Request for Proposals (RFP)

Rochester Public Transit - Transit Signal Priority (TSP) Project
Equipment, Installation, and Training Services
FTA Grant Contract MN-2018-014-00

ADDENDUM #2

Issued: September 23, 2019

RESPONSES TO PRE-PROPOSAL INQUIRIES: The following questions were received by the RFP Administrator prior to the deadline set by the RFP.

Questions from Pre-Proposal Meeting

1. Will all controllers be updated for TSP capability?

    A. Yes

2. Will it be required to have As Built wiring records after completion?

    A. Yes

3. Is there real time (DoubleMap) module?

    A. Not at this time. TSP may have to operate unconditionally until such time a connection can be made to the DoubleMap AVL system. It is encouraged for proposers to offer other solutions in the proposal, if any, to provide conditional TSP operation.

4. Is there remote access to the intersection controller?

    A. There is not currently web-based access. The signal controllers can be accessed in the field or at the Traffic Operations Building, 24 Civic Center Dr NE, Rochester, MN.

5. Is connection to cellular modem on the buses available?

    A. No. The cellular communications system on the buses is a closed system to operate the DoubleMap system.

6. Is there Ethernet capability?

    A. Only on fiber connected intersections. Specialty hardware would be required to make this work on intersections on copper pair interconnect.

7. Are there plans to implement adaptive signal control?

    A. Not at this time.

8. Where can the intersection equipment be mounted? Are there height requirements?

    A. The intersection equipment will be mounted on the closest signal pole. Preferably high enough not to be tampered with and to provide a clear line of sight.

9. Can the copper pair interconnect use IP?

    A. Only on fiber connected intersections. Specialty hardware would be required to make this work on intersections on copper pair interconnect.

Questions Received by Email

10. Under the heading "Signal Coordination and Timing" on page 8 of the RFP: The paragraph says that signals will be re-timed prior to the deployment of the TSP project. Does the city plan to accommodate or include TSP timing values (green extensions and red truncations) in these new timing plans, so that TSP may be initiated with minor changes?

    A: The City will be conducting signal retiming for the Broadway Avenue and 2nd Street SW project corridors prior to the TSP project deployment. TSP timing plans are included in the RFP as a task for the TSP project contractor to develop and program in each intersection controller.

11. Under Task 3, 1.E, on page 11 of the RFP: Will the 3rd Party AVL system vendor "DoubleMap" support integration with the TSP system, with no added costs to the TSP system contractor?

    A: At the present time the DoubleMap AVL system that RPT utilizes does not support an interface for the TSP system. The TSP contractor will be required to provide their own AVL solution.

12. Under Task 3, 1.G, on page 12 of the RFP: The RFP calls for logging the "TSP active/inactive status". Please confirm that this status information is coming from the TSP system itself and not from the traffic signal controller.

    A: Yes, this status information may come from the TSP system.

13. Under Task 6, 4.0, on page 16 of the RFP: The last part of the paragraph reads, "The TSP system shall also store priority TSP calls, check-in and check-out points on-board for each signalized intersection, and make the determination of when to activate and deactivate the emitter at these points. The check-in point is used to activate the emitter and thereby initiate the priority call and the check-out point is used to turn off the emitter and therefore inform the traffic signal controller that the transit vehicle has successfully cleared the signalized intersection." Please confirm that it is a requirement that the database of "detection zones" (TSP check-in and check-out points) be stored on-board the bus within the TSP vehicle control unit.

A: The database of detection zones may be stored on-board the bus within the TSP vehicle control unit or may be stored in the central management system and communicated to the bus.

14. General question. Do network communications exist between the TOC (Traffic Operations Center) and all intersection cabinets, for use by the TSP system? The existence of a network seems to be suggested by Task 6, 2.D (page 15), where phases selector status must be displayed in the central management software.

A: Yes, there is communication via fiber or twisted pair copper to each intersection cabinet to the City's TOC.

15. In task 7, #3 page 16 in the RFP it lists development and programming TSP signal timings. During the Pre-bid meeting it was mentioned that these parameters will be loaded. Can you clarify what the RPT/City is having performed on a different contract or what is required for this item?

A: The City will be having a contractor perform signal timing optimization updates to the two corridors prior to and independent of implementation of the TSP signal timing configuration work. The City's goal of the signal optimization is to develop TSP timing parameters to maximize transit benefit while minimizing disruption to the overall network.

1. If items listed in Task 7 are needed where would the pricing appear on the cost proposal. Can a line item be added in the cost proposal for the TSP timing labor/services?

   A: This cost can be included in Item #5 Required labor for installation of TSP traffic signal equipment on the cost proposal form. Pricing can be broken out separately.

2. Can you confirm all of the Controller firmware will be updated to accommodate TSP.

   A: Yes, all controller firmware will be updated to accommodate TSP.

16. Task 6 requires Central Management System Software solution. Please confirm if the Purchaser will provide the central computing environment to host the software.

A: Yes, the City will provide the computer hardware to host the software.

17. In Task 6, #3 on page 16, the RFP references the requirement for the TSP equipment at the intersection to send logging information to the Central Management system via the existing intersection communications system.

1. Please confirm that all intersection cabinets will have an IP-based connection infrastructure (i.e. Ethernet Switch) in order to connect to the existing intersection communications system

   A: Only the fiber connected intersections are ready for IP.

2. If not, please confirm the quantity of intersections that do not have an IP-Based connection device, and if the City will procure such networking devices if required.

   A: 17 signals have serial connections and 5 have fiber connections. There are no plans to procure additional networking devices. It will be acceptable for each signal to operate

independently and not rely on communication with the central system for operations and decision making. The connection to the central system would be for programming and retrieving data.

18. As discussed in the Pre-bid meeting, please provide connection diagrams of the relevant traffic cabinet components (i.e. Traffic Controller, Network Communications, etc.) for each different cabinet type.

A: This information will be included in the Addendum.

19. Is mutual indemnification possible?

A: The City can negotiate indemnification language