North American Toll Interoperability

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ATI EZPass AAMVA DMV Working Group

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TOLL OPERATOR PERSECTIVE

Toll operators have been dealing with toll violators for as long as toll collection has been in existence. More than a two decades ago a technological development lead the toll operator to move away from collecting cash at tolling points on their facilities to reading a uniquely coded transponder installed in the vehicle or the vehicle license plate that is linked to an account which is debited for the toll amount.

Since the introduction of electronic toll collection (ETC) in the United States in 1989 toll agencies across the country have made substantial investments in roadside and in-vehicle technology, and have enrolled millions of customers in ETC programs that generate billions of dollars of annual revenue for the preservation and operation of roads, bridges and tunnels.

The introduction of electronic toll collection has also driven the development of video capture equipment that allows the toll operators to capture the license plates of vehicles that do not register a transponder reading or register a reading from transponders that have been deemed invalid. Coupling electronic toll collection with the video capture allowed the toll operators to explore dedicated electronic toll collection lanes that are unstaffed and as the technology improved to eliminate the traditional toll-booth environment and allow traffic to flow freely. The video capture technology has steadily advanced in capability to where it is now feasible to convert license plate captured images into text thus allowing the greater automation of this process, with much higher accuracy rates and collect tolls through license plate identification and associated billing programs.

In order to effectively use these technological advancements the toll operators worked for the passage of legislation to make it a legally accepted mechanism for violation enforcement. The legislation makes the registered owner of the vehicle responsible for the payment of the toll under the law unless the owner can provide proof of who was operating their vehicle at the time of the violation [not all states’ legislation is defined this way]. The legislation establishes the requirement that the source of the vehicle owner’s address be the Motor Vehicle agency that issued the plate. Today, some states are able to suspend owner registration (for in-state travelers) and some regions have begun to explore registration suspension of out-of-state vehicle owners for non-payment of tolls. The New England states of Maine, New Hampshire and Massachusetts have crafted legislation that enabled the toll agencies with the respective states to enter into agreement with the Motor Vehicle Agencies outside their state to suspend a resident’s registration for out-of-state toll violations.

Looking ahead to the future of tolling, the next advancement is to All Electronic Tolling or AET for short. Under this concept no cash is collected from the patron at the time of facility use. Instead the patron either has a transponder with a prepaid account or the system captures the vehicle’s license plate and then issues a bill to the patron for the tolls incurred. AET is a radical redesign of toll collection systems as it completely eliminates the traditional toll booth and cash collection concept and replaces it with an efficient free flow method of toll collection where
roadway capacity is maximized and collection costs reduced. However, there are several critical ingredients needed to manage risk and reduce financial risk. Those items are: (1) minimizing the number of customers who receive bills, (2) assuring that needed legislation to allow Motor Vehicle Agencies to provide name and addresses for vehicle owners that are going to be billed for their tolls [doesn’t DPPA already provide for this?], (3) ability to suspend in state registrations for non-payment of tolls and (4) ability to suspend out-of-state registrations for non-payment of tolls.

The relationship with the Motor Vehicle Agencies has thus far been a very positive one. The toll operators have been able to reach agreements with most MVCs to obtain registration ownership information. Pilot or full-fledged in-state registration suspension programs have been started in a number of states where toll operations exist and are expanding. Toll operators are pursuing getting the right to request registration suspension for in-state violators.

The most recent federal transportation, Moving Ahead for Progress in the 21st Century (MAP-21), enacted in July 2012, mandates that a nationally interoperable system for collecting tolls electronically be established within 4-years. The success of these developments relies on the toll industry working with the Motor Vehicle Agencies to find ways to address each other objectives while dealing with the underlying issues.

**DMV PERSPECTIVE**

While interoperability and reciprocity have long been issues studied in the tolling industry and among tolling agencies it is a fairly new topic to the nation’s motor vehicle departments. It is with this in mind, that partnerships need to be fostered between tolling agencies and DMV’s that are mutually beneficial to both agencies. Both agencies have similar needs in regards to ensuring customer data is accurate as well as ensuring all fees, penalties are collected timely and scofflaws are held accountable.

State DMV’s have extensive and varied license plate designs, colors, fonts and many other differences. The likelihood of tolling agencies driving changes in license plate standardization is slim, however if states elect to agree on some standard designs both DMV’s and Tolling agencies can shape the future of toll collections and data sharing.[AAMVA

Reciprocity agreements such as the one in place currently with several New England States should be held as the model for states to utilize. This would allow for state DMV’s and tolling agencies to work in conjunction to collect on outstanding tolls. These agreements allow for not only the sharing of data for violators but the potential for state to state data exchange to allow for true automated tolling in the form of open road tolling with fees paid from the customers regardless of the primary state of residence.
The emerging desire to deploy toll collection based on AET and/or ORT that has successfully been demonstrated in this country and many others across the globe. A critical key to implementation of true interoperability as outlined in MAP-21 is not only the advancements in technology, advancements in intergovernmental relationships that are vital to success.

DMV’s in North America are struggling with extensive federal and state regulations and shrinking resources. Revenue and information sharing are both powerful tools that can be used to gain the support and participation of DMV’s with toll interoperability. This can be done via outreach by the groups working on this issue like the ATI, IAG, IBTTA, I95 Coalition and AAMVA. Getting pertinent and up to date information to state DMV’s in regards to what is happening nationally and locally with toll interoperability should be a priority of these organizations.

As a result of various state and federal interests in the greater reliance on toll financing for transportation infrastructure, there is the potential for political and legislative actions to be taken that would require DMV’s to suspend the registration privileges of toll violators even if the state that the violator has the vehicle registered has no tolls.

SYNERGIES

Toll Operators and DMVs need to find ways to forge business relationships that:

- Periodically explore potentials for plate standardization and/or technology integrations into the plate that will make automated license plate recognition easier and more accurate so as to the benefit home land security, law enforcement, and the toll evasion enforcement
- Establish the ability to provide registration information to the toll operators that are deploying AET as an additional business service
- Establish reciprocity for the suspension of registrations to enforce toll violations scofflaws and assure that everyone is paying their fair share
- Exploring with the toll operators how to improve the accuracy of our mutual databases
- Sharing mutual awareness of each other’s needs through continued partnership with such organizations as ATI, IAG, IBTTA, and the I95 Corridor Coalition
- Leverage future toll operator improvements to their video enforcement systems, as mutually agreed upon, to identify and take action against vehicles that are operating in violation of regulations or laws on the roadways