Dear Sir/Madam:

Attached is Addendum No. 4 to SEPTA’s Two-Step Procurement Solicitation 20-00554-ATMM - Computer Aided Radio Dispatch System

The deadline for receipt of technical proposals has been changed from Tuesday, June 24, 2021 at 1:00 P.M. to Tuesday, August 24, 2021 at 1:00 P.M.

Any inquiries regarding this opportunity must be directed to Thomas Moiani of the Procurement, Supply Chain & DBE at tmoiani@septa.org.

Sincerely,

Thomas Moiani
Contract Administrator
Procurement, Supply Chain & DBE
Two-Step Procurement 20-00554-ATMM: Computer Aided Radio Dispatch System

To All Bidders:

The following constitutes Addendum No. 4 to SEPTA Solicitation 20-00554-ATMM, Computer Aided Radio Dispatch System. This Addendum must be acknowledged by inserting the date of this Addendum next to “No. 4” in the Response Form entitled “Addenda”. Failure to do so may render your bid as non-responsive.

Questions, Answers, and Clarifications issued with this Addendum are hereby incorporated by reference and made part of the Terms and Conditions of this project.

A. General
1. The deadline for receipt of technical proposals has changed from Thursday, June 24, 2021 at 1:00 PM, Tuesday, August 24, 2021.
2. Step One Request for Qualifications Proposal Addendum 1 has been replaced with Step One Request for Qualifications Proposal Addendum 4.
   a. Section 4.3 Documentation, item f. has been added.
3. Answers to questions submitted are hereby incorporated by reference and are made part of the requirements of this bid. Questions submitted which are not included will be answered in a future addendum.
4. Additional questions must be submitted in writing to tmoiani@septa.org no later than 1:00 P.M. on June 14, 2021 to guarantee an answer.

B. Specifications
1. None.

C. Drawings
1. None.
1. **Question**  
Does DBE participation include WBE as well.

**Response**  
A WBE (women owned business) must be a Certified Disadvantaged Business Enterprise (DBE) in the Pennsylvania United Certification Program Web site: [www.paucp.com](http://www.paucp.com)

2. **Question**  
Will prevailing wage need a determination from the state For Radio communications / wireless communication techs.

**Response:**  
Per Contract Section VIII Contractor, E. Labor, Materials and Facilities Item 6. As required under Commonwealth of Pennsylvania law, the Contractor shall pay, and report as required, to any person the prevailing wage rate of wages applicable to the labor performed by that person, other than maintenance work, that qualifies as construction, reconstruction, demolition, alteration, or repair work.

3. **Question**  
Will a pre bidders list be provided?

**Response**  
The pre-bid meeting attendance was posted to SEPTA.org with Addendum 3.

4. **Question**  
This proposer understands that installations are to be performed on nights and weekends. Will SEPTA please indicate how many vehicles are available for installation per week night and how many vehicles are available per day over the weekend by depot?

**Response**  
SEPTA will provide the necessary vehicles for installation in order to meet schedules. Based on operational need and service requirements vehicle availability in terms of quantity may fluctuate.

5. **Question**  
Please list any components that must be removed by the vendor.

**Response**  
Stated in section 13349, subsection 1.3, item J and in section 13709, subsection 1.2, item E.

6. **Question**  
Document SECTION 13345-12 1.15. VEHICLE EQUIPMENT  
Please confirm that the required backlit keys can be provided as touch screen buttons on the MDT.

**Response**  
Confirmed

7. **Question**  
13345-16  
Section 1.15-T of Volume 3 mentions VoIP, however there are no further requirements. Will SEPTA please provide detailed requirements for the VoIP functionality, including the type of calls to be supported (one to one, one to many) and group requirements?
Response
The voice/data controller shall provide VoIP functionality supporting a real time voice communication path between the vehicle operator and the dispatch console operator as a backup in lieu of the equivalent voice channel over the current radio system or the new 700 MHz radio system, should the radio systems be unavailable.

8. Question
13345-16
Section 1.15-T of Volume 3 mentions VoIP. Is a mobile app for supervisors envisioned?

Response
The proposed design shall support all requirements listed.

9. Question
01010-4 & 13342-6 & 13345-14
Section 1.02-B of Volume 2 specifies that "discrete inputs are NOT included in the CARD System "; however, section 1.4-A-1 of Volume 3 requires door open information and section 1.15-J-5-a requires Wheelchair lift/ramp status. Will SEPTA please clarify?

Response
All inputs will be provided through the VAN if possible and as a discreet signal if necessary.

10. Question
13342-6
Section 1.4-A-1-a of Volume 3 requires each alarm (emergency alarm and other alarm) to be logged. Are these discrete signals or through the VAN? Will SEPTA please provide details about the "other alarms"?

Response
All inputs will be provided through the VAN if possible and as a discreet signal if necessary. Remove "and other alarm" from 13342 Section 1.4 item A.1.a.

11. Question
13342-32
Section 1.19-A-1 of Volume 3 states that the CAD/AVL system must "through a Smart Card and at the Vehicle Logic Unit (VLU) shall automatically logon or all onboard system equipment, including destination signs, Clever Devices IVN or DR 500C/600/700, and the farebox/Key payment device". However, section 1.19-I states "log-on/log-off data from the farebox to the CAD/AVL System after Operator logon/log-off at the farebox ". Please clarify where operator logon/logoff is initiated -- at the farebox or the CAD/AVL system operator terminal?

Response
The operator shall primarily login through the vehicle logic unit (VLU) but should the operator login through the Farebox as a secondary method that information shall be passed to the CAD/AVL system.

12. Question
Please confirm the successful bidder is to install on-board equipment in rail vehicles.

Response
All vehicle quantities are listed in drawing ES-1000-5,
13. Question
In the "Unit Price Schedule", it stipulates "If the actual quantity of unit priced items varies more than fifteen percent (15%) above or below the estimated quantity below, an equitable adjustment in the contract price shall be considered." Based upon the quantities required, 15% adds substantial risk. Using an approximation of 2500 vehicles to be equipped, 15% of 2500 is 375 vehicles. Estimating on-board equipment cost of $2,500 equals almost $1 Million in risk. Will SEPTA consider removing this requirement and instead pay for the actual number of vehicles requiring installation of equipment?

Response
SEPTA will pay for the actual number of vehicles requiring installation of equipment. If the actual quantity of any unit priced items varies more than fifteen percent (15%) above or below the estimated quantity an equitable adjustment (increase or decrease in the item unit price) would be considered if the following occurs. The contractor's unit cost is increased or decreased due to the increase or decrease in the actual quantity by more than 15% of the Schedule A quantity.

14. Question
On page 5 of Drawings.pdf, please confirm that "ALL" means both a CAD/AVL and a Radio Console.

Response
All radio and CAD/AVL consoles quantities are listed in drawing ES-1000-2. All radio and CAD/AVL system management consoles quantities are listed in drawing ES-1000-3.

15. Question
On page 8, Table 1 of Drawings.pdf, please explain why under the Digi Router column it specifies "1" while the other rows specify "Existing"?

Response
A Digi Router shall be provided as part of this contract for the CCT Omni Buses. All other vehicle types have an existing Digi Router.

16. Question
As this is a two-part procurement, the CAD/AVL system followed by the Radio System, would SEPTA consider breaking into two separate procurements to facilitate competition?

Response
No

17. Question
1-Step-One-Request-for-Qualifications-Proposal.pdf page 55
Regarding the 11-point font requirement, sometimes graphics, screenshots and particularly schedule Gantt charts can be difficult to present in 11-point font. Will SEPTA allow for a limited number of graphics, screenshots, and the Gantt chart to be of a smaller font?

Response
Yes

18. Question
Will SEPTA please name the supplier of your CCT Scheduling system?
Response
RouteMatch as stated in section 13342, subsection 1.1, item 8.

19. Question
Would SEPTA like an Emergency Alarm (EA) interface to the CCTV system to tag events? If so, is it a discrete input?

Response
Yes, as stated in section 13345, subsection 1.15, item P. Yes, it is a discrete input.

20. Question
13345-14
Section 1.15-J-5 in Volume 3 states "interface to the Contractor's proposed industry-standard vehicle area network (VAN) for performing processing related to the on-board functions (e.g., mechanical alarms)". There are many events occurring on the VAN. Will SEPTA please clarify the requirement or provide a list of alarms to be monitored?

Response
A list of alarms will be provided during the design phase of the project.

21. Question
Please confirm that at least one spare Ethernet port is available on your Digi routers.

Response
An ethernet port will be available for the CARD system onboard the vehicle through the existing Digi Router. The bidder shall include Digi Routers for the CCT vehicles.

22. Question
In Drawings.pdf, page 39, shown is "Depot Wi-Fi Access Points (NEW)." Is the successful proposer to install new access points at all nine (9) depots? If so, please provide requirements including access.

Response
Depot Wi-Fi Access Points are not part of this scope.

23. Question
Is the successful proposer to provide speakers, handsets, headsets and/or gooseneck microphones in all vehicles with mobile radios? If so, please provide specific requirements by vehicle type?

Response
Stated on pages 13703-27 and 30, Items j and k.

24. Question
Is the successful proposer to provide speakers, handsets, headsets and/or gooseneck microphones at workstations? If so, please provide specific requirements?

Response
Stated in section 13708-5, subsection 1.3, item C.2.t-w.

25. Question
Section 1.4-C in Volume 3 states "Whenever the CAD/AVL System is unable to perform its assigned data communication functions through primary and backup data paths". Is there a 2nd
SIM card in the routers providing this backup data path? Is the radio system data channel to be used? Will SEPTA please elaborate on the nature of the "backup data paths"?

Response
No, there is not a 2nd SIM card in the routers providing a backup data path. Yes, the radio system is to be used for the backup data path for critical data such as vehicle location data, text messages between the vehicle operator and the dispatch console operator, at a minimum, and other critical data to be determined by SEPTA and the contractor based on what the radio system's data channels are capable of reasonably accommodating.

26. Question
13342-32 section 1.19-1
This requirement implies the CAD/AVL system is to logon to onboard system equipment, including destination signs. As the CAD/AVL system does not have a communication path to the destination signs, will SEPTA please modify this requirement to remove the logon of the head sign from the CAD/AVL system and make it a requirement of Clever Devices?

Response
The Bidder shall work with Clever Devices to logon all onboard system equipment automatically.

27. Question
13342-36 section 1.20
Will SEPTA approve a solution based on android tablets as an alternative to laptops if they meet the functional requirements?

Response
Solution shall be Window 10 based and be installed on existing Supervisor laptops.

28. Question
13345-14
Do Paratransit Vehicles have wheelchair ramps that need to be monitored?

Response
Monitoring paratransit wheelchair ramps is not part of this project.

29. Question
20-00554-ATMM-Step-One-Computer-Aided-Radio-Dispatch-System-Addendum-1
SEPTA states the following: "The RFQ Proposal must be submitted in a sealed container that is identified on the face with the name of the Proposer, the Project name, and the contents of the container." Is a shipping box equivalent to a "sealed container"? Or rather, must the proposer seal the documents in a container that then goes inside a shipping box?

Response
A shipping box is equivalent to a sealed container.

30. Question
13342-39 Section 1.26-D
As destination signs are the responsibility of the Clever Devices system, will SEPTA remove "Destination Sign" from this requirement?

Response
Remove "Destination Sign Data" from requirement 13342-39 Section 1.26-D.
31. **Question**
   As the interface requirement may differ, please provide the quantities of Clever Devices IVN's vs. DR500's vs. DR600's vs. DR700's.

   **Response**
   SEPTA will provide the final count after selecting the winning bidder.

32. **Question**
   Volume 2 01010-2 (PDF 6) j1.01-E
   Are the Ancillary Control Center (ACC) and Backup Server Room activated only when PCC/primary sites are down?

   **Response**
   Both the Primary and Auxiliary Control Centers can be active simultaneously. Refer to Volume 3, Section 13347 Configuration Characteristics, subsection 1.2 System Configuration Requirements, Part 1 General, items F, G, H, and I (13347-2 - 13347-4) for requirements for Backup Servers in the Backup Server Room.

33. **Question**
   Volume 2 01010-4 (PDF 8) 1.02-B
   Does the 'OR EQUAL' clause apply to Clever Devices equipment and functions? Can new the CAD/AVL system replace partial or all Clever Devices' functions if no additional cost is required?

   **Response**
   The Clever Devices DR500/600/700/IVN4 equipment shall not be replaced within the scope of this RFP. Only CAD/AVL equipment shall be replaced for a fully functional system. as stated in section 13342, subsection 1.19, item A.1.

34. **Question**
   Volume 2 01010-3 (PDF 7) 1.01-G
   Can you please identify what Central Network Management System you are current using to manage all CARD devices?

   **Response**
   Bidder to provide a new Central Network Management System.

35. **Question**
   Volume 2 01010-3 (PDF 7) 1.01-H
   Can you please clarify if the requirements for the Network Security Systems include physical security measures?

   **Response**
   No physical security measures are required.

36. **Question**
   Volume 3 13342-28 (PDF 32) 1.17-P Surface Snow App
   Can you please provide additional information on the Surface Snow App? It doesn't match to the functional descriptions below. Does it need to be used beyond snow conditions?

   **Response**
   All Snow App requirements are stated in Section 13342, subsection 1.17, item P. App is for snow
conditions only.

37. Question
   Volume 3 13342-33 (PDF 37) 1.19-A.4. Text to Speech
   If the System Administrator disables the "read" requirement, does this mean that listening to the text automatically removes the message?

   Response
   Correct.

38. Question
   Volume 3 13342-35 (PDF 39) 1.19-J.2 Fallback Mode
   Is it SEPTA's expectation that all location data messages be queued for up to a full service day for transmission when data communication is restored?

   Response
   The CAD/AVL on-board system shall buffer all queued data messages for at least a full-service day as stated in section 13342, subsection 1.19, item J.2.

39. Question
   Volume 3 13342-36 (PDF 40) 1.19-Item L Pre-Trip and Vehicle Condition Inspection System
   What are the "current electronic inspection systems"?

   Response
   Current "Electronic Inspection System" is provided by Clever Devices.

40. Question
   Volume 3 13342-40 (PDF 44) 1.20-Item G Fixed-Route Scheduling System Interface
   Does 'OR EQUAL' clause apply to Trapeze Standard ICD? Please confirm this applies to the existing working ICD.

   Response
   The CAD/AVL System shall interface with SEPTA's Trapeze® scheduling system for schedule data using the Trapeze Standard Data Exchange (TSDE) ICD as stated in section 13342, subsection 1.20, item G.

41. Question
   Volume 3 13342-42 (PDF 46) 1.26-I System Time Interface
   Is SEPTA providing the GPS time reference equipment for the CAD/AVL system or is this to be included in bidder's pricing?

   Response
   The Contractor shall provide Network Based Timing as the primary Radio system synchronization source. All equipment required to provide for Network timing including GPS antenna and servers shall be provided as stated in section 13702, subsection 1.5, item K.

42. Question
   Volume 3 13342-6 (PDF 10) 8. Integration with RouteMatch to retrieve driver and vehicle information
   If the same results can be obtained without Routematch, can bidder submit an alternative?

   Response
No, as stated in Volume 3 13342-6 (PDF 10) 8. Integration with RouteMatch to retrieve driver and vehicle information.

43. Question
   Volume 3 13345-9 (PDF 83) 1.13 Time Displays
   Please provide the quantities for the time displays.

   Response
   See the response to question 74.

44. Question
   Volume 3 13345-9 (PDF 83) 1.14 Wireless LAN
   Are the Wireless LANs at the depots being reused or should new WLANs be provided?

   Response
   Wireless LAN is not part of this scope.

45. Question
   Volume 3 13347-1 (PDF 96) 1.2-B System Configuration Major Elements - Item 10d
   Is the Vehicle Management Information System (VMIS) an AssetWorks system?

   Response
   The VMIS M4 and M5 systems are Assetworks based systems.

46. Question
   Given that some vehicle types are double-ended, how many of the BIBs should be double-ended?

   Response
   See the response to question 78.

47. Question
   Does the consist of Blue Line change dynamically? For the Blue Line LRVs, can we assume that CAD/AVL equipment is only to be installed in the head and end car of the consist?

   Response
   Scope does not include a CAD/AVL system for the Blue line (Market-Frankford Subway-Elevated Line).

48. Question
   Do you have any recent structural analysis data on any of the proposed towers?

   Response
   SEPTA does not have recent structural analyses for any of the towers. Per Volume 3, 1.7 Antenna Systems, B. Antenna, item 2.: "The Contractor shall be responsible for providing structural/civil load calculations for all Tower/Building Antenna work."

49. Question
   For the Frankford TC site, what is the height of the (SST) self-supported tower?

   Response
   The Frankford Transportation Center does not have a self-supported tower. The height of the tower at the existing Bridge St. Site, adjacent to the Frankford TC, is nominally 80 ft. AGL.
50. **Question**
   For the Frankford TC tower without a safety cable & climb ladder, should we plan to bid for installation of this climbing safety equipment, or just adding a safety cable climb for use with the existing climbing pegs up one of the tower legs, or no change?

**Response**
The Frankford Transportation Center does not have a self-supported tower. Regarding the tower at the existing Bridge St. Site, adjacent to the Frankford TC, refer to Volume 3, Section 13703, Part 1-General, 1.7 Antenna Systems, B. Antenna, item 2.: "All work required to the tower/building as a result of the Contractors Antenna/Mounts/Transmission line shall be the responsibility of the Contractor."

51. **Question**
   For the 2nd & Wyoming tower, do you have an overall height of the guyed tower above ground level?

**Response**
The nominal height of the 2nd & Wyoming tower is 120 ft AGL (100 ft tower + 20 ft building height).

52. **Question**
   For Roxborough site, for which the tower and fence are missing ASR placard signage as required by FCC regulations, should we plan to bid to include this in the quote?

**Response**
Refer to Volume 3, Section 13703, Part 1-General, 1.7 Antenna Systems, B. Antenna, item 2. "All work required to the tower/building as a result of the Contractors Antenna/Mounts/Transmission line shall be the responsibility of the Contractor."

53. **Question**
   Should work such as correcting the main grounding down lead from the internal MGB, which makes a sharp angle going through the wall to route to the outside site earth ground field, be included?

**Response**
Refer to Volume 3, Section 13709, Part 1-General, 1.2 General Installation Requirements, C. Installation, 1c. "The Contractor shall provide all grounding, bonding, earthing and lightning protection per the latest version of Motorola's R56 Standards and Guidelines for Communication Sites, IEEE, TIA, NFPA or ANSI standards and shall utilize the most stringent standard at the time of construction."

54. **Question**
   It was reported that the Roxborough to Oxford Valley MW hop has some issues with RSL in winter time, can you expand on this so we can look to remedy in the updated CARD system?

**Response**
No. Refer to Volume 3, Section 13703, Part 1-General, 1.10 Microwave Radio Equipment, A. for contractor requirements regarding the microwave system. Also refer to Volume 3, Section 13704, Part 1-General, 1.7 Radio System Availability, C. for requirements for overall radio system availability that drive the availability requirements for the microwave system.
55. **Question**
For Eagleville site shelter, should work such as correcting the main grounding down lead from the internal MGB be included?

**Response**
Refer to Volume 3, Section 13709, Part 1-General, 1.2 General Installation Requirements, C. Installation, 1c. "The Contractor shall provide all grounding, bonding, earthing and lightning protection per the latest version of Motorola's R56 Standards and Guidelines for Communication Sites, IEEE, TIA, NFPA or ANSI standards and shall utilize the most stringent standard at the time of construction."

56. **Question**
Should the Eagleville quote be for the project ready primary equipment shelter next to the EOC, or for the more expensive alternate shelter and tower shared with cellular carriers?

**Response**
As the exact equipment configuration any prospective bidder may propose for a particular site is dependent on the bidder's design, the bidder should confirm with site manager any specific installation requirements or details. The contact person for the Eagleville Site is: Rick Lohwasser, rlohwass@montcopa.org, 610-631-6542.

57. **Question**
For Oxford Valley, same question on ASR signage as existing tower is more than 20 feet above the building height?

**Response**
Refer to Volume 3, Section 13703, Part 1-General, 1.7 Antenna Systems, B. Antenna, item 2.: "All work required to the tower/building as a result of the Contractors Antenna/Mounts/Transmission line shall be the responsibility of the Contractor."

58. **Question**
For New Britain site, should work such as adding a tower transition ground bar or any other grounding repair be included in the quote?

**Response**
Refer to Volume 3, Section 13709, Part 1-General, 1.2 General Installation Requirements, C. Installation, 1c. "The Contractor shall provide all grounding, bonding, earthing and lightning protection per the latest version of Motorola's R56 Standards and Guidelines for Communication Sites, IEEE, TIA, NFPA or ANSI standards and shall utilize the most stringent standard at the time of construction."

59. **Question**
For the Airport Tower site, what is the height of that well-grounded SST?

**Response**
The nominal height of the Airport Tower Site tower is 90 ft AGL.

60. **Question**
Would SEPTA please extend the proposal submission date by 60 days?

**Response**
See Addendum 4, page 1, A.1. The Request for Qualification submission date is changed from
1:00 P.M., Thursday, June 24, 2021 to 1:00 P.M., Tuesday, August 24, 2021.

61. Question
Due to the complexity of the solution and your responses to our questions may require additional clarification, will SEPTA be allowing a second round of questions?

Response
See Addendum 4, page 1, A.4. Additional questions must be submitted in writing to tmoiani@septa.org no later than 1:00 P.M. on June 14, 2021 to guarantee an answer.

62. Question
We would like to submit an extension request to submission due date for this project. In order to fully engage with all required parties on a comprehensive and fully integrated solution for this project, we respectfully request an additional sixty (60) days to ensure we're able to bring the most compliant and cost effective system proposal to SEPTA.

Response
See the response to question 60.

63. Question BRFI 9
We have determined that to provide a complete and comprehensive response, that will meet the Authorities requirements we respectfully request a sixty (60) day extension in the bidding process, to include questions.

Response
See the response to questions 60 and 61.

64. Question
Please verify if new Fire Alarm system is to be wired in Class A, or Class B. There are notes that conflict in regards to how the system is to be wired which dramatically affect pricing.

Response
Class B, per FA002 and spec section 283100.

65. Question
The vehicle quantities listed in Table 5 in the Drawings add up to 1617 vehicles, which matches the number on the pricing sheet. However, based on past procurement information, we believe the fleet sizes to be different for all vehicle types. For example, the XDE40 Procurement from New Flyer was for 525 buses not 582, and the 30-foot midi bus procurement from New Flyer was for 35 buses, not 39. Can you explain the additional vehicle quantities in Table 5, or provide new quantities? We do not believe it is spares, as those seem to be captured elsewhere.

Response
Proposals shall match the vehicle quantities listed in Table 5 in the Drawings. SEPTA will verify the final count after selecting the winning bidder. SEPTA will pay for the actual number of vehicles requiring installation of equipment. If the actual quantity of any unit priced items varies more than fifteen percent (15%) above or below the estimated quantity an equitable adjustment (increase or decrease in the item unit price) would be considered if the following occurs. The contractor's unit cost is increased or decreased due to the increase or decrease in the actual quantity by more than 15% of the Schedule A quantity.

66. Question
SEPTA Microwave 1735 Market St building site
I need to know the exact path the waveguide runs from the antenna to the radio room. I believe the radio room is on the 54th floor and then we go up the latter to the roof. Where does the waveguide exit the roof? Does it go through a conduit to get to the radio room and if so, how long is that conduit? Or does it enter the radio room through the wall without going through any kind of conduit? What's the approximate distance between the likely antenna mounting point and the equipment in the rack?

Response
The Contractor is responsible for confirming all details regarding the acceptable pathways for antenna feedline and/or waveguide that may be required at the Nine Penn Center (BNY Mellon Bank) with Silverstein Properties, the property manager. The contact at Silverstein Properties is Thomas Flach, Property Manager, Silverstein Properties, Inc., 1735 Market St, Suite 500, Philadelphia, PA 19103, Office: 215.979.3330, Mobile: 215.668.3038, tflach@silvprop.com

67. Question
The vehicle quantities listed in Table 5 in the Drawings add up to 1617 vehicles, which matches the number on the pricing sheet. However, based on past procurement information, we believe the fleet sizes to be different for all vehicle types. For example, the XDE40 Procurement from New Flyer was for 525 buses not 582, and the 30-foot midi bus procurement from New Flyer was for 35 buses, not 39. Can you explain the additional vehicle quantities in Table 5, or provide new quantities? We do not believe it is spares, as those seem to be captured elsewhere.

Response
Proposal shall match the vehicle quantities listing in Table 5 in the Drawings. SEPTA will verify the final count after selecting the winning bidder. SEPTA will pay for the actual number of vehicles requiring installation of equipment. If the actual quantity of any unit priced items varies more than fifteen percent (15%) above or below the estimated quantity an equitable adjustment (increase or decrease in the item unit price) would be considered if the following occurs. The contractor's unit cost is increased or decreased due to the increase or decrease in the actual quantity by more than 15% of the Schedule A quantity.

68. Question
Specification Volume 3/3 - Document 13342, Section 1.1 - CCT/Paratransit Solution Feature Set
The RFP states that "The CAD/AVL System specified herein shall support fixed-route and Customized Community Transportation (CCT) service operations for SEPTA." There appear to be some features and functions that do not apply to CCT service, such as Route Adherence. Furthermore, we assume Schedule Adherence (pick-up and drop-off type activity) is being handled by the RouteMatch system.

a. Can SEPTA please provide a list of expected features and functions applicable for the CCT vehicles/CAD dispatch solution? For example, does the CCT CAD/AVL functionality at dispatch to be provided include only voice control, EA, and covert microphone monitoring? Or does it also need to provide text messaging? How about onboard features like electronic pre-trip inspections?

Response
All features and functions shall be implemented to support CCT. SEPTA will decide after bid award which features, and functions shall be turned on and off.

69. Question
Specification Volume 3/3 - Document 13342, Section 1.4.c - Fallback Data
"Fallback Data Communications - Whenever the CAD/AVL System is unable to perform its assigned data communication functions through primary and backup data paths. The CAD/AVL System shall initiate a fallback communications mode of operation for all affected vehicles and the CAD/AVL System shall generate and present an event to the appropriate CAD/AVL System user(s) in the event queue."

a. Can SEPTA please confirm that the expectation is to use cellular as the primary data communication and private radio as the backup data communication channel?

Response
Confirmed.

70. Question
Specification Volume 3/3 - Document 13342, Section 1.4.D - Backup Voice
The RFP states that "Fallback Voice Communications - The CAD/AVL System shall support a "fallback" mode of voice communications in the event that normal (voice) communications with one or more vehicles has failed, such as during the failure of a voice channel. In the fallback mode of operation, two-way voice communications between the CAD/AVL System users and the vehicles affected by the failure shall still be possible via alternate voice channels that are assignable by the System Administrator for this purpose."

a. Can SEPTA please clarify if the intent is utilize VoIP for back-up voice communication?

Response
The intent is to utilize a VoIP path for back-up communication if the primary voice path through the radio system is unavailable.

71. Question
Specification Volume 3/3 - Document 13342, Section 1.20.A - Supervisor Laptops - Existing and Supplied
The RFP states "The CAD/AVL system shall provide an App to be installed on existing SEPTA laptops with all required CAD/AVL system application and utility software to provide CAD/AVL system user functions in a vehicle in support of field supervision activities."

a. Can SEPTA please clarify the number of laptops planned for reuse?

Response
All Supervisor vehicles will have a laptop. Enterprise licenses shall be provided for all Contractor-developed software as stated in Section 13344, subsection 1.8, Item A.

72. Question
The RFP states that "Vehicle Management Information System (VMIS) Interface - The CAD/AVL System shall push all relevant vehicle and operational data to the existing Vehicle Management Information System (VMIS) System. This data push shall be triggered in real time by incident problem and problem subcodes. The Senior Administrator and System Administrator shall be able to add, modify, and delete incident problem and problem subcodes. See Section 13352 for interface details."

a. Can SEPTA please clarify which user group will be expected to be creating the incidents (BOC Dispatchers, Road Supervisors, or Vehicle Maintenance Staff)?

Response
BOC Dispatchers will create incidents.
73. **Question**  
Specification Volume 3/3 - Document 13345, Section 1.13 - Time Displays  
Can SEPTA please clarify how many Time Displays are required? Where are they to be installed?  

**Response**  
Nine (9) Time Displays are required. Time Displays shall be installed on the 19th floor (Control Center) at 1234 Market Street.

74. **Question**  
Specification Volume 3/3 - Document 13345, Section 1.15.J.3.C - Routers on CCT Vehicles  
The RFP requires a router on the CCT vehicles.  
a. Is the sole purpose of the router for the onboard ITS equipment? Or is it intended to support multiple connections?  
b. If the sole purpose is for the ITS equipment, will SEPTA accept a solution that uses the private radio and an integrated cellular modem in the MDT/VLU for data communication?  

**Response**  
a. The digi router onboard shall support multiple connections.  
b. The proposed solution shall meet the requirements.

75. **Question**  
Specification Volume 3/3 - Document 13342, Section 1.19.I - Key/Farebox Interaction  
This requirement implies that operators will use the existing Card reader from the fare system. However, Document 13345, Section 1.15.Q states: "Smart Card - The Contractor shall install Smart Card readers on all CAD/AVL System equipped revenue vehicles for Operator login."  
a. Can SEPTA please clarify whether proposers are responsible for integrating with existing card readers or providing new Smart Card readers?  

**Response**  
Proposer shall install Smart Card Readers on all CAD/AVL equipped revenue vehicles as stated in Section 13342, subsection 1.19, item I.

76. **Question**  
Specification Volume 3/3 - Document 13345, Section 1.15.T - Voice/Data Controller  
The RFP states that "The Contractor shall install voice/data controllers on all CAD/AVL System equipped vehicles. The voice/data controller shall be able to connect the IVCU to the current radio system, the new 700Mhz radio system, and provide VoIP functionality using the existing Digi Router. The voice/data controller shall support primary and backup voice/data paths without the need of a manual transfer to a different voice/data path."  
a. Can SEPTA please confirm that VoIP is required?  
i. If so, should it include functionality such as the following?  
1. All call  
2. Group call  
3. Private call  
4. Geographic call  
5. Dynamic Call  
6. Emergency Alarm  
7. Mandown covert monitoring  
8. Automatic switching between voice and data paths
9. Text messaging

Response
a. Confirmed, VoIP is required. (i.) The voice/data controller should utilize a VoIP path for voice calls from/to a CAD/AVL equipped vehicle as backup if the primary voice path through the radio system is unavailable.

77. Question
Step Two Instructions to Bidders and Contract - Schedule A
The Price Sheet specifies a quantity of 21 Bus in A Box (BIB) units. The hardware on the training/test units may vary based on the mode of transportation. Can SEPTA please clarify the number of fixed route, rail, and paratransit training/test units (BIBs/TIBs) requested?

Response
All Bus in a Box (BIB) units shall be the same. Exact BIB configuration will be discussed during the design phase.

78. Question
SECTION 01010 - 1.03.A
The Contractor shall supply the 700 MHz radio system portion of the CARD System that shall utilize the recent acquisition of eighteen channels approved from the FCC and will replace the current T-Band spectrum. The Contractor shall attempt to use the existing communication sites in service to the maximum extent possible with the addition of new locations to supplement coverage that meet the requirements of the coverage specification. The radio system shall be designed with both P25 Phase II Trunking having two slots per channel (two talk paths) and P25 Digital Conventional channels. The Contractor shall configure the system based on the user groups along with the required service area defined by SEPTA. SEPTA Police will utilize the City Public Safety 800 MHz system when in the Philadelphia City limits and then roam onto the SEPTA 700 MHz system when outside that area.

Are there any specific requirements for the digital conventional system including number of channels?

Response
The requirement for P25 digital conventional channels is removed from the Specification. The corresponding sentence in SECTION 01010 - 1.03.A should now read: "The radio system shall be designed with P25 Phase II Trunking having two slots per channel (two talk paths).

79. Question
SECTION 13700 - 1.2.F.3
Remote Site Mini Base Control Stations - SEPTA utilizes standalone base stations at fixed field locations for local communications. The Mini base stations shall be used on the desktop or under cabinet mounted, programmable with all frequencies and talk groups as required by SEPTA, palm microphone, adjustable output power to 40 watts, power source shall be 120 VAC.

Please identify the quantities and locations for the required Control stations per site.

Response
The contractor is required to provide all applicable materials organized in Mini Base Station Kits as described in SECTION 13700 - 1.2.F.3. The total quantity of kits are described in the total
quantities shown in Drawing Number ES-1000-5 that accompanied the RFP bid package. Installation of the radio kits will be handled by SEPTA C&S Maintenance.

80. **Question**  
SECTION 13700 - 1.2.F.4 & 1.2.F.5.A  
SEPTA Fiber Network Core Node connectivity - Each of the existing SEPTA fiber node core sites have fiber connectivity utilizing Wave Division Multiplexing (WDM). The Contractor shall provide a fiber switch/router/multiplexer for connection into the fiber / WDM network to be utilized as the backhaul system and connectivity between the core node Sites.

SEPTA has an extensive wayside fiber optic network along its right of way (ROW) comprised of OTN fiber Optic multiplexors, Wave Division Multiplexing and dark fiber. These existing network locations are available to the Contractor to augment the coverage area.

Can SEPTA provide a network map/diagram for the existing Fiber Optical Transport Network (OTN)? Also, please define the locations where the dark fiber is available.

Can vendors assume that where fiber is present it can be used to support network connectivity?

**Response**  
SEPTA can confirm that it has fiber along the Regional Rail Lines, Norristown High Speed Line, Broad Street Line, and Market-Frankford Line excluding any portion of these rail lines through Amtrak territory. Vendors can assume where fiber is present it can be utilized. The detailed fiber architecture will be supplied to the winning bidder.

81. **Question**  
SECTION 13700 - 1.2.F.12  
Replacement of existing Alcatel MDR8000 T1 Microwave backhaul system with a hybrid T1/Ethernet Microwave backhaul system.

Would MPLS be required in the new backhaul network design?

**Response**  
Vendors must meet all specification requirements. MPLS is desired but not required.

82. **Question**  
SECTION 13703 - 1.7.B.2  
The Contractor shall replace ALL existing antenna mounts and associated mounting hardware with new components that meet mechanical and wind load requirements. The Contractor shall be responsible for providing structural/civil load calculations for all Tower/Building Antenna work. These calculations and drawings shall require submission of drawings for approval by SEPTA and drawings must be stamped/sealed by a Professional Engineer registered in the state of Pennsylvania. All work required to the tower/building as a result of the Contractors Antenna/Mounts/Transmission line shall be the responsibility of the Contractor.

In order to minimize costs associated with the structural analysis of the tower/buildings, can SEPTA provide as-built drawings for the existing antenna mounting structures (towers/rooftops) including tower foundation information for the site locations visited during the sitewalks?

**Response**
No, SEPTA does not have recent structural analyses for any of the towers. Per Volume 3, 1.7 Antenna Systems, B. Antenna, item 2.: "The Contractor shall be responsible for providing structural/civil load calculations for all Tower/Building Antenna work." Also refer to Volume 3, Section 13703, Part 1-General, 1.7 Antenna Systems, B. Antenna, item 2.: "All work required to the tower/building as a result of the Contractors Antenna/Mounts/Transmission line shall be the responsibility of the Contractor."

83. **Question**
   SECTION 16750 -1.02.B
   A Central NMS, supplied, provisioned and configured by the manufacturer of the CARD system to be installed, that shall report and manage all in-band CARD monitored messages and points. The Central NMS shall receive all alarms and events from the three subsystem NMSs and be protected by a dedicated hardware firewall as shown on the Contract Drawings.

   Does SEPTA have an existing Manager of Manger (MoM) system? If so, who is the provider, and can SEPTA provide more details on the architecture and capabilities of the current MoM system?

   **Response**
   Bidder to provide a new Central Network management System.

84. **Question**
   Step 2 - Instructions to Bidders - Contract - Section R - Drawings & Specifications
   The Contractor shall fully comply with the drawings and specifications as found in Exhibit VI which is attached hereto and made a part hereof.

   Can SEPTA provide Exhibit VI drawings and specifications referenced here?

   **Response**
   The Executed Contract will include the Drawings, Specifications Volume 2, Specifications Volume 3, and all Addenda in Exhibit VI.

85. **Question**
   Site Visits 1234 Market Street
   Is there an existing conduit/chaseway available with space between 19th and 22nd floor Equipment room to run Ethernet and RF cables?

   Similarly, is there an existing conduit/chaseway available with space between the equipment rooms to the Rooftop?

   What is the distance (ft) between these equipment rooms to the Rooftop?

   **Response**
   There are conduits with available space in the southwest riser from the 19th and 22nd floors to provide a pathway for Ethernet/Fiber cables. All RF equipment is to be installed on the 22nd floor. No RF equipment is to be installed on the 19th floor. There is cable entrance doghouse in the roof of 1234 Market St from the ceiling of the equipment room on the 22nd floor.

86. **Question**
   Site Visits 15th and Fairmount Underground
   Is there another equipment room available for the installation of the proposed equipment at this
location?

**Response**
No, another equipment room is not available for the installation of the proposed equipment. The Contractor is responsible for determining how to phase in the new equipment and later remove any existing equipment that will be replaced by the new equipment following successful cutover.

87. **Question**
Site Visits Bridge Street
Does SEPTA have any plans to remove existing Harris equipment at this site?

If yes, when will this equipment be removed?

**Response**
The Contractor is responsible for determining how to phase in the new equipment and later remove any existing equipment that will be replaced by the new equipment following successful cutover.

88. **Question**
Site Visits 2nd & Wyoming
Is there an existing conduit/chaseway available with space between server room and voter room to run Ethernet and RF cables?

Similarly, is there an existing conduit/chaseway available with space between the equipment rooms to the Rooftop?

What's the distance (ft) between these equipment rooms to the Rooftop?

**Response**
There is an existing conduit/chaseways with space available to run Ethernet cables between the Backup Server Room and the Voter Equipment Room. No RF is permitted in the Backup Server Room. There is also a conduit/chaseway between the Voter Room and rooftop with a cable entrance panel located on the outside of the building. The approximate distance between the Voter Room and the rooftop is 300ft.

89. **Question**
Site Visits Nine Penn Center
Is there an approved antenna mounts and antenna types a vendor need to use for the installation at the Nine Penn Center site?

If not, are there any other restrictions?

**Response**
The Contractor is responsible for confirming all details regarding the acceptable types of antennas and their mounts that may be required at the Nine Penn Center (BNY Mellon Bank) with Silverstein Properties, the property manager. The contact at Silverstein Properties is Thomas Flach, Property Manager, Silverstein Properties, Inc., 1735 Market St, Suite 500, Philadelphia, PA 19103, Office: 215.979.3330, Mobile: 215.668.3038, tflach@silvprop.com

90. **Question**
Can SEPTA please provide the "Schedule A - Schedule of Items" in Excel format to facilitate its
completion?

Response
Please complete the pdf Schedule A.

**** End Addendum ****