



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PROGRAM DEVELOPMENT & ADMINISTRATION DIVISION
SUITE 600, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-3301

CLAY BRIGHT
COMMISSIONER

BILL LEE
GOVERNOR

TO: Will Reid, Assistant Chief Engineer of Operations

FROM: *RP* Ronnie Porter, Director, Program Development and Administration Division

SUBJECT: **Proprietary Item Request and Justification for City of Lexington**

I, Ronnie Porter, Director of the Program Development and Administration Division, request approval for the City of Lexington, TN to be certified to utilize the following proprietary item(s) over the next three years, where Federal funding is used:

1. McCain ATC Flex Controller with Cabinet
2. Miovision Smart View 360 Camera Vehicle Detection System
 - o includes:
 - smart link performance software
 - smart sense turn count software.

Justification

See attached letter.

If you have any questions or comments, please contact **Meghan Wilson** at (615)253-2166 with the Local Programs Development Office or at Meghan.Wilson@tn.gov.

I, Ronnie Porter, Program Development and Administration Division Director, of the Tennessee Department of Transportation, do hereby certify that in accordance with the requirements of 23 CFR 635.411(a) (2) that the patented or proprietary item(s) as listed above is essential for the synchronization with existing facilities or no equally suitable alternative exists for this patented or proprietary item as listed above.

Recommendation for Approval

Assistant Chief Engineer of Operations

Date

February 19, 2020

TDOT
Meghan Wilson
Local Programs Development Office
James K. Polk Building, 6th Floor
505 Deaderick Street
Nashville, TN 37243

Re: Proprietary Item Request for the Next Three (3) Years for the City of Lexington

Ms. Meghan Wilson,

The City of Lexington would like to request propriety approval for McCain ATC Flex Controller with Cabinet and Miovision Smart View 360 Camera Vehicle Detection System over the next three (3) years where Federal and/or State funding are used. The requested detection system includes both smart link performance software, and smart sense turn count software. Many of Lexington's traffic signals are located within the state route system and use of proprietary items would allow the City to maintain and operate the coordinated traffic signal systems in a more efficient and effective manner.

The City of Lexington Staff has been extensively trained to operate, maintain, program, and troubleshoot McCain ATC Flex Controllers. This allows the City's technicians to quickly diagnose problems with field units which reduces the time required to maintain the system overall; in addition, helps keep the system operational during heavy traffic times to insure maximum capacity of the synchronized system.

The City of Lexington's Staff has been trained to install, operate, maintain, and troubleshoot the Miovision software and detection as well. By utilizing this detection as the standard for the City, there will be a cost savings in stocking replacement equipment and will result in faster and less costly repair. This request is based on the necessity to provide highly reliable detection for the synchronization with the existing traffic signal systems operated and maintained by the City.

The City of Lexington has begun the change out of all traffic signal control equipment City-wide to standardize signal equipment for its eight (8) intersections. Currently, the City have three types of controllers, PEEK, Eagle, and McCain. To date, the City has three (3) McCain ATC Flex Controllers with Miovision Smart View 360 Vehicle Detection.

During this transition, we have seen excellent performance with the McCain ATC Flex Controller & Miovision software with little to no maintenance to date. Because of the re-occurring maintenance costs of replacing loops and the routine failures of the loops, the City has begun the change out to increase the reliability of vehicle detection. In addition, with this software, we are able to watch live feed of the

intersections to include, gathering traffic count data, pedestrian count data, and investigative video retention for the law enforcement.

As the Lexington population and traffic volumes continue to grow, the City must find minimally evasive solutions to optimize the existing traffic signal system. Because of reoccurring maintenance cost of replacing loops with a high failure rate and the loss of efficiency in a coordinated traffic signal system when a loop has failed, the City has standardized plans to install Miovision Smart View 360 Camera Vehicle Detection System on new signals and convert existing signals as budget allows. Failed detection results in longer delays, increased stop time, and increased fuel consumption and emissions for all users. Lexington has tested a number of available detection devices, including various video and radar detection units. The City has seen excellent performance with the Miovision Smart View 360 Camera Vehicle Detection System with little to no maintenance required and a high level of support from the local representatives and online direct support. Miovision Smart View 360 Camera Vehicle Detection System is a non-intrusive detection system which is a cost savings over time as the system will not have to be replaced when a roadway is milled and resurfaced as compared to loop installations. Miovision Smart View 360 Camera Vehicle Detection System increases the reliability of vehicle, bicycle, and pedestrian detection and directly relates to the overall operation of signalized intersections.

Specifications for the City of Lexington Traffic Signals have been prepared as well and all traffic signal projects within the City will be required to adhere to those specifications, which include the requested proprietary items. By keeping with these proprietary products, the City of Lexington can better maintain Lexington's Traffic Management System and reduce system down time.

Thank you for consideration of this request.

Respectfully,



Jeffrey H. Griggs, Mayor

City of Lexington
33 First Street,
Lexington, TN 38351