



OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

682 Prospect Street,
Berea, Ohio 44017

ADDENDUM NO. 12
Issued November 22, 2019

to
RFP NO. 1- 2019
REQUEST FOR PROPOSALS
TO FURNISH, INTEGRATE AND MAINTAIN A
TOLL COLLECTION SYSTEM ISSUED OCTOBER 4, 2019

ATTENTION OF RESPONDENTS IS DIRECTED TO:
Answers to questions received through November 12, 2019 are attached

Issued by the Ohio Turnpike and Infrastructure Commission through Jennifer L. Stueber, Esq.,
General Counsel.

Jennifer L. Stueber, Esq.
General Counsel

11/22/2019

Date

Q#85 Would the OTIC consider revising the payment milestones (shown in Table 8-1, Payment Milestones) to allow a more cash flow neutral program?

A#85 Yes. See revised Table 8-1 attached.

Q#86 Given the significant quantity of equipment for the new TCS, would the OTIC consider payment milestones related to procurement, delivery, and installation of the equipment?

A#86 No. See A#85.

Q#113 In Special Provisions – Attachment A, I. Correction of Work, the second paragraph appears to be missing the first word(s) It begins as follows: “shall perform construction administration services.” Please provide the missing word(s).

A#113 Delete the paragraph: “shall perform construction administration services. The Integrator shall ensure that all construction work performed and materials or equipment provided in the construction/installation shall meet or exceed industry standards and shall be in accordance with recognized construction procedures and in accordance with the plans and specifications upon which the construction TCS Integrator(s) based their bid(s).”.

Q#114 Could OTIC please confirm that all costs related to the removal of the existing DMSs are the responsibility of the TCS Integrator and not a part of the Certified Construction Cost Estimate?

A#114 Yes, all costs related to the removal of the existing DMSs, as well as all other legacy equipment, are the responsibility of the TCS Integrator and not a part of the Certified Construction Cost Estimate.

Q#115 Relevant to Section 6.2.6, No. 2, During the mandatory pre-bid meeting, it was stated that the requirements for the Certified Cost Construction Estimate would be limited to the new plaza construction. Could OTIC please confirm that the requirement will be changed in an upcoming addendum?

A#115 This is not correct. The Certified Cost Construction Estimate should include any and all construction that is required turnpike-wide to be performed by OTIC’s Contractor in order for the TCS Integrator to install their solution to meet the RFP Scope of Services.

Q#116 The RFP requires the Integrator to follow the OTIC Data Retention Policy. Could OTIC please provide a copy of the policy so that the proposers may fully understand the data retention requirements?

A#116 Respondents may assume their solution will incorporate the following data retention schedules:

- a. Detailed toll, WIM and ATR transactional data – Retain online in the TCS Host for at least 3 years then archive to long term storage for at least 5 years.*
- b. Summary level toll, WIM and ATR data – Retain online in the TCS Host for at least 12 years.*
- c. License Plate Images – Retain online in the TCS Host or VES servers for a minimum of 90 days*
- d. System Logs – Retain Online in the TCS Host for at least 120 days then archive to long term storage for at least 5 years.*
- e. All Other data – Retain online in the TCS Host for at least 3 years then archive to long term storage for at least 5 years.*

Q#117 Is OTIC providing VPN access to the Primary and DR Host sites so that the Integrator may provide the required remote support?

A#117 Yes

Q#118 Please confirm that the Integrator does not need to provide a new UPS at with the Primary or Secondary Host site.

A#118 The TCS Integrator does not need to provide a new UPS at either site.

Q#119 The Format section states that the Proposal shall be in 12 point font. Will OTIC allow the Project Schedule to be excluded from the 12 point font requirement due to the nature of generating a PDF to a specific page size from the scheduling software?

A#119 Yes, see allowable deviations in A#24.

Q#120 Table 6-1 lists the Project Schedule in the 100 page limit. Will OTIC allow the Project Schedule to be excluded from the 100 page limit in order to include sufficient schedule detail?

A#120 Yes. Follow guidance provided in A#41.

Q#121 Is the Contractor's work on the TCS subject to prevailing wage requirements? If so, please provide the prevailing wage rates.

A#121 Yes, See A#101.

Q#122 Would the Commission please confirm that we are to provide the following plans with our proposal (i.e. these are not post-award deliverables)?

- **Preliminary Project Schedule**
- **Preliminary Project Management Plan**
- **Preliminary TCS Development Plan**
 - **Preliminary Transition Plan (per RFP 6.2.3, to be provided separately from the Development Plan)**
 - **Preliminary Construction Plans**
 - **Preliminary Staffing Plan**
 - **Quality Management Plan**
 - **Business Continuity and Disaster Recovery Plan**
 - **Maintenance Staffing Plan**
 - **Redlined Conceptual Layouts for**
 - **Weigh-in-Motion Solution Infrastructure**
 - **Traffic Counting System Infrastructure**
 - **Conventional Barrier Exit Lane**
 - **Conventional Ticket Entry Lane**
 - **Conventional Ticket Exit Lane**
 - **ORT Barrier Exit Lane and Shoulder**
 - **ORT Ticket Entry Lane and Shoulder**
 - **ORT Ticket Exit Lane and Shoulder**

A#122 Yes, all the above documents are required as part of the proposal and are not post-award deliverables. See A#40 and A#41,

Q#123 What are the required RTO (Recovery Time Objective) and RPO (Recovery Point Objective) for Disaster Recovery for the Hosts, referenced in Section A.2.13.17?

A#123 This will be responded to in a subsequent Addendum.

Q#124 The Authority requests single-unit pricing for this optional printer; however, there is no indication of the total quantity to be purchased. Could the Authority indicate the minimum intended number of units that would be purchased, should this option be taken? Would these optional units be purchased at the same time as the other lane equipment?

A#124 Respondents shall assume 10 units may be purchased. These optional ticket printer units may be purchased at a different time than the other lane equipment.

Q#125 For ATPM coin acceptance, does the Authority require that coin acceptors accept multiple coins at once (batch acceptance, as with a coin basket), or is single-coin-at-once acceptance (via a vending machine-style coin slot) acceptable?

A#125 OTIC requires the acceptance of multiple coins at once (i.e. with a coin basket).

Q#126 What is the network connection between Toll Plazas and Primary/Secondary Hosts? Is that MPLS or others, please provide the bandwidth details/speed. What is the type of network connection between CSC and Host?

A#126 The OTIC has its own internal SONET Fiber Optic Network that connects all Toll Plazas within the same LAN. The current configuration has two 100 Base-T Ethernet circuits per Toll Plaza. Each Toll Plaza is provided a primary and secondary routed Layer 3 path to the OTIC Primary and Backup Datacenters via the LAN.

Q#127 Can OTIC provide any network diagram for the OTIC WAN?

A#127 This will be responded to in a subsequent Addendum.

Q#128 What is the current MPLS bandwidth utilization in the OTIC's data center in Berea, OH?

A#128 There are no MPLS circuits. The Turnpike's existing SONET paths are currently running at no more than 3% capacity.

Q#129 What is the current MPLS bandwidth utilization in the OTIC's data center in Strongsville, OH?

A#129 There are no MPLS circuits. The Turnpike's existing SONET paths are currently running at no more than 3% capacity.

Q#130 Please provide a copy of or link to the OTIC Data Retention Policy.

A#130 See A#116.

Q#131 Will OTIC provide all WAN connectivity directly from the primary to the back-up Disaster Recovery site?

A#131 Yes. Connectivity between the primary and backup datacenter is provided by a 20gbit Ethernet connection over single-mode fiber optic cable.

Q#132 Will OTIC provide connectivity from the DR site to CSC?

A#132 Yes.

Q#133 Referencing Section A.2.15, specifically, “The TCS Integrator shall be responsible for the following: ...

3. Wide Area Network (WAN) connectivity to external interfaces that include the back-up Disaster Recovery site.”. Please provide the WAN connectivity list, or any examples which are not included in the previous paragraph, which reads: “OTIC is responsible for maintaining the network connecting the on-site data center(s) to the toll plazas and also for the on-site data center to cloud-based CSC network connection.”

A#133 The Selected TCS Integrator is not required to provide Wide Area Network (WAN) connectivity to external interfaces including the back-up Disaster Recovery Site. Connectivity between both the primary and backup datacenter to all toll locations is facilitated by buried fiber cable that runs the length of the road. Connections to all toll plaza locations are provided as two (2) 100mbit, full duplex connections encapsulated in the SONET protocol. For the purposes of this project, connectivity between the datacenter(s) and remote locations is done within the Local Area Network. Connectivity to the new cloud-based CSC system (currently under implementation) will utilize the aforementioned fiber optic network to reach the primary/secondary datacenters, which then access any cloud resources through the internet.

Q#134 Please provide the bank interface ICD for bank deposits.

A#134 The existing TCS does not currently have an interface to the OTIC’s bank, currently Huntington Bank. The Selected TCS Integrator shall work with OTIC and its bank, to implement this new interface.

Q#135 For the remote gates that have no network, is the TCS vendor required to add network connectivity to those 16 locations?

A#135 Yes. Remote gates that are not currently connected by wire shall be connected using cellular/short-range wireless or another approved communications solution. The Selected TCS Integrator shall work with OTIC’s Technology Department and the OTIC’s wireless provider (currently Verizon). This work shall be coordinated and approved by OTIC as OTIC will directly pay for any such services under the existing agreement with their wireless provider.

Q#136 For the "manual access gates," is the TCS vendor providing any work at those locations? If so, can you please clarify the nature of the work to be performed?

A#136 No. Manual access gates are outside of the scope of the TCS Integrator.

Q#137 For the WIM sites, the provided table states indicates "3 Lanes between TP 71 and SP3". Would the Commission please clarify the SP and MB acronyms? In addition, please indicate the locations of the SP and MB locations. Are they located on the OH Turnpike or an entrance ramp prior to the OH Turnpike TP 71?

A#137 Per the legend in Appendix A – Exhibit AH, SP = Service Plaza, MB = Maintenance Building. Mileposts are indicated in the appendix in the column marked "Location". For example, SP3 is at milepost 76.9.

Q#138 We understand from the RFP that “the TCS Integrator, and any Subcontractors, for this TCS RFP will be precluded from bidding on any aspect of the third-party construction.” We would like to suggest that the Commission consider allowing TCS civil, electrical and structural subcontractors to bid.

A#138 The TCS Integrator’s subcontractors may bid the third party construction.

Q#139 Is replacement of the intercoms from booths to the Sergeant’s Room in-scope for the TCS vendor?

A#139 Replacement of the intercom in the toll booth is not in the TCS Integrator's scope, however, the DATIMs and ATPMs shall have dialers to provide remote assistance to customers.

Q#140 Regarding the OTIC schedule for construction shown on EXHIBIT AO – PRELIMINARY CONSTRUCTION SCHEDULE, would OTIC be willing to have separate Go-live date and Milestone payments for Host and Lane operations?

A#140 No. See A#86

Q#141 Regarding the OTIC schedule for construction shown on EXHIBIT AO – PRELIMINARY CONSTRUCTION SCHEDULE, would OTIC negotiate an early, phased Host and Lanes' operation and maintenance with a TCS vendor who transitions the systems earlier than the last lane acceptance?

We have experience with other programs which have successfully adopted a rolling approach to acceptance. For example, TP49 transition in 2021 through 2022.

A#141 No.

Q#142 Would the Commission please verify that the TCS vendor is responsible for the design of the civil infrastructure defined by the TCS scope of work? The scope of work limits--particularly for the design work--need clarification.

A#142 Respondents are responsible for identifying the infrastructure needed to install their solution in the redline conceptual plans and the Certified Construction Cost Estimate in their Proposal. After contract award, the TCS Integrator shall support the OTIC's Design Consultant to prepare detailed construction plans and specifications, which shall be submitted to OTIC's Chief Engineer for review and acceptance.

Q#143 Would the Commission please confirm that the construction work includes the establishment of local power for all TCS design scope of work? Specifically, for the WIM and ATPMs.

A#143 No, power will be provided by others. Integrator must provide sufficient information so OTIC may design and provide a local power drop for the Integrator to terminate to in a local junction box.

Q#144 Would the Commission please confirm if demolition and decommissioning are considered construction activities?

A#144 Demolition is considered a construction activity. Decommissioning, removal and disposal of all obsolete TCS equipment is the Selected TCS Integrator's responsibility.

Q#145 In the Traffic Counter section, the below is indicated: "The TCS Integrator shall also propose a solution that utilizes ETC and cash trip data for transactions occurring on the same day to be used to determine total miles traveled for each."

Does the per-trip mileage calculation have any relation to the Traffic Counter? Would the Commission please clarify how the Traffic counter can be used in computing mileage?

A#145 No, the proposed ATRs will not be used to compute mileage. However, in addition to the ATRs, the Selected TCS Integrator shall provide a solution that uses ETC and cash/credit card trip data from the TCS for transactions occurring on the same day to be used to determine miles traveled for each trip.

Q#146 With respect to WIM overweight notifications to OTIC and OHSP, may we assume email notifications will meet the requirement?

A#146 Yes, an email to the OTIC's Communications Center and OSHP meets the requirement. WIM Location (milepost), direction, date, and time must be included. Email notifications to the OTIC's Communications Center shall be both audible and visual on the operator's monitor to alert them to an overweight condition.

Q#147 Is the expectation that the WIM subsystem will be fully integrated with the Toll Zone / Lane controller, or can it operate as an independent system? Is the WIM information needed on the transactions that are sent from lane to Host?

A#147 The WIM subsystem may be implemented and operated as an independent system from the TCS. No WIM information is needed on the toll transactions that are sent from the TCS lanes to the TCS Host. See A#105 for further information.

Q#148 Is the TCS integrator required to provide a new CCTV camera on ATPM lanes or reuse the existing CCTV camera? Is the proposed solution expected to utilize a CCTV camera for two-way communication? Is the camera expected to record and store video, and where: Host, Plaza or Lane?

A#148 See A#58.

Q#149 Please extend the due date for submission of all bidder RFP questions to one week after the release of your response to this round of questions (submitted 11/12)?

A#149 See A#104.

Q#150 Would the Commission please let us know when requested AutoCAD drawings will be released to us? We will need a minimum of four (4) weeks to redline these and obtain engineer certification.

A#150 CAD files are in progress and will be available soon.

Q#151 Would the Commission please let us know when it anticipates the release of responses to all bidder questions?

A#151 All questions received through November 12, 2019 have been answered through Addendums issued by OTIC, inclusive of this Addendum No. 12.

Q#152 Would the Commission please provide additional detail and/or a preference for the scheduling of system training(s)? We would appreciate input from the operations team regarding the training requirements, including:

- **number and type of training locations (onsite? Plazas? Other training facility?),**
- **number of training sessions,**
- **number of proposed trainees/employees per session,**
- **estimated number of trainees by the business segment (supervisor, etc.).**

A#152 Training needs will be driven by the differences between the existing TCS and new TCS, of which OTIC has no current knowledge. RFP Section A.7 states that training for the new TCS shall be conducted for four distinct OTIC business groups. For Toll Operations training, OTIC expects at least three toll training locations at toll plazas (specific locations TBD). There will be 12-15 toll supervisors at each toll training session, for approximately 40 total toll supervisors. OTIC expects that the Selected TCS Integrator's training will equip toll supervisors to train local toll collectors. However, that may not meet the needs of OTIC personnel to operate the new TCS, and more Integrator led sessions may be required. Other anticipated Business groups (OTIC Admin, TCS Host Users and OTIC Technology staff) would be trained at OTIC HQ in Berea, OH, and number approximately 25 persons.

Q#153 Would the Commission please indicate the required shifts for employees in each business segment?

A#153 Toll Operations Shift 1 typically starts between 10PM and midnight, shift 2 starts between 6-8AM, and shift 3 starts between 2-4PM. Other anticipated Business groups listed in A#152 have standard hours of 8am-5pm.

Q#154 Would the OTIC please confirm if an annual external QSA audit concerning PCI will be performed, or will internal testing be sufficient?

A#154 Annual TCS PCI audits must be conducted by an OTIC-approved external QSA auditor as part of the Annual Security Audit and Certification which will be a contract cost to the OTIC. The TCS Integrator shall include the cost of the PCI Audit as part of the Security Audit and Certification Cost where specified in ATTACHMENT F – PRICING PROPOSAL TEMPLATES.

Q#155 Multiple elements of the technical proposal response for Sections II and III require trade secret communication to properly respond within the context of the related section requirements. Section II includes a completed compliance matrix with requested notes and additional lines to identify specifics of the SOW related to the proposer's ability to meet requirements and/or alternate approach - all of which, by including this information, can be deemed trade secret (i.e. a competitor can review completed matrices to identify other proposers' overall solutions' abilities to meet requirements, and specific comments related to compliance, functionality, alternate method, etc.). The Section III Narrative Response includes multiple instances where providing the requested information will be divulging trade secrets.

With respect to all subsections, the requested information for proposal response (to include personnel, key personnel, partners, TCS design and architecture, project implementation, project schedule, transition and testing, along with maintenance approach) requires a level of trade secret disclosure in order to fully articulate the proposed system, personnel, approach schedule, etc.

The proposed requirement states to include these trade secret statements as a distinct subsection to Section IV or V (or addendum to pricing), but the OTIC does not commit to review any information other than that required to be provided.

Please specify the best method for proposers to effectively respond to the requirements of Sections II and III without compromising our ability to maintain trade secrets – while enabling the OTIC to fully understand the proposed solution and response without having to read multiple documents simultaneously.

A#155 See A#42.

Q#156 Please confirm that any structural evaluation or modification for the new, larger DMS signs will be provided by the OTIC and is not the responsibility of the Integrator to include in the Certified Construction Cost Estimate (CCCE).

A#156 Yes, OTIC is responsible for any structural evaluation or modifications to support the DMS signs, and should not be included in the CCCE.

Q#157 In addition to specifying the ORT gantry span type and fabrication proposed by the Respondent, is the Respondent required as part of the Certified Construction Cost Estimate (CCCE) to provide the CCCE for the procurement and installation of the ORT gantries?

A#157 Yes.

Q#158 Please describe the process for a Respondent to propose an alternative design and pricing. The RFP Response requirements indicate that Section II Compliance Matrix is where a Respondent submits an alternative approach to a requirement. RFP Section 6.2.12 Pricing Instructions states that a Respondent can submit alternate pricing models – however, is the OTIC interested in alternative solutions that may change technology or operations approach, and if so, how does a Respondent submit this alternative proposal and related pricing?

A#158 Any alternative pricing models proposed by the Respondent shall be organized in the same format as the pricing proposal template (by sheet). See updated Price Proposal template provided in A#100.

Q#159 The Payment Milestones are currently set up in such a way that the Respondent would receive the majority of the payments after SAT is approved. In order to create a more favorable cash flow to the Respondent, which could in turn result in a lower price to the OTIC, would the OTIC consider revising the current payment milestones and break out Equipment, Hardware, and Off-the-Shelf Software payments, based on pricing for those items, separately? For those items, we propose the following payment structure: Order Verified: 20% Purchased, Received, and Verified: 60% Installation Approved: 20%?

A#159 See A#85.

Q#160 Toll Plaza 64 is shown with eight lanes for the 2022 Toll Plaza Lane Configuration table but is only shown with seven lanes in the 2019 Toll Plaza Lane Configuration table. Is the intent to add a future lane farthest from the building, then renumber the lanes? Should the Toll Integrator include booth modifications for the DATIMs for this work as part of the Construction Cost Estimate, or would booth modifications be part of the lane construction scope?

A#160 OTIC is planning to construct an additional toll lane at TP 64 prior to 2022. All booth modifications required to install the new TCS in all lanes shall be included in the Certified Construction Cost Estimate.

Q#161 Toll Plaza 152 is shown with five lanes for the 2022 Toll Plaza Lane Configuration table but is only shown with four lanes in the 2019 Toll Plaza Lane Configuration table. Is the intent for a future lane addition? Does the Toll Integrator need to include booth modifications for the ATPM for this work as part of the Construction Cost Estimate, or would booth modifications be part of the lane construction scope?

A#161 OTIC is planning to construct an additional toll lane at TP 152 prior to 2022. All booth modifications required to install the new TCS in all lanes shall be included in the Certified Construction Cost Estimate.

Q#162 Is the intent to redeploy existing AVI toll readers (Badger readers) to select gate locations to add RFID functionality to gates currently without RFID capability? Or is the intent to redeploy existing AVI toll readers as replacement equipment in the event of current gate RFID equipment failure? The gates currently utilize the MarkIV MGate RFID reader, which has an enclosure smaller than the Badger reader requires?

A#162 The Selected TCS Integrator shall redeploy existing Mark IV/Kapsch Badger Readers to select gate locations to add RFID functionality at new back gate locations (new plazas) as well as to replace the existing Mark IV/Kapsch MGate Readers at select back and remote gate locations to provide stronger RFID coverage. The TCS Integrator shall reuse the existing Mark IV/Kapsch Badger Reader enclosures or provide new enclosures.

Q#163 On which ISO track or tracks of the magnetic stripe is the ticket information encoded?

A#163 In the current TCS, data is written on the magnetic stripe in two (2) successive frames on Track 1. The magnetic encoding method is Aiken Biphase (F/2F) at 110 bits per inch (BPI) in accordance with ISO/IEC 7811.

Q#164 Please provide the name of the card payment processor.

A#164 See A#66

Q#165 Does this include temporary license plates?

A#165 The VES subsystem is not expected to perform OCR on temporary license plates.

Q#166 Please clarify which subsystems are included in the ORT Lane and Shoulder availability requirement, given that some of the subsystems are included in a separate requirement.

A#166 The ORT Lane and Shoulder availability requirement shown in Table A-4 applies to all subsystems, including the Violation Enforcement Subsystem and Digital Video Audit System.

Q#167 Attachment E - Compliance Matrix includes Section A.4.2 Task Order and Process Management, but there is no corresponding section in the RFP. Please clarify.

A#167 All references to "Task Order" in Attachment E – Compliance Matrix, were meant to be "Change Order".

Q#168 Attachment E - Compliance Matrix includes Section A.5.1.2.1.2 Key Personnel/Key Staff, but in the RFP, this section is titled "A.5.1.2.2". Please clarify.

A#168 Section A.5.1.2.2 is correct. This is a typo in Attachment E – Compliance Matrix.

Q#169 Considering that the TCS Integrator is ultimately responsible for lane and system performance, will the OTIC allow the TCS Integrator to install and tune the AVI system as is best suited to the Integrator's lane design instead of contracting with the AVI equipment manufacturer to tune and certify the lanes?

A#169 Yes

Q#170 How many conventional plaza lanes, entry or exit, can we close at one time at the same plaza, and for how many days?

A#170 Please see attached OTIC “Toll Facility Accessibility Schedule 2019-11-22”.

Q#171 The 2022 OTIC Back and Remote gate list includes back gates at Toll Plazas 13, 25, 34, 39, 215, 216, 218, 232 and 234. Will these back gates remain operational and continue to be updated with transponder lists after the new toll collection system is in place?

A#171 No, these plazas will be decommissioned after January 1, 2024.

Q#172 Please clarify if the recovered bills can go to the final bin along with the bills accepted.

A#172 No. Recovered/uncollected bills shall go to a separate bin than the bills accepted by the ATPM.

Q#173 Is the intent to have one bill dispenser that can be reached by both high and low vehicles, or to have one bill dispenser for high vehicles and another for low vehicles?

A#173 The ATPM shall have a bill dispenser for high vehicles and another for low vehicles.

Q#174 Please confirm the number of vaults needed for coins and bills and the required capacity.

A#174 The number and purpose of the vaults are:

- *Two Coin Vaults (coins paid by the customer end up in these vaults)
 - *The ATPM accepts nickels, dimes, quarters and \$1 coins**
- *Two Bill Acceptors (currency paid by the customer end up in these receptacles)
 - *The ATPM accepts \$1 bills, \$5 bills, \$10 bills, \$20 bills and \$50 bills**
- *Three Coin Dispensers (dispense change to the customer)
 - *The ATPM dispenses nickels, quarters and \$1 coins**
- *Two Bill Dispensers (dispense change to the customer)
 - *The ATPM dispenses \$5 bills only**
- *Two Bill Retractor Bins (if a customer fails to take their change in the form of currency, the ATPM will retract the currency and place it in these bins).*

Information regarding capacity will be responded to in a subsequent Addendum.

Q#175 Considering the patron equipment on the front of the ATPM, is the requirement to provide an ATPM cabinet and door assembly that are corrosion proof (NEMA 4X) and sealed (IP66), and not provide the kiosk devices (card reader, ticket reader, receipt printer, bill acceptor, and coin acceptor) that are IP66 sealed?

A#175 The ATPM cabinet, as well as the kiosk devices, shall be IP 66 sealed.

Q#176 Please clarify if the door can be opened via RFID tag, proximity card, or other means that identifies the person opening the door.

A#176 The TCS Integrator may choose to propose a solution where the ATPM door can be opened via a means that identifies the person opening the door.

Q#177 Please confirm the capacity required for the coins and bills dispensers.

A#177 See A#174.

Q#178 Would the OTIC entertain a cloud solution if the Integrator can demonstrate data security, redundancy, and equipment savings?

A#178 No.

Q#179 Please provide specifications for the pavement in the conventional lanes to include re-bar depth, depth of re-bar dowels where the concrete is patched or joined, etc. We would like to understand any challenges we might face with in-pavement sensor installation.

A#179 Information to this level of detail isn't available.

Q#180 Please describe the switching, the control, and any interlock required between the lane controllers that are controlling each direction of a bidirectional lane.

A#180 The TCS Integrator shall propose a lane solution that accommodates reversible lanes, with the appropriate switching, control and interlock between the lane controllers controlling each direction of a reversible lane, to ensure that if a lane is opened in one direction, the lane functions as closed in the opposite direction and no "reverse vehicle" information is captured in that direction.

Q#181 During the site visits, some conduits were observed to be in a degraded state. Due to the time required to perform a survey of all toll plazas and sites, please confirm that degraded conduit identification, replacement, and repair is not a requirement for the Respondent to include in the Certified Construction Cost Estimate.

A#181 OTIC recently conducted a field verification of the as-built toll plaza conduits for the conventional toll plazas which is provided in EXHIBIT AS – OTIC 2019 AS-BUILT TOLL PLAZA CONDUIT FIELD VERIFICATION. The TCS Integrator shall indicate if they need new conduit to install their solution at each plaza and include this as part of their Certified Construction Cost Estimate. See A#60 also.

Q#182 In order to obtain lower bonding costs, would the OTIC consider bonding the maintenance period on an annually renewable basis?

A#182 Yes, annually renewable bonding during the maintenance period is acceptable.

Q#183 Are we allowed to submit redlined drawings that were not part of the AutoCAD drawing set provided by the OTIC? For example, if our engineering firm created plans for some of the existing equipment installation, can we use these in our submittal?

A#183 Yes, you may use red-lined drawings besides those provided by OTIC.

Q#184 Can the Commission provide a network backbone interconnect diagram for the toll plazas, remote gates (that are connected to the backbone), and TCS Host Primary site?

A#184 See A#127.

Q#185 Relative to the construction work, does the Commission have an expectation on the transition between the existing tolling solution and the new tolling solution? Where cables and conduits provide functionality for multiple lanes, or cables for tolling equipment in multiple lanes share a common conduit, how does the Commission anticipate such equipment and cables will be replaced? For example, the AVI reader and the associated coaxial cables provide the AVI functionality for multiple toll lanes, requiring multiple lanes to be simultaneously affected by their replacement.

A#185 The Selected TCS Integrator shall describe in their Narrative Response for Project Transition (RFP Section 6.2.6 No. 3), how they intend to convert the existing toll collection system to the new TCS, including how they plan to sequence the lane conversions, to minimize the impacts to both the customers and the OTIC's toll operations. See A#60 also.