS system.
9. Programs up to 18 dedicated validations keys garage price tables and tariff structures.
10. Supporting up to 500 additional validation/companies.
11. Supporting In-lane or centralized location deployments.
12. Supporting up at least 32 cashiers via password or magnetic strip card sign in.
13. Supporting Proximity and AVI readers.
14. Cashier management with security access levels.
15. Runs end-of-shift report summarizing all cashier activity plus open tickets, X & Z reports and grand total reports.
16. Sends transaction and event data to the PARCS Central Controller and to the FMS.
17. Hardwire communication.
18. In case of a temporary loss of power, the Cashier Station shall not lose any data and will restart automatically when power is restored. Booting or re-booting of the Cashier Station shall not exceed 4 seconds.

The Cashier Station shall be equipped with the following components:
1. Direct motor ticket reader/encoder (handles roll paper or fan fold tickets).
2. Hi-res color display for customer guidance that is visible in all lighting conditions. Supports the usage of pictographs, custom logos and text.
4. Supports Proximity, Mag-Stripe, AVI, Mifare, EMV readers.
6. QR/Barcode scanner to read paper, plastic cards, or smartphone displays.
7. Programmable Keyboard:
   a. At least 18 predefined programmable buttons for validations.
   b. At least 1 predefined programmable button that supports up to 1000 validation/company accounts.
   c. Cashier switch button.
   d. Entry ticket issue button.
   e. Gate opening buttons.
10. Data line surge protector.
11. Cash drawer for bill and coin storage.
13. Built-in clock (backed up by lithium ion battery).
14. Data inputs for card readers.

Remote Cashier Stations

The PARCS shall provide the following remote fee management functionality:

1. Master Audio/Video Intercom Station.
2. One of more Remote Cashier Stations shall be able to operate simultaneously.
3. Allows the following exception transactions occurring at Exit Stations to be processed at a PARCS workstation and records each exception type uniquely.
   a. Unreadable entry media.
   b. Unreadable proximity cards.
   c. Swapped tickets.
   d. Stolen tickets.
   e. Unreadable validations.
   f. Lost prepaid tickets.
   g. Be capable to find by an LPR system a customer’s entry date at all exit lanes, when license plate is not matched to the parking ticket.
   h. Allows customer service personnel to find an entry date based on the LPR data and/or by entry media number.
   i. Once the entry date is found the FMS automatically computes the parking fee, operator can send the payment to the exit station display.
   j. If an entry date is not found, customer service personnel shall be able to manually input an entry date in order to compute the parking fee or to select a lost ticket fee. The fee is automatically displayed at the exit lane device.
   k. After successful completion of the transaction, the entry media is automatically marked as ‘closed’ in the system.
   l. If a paper ticket paid at a POF unit is unreadable at exit, customer service personnel shall allow the ticket sequence number to be input. The FMS shall locate the POF payment data to complete the transaction and shall automatically compute and display any additional fees due at exit, or print a copy of the entry ticket to the customer.
m. Allows customer service personnel to apply a discount to a parking transaction and input the reason for the discount in an input field with drop down menu.

n. Records the different exception transaction types in the transaction database so that the type of exception transaction is displayed in the FMS reports.

o. Provides reports and accountability features per cashier ID on a shift basis.

4. The system shall provide a tool to assist the operator with Remote vending of gates. The purpose of the tool is to insure that all remote gate vends are tied properly to the counting system. For example – if the exit station is not able to process a transient ticket and the operator needs to vend the gate, it will be done in such a manner that the gate vend transaction will be tied to that specific transient that will insure to update the counting system accordingly, that will differentiate between the type of customers such as transients, card holders, guests and reservations.

5. The same method should apply for registered card holders, guest and reservations.

6. The tool will provide a snapshot to the operator of all data related to the credential / ticket / reservation used by a customer requiring assistance at the remote station.

7. All gate vends shall prompt the operator to input the reason for the gate vend, which can thereafter be tracked in an audit report.

8. **Fee change:** Send on real-time, a fee change command for a single parking transaction, from the management software to either a vehicle pay station or a pay on foot terminal.

9. The operator’s control panel shall allow the operator to create an IOU for the transaction, based on the information provided by the control panel and by the customer.

Remote Cashier Stations should include the following remote management capabilities:

1. Sends equipment status, events & transactions data to the central controller and to the FMS.

2. Customer service personnel from a FMS workstation shall be able to open or close the barrier gate connected to the PIL station.

3. Customer service personnel from a FMS workstation shall be able to manually override the entry lane terminal for monthly and transient customers.

4. Remote configuration shall be performed from the FMS.

**Reliability and Accuracy**

1. The PARCS shall operate twenty-four (24) hours per day and seven (7) days per week.

2. The PARCS shall achieve availability of 99% during operations.

3. The PARCS shall employ multiple levels of redundancy, such that:
   a. Failure of any single device, component or network segment shall not adversely affect any significant portion of the system.
   b. In the event of single or multiple component failure, the system shall continue to operate to the degree possible, degrading gracefully and recovering seamlessly:
      i. In case of server failure, PARCS field equipment will stay up and running, managed by the local parking system main controller(s).
      ii. In case of a total network failure, all lane equipment shall be able operate off-line with limited functionality.
      iii. Credit card acceptance shall depend on an online connection with credit card Point of Interaction (POI) hardware and credit card clearing house, and be
The PARCS shall be designed and implemented to facilitate prompt repair for all failed or degraded PARCS components by providing subsystems and devices with field-replaceable components.

Ticket processing devices shall have a ticket read accuracy rate of 99.999%, assuming all unreadable (mutilated, blank or foreign) tickets and/or damaged cards are excluded.

Fee calculation accuracy for all devices that perform fee calculations shall be 100%

Data transfer (data received, validated and accepted by the PARCS management software from devices or Subsystems) accuracy shall be 100%.

Transaction count accuracy for each lane device (transactions processed compared to transactions posted to the FMS) shall be 99.998% for all lane devices.

Exception count accuracy shall be 99.998% (exceptions noted at the device compared to exceptions reported to the PARCS management software.

Revenue amount accuracy shall be 99.998% (amounts calculated at the device, and where appropriate posted to a local audit trail, compared to amounts posted to the PARCS management software).

Revenue reconciliation and data transfer for bankcards shall also be 99.5% accurate (assuming all source data is complete and communications devices operate nominally).

Parking space counts for any individual parking lot/garage shall be no less than 99% accurate (FMS count compared to manual count).

**System Management (Back Office)**

Programming to all equipment will be done remotely from the PARCS management software.

**Validation Workstations**

1. All validation functionality should be accessible from a standard Windows PC workstation:
   a. Account preferences,
   b. Account management for online validation users
   c. Issuance or validations
2. Browser-based UI preferred.
3. Installation of JAVA should not be required on validation workstations.

**Client Workstations**

4. Client access should be accessible from a standard Windows PC for all functionally, including remote customer service interventions, for the control and management of the facility.
5. Browser-based UI preferred.
6. Installation of JAVA should not be required on client workstations.

**System Management**

1. All system management functions should be accessible from a standard Windows PC, not only from a main server console.
2. Browser-based UI preferred.
Real-Time Monitoring & Control

The PARCS shall have real-time monitoring & control capabilities to manage the parking equipment connected to the parking system network such as:

1. **Real-time monitoring:** All transactions shall be displayed in real-time on the operator live screen. This shall include credit card transaction status monitoring and provide an explanation in case a credit card was denied. Other features shall be reprinting a copy of an entry ticket or receipt and changing settings for a monthly parker from the real-time screen.

2. **Barrier control:** Open or close remotely a barrier gate connected to a lane device either temporarily (gate will close if vehicle leaves the safety/closing loop at the gate) or until a new command is sent to the barrier. The barrier shall change its state according to the user programmed schedule of the management software.

3. **Equipment status:** Display the equipment status in real-time and generate a pop-up window for select messages.

4. **Income monitoring:** Display in real-time detailed cash or credit card transactions of filed devices.

5. **Lane activity:** Activate/deactivate a terminal either entirely or for select user groups. The barrier shall change its state according to the user programmed schedule of the management software.

6. All remote actions shall be tracked and fully auditable.

The FMS shall be capable of monitoring in real-time the status of the various lane devices and the corresponding subcomponents:

1. Lane status: open or closed.
2. Device status: active or out of service.
3. Door status: open or closed - On cash enabled stations.
4. Gate failure.
5. Gate up.
7. Low-receipt/Out of receipt condition.
8. Jammed ticket.
10. Stuck credit card.
11. Illegal exit - reverse direction through lane.
12. Stolen ticket.

Alerts

The FMS shall have the following system alert capabilities:

1. An alarms function shall allow the user to select which events to alarm.
   a. Alerts can be displayed on a workstation or sent to an authorized user via email notification, text, or alert pop-up to mobile assistance device.
   b. Abnormal status conditions shall be flashed on monitor(s) and accompanied with an audible alarm.
c. Display shall continue to flash until abnormal condition is corrected. Audible alarm shall continue until it is turned off by a command issued from a PARCS monitoring workstation(s).

d. Acknowledgement of alarm condition shall be able to be performed at any workstation with access to FMS.

e. It shall not be necessary to acknowledge alarm condition at every workstation.

f. The FMS shall record abnormal status condition of alarm condition by time.

g. Authorized users shall see and be able to manage alarms.

h. Alarms shall be selectable as visual, or else email or both.

Remote Management
THE FMS should have the ability to control all field devices, including the following as applicable:

1. Customer service personnel from a FMS workstation shall be able to manually override the Card Reader Station for monthly and transient customers.

2. Remote configuration shall be performed from the FMS.

System Auditing
1. The PARCS shall provide the following financial, transactional, and operational auditing abilities:
   a. Trace any individual ticket from entry to exit, including cases where the same credential is not used for both entry and exit.
   b. See all transactions that occurred on any credential (such as a permit or license plate), even if the transactions were submitted by an external system (such as an online prepayment).
   c. Trace validations by individual merchant, including login associated with validations applied online when applicable.
   d. Find a bankcard transaction via its last 4 digits of the card number.
   e. Locate all transactions performed at any individual device.
   f. Discover all transactions performed by any individual cardholder.
   g. Isolate and examine all exception transactions.
   h. Find by user all changes to configuration, rates, discount programs, customers, etc.

Reports
The FMS shall include a fully integrated Reports Module with the following capabilities.

1. The FMS shall maintain data without limitation from system start-day for use by the Report Module.

2. Reports can be scheduled to run and emailed to specified users.

3. Reports can be scheduled to run automatically. For example, on the first day of each quarter, weekly, etc.

4. The Reports Module provides real-time reporting.

5. Reports (manual and automated) can be run at any time and not impact the system performance.

6. Reports can be exported to Microsoft Word, Excel, PDF etc.

7. The Reports Module shall be able to provide customizable, ad hoc reporting.

8. The database of the FMS shall contain sufficient ‘Views’ to support external reporting tools such as Crystal Reports.
9. Queries can minimally be run for transactions by day/date/time (or time range), station, cashier/user ID, payment type, amount or amount range, access card number or by exception type.
10. Query results are sortable.
    The Reports Module shall be able to generate the following Revenue Reports. These reports shall provide financial information and detailed statistical data pertaining to the various revenue streams generated by a parking facility

Specific Reports must be included:

1. Z Report: Is a daily income statement that shows payment totals, credit outlay totals, payment summaries and till totals broken down by cashier station.
2. Manual Charge Log Report: Lists the manual parking fees sent to the payment stations and then subsequently paid by customers. The report identifies the ticket, time, location, value and description of each transaction.
3. The System Alerts Report: Lists the operation and maintenance alerts, broken down by garage station that were received during a specified time period.
4. The Non-Resetable Counts Report: Maintains loop and gate activity counts for each entry and exit lane during a specified time period.
5. Open Tickets Report: Lists the parking tickets, sorted by entry station that have not exited the parking facility during a particular time period.
6. End-to-End Ticket Activity report: Lists all activities related to a specific ticket in chronological order.
9. Detailed LPR Trans Report: Provides in depth information about the LPR Transactions that transpired on a selected day or during a specific time period.
10. Company Detailed Debit Report: Is a chronological list of company validation debits, sorted by internal company issuer, that were incurred during a selected time period. The report details the ticket, time, location, nature, value and description of each validation debit transaction.
11. Entries & Exits: Shows the amount of vehicles accessing or leaving the parking lot during the day. This statistic chart shall provide information between two dates chosen by the operator.
12. Occupancy Distribution: Displays vehicle occupancy by hours during the day. This statistic chart shall provide information between two dates chosen by the operator.
13. Transients Parking Time Distribution: Displays the amount of hours transients occupied the parking facility. The information shall be by vehicle quantity and between two dates chosen by the operator.
14. Transient’s Income Distribution: Presents the income distribution of cash, credit cards and validations. This statistic chart shall provide information between two dates chosen by the operator.

PARCS system must include customizable reports and queries

1. Provide full reporting (revenue and statistics), with flexibility in content, formatting, and timing of the pertinent operational and management reports.
Dashboards
1. The system shall provide real-time, password-protected, statistical information, viewable on any Internet-connected computer or mobile device.
2. Information must include the following:
   a. Current Occupancy, available in sum and by location and sub-location.
   b. Active users logged into the system.
   c. Status of all devices.
   d. Current Cash balances for attended and unattended devices.
   e. Financial performance, available in sum and by location and sub-location.

User Access
1. Access to system functions shall be based upon the user’s operational role.
2. The PARCS shall incorporate password policy that shall include the following programmable parameters:
   a. Password Aging.
   b. Minimum Password Length.
   c. Enforce Password History.
   d. Password Shall Meet Complexity Requirement.
3. The PARCS shall support maintenance of access level tables through a security administration function. These tables shall be used to establish employee and employee group access to PARCS devices, Network, database and data.
4. Based on password/user ID security, any authorized user shall be able to download to any single piece of PARCS equipment:
   a. Security access codes.
   b. Rate changes.
   c. Configuration files.
   d. Operational parameters.
   e. New and updated ticket layout and text.
   f. New and updated customer display screen text.
   g. View, create, modify or delete card holders or validation data.
   h. Any other information necessary for the operation and maintenance of the PARCS equipment.
   i. Authorized users shall be able to select the date and time when configuration data download is to occur and to review and cancel any previously scheduled download.

UCDHS IT Compatibility
All “on-site” servers should be located in UC Davis Medical Center data center
1. It is preferred that all “on-site” servers be compatible with enterprise virtualization technologies and hosted on UCDHS IT department virtual servers.
2. It is preferred that servers run on Windows Server 2012 or newer.
3. All servers and client devices should be able to tolerate a 100ms communications latency and must be capable of operating normally with up to 900 miles between the server(s) and field devices.
4. It is preferred that the PARCS utilize SQL Server 2012 / SQL Server Express 2012 or newer, and be compatible with the database being hosted on a dedicated server.

**Scalability**

1. The system shall be expandable to control a minimum of 7 additional parking structures or lots (up to 20K stalls).
2. The PARCS shall be expandable by adding cashier terminals, entry lane terminals, exit lane terminals, pay-on-foot stations, validation devices and management software workstations.
3. The PARCS shall be capable of adding optional features, equipment and interfaces listed in the specifications, even if not initially included or shown on the plans.
4. The PARCS system should be able to manage on-site and off-site facilities, up to 60 miles away from “on-site” facilities at the Medical Center.

**Quality**

1. All equipment shall be new, in current production, and the standard products of a manufacturer of PARCS equipment.
2. Manufacturer shall be certified as complying with the standards of ISO-9001 for quality control.
3. All PARCS equipment installed shall comply with: UL 60950-1 (for indoor usage) and UL60950-22 (for outdoor usage), as required and are identified with the UL Mark or equivalent.
4. All PARCS outdoor equipment shall be:
   a. Rated at or above IP-54.
   b. Be fully protected against and not affected by weather/environmental conditions, including temperature extremes, humidity, rain, dust, RFI/EMI, and static electricity.
   c. Not emit excessive heat, RFI/EMI, static electricity, or fumes.

**Security**

1. All credit card related components, systems, software, subsystems and third party systems or services shall comply with all current Payment Card Industry (PCI) Security Standards Council regulations, and shall be listed on their web site, (www.pcisecuritystandards.org), as “acceptable for new deployments” at the time of the installation.
2. The system shall meet or exceed all requirements as defined in University of California Appendix – Data Security and Privacy.
3. All users, including device operators, system admins and web-based users, shall be required to have individual unique logins. No changes or operations should be allowed via group, generic or shared logins.
4. All User activity history shall logged and auditable.
5. All personal customer information should be encrypted and accessible only to properly authenticated users according to granted rights.

**Event Logs**

The FMS shall have the following event log capabilities:

1. Record all system events, which can be viewed or printed.
a. Record the specific information and details for changes to system configurations including type of change, date/time, and user ID.

b. Have the ability to sort events by activity type and/or device ID.

### III. SCHEDULE OF EVENTS

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release of Request for Proposals</td>
<td>June 13, 2016</td>
</tr>
<tr>
<td>Deadline for submission of E-mailed questions or request for clarification</td>
<td>June 17, 2016</td>
</tr>
<tr>
<td>Response back to vendor with answers for clarification</td>
<td>June 21, 2016</td>
</tr>
<tr>
<td><strong>Deadline for receipt of Bidders’ Proposals by 3 PM, PST</strong></td>
<td><strong>June 27, 2016</strong></td>
</tr>
<tr>
<td>*Demos if requested and IT Evaluation</td>
<td>TBD</td>
</tr>
<tr>
<td>*Expected execution of contract</td>
<td>September 1, 2016</td>
</tr>
<tr>
<td>*Awardee commencement of project</td>
<td>September 8, 2016</td>
</tr>
</tbody>
</table>

* Approximate date only.

### IV. QUESTION AND ANSWER PERIOD

Questions or requests for clarification regarding the RFP must be submitted to UC Davis Health System, Michael Wegmann, via email no later than June 27 2016 by 3:00 pm. Individual questions will not be answered directly to submitter. All questions submitted shall be responded to as an addendum to the RFP. The addendum will be provided to each qualified responder of record and posted on the UCDMC Purchasing web site at: [http://www.ucdm.ucdavis.edu/matmgnt/](http://www.ucdm.ucdavis.edu/matmgnt/). The identity of the submitter of any particular question will not be disclosed. Inquiries and questions regarding this RFP will not be entertained after June 17, 2016. Answers will be posted at the above Purchasing web site by June 21, 2016.

### V. ADDENDUM OR SUPPLEMENT TO REQUEST FOR PROPOSAL

UCDHS may modify the RFP prior to the RFP due date by issuance of amendments sent by email, facsimile, overnight courier or mail to all vendors who receive a copy of this RFP from UCDHS. Amendments will be clearly marked as such. Each amendment will be numbered consecutively and will become part of this RFP. Any vendor who fails to receive such amendments shall not be relieved of any obligation under this quotation as submitted. SPECIFICATIONS OR RFP REQUIREMENTS MAY BE REVISED ONLY THROUGH WRITTEN NOTICE OF ADDENDUM ISSUED BY MICHAEL WEGMANN, UNIVERSITY OF CALIFORNIA, DAVIS, HEALTH SYSTEM, PURCHASING DEPARTMENT. CHANGES BY ANY OTHER INDIVIDUAL ARE NOT AUTHORIZED.

### VI. BASIS OF AWARD

Proposals will be evaluated using a two-tier evaluation. Responses shall initially be evaluated for factors listed in **Tier 1 Qualification Statement, Attachment 1**. To be eligible to advance to **Tier 2 Technical Proposal, Attachment 2** a Bidder must meet the minimum requirements and receive at least seventy (70%) of the available Tier 1 quality points. Those Bidders receiving less than (seventy) 70% of the total quality points in the Tier 1 evaluation shall be eliminated from further consideration. Qualified Bidders must also receive at least 70% of available points in the Tier 2 evaluation to be considered for award.

To determine the lowest cost per quality point, each Bidder’s quoted fee, as specified in the **Cost Proposal, Attachment 3**, will be divided by the total quality points awarded to that particular Bidder’s response for **Tier 2 Technical Proposal** and, if necessary, **vendor presentations for the top two (2) or three (3) candidates**. More
than one person may evaluate responses. If evaluated by two or more individuals, an average of all the quality points awarded per category will be used.

Demonstrations may be requested of 2 or more Bidders having the lowest cost per quality point scores. After the demonstrations are completed, the cost per quality point will be re-calculated to include the points awarded in Tier 2.

One or more of the Bidder(s) invited to participate in demonstrations will be required to fill out IT questionnaires within 7 calendar days to facilitate UCDHS IT Evaluation Process. Questionnaires will be provided after the RFP evaluation has been completed and the top one or more bidders chosen; however, we have provided a copy to you in this RFP for review and it is not necessary to return with your initial submission due June 27, 2016. Please see attached Technology Evaluation documents. Successful passing of the UCDHS IT Evaluation Process is mandatory prior to contract negotiations.

- Attachment 10a Technology Evaluation Checklist.pdf
- Attachment 10b Technology Questionaire v2.4.docx
- Attachment 10c Technology Evaluation checklist.pdf

- The UCDHS IT Evaluation Process is a set of activities and procedures referring to the acquisition of new applications, technology, or technology devices. It is the goal of the UC Davis Health System to ensure new applications, technology, and devices adhere to current Information Technology, Clinical Engineering, and Security standards to safeguard patient privacy, enable organizational efficiencies, and provide overall protection of health systems assets.

The Bidder with the lowest cost per quality point and IT evaluation approval shall be given the opportunity to enter into negotiations with UCDHS if the cost is within the project funding allotment and Bidder's proposal is in compliance with all terms and conditions expressed within the RFP document. If UCDHS and Bidder are unable to come to satisfactory terms, UCDHS reserves its right to pursue other alternatives, including, but not limited to, awarding the opportunity to negotiate with the next lowest cost per quality point Bidder.

Responses that are incomplete in that there has been failure to respond in all of the requested areas may be disqualified. UCDHS reserves the right to set the criteria for and make this determination independently in each case.

UCDHS reserves the right to accept, reject or waive any irregularities in any proposal. UCDHS reserves the right to reject all responses received in response to this request.

The University of California Davis Health System (UCDHS) grants other University of California (UC) entities the right to acquire the properties and/or services from a resulting contract based on this competitively bid Request for Proposal (RFP). By submitting an RFP that results in a contract, the Contractor agrees to make the same bid terms and price, exclusive of freight and transportation fees, available to other University of California entities. UCDHS will not be responsible for any problems, which may arise between UC entities and the Contractor as a result of any sales and/or purchases made.

Termination due to Non-Funding. Bidder understands that the obligation of University to proceed is conditioned upon the appropriation of state, federal and other sources of funds not controlled by University ("Funding"), that in the event that through no action or inaction on the part of University, the Funding is withdrawn, University shall have the right to withdraw the RFP without damage, penalty, cost or further obligation.

An agreement shall be entered into only after it has been determined that prices are reasonable. The University reserves the right to have the Bidder provide supporting documentation justifying Bidder’s pricing and Bidder’s ability to meet proposed University agreement obligations prior to issuance of an award or agreement. Any proposal
that appears to have unrealistically low prices or other implausible terms may be rejected, in the University’s sole discretion.

VII. REQUIRED SUBMITTALS

Copies of Proposals

Bidder is required to submit one (1) one signed copy via email to mwegmann@ucdavis.edu. Responses must be received by June 27, 2016 by 3:00 P.M. Pacific Time. Responses must be submitted by E-mail. Request for Proposal E-mail responses should be submitted with the words RFP 16-627094-MW, clearly marked in the subject line and body of the E-mail.

Submit by E-mail responses to:

mwegmann@ucdavis.edu – reference RFP 16-627094-MW

It is a requirement that vendors provide a complete narrative with answers to all statements listed all the Attachments. The narrative response must reference each corresponding section and item number in the order provided on the attachment.

VIII. PROPOSAL CONDITIONS

1. Notwithstanding any other provision of the RFP, Bidders are hereby advised that this RFP is a solicitation of proposals only and is not to be construed as an offer to enter into any contract or agreement. Thus, UCDHS reserves the unqualified right to reject any or all proposals for any reason.

2. UCDHS shall have the unconditional and unqualified right to withdraw, cancel, or amend this RFP at any time. Bidders shall bear all costs associated with the preparation and furnishing of responses to this RFP. UCDHS, in its sole discretion, reserves the right to determine whether any Bidder meets the minimum qualification standards, to determine whether a proposal is responsive, and to select a proposal which best serves its programmatic objectives. UCDHS reserves the right to negotiate a contract with the selected Bidder.

3. All proposals shall be firm for a period of 180 days following the proposal submission due date.

4. Responses to this RFP should be made according to the instructions contained herein. Failure to adhere to RFP instructions may be cause for rejection of the proposal. A proposal, which contains conditions or limitations set up by the Bidder, may be deemed irregular and subsequently rejected by UCDHS.

5. False, incomplete, or unresponsive statements in the proposal response may be cause for its rejection. The evaluation and determination of the fulfillment of the RFP requirements will be UCDHS's responsibility and its judgment shall be final.

6. UCDHS reserves the right to interpret or change any provision of this RFP at any time prior to the proposal submission date. Such interpretation or change shall be in the form of a written addendum to this RFP. Such addendum will become part of this RFP and any resultant contract. Such addendum shall be made available to each company that has received an RFP. Should such addendum require additional information not previously requested, a Bidder's failure to address the requirements of such addendum in the proposal response might result in the proposal not being considered.
UCDHS has, at its sole discretion, the unconditional and unqualified right to determine that a time extension is required for submission of proposals, in which case, a written RFP addendum issued by UCDHS shall indicate the new submission date for proposals.

Prior to the final submission date, any Bidder may retrieve their proposal to make additions or alterations. Such retrieval, however, shall not extend the final submission date.

Bidders wishing to submit proposals in response to this request do so entirely at their own expense, and submission of a proposal indicates acceptance of the conditions contained in the RFP unless clearly and specifically noted otherwise.

7. PUBLIC INFORMATION AND TRADE SECRETS--The California Public Records Act limits UCDHS's ability to withhold pre-qualification and bid data to trade secrets or records, the disclosure of which is exempt or prohibited pursuant to federal or state law. If a submittal contains any trade secrets that Bidder does not want disclosed to the public or used by UCDHS for any purpose other than evaluation of the Bidder's eligibility, each sheet of such information must be marked with the designation "Confidential." UCDHS will notify the Bidder any request, by another party, to inspect such confidential information. Bidder will have an opportunity to establish that such information is exempt from inspection in any proceeding to compel inspection.

8. All computer programs and data made available by UCDHS to Bidders hereunder shall remain the property of the UCDHS and shall be maintained, used, and disseminated in accordance with the California Information Practices Act of 1911, Civil code Sections 1798 through 1798.76, and the California Public Records Act, Government Code Section 6250 through 6260. All listings and all copies of listings that reveal names or identification numbers of individuals (i.e., employees, patients, etc.) shall be destroyed or returned to UCDHS.

9. Bidders may not distribute any announcement or news release regarding this RFP project without written approval by the University of California Davis Health System. Any materials to be provided to regulatory agencies, other entities, or to the public shall be submitted to the UCDHS for review and distribution unless otherwise directed by a UCDHS representative.

10. All agreements resulting from this RFP shall be construed and enforced in accordance with the laws of the State of California.

11. Piggyback: The University of California Davis Health System (UCDHS) grants other University of California (UC) entities the right to acquire the properties and/or services from a resulting contract based on this competitively bid Request for Proposal (RFP). By submitting an RFP that results in a contract, the Contractor agrees to make the same bid terms and price, exclusive of freight and transportation fees, available to other University of California entities. UCDHS will not be responsible for any problems, which may arise between UC entities and the Contractor as a result of any sales and/or purchases made.

IX. TERMS AND CONDITIONS

University of California, Davis Health System, Purchase Agreement, Standard University Terms and Conditions for Purchase and Appendix – Data Security and Privacy will be in effect for this engagement.

To facilitate timely award of this order, insurance requirements as outlined in the attached UCDHS Independent Contractor Agreement must accompany your quote or be in force and on file as a result of a previous contract. All of the required policies shall name the Regents of the University of California as an additional insured, shall be in a form as issued by an insurer approved by the UCDHS, and shall contain an endorsement requiring not less than thirty (30) days written notice to UCDHS prior to any cancellation or modification thereof. Thereafter, a certificate
evidencing the renewal of each such policy shall be furnished to UCDHS at least ten (10) days prior to the expiration 
of the term of such policy. Failure to comply with this requirement may result in cancellation of any order resulting 
from this request for quotation.

Any order resulting from this Request for Proposal shall be subject to the examination and audit by the California 
State Auditor for a period of three years after final payment under this order. The examination and audit shall be 
confined to those matters connected with the performance of the contract, including, but not limited to, the cost of 
administering the contract.

X. GENERAL INFORMATION / CERTIFICATION

The Bidder shall not maintain or provide racially segregated facilities for employees at any establishment under the 
Bidder’s control. The Bidder agrees to adhere to the requirements set forth in Executive Orders 11246 and 11375, 
and with respect to activities occurring in the State of California, to the California Fair employment and Housing 
Act Government Code section 2900 et seq.). Expressly, the Bidder shall not discriminate against any employee or 
applicant for employment because of race, color, religion, sex, national origin, ancestry, medical condition, marital 
status, age, physical and mental handicap in regard to any position for which the employee or applicant for 
employment is qualified, or because he or she is a disabled veteran or veteran of the Vietnam era. The Bidder shall 
further specifically undertake an outreach effort in regards with the hiring, promotion and treatment of minority 
group persons, women, the handicapped, and disabled veterans and veterans of the Vietnam era. The Bidder shall 
communicate this policy in both English and Spanish to all people as concerned within its company, with outside 
recruiting services and the minority community at large. The Bidder shall provide the University on request a 
breakdown of its labor force by groups, specifying the above characteristics within job categories, and shall discuss 
with the University its policies and practices relating to its programs.

Please complete the vendor contact information requested below:

Company Name __________________________________________
Federal Employer Identification # ____________________________
Contact Person/Title- ______________________________________
Address __________________________________________________
Telephone Number __________________ Fax - ___________________

I certify that I am authorized to sign on behalf of the organization I represent for this offer, and agree to all terms 
and conditions described herein. ______________________________________

Authorized Signature ___________________ Date

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YOUR PROPOSAL MUST INCLUDE A RESPONSE TO EVERY QUESTION AND SECTION THAT REQUESTS INFORMATION, REFER TO THE SECTION AND CORRESPONDING ITEM NUMBER.

Failure to provide the information necessary to fully evaluate the bid response may result in disqualification of the bid.

The Qualification Statement must contain a description of the Bidder’s corporate qualifications, area of expertise, and prior experience with providing services similar to those described in this RFP, including, but not limited to the following:

1. Mandatory Requirements

The following represents pre-qualification criteria. Responses of “NO” or that are incomplete and/or do not meet the University’s expectations, basic requirements, and standards of performance may/shall be disqualified and the bid rejected. The University reserves the right to set the criteria for and make the determination independently in each case. Please Answer Yes or No to each numbered criteria:

a. Credit Card / PCI Compliance
PARCS must have fast, integrated, PCI Compliant, EMV-ready, credit card functionality at payment locations and must continue to maintain a PCI DSS Compliant environment, consistent with evolving standards and requirements.
Solution must be listed as a validated compliant solution on the PCI Security Standards Council web site (https://www.pcisecuritystandards.org) as acceptable for new deployments at time of implementation:
   i. A validated, “Point-to-Point Encryption Solution” (P2PE) listed on the PCI Security Standards Council web site, installed in PCI DSS compliant manner. Yes/No

b. Online Validation
PARCS must include a web-based (i.e. HTML/HTML5) electronic validation system, capable of supporting unlimited unique validations by over 1,000 separate validation customer accounts (companies or “clinics”) and over 2,000 individual company users with unique logins to issue validations as permitted by account managers. Yes/No

c. Fully Automated
The PARCS shall include self-service equipment and automation features to manage facilities that operate 24/7 for monthly and transient parkers, but may not be attended at all times. Yes/No

d. Remote Cashiering and Intercom
PARCS must include Remote Cashiering Station with two-way audio and video intercom. All activity must be recorded and fully auditable. Yes/No

e. Optical Bar Code
All PARCS proposals are expected to utilize optical bar code technology for transient tickets and to support optical bar code validations. Yes/No
i. Transient tickets must be on-the-fly printed tickets, with QR codes, bar codes, or other mechanism for encoding information that can be photographed or otherwise viewed (no mag stripe).  Yes/No

ii. PARCS should include support for visual, barcode-based prepayment coupons, vouchers and validations (eg. Self-printed Stickers, QR code displayed on mobile device). Yes/No

iii. To be considered, vendors who do not propose a ticketing system based on optical barcode technology (without mag stripe) must include a compelling, evidence-based case which clearly demonstrates why the proposed solution is technologically and operationally superior to optical barcode technology. This argument should include hard data from multiple sources, such as test results based on industry recognized standards, third-party research, statistics, independent case studies, user references, etc. Yes/No

f. Local Service
   Vendor must be able to provide local, on-site service within 4 hours, and must maintain sufficient tools and spare parts with trained technicians sufficient to solve most problems in one visit. Yes/No

g. Laws, Ordinances and Standards
   The design and installation of the proposed PARCS should be consistent with industry standards for best practice and shall conform to the following referenced codes, regulations, and standards as applicable:
   i. All equipment shall be UL or equivalent listed. Yes/No
   ii. ALL PARCS equipment shall be certified with a FCC label as conforming to rigid EMC requirements for electromagnetic emissions, immunity and harmonics. Yes/No
   iii. Meet all ADA requirements (federal, state, local) as of the date of acceptance, along with any requirements that are published but due to be implemented at a later date. Yes/No
   iv. Payment Application Data Security Standard (PA DSS) current at the time of implementation. Yes/No
   v. The PARCS shall comply with EMV security standards effective at the time of implementation, including fully compliant EMV readers. Yes/No
   vi. University of California Appendix – Data Security and Privacy. Yes/No
   vii. Restrictions or requirements recommended by UC Davis Medical Center IT department. Yes/No
   viii. Must conform to all Federal, State, and Local laws, regulations and codes. Yes/No

h. Warranty
   i. The PARCS shall include a factory warranty that equipment is free from defects in design, material, manufacturing and operation, for a minimum of 12 months from date of final install. Yes/No
   ii. The Installing PARCS vendor shall guarantee the equipment, wire, cable, and installation for 12 months from date of final install. Yes/No
   iii. The PARCS’ Manufacturer shall guarantee availability of parts, for minimum of (9) years from date of completion of installation. Yes/No

2. UC Davis Health System would like to have the following but it is not required. Please answer Yes or No with explanation and provide additional services in your Technical proposal in the Tier 2 Attachment and any additional costs in your Cost Proposal:

   Third Party Interface
   Ability to interface with third party software such as T2 Flex, AIMS or similar systems: Ability to collect payment for outstanding citation fines at POF and exits, and/or deny access to scofflaws.
The FMS shall provide tools to interface to external platforms and systems (API, etc)

1. The FMS shall provide tools to interface to external platforms and systems. Yes/No
2. System APIs shall provide real-time XML interfaces. Fields and data structures shall comply with a specified schema. Yes/No
3. API’s shall support security authentication of all clients invoking APIs so that each individual client is identified for each API call. Yes/No
4. The FMS shall allow for logging all requests and responses to and from the APIs. Yes/No
5. All interfaces where possible shall be upon RESTful compliant Web Services technology. Yes/No

Fine Collection
Ability to assess fines and collect payment at POF and exits for nested parking violations. Yes/No

In-and-Out
System provide an automated solution for allowing in-and-out privileges. Yes/No

Prepaid eReservation
1. The FMS should support interfacing to the following (but not limited to) on-line reservations platforms:
   a. ParkWhiz Yes/No
   b. SpotHero Yes/No
   c. Parking Panda Yes/No
   d. Click & Park Yes/No
   e. BestParking Yes/No

Pay by Mobile
The FMS shall support interfacing to pay-by-cell platforms. Yes/No

Accounting & Revenue Control
1. The FMS shall support interfacing to parking focused account receivable platforms such as North Platform. Yes/No
2. The FMS shall support interfacing to campus card payment solutions such as First Data Merchant. Yes/No
3. The FMS shall support export of inter-departmental recharge invoices, and revenue collections reporting to campus financial systems such as Kuali. Yes/No

Value Card
PARCS system should include support for prepaid and refillable value cards.

Reuse of Existing Equipment
If any existing 3M/FAPD equipment is compatible and may be re-used (e.g. barrier gates, cables, in-ground loops, etc.), options to integrate these items should be presented.

3. Service Standards: As outlined in the SOW.
   - Agree/Disagree:
   - Explanation:

4. Reporting Requirements as detailed on pages 28 and 29 of this RFP
   - Agree/Disagree
5. **Please indicate** earliest date you can start?

6. **Company Ownership and Management**

   a. Company name:
      Address:
      Phone:
      Fax:
      E-mail:
      Internet address:

   b. Provide names and titles of company principals.

   c. When was your company founded?

   d. Who owns the company? If a subsidiary of another company, please provide name and location of headquarters.

   e. Provide the name and title of the individual, telephone number, and e-mail address with whom to communicate if further information about your proposal is desired.

7. **Company Organization and Staff**

    Identify by name all firm staff to be involved in the project as well as engaged in management/oversight. Provide profiles or resumes for all of these individuals. Please include a description of experience, qualification, and expertise that your company will provide.

    The successful Bidder will perform all work. Subcontracting by the Bidder will not be allowed.

8. **Company Experience**

    a. Describe your firm's area of expertise and prior experience with similar projects as specified in the RFP.

9. **References**

    Provide organization names and specific individual contacts for at least three similar projects you have conducted for other clients in the past two years that may furnish a reference. The references may be from current or prior clients and at least two should correspond to the two case histories that will be documented in Tier 2. The references will be used as a basis for inquiry concerning the Bidder’s quality of service. Furnishing incorrect and/or incomplete reference information may lead to bidder’s elimination from consideration for award. The decision to eliminate Bidder from consideration for award for poor reference checks or for incorrect and/or incomplete reference information shall be at the sole discretion of UCDHS and shall not be subject to appeal.

10. **Conflict of Interest**

    Identify by name and University position any University officer, faculty member, or other employee who holds a position of director, officer, partner, trustee, manager, or employee in the Bidder's organization, as well as the name of any near relatives who are employed by the University.
Provide a statement of the total dollar amount of work performed for the University of California in the past twelve (12) months and listing of the campus(es) served.

The contract will not be awarded to any person, company, or corporation that has failed to perform in a satisfactory or faithful manner on any previous contract or purchase order with the University of California.

11. University Terms and Conditions

Please indicate your compliance with the University terms and conditions specified in the RFP, including the University of California Purchase Agreement?

12. Health Care Criminal Offence Exclusion

The Bidder certifies that neither the Bidder, nor its shareholders, members, directors, officers, agents, employees or members of its workforce have been excluded or served a notice of exclusion or have been served with a notice of proposed exclusion, or have committed any acts which are cause for exclusion, from participation in, or had any sanctions, or civil or criminal penalties imposed under, any federal or state healthcare program, including but not limited to Medicare or Medicaid, or have been convicted, under federal or state law (including without limitation a plea of nolo contendere or participation in a first offender deterred adjudication or other arrangement whereby a judgment of conviction has been withheld), of a criminal offense related to (a) the neglect or abuse of a patient, (b) the delivery of an item or service, including the performance of management or administrative services related to the delivery of an item or service, under a federal or state healthcare program, (c) fraud, theft, embezzlement, breach of fiduciary responsibility, or other financial misconduct in connection with the delivery of a healthcare item or service or with respect to any act or omission in any program operated by or financed in whole or in part by an federal , state or local government agency, (d) the unlawful, manufacture, distribution, prescription or dispensing of a controlled substance or (c) interference with or obstruction of any investigation into any criminal offense described in (a) through (d) above. Each Party further agrees to notify the other Party immediately after the Party becomes aware that any of the foregoing representation and warranties may be inaccurate or may become incorrect.

Notification Requirements. Bidder shall notify Hospital immediately in the event that (1) Bidder is convicted of a criminal offense related to health care and/or related to the provision of services paid for by Medicare, Medicaid, or another federal health care program; or (2) Bidder is excluded from participation in any federal health care program, including Medicare and Medicaid.

Termination. Hospital may terminate any resulting Agreement immediately in the event that (1) Bidder is convicted of a criminal offense related to health care and/or related to the provision of services paid for by Medicare, Medicaid or another federal health care program; or (2) Bidder is excluded from participation in any federal health care program, including Medicare and Medicaid.

13. Service

a. Provide a corporate profile, service portfolio, and description of the Bidder’s service philosophy and approach. Do you have a written service guarantee? If so, please submit with the proposal. What separates and distinguishes this Bidder from other applicants?

14. Company Financials:

a. Provide a report of the Bidder’s financial status, including the most recently audited financial statements and profit and loss statements or equivalent evidence of financial stability and include auditor's opinion.
Failure to provide the information necessary to fully evaluate the bid response and/or providing a response that is not customized to address the requested information may result in disqualification of the bid.

1. **Project Summary**
   
   Provide a narrative summary of your understanding of the project, described in Section II, Overview/Project Goals.

2. **Scope of Services**
   
   Provide your approval of the Scope of Work provided in this RFP. Please add any additional services required.

3. **Other Information**
   
   Describe any other company experience you believe would be relevant or useful if you were to be awarded the project.

4. **Capabilities:** In addition to the above you are required to fill in the attached excel spreadsheet:
   
   “Attachment 9 Capabilities Matrix.xls.”
ATTACHMENT 3
COST PROPOSAL

The Bidder must include definitive information regarding the payment schedule, to include the following:

1. A detailed cost proposal outlining total cost for the services described in this RFP in the attached excel format:
   
   “PARCS Price Sheet.xlsx”

   Bidder must submit the Cost Proposal in the pricing sheet provided. Please ensure to fill out completely every tab in the attached spreadsheet. Tabs to be completed: Pricing Sheet, Payment Schedule, and Installation detail

2. A description of additional charges if any for any extra services.

If a Bidder’s fee proposal is not clear to the evaluation committee, fails to address any of the points (1 -2) above or does not distinguish Phase 1 and 2 total costs, the proposal will be considered non-responsive and the proposal will be disqualified from further consideration.