

**STATE OF OHIO
DEPARTMENT OF TRANSPORTATION**

**SUPPLEMENT 1096
SMART TRAFFIC INFORMATION SYSTEM
PREQUALIFICATION PROCEDURE
OCTOBER 21, 2005**

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1096.01 Description This Supplement describes the procedure by which the Department will prequalify Smart Traffic Information Systems for inclusion on the Department's Approved List.

1096.02 System Requirements The Smart Traffic Information System (STIS) shall be a turn key system consisting of traffic sensors, portable changeable message signs, communications equipment, control equipment and software. The STIS shall be a portable, automated system that calculates real-time vehicular speeds at several locations on a freeway and displays the appropriate messages on portable changeable message signs at upstream locations. The STIS shall provide both user defined messages on the portable changeable message signs as well as user defined speed thresholds that would activate messages being displayed.

The traffic sensors shall be a type whose accuracy does not degrade due to inclement weather and visibility conditions including precipitation, fog, darkness, excessive dust and road debris. These sensors shall be capable of acquiring vehicle data from up to four lanes of traffic on a lane-by-lane basis, either directionally or bi-directionally.

The STIS shall operate continuously (24 hours a day, 7 days a week) in the automated mode when deployed. The system shall be capable of acquiring vehicular flow data and selecting motorist information messages automatically without operator intervention.

The portable changeable message signs shall be Class A and listed on ODOT's approved product list. Each portable changeable message sign shall be capable of communicating directly with other devices at upstream and downstream locations and a remote monitoring station.

The software supplied with the system should:

1. Download data to Excel
2. Tag data with labels
3. Print to a variety of printers

4. Produce graphic and numeric reports
5. Calculate statistics such as mean speed, 85th percentile speed, average daily traffic, percent above a speed, etc.

1096.03 Approval Submit descriptive literature to the Office of Traffic Engineering that fully describes the system and a manufacturer's letter certifying the system supplied meets or exceeds the requirements of 1096.02. Submit proof of previous deployment(s) (minimum six months continuous deployment). Submit a contact name, phone number and e-mail address for each previous deployment. Submit model of portable changeable message signs.

The Department will review the submittal and verify the previous deployments. If the system meets the specifications; the product will be added to the Department's Approved List.

1096.04 Removal from the Approved List A Smart Traffic Information System may be removed from the Approved List if the Smart Traffic Information System has substantially or recurrently failed to perform satisfactorily in the field.

1096.05 Reapproval A Smart Traffic Information System removed from the Approved List due to unsatisfactory field performance shall not be returned to the list until the manufacturer identifies the reason for the failure and the problem has been corrected to the satisfaction of the Department. Experiences of other States and governmental agencies may be considered in this action.

1096.06 Modifications to Prequalified Smart Traffic Information Systems It is recognized that manufacturers will occasionally modify certain aspects of their products in an effort to enhance performance, improve durability, reduce costs or for other similar reasons. Notify the Department whenever modifications are made to Smart Traffic Information System contained on the Approved List. Include descriptive literature of the modification and certify that the modified system meets or exceeds the requirements of 1096.02. The Department will review the submittal and verify if the modified system meets the specifications. Modified systems meeting the specifications will be retained on the Approved List.

1096.07 Annual Recertification By January 1st of each calendar year manufacturers must recertify that the system supplied meets or exceeds the requirements of 1096.02. Address modifications in accordance with 1096.06. Systems not recertified will be removed from the Approved List effective February 1st.