



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

DESIGN DIVISION
SUITE 1300, JAMES K. POLK BUILDING
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JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

TO: Greg Duncan, Assistant Chief Engineer of Operations

FROM:  Carolyn Stonecipher, Director, Roadway Design Division

SUBJECT: Proprietary Item Request and Justification
City of Memphis Signalization Components of Projects with Federal Funds

DATE: February 27, 2014

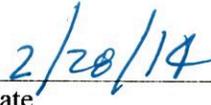
The City of Memphis is requesting a certification to specify the Iteris Vantage Vector Video/Radar Detection System to be used in the signalization component of projects within the City of Memphis' control and maintenance over the next three years using federal funds. This detection system would also be used in projects throughout Shelby County as the City of Memphis maintains the signals for all of Shelby County including those in all municipalities. The request is based on the use of a product for which there is no suitable alternative to replace high maintenance prone in-pavement loops.

Justification

This item is essential for improved safety and maintenance of existing facilities. The City of Memphis is moving away from using traditional in-pavement loops for vehicle detection because of the increased maintenance in keeping loop detectors functioning properly. The use of this detection system is being requested because of its unique capabilities that incorporate the benefits of two forms of vehicle detection technology. Their inventory of detection equipment is comprised primarily of Iteris products. The City is not aware of any suitable alternate that provides the same functionality needed. Of equal importance, their Traffic Signal Technicians have undergone extensive technical training for trouble shooting, programming and maintaining the Iteris Vantage Vector Video/Radar Detection System and product parts are now kept in the City's maintenance inventory.

I, Carolyn Stonecipher, Director of the TDOT Roadway Design Division, do hereby certify that in accordance with the requirements of 23 CFR 635.411(a) (2) that the patented or proprietary item identified above is a unique product for which there is no equally suitable alternative.


Assistant Chief Engineer of Operations (Concurrence)


Date

CC: Jeff C. Jones, TDOT Assistant Chief Engineer of Design
Brad Freeze, TDOT Director of Traffic Operations
Mike Tugwell, TDOT State Traffic Engineer
Pete Falkenberg, TDOT Design Division
Lee Jones, TDOT Design Division
Danny Lane, TDOT HQ Materials & Tests Division
Randall Tatum, City of Memphis, Administrator, City Traffic Engineer



February 25, 2014

Mr. Pete Falkenberg, P.E.
Civil Engineering Manager
Design Division
Tennessee Department of Transportation
James K. Polk Building, Suite 1300
Nashville, TN 37243

**SUBJECT: Request for Proprietary Traffic Signal Products Certification
(Iteris Vantage Vector Hybrid Video/Radar Detection System)**

Dear Mr. Falkenberg:

The City of Memphis is moving away from using traditional in-pavement loops for vehicle detection because of the increased maintenance associated with keeping loop detectors functioning properly. For this reason, The City of Memphis would like to request the use of the Vantage Vector Hybrid Video/Radar Detection system from Iteris on all Traffic Signal projects within the City of Memphis and Shelby County. The City of Memphis maintains the traffic signals for all of Shelby County, including the suburban municipalities of Arlington, Bartlett, Collierville, Germantown, Lakeland, and Millington. There are currently 770 traffic signals located in the City of Memphis and approximately 220 traffic signals in Shelby County outside of the City of Memphis. The Vantage Vector detection system provides the benefits of both video and radar technology. The video detection component is ideal for stop bar detection. Radar detection provides an extended detection zone compared to what is available with video and works very well for advance detection. The Vantage Vector system provides enhanced dilemma zone precision which can improve safety at the intersection. This detection system also works very well for volume-density signal timing applications. Our inventory of video detection equipment is comprised primarily of Iteris products. The City of Memphis maintains an inventory of parts for Iteris detection systems and our Traffic Signal Technicians have undergone extensive training on the maintenance and trouble shooting of these systems. The use of the Vantage Vector Hybrid Video/Radar Detection System is being requested because of its unique capabilities that incorporate the benefits of two forms of vehicle detection technology. The City of Memphis is not currently aware of any suitable alternative forms of vehicle detection that provide the same functionality. Thank you for your consideration of this request to better serve the citizens of Memphis and Shelby County with increased safety and efficiency through new vehicle detection technology. If you have any questions please feel free to contact me at 901-636-6710.

Sincerely,

Randall Tatum, P.E.
Administrator, City Traffic Engineer
City of Memphis
Division of Engineering