



**REQUEST FOR INFORMATION (RFI)**

**RFI Number:** 00801  
**Date Mailed:** April 30, 2008  
**Closing Date:** June 15, 2008, 10:00 AM  
**Procurement Officer:** Marty R. Wiltse  
**Telephone:** 316-652-2700  
**E-Mail Address:** [mwiltse@ksturnpike.com](mailto:mwiltse@ksturnpike.com)  
**Web Address:** <http://www.ksturnpike.com>

**Item:** **Automatic Vehicle Identification System**

**Agency:** **Kansas Turnpike Authority**  
**Location(s):** Wichita, KS

**Scope:** The Kansas Turnpike Authority (KTA) is requesting Technical Information on Toll System Technologies that would provide Automatic Vehicle Identification (AVI) capabilities for the Kansas Turnpike. The KTA currently employs a Radio Frequency Identification (RFID) system (marketed as K-Tag) that uniquely identifies vehicles equipped with radio frequency transponders and also uses magnetically encoded tickets for those vehicles that are not equipped with transponders. The KTA is interested in technologies that could replace and would provide equivalent functionality to the currently implemented magnetic ticket technology for customers not enrolled in K-Tag. Interested Parties (IP) Responding firms should include innovative but commercially proven alternative toll collection technologies and systems that maximize vehicular throughput and customer services while minimizing toll system operations and maintenance costs and capital expenditures.

Based on the information received in response to this Request for Information, the KTA reserves the right, at its option, to short list, conduct interviews, attend off site visits, entertain oral presentations, issue requests for proposals and/or enter into negotiations with any, all, or none of the respondent firms.

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**It shall be the vendor's responsibility to monitor this website on a regular basis for any changes/addenda.**

<http://www.ksturnpike.com/RFI00801.pdf>

**KANSAS TURNPIKE AUTHORITY  
REQUEST FOR INFORMATION**

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**Automatic Vehicle Identification System**

**A. Background:**

The Kansas Turnpike Authority is issuing this Request for Information (RFI) to obtain Statements of Interest (SOI) on current technology information from manufactures and/or equipment representatives (Respondents) experienced with the technology development and/or operation of Automatic Vehicle or Object Detection Systems. Any responding **Interested Party (IP)** should briefly but completely address the issues raised below, in writing.

**Quick Turnpike Facts:**

- Over 50 years of operation
- 236 miles from Kansas City, Kansas, to the Oklahoma border south of Wichita
- 22 interchanges comprising 31 entry and 51 exit ticketed lanes
- Diverse population of rural and metropolitan areas

**B. System Information:**

The KTA operates a 236 mile "Closed toll" or "Trip tolling" system. The process for determining the charges for a particular vehicle is based on vehicle class, the distance traveled and in some cases time. Currently, the KTA employs a Radio Frequency Identification (RFID) system that uniquely identifies vehicles equipped with radio frequency (RF) transponders which are either fixed (permanent) or portable (easily moved between vehicles). For all vehicles that are not equipped with an RF transponder, a magnetically encoded ticket is issued for identification purposes. The tickets are issued either manually by an individual or automatically by a dual height ticket issuing machine. In either case, the vehicle must stop in order to obtain a ticket. Prior to exiting the roadway the vehicle must stop, surrender the ticket to an individual where the magnetically encoded data is read and the appropriate charges are calculated. The KTA is interested in technologies that would replace the magnetically encoded tickets used for the purpose of identifying vehicles and eliminate the need for the vehicles to stop when entering and the roadway. Since approximately 60% of the KTA transactions are paid by cash the proposed system would likely require the customers to stop on exit to pay the appropriate toll charge. The IP must address, but not be limited to the following questions or issues in response to this RFI.

- 1) Must uniquely identify individual vehicles based upon properties inherent or intrinsic to the vehicle itself.
  - There are currently 31 unique entry and 51 ticketed exit lanes on the turnpike. The proposed technology has to identify a vehicle at one of the entry locations and identify the same vehicle at one of the exit points. Based on traffic volumes, the average number of vehicles concurrently requiring identification at a given time would be approximately 7,000. This number represents the "working pool" of vehicles traveling on the turnpike at any given time. All vehicles entering or exiting the roadway are "channelized" into individual lanes as opposed to an open road configuration. Vehicles equipped with RF transponders enter and exit the roadway at approximately 20 mph due to plaza design and safety concerns

of employees in the plaza area. The entry speed of a proposed system would also need to be limited to a maximum of 20 mph.

- 2) The KTA determines the class for a particular vehicle based upon the number of axles. The proposed technology is **not necessarily required** to determine vehicle classification.
- 3) The technology would be integrated into the existing toll system at the lane computer level and would provide the entry and exit locations of individual vehicles.

**C. Responding to the Request for Information (RFI):**

Any or all responding IP may be requested to conduct a formal presentation to further explain and clarify the IP's available products, current applications of those products, and understanding and approach to making any needed adaptations of those products to operate in a toll road environment, and/or to respond to questions from the KTA.

Responding IP should include its qualifications in the response. The qualifications should provide a brief history of the IP, evidence of credibility and a resume for key staff members involved with preparation of the response to this RFI.

Respondents should submit a concise SOI not exceeding five [5] pages in length and which demonstrates a clear understanding of the technology issues associated with the KTA's implementation of available products.

The SOI should include the following:

- 1) A brief statement of interest and/or no interest in pursuing such an opportunity with the Kansas Turnpike Authority.
- 2) Any suggestions for structuring a public-private partnership to advance such a technology as may be presented.
- 3) Identify topics or issues regarding Automatic Vehicle or Object Detection Systems not addressed by the RFI that respondents believe are important to address in any future RFP and offer input on those topics or issues.
- 4) A list off additional information that would assist KTA in its evaluation of your company and your interest in future participation in the Authority.

The KTA is **not** requesting a proposal, detailed plans, budgetary information or proprietary information in response to this RFI.

The cost of developing and submitting the SOI is entirely the responsibility of responding IP. This includes costs to determine the nature of this RFI, preparation of the response, submitting the response and any other costs associated with this RFI.

Responses should be prepared simply and economically, providing a straightforward, concise description of technology and product information being requested in this RFI. Emphasis should be on completeness and clarity of content.

Each IP shall give the complete mailing address of the vendor and be signed by an authorized representative by with original signature of his or her name and legal title typed below the signature line.

**Questions:** - No pre-conference is scheduled for this **Request for Information**. Questions requesting clarification shall be submitted electronically to the Procurement Officer prior to **10:00 a.m. on June 15, 2008** to:

[mwiltse@kturnpike.com](mailto:mwiltse@kturnpike.com)

**Questions-RFI #00801**

**Respondents to this RFI shall provide:**

- **Three (3) paper copies of the five (5) page SOI**
- **Three (3) paper copies of the technical specifications, including literature and other supporting documents, such as any available results from testing of the respondents' products which clearly demonstrate the performance capabilities and accuracy levels of those products in actual operation.**

**In addition, information as provided above shall be submitted via a CD in word format or on DVD as appropriate for product information.**

**Vendor's information, sealed securely in an envelope or other container, bearing the respondent's name address, and the words RFI: Automatic Vehicle Identification System, clearly written on the outside and shall be received promptly at 10:00 a.m., Central Standard or Daylight Savings Time, whichever is in effect, on June 15, 2008, addressed as follows:**

**Kansas Turnpike Authority  
RFI: # 00801  
Closing: June 15, 2008  
9401 E. Kellogg  
Wichita KS 67207-1804**

**KANSAS TURNPIKE AUTHORITY RIGHTS RESERVED**

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