Pre-Bid Meeting

Dedicated Short Range Communication (DSRC) and Automated Traffic Signal Performance Measures (ATSPM) project

July 12, 2019

District 7 Office

Attendees:

Shane McKenzie – KYTC CV/AV

David Durman – KYTC Central Office Traffic Operations

Jarrod Stanley – KYTC Research

Telma Lightfoot – KYTC Central Office Traffic Operations

Joe Carter – KYTC Central Office Traffic Operations

Ezekiel Goodwin – KYTC Central Office Traffic Operations

Lynn Witmer – KYTC District 7 - Danville Section

Ted Swansegar – KYTC Central Office Traffic Operations

Kyle Bidwell – KYTC District 7 – Richmond Section

Matt Simpson – KYTC District 7 Branch Manager

Natalia McMillan – KYTC District 7 Traffic Engineer

Daniel Kucela – KYTC District 7 Branch Manager – Engineering Support

Don Hicks – KAPSCH

Keith Simpson – Davis H. Elliot

Mike Smith – Davis H. Elliot

Meeting:

The meeting began with introductions of each person present and Jarrod Stanley began by moving thru a short presentation about the project. The presentation included:

- An outline of the Main Components of the Project
    - Advanced detection
    - Dedicated Short Range Communication (DSRC) Radios
    - Connected Vehicle Module for Controller
    - System Configuration and Validation
- The Purpose of the project including:
    - Safety – Reduce Crashes (ATSPM & DSRC)

    - Improve Congestion (ATSPM)
    - Learn Vehicle to Infrastructure Technology (Both)
    - Grow Data and Data Sources for Decision Making (Both)
    - Meet Signal Phase and Timing (SPaT) Challenge (DSRC)
    - Potential Environmental Impact (ATSPM)
- Illustration that the project has two main goals: DSRC and ATSPM
- Map with deployments of both technologies nationwide
- Illustration of typical DSRC setup
- Wiring Diagram for DSRC, Traffic Controller and Server.
- Photos of DSRC and messages on an on board unit
- List of DSRC applications
- Illustration of ATSPM setup
- ATSPM website from Utah
- ATSPM data chart
- A list of Integrator activates such as:
    - Verify the transmission of DSRC messages.
    - Work with KYTC Staff for the storage of received DSRC messages.
    - Load software on 2070 ATC for ATSPM translation.
    - Create GIS maps for DSRC and ATSPM applications.
    - Work to integrate ATSPM data from ATC (2070) to desktop software for review by KYTC staff.
    - Work with KYTC Staff for the storage of ATSPM data.
- Map of the project
- Photos of the Cabinets that may need some modifications
- Copy of the FCC License pre-filed by Jarrod Stanley for the project

After the presentation, the discussion was shifted to questions, for the project, from the perspective contractors. The questions were:

Q: Regarding placement of RSU, I assume we will ask the radio company?

A: Yes, the contract did not assume that an RF Engineer will need to be hired. With all of the interviews from the other DOTs, terrain, building setback and foliage all inhibit the transmission but that is not expected in Richmond. FCC also has a minimum height for mounting of the RSU which is 26'.

Q: Is there fiber anywhere?

A: No, not in Madison County

Q: Are all requirements related to the interface (ATSPMs) in the RFP?

A: Yes, see the FHWA open source webpage for further information.

Q: Are the cabinets that potentially need modified identified in the RFP?

A: Yes, they are listed in the summary sheet in the proposal.

Q: Any concerns with contractor doing field investigation?

A: No. Please reach out to District 7 to notify when you plan to investigate.

Q: Are there 3 main suppliers for the RSUs?

A: More exist but there are 3 brands that have been the most used in deployments nationwide.

Q: Was there an initial design effort that looked at spacing?

A: No. Since our project intent is focused on intersections, we did not look for continued coverage similar to the Drive Ohio project. Our focus is slightly different so communications at intersections is all we are looking to achieve at this time.

Q: Of the deployments nationwide, which should be looking at for information?

A: You should probably look at the deployments in Florida, North Carolina, Wyoming and New York.

Q: Who is supplying the radar detection devices?

A: Central Office Traffic Operations will purchase the equipment and the contractor will pick it up at the warehouse in Frankfort. An install list is included in the contract.

Project No. 121GR19T013-HSIP - Implement ATSPMs and V2I on KY-876 and US -25 in Madison County, Richmond, KY

JULY 12. 2019

SIGN IN SHEET

	Print Name	Sign In	Affiliation
1	Shane McKenzie		KYTC
2	David Durman		KYTC
3	Joseph Carter		KYTC
4	Ezekiel Goodwin		KYTC
5	Keith Simpson		Elliot
6	Mike Smith		Davis H. Elliot
7	Don Hicks		KAPSCH
8	Ted Swansoger		KYTC
9	Telma Lightfoot	Telma Lightfoot	KYTC
10	Jarrod Stanley		KYTC
11	Kyle Bidwell		KYTC
12	Lynn Witmer	Lynn Witmer	KYTC
13	Daniel Kucela		KYTC
14	Natalia McMillan		KYTC
15	Matt Simpson		KYTC