



REQUEST FOR INFORMATION

INTRODUCTION

The Alliance for Toll Interoperability (ATI) is a membership organization comprised of toll agencies, toll authorities, and various state Departments/Divisions of Transportation (DOTs) collecting tolls for roads, bridges, and tunnels (i.e. toll agencies). Among our goals, ATI is working to achieve toll payment account interoperability arrangements that span all of North America by:

- 1) Issuing this Request for Information (RFI) to inquire about potential solutions for achieving toll payment account interoperability for North America. ATI envisions a program that would supplement existing regionally interoperable electronic toll collection systems by allowing participating agencies to match license plate information on customer account-holders' vehicles with information from captured license plate images on other agencies' facilities.
- 2) Developing a conceptual set of business rules for toll payment account interoperability that is acceptable to a majority of ATI's members such that the matched vehicle information in 1) can be used as the basis for funds from customer accounts being transferred between/among agencies.

The two activities above are expected to result in a set of recommendations by ATI to its members and to various federal and state transportation entities.

Requests for Qualifications (RFQ), Requests for Bids (RFB), and/or Requests for Proposals (RFP) may subsequently be issued by ATI or a representative member to expand toll payment account interoperability in North America. Unsolicited proposals will not be accepted at this time.

CURRENT INTEROPERABILITY & RFID TOLL COLLECTION

Today's interoperability and compatibility challenges lie in technical standards and business arrangements. Today's most cost-effective means of account-based toll collection is based on Radio Frequency Identification (RFID) systems. Current RFID systems are generally proprietary technology and claimed patent protection. These ETC systems represent a large deployed investment in equipment, which may remain unchanged for years to come. Business arrangements for reciprocity and settlement have generally been grouped by technology standards in RFID technology (as outlined below). Current interoperable programs share a link in technology and business rules. The interoperable business rules have served member agencies of these individual interoperable systems far better than envisioned by anyone when created, but are constrained by their unique technology solutions and strict usage guidelines.

Four separate and distinct toll payment account interoperability arrangements that are operating in North America are:

- California toll authorities, e.g. **FasTrak**.
- Florida toll authorities, e.g. **SunPass**.
- Texas toll authorities, e.g. **TollTag**.
- The largest toll account interoperability program in North America is located in the northeast geographic quadrant of the United States, known as **E-ZPass**, including **25 members in 14 states**.



In each of these arrangements, toll agencies are encouraged to market, open, and hold toll payment accounts for individuals and businesses near their facilities that don't already have a toll payment account within that prospective interoperable group.

While regional interoperability exists in North America, such arrangements must permit significant policy and operational flexibility for each individual agency. For example:

- Each toll agency independently sets and occasionally changes the formula for calculating tolls on their roads, bridges, and tunnels. The variables used by these calculations (e.g. personal vs. commercial account, vehicle attributes) have been standardized, albeit differently, within each arrangement.
- Many toll agencies independently determine and operate the process by which travelers can dispute a toll or toll amount.
- While most toll agencies offer both individual and commercial toll payment accounts, each toll agency within an arrangement typically determines the financial policies related to each (e.g. pre-paid, post-paid, post-paid bonded, automatic credit card replenishment, cash replenishment).
- Each toll agency determines the types and amounts of fees related to opening and holding a toll payment account (e.g. fees for user equipment, monthly account fees).
- Each toll agency determines the vehicle classification (size, weight, axle, etc.) and total toll amount for each vehicle type.
- Many toll agencies independently determine and operate the process for collecting from travelers with accounts holding insufficient funds and other toll evaders
- Many toll agencies offer incentives that are exclusive to their account holders (e.g. resident discounts).
- Policies and legislation controlling the disclosure and use of information related to toll payment accounts vary widely between the various states and provinces.

Since three of the four arrangements each rely on a different RFID product line (only the Florida and Texas arrangements use a common RFID product line), customers who open a toll payment account with one agency can only use the account technology to pay tolls within the established interoperability arrangement, these accounts are not recognized or accepted for payment of tolls on any of the roads, bridges, or tunnels participating in the other three interoperability arrangements.

Getting these four existing toll payment account interoperability arrangements to accept a single, common RFID product line is not likely to occur in the foreseeable future because:

- Removing an existing RFID product line and replacing it with a common RFID product line all at one time is believed to be unaffordable due to the quantity/cost of RFID equipment already installed at the toll facility and the quantity/cost of RFID transponders already issued to travelers.
- Contract restrictions and potential intellectual property claims are discouraging toll agencies from operating additional equipment to read both RFID transponders from their current arrangement and other RFID transponders in their facilities, preventing the gradual phase in of a common RFID product line. In addition, in some cases there are technical obstacles to such a migration path.

INTEROPERABILITY THROUGH LICENSE-PLATE IMAGE TOLL COLLECTION

Utilizing the current status quo for toll collection is inadequate for establishing complete interoperability in the near future. Therefore, ATI intends to form an organizational and business structure to support interoperability, unrestricted by proprietary technology. This can be achieved through improved license plate image capture, processing of license plates, and a compatible database / transaction processing center(s).

ATI's current initiatives and pilot programs focus on interoperable operations using -license-plate image-based transactions. Any upcoming procurement for interoperable services will be based on license-plate image toll transactions.

To various degrees, toll agencies within each existing toll payment account interoperability arrangement are already using an images of license plates as provided by current customers or a third party, such as a state DMV, as a secondary means of collecting tolls from the associated toll payment account within their existing interoperability arrangement, however toll agencies:

- Typically have policies and/or operate under legislation that limits their use of these images due to privacy concerns
- Are not using license plates to collect tolls from toll payment accounts outside their current regional arrangement.
- Do not always have accurate customer license plate information due to use of a transponder in multiple vehicles, inaccurate DMV information, transferred plates, stolen vehicles, etc. Rules controlling the issuance, display, retirement, and re-issuance of license plates vary widely between the various states and provinces.

Toll payment accounts with insufficient funds and travelers without toll payment accounts that attempt to evade the tolls are pursued through a collection process utilizing license-plate image technology. Policies and legislation enabling or limiting these collection efforts vary widely between toll agencies and the various states and provinces. The four regional interoperability arrangements assign accountability for the collection process differently between the toll agency holding the account and the toll agency operating the road, bridge, or tunnel where the

toll was incurred. There may be opportunity to harmonize these arrangements along larger financial industry standards, if it can be demonstrated to be advantageous overall for the toll industry operators.

At this time, ATI is most interested in interoperability approaches that can be achieved using license plate images and/or approaches since there is currently no common RFID solution.

At present, ATI is likely to select a single entity to outsource all aspects of bring-up, operation, and maintenance of a secure network that processes and accounts for license plate based toll transactions at participating toll agencies.

ATI has not yet determined whether toll agencies will contract for these network services directly with this outsourcer or with ATI. In either case, monies to settle today's (regionally) interoperable toll transactions are currently exchanged directly between toll agencies and many ATI members have expressed a preference to extend this practice to North American interoperability of license plate based transactions.

Practically all ATI members currently pay the costs of promoting, opening, and managing customer accounts for toll payment. ATI is interested in approaches that would increase the percentage of toll transactions made via customer accounts without reducing the number of RFID-based transactions. Concepts under which a 3rd party would pay the costs of promoting, opening, and managing customer accounts for travelers who would not normally adopt an RFID transponder are of particular interest, however information about these concepts will be solicited through a separate RFI at a later date.

At this point in time, it is envisioned that some of the IT or financial services required may include 1) support infrastructure for license plate inquiries; 2) support for account validation and registration purposes; 3) support for interoperable transaction processing and settlement; or 4) 3rd party management of toll accounts. How these objectives can be accomplished, in what format or within what type of organization, is of great interest to ATI.

RFI PROCESS

This RFI is not a part of any procurement process and is not binding on any party. Any parties providing information in response to this RFI shall do so at their own expense. ATI has the right to disclose, publish, and/or use any and all information provided in response to this RFI without limitation and all materials submitted in response to this RFI are considered public documents. ATI will not enter into any agreements limiting its right to disclose or use information submitted in response to this RFI. Unsolicited proposals will not be accepted by ATI.

ATI envisions three key areas of activity during this RFI process:

Informational Webinar: Parties interested in responding to this RFI can join ATI's Chairman, JJ Eden and Secretary / Treasurer, Grady Rankin, in a webinar held Monday, November 9, 2009 at

3:30 p.m. (EST). Potential respondents should contact J.R. Fenske at jr.fenske@tollinterop.org for information about participating in the webinar.

Written Submittal: Parties responding to this RFI should provide an information package describing a comprehensive solution for achieving North American toll account interoperability by use of license-plate images. This package should address the attributes of today's toll collection environment as described in this RFI and any changes or migration issues that would need to be addressed as part of implementation.

Written submittals are requested to be submitted, electronically in MS Office format, by December 14, 2009 to jr.fenske@tollinterop.org. Printed copies should be scheduled to arrive shortly thereafter.

Follow-on Discussions: ATI will evaluate the information packages described above and schedule follow-on discussions regarding the solution or solutions that, in our sole determination, provide the most promising comprehensive solution for achieving North American toll account interoperability.

All questions regarding this RFI should be directed to:

Alliance for Toll Interoperability
J.R. Fenske
Director of Memberships & Programs
5400 Glenwood Avenue, Suite 400
Raleigh, NC 27612

jr.fenske@tollinterop.org

WRITTEN SUBMITTAL

Responses to this RFI should consist of one printed paper copy and one electronic copy of the written submittal. The printed paper copy should be unbound and readily reproducible via a (non-color) copier. The electronic copy should be in .pdf format with software permissions set to allow readers to search, cut and paste, and print the document without restriction.

Parties responding to this RFI should provide a brief (no more than 2 page) description of your firm's qualifications and experience as part of their written submittal.

The remainder of the written submittal should focus on describing a comprehensive solution for achieving North American toll payment account interoperability, particularly addressing:

- 1) All of the entities that would be involved in the proposed comprehensive solution and their respective roles and responsibilities
- 2) How toll payment account information would flow between all of the various entities required to make the solution economically viable, specifically sensitive:

- a. Information about the account holder (e.g. name, addresses, phone numbers),
- b. Information about vehicles (e.g. license plate, resident address), and
- c. Information about vehicle travel.

3) How the solution would:

- a. Guaranty payment to toll road, bridge, and tunnel operators for specific vehicles, describing:
 - i. The form of the payment guaranty (e.g. contract promise, bond, escrow) from each involved party, and
 - ii. The criteria by which each involved party would guaranty such payment.
- b. Provide payment to toll road, bridge, and tunnel operators for specific vehicles without guaranty and describe how the order of payment claims for these vehicles would be processed by each involved party.
- c. Require use of, limits on, or elimination of other (e.g. existing) toll payment account interoperability activities and/or arrangements to be economically viable.
- d. Require use of, limits on, or elimination of other (e.g. existing) toll violation enforcement activities and/or arrangements to be economically viable.
- e. Potential terms of compensation to be paid by each entity, for the range of services, incorporating any payments/adjustments to compensate an agency for any higher costs (transaction, credit card fees, etc.) associated with doing a disproportionate volume of work.
- f. How the ability to continue utilizing a comprehensive reporting, auditing and tracking of all transactions and disposition, reconciliation and settlement of transactions would be allowable.
- g. How drivers' privacy, with respect to personal information, drivers licenses, credit cards, vehicle information, and so on, would be protected in the course of any transaction or information handling.