Good afternoon, Honorable Chairman and Distinguished Members of the Committee. I am pleased to join this distinguished panel to discuss an issue of concern to Congress, the public and the transportation industry (especially the toll community). My name is James J. Eden and I am a Vice President of AECOM. Today, I am here as the President of the Alliance for Toll Interoperability (ATI). As an ATI volunteer, my statements and views represent my own opinions, and are not necessarily the opinion of my employer, AECOM

Organization Overview:
Established in 2008, the Alliance for Toll Interoperability (ATI) is a not-for-profit 501 C-6 membership organization, focusing on toll interoperability. The organization oversees and facilitates conversations and meetings between member agencies in addition to assisting in rule-based interoperability for toll roads, bridges, tunnels, and ports in America. ATI predates MAP 21 and was an integral participant in advancing the national interoperability effort.

ATI was created by and is wholly owned & governed by public toll agencies. Currently comprised of 38 Full and Affiliate Members spanning the United States & Canada, the organization funding is derived primarily from the annual dues of $2,500.00 and $1,875.00, respectively.

The ATI Mission Statement is:
Promoting and implementing interstate interoperability for the benefit of customers and member agencies

Three Largest Program Service Accomplishments to date are:

1. Alliance for Toll Interoperability (ATI) began exploring the development of an Interoperability HUB network in 2010 to provide the infrastructure to exchange and settle toll transactions between regions, states and independent agencies. The HUB was publicly bid & awarded to Secure Interagency Flow (SIF) in September of 2013. The HUB is scheduled to go live between Illinois & Florida agencies in November 2015. The HUB is a system capable of matching license plate numbers from vehicles traveling in one state to valid accounts held in another state. This means the financial infrastructure now exists to support national toll interoperability – to allow toll customers to use one toll account for travel within the US for all participating toll agencies.

2. AAMVA/E-ZPass/DMV/ATI Working Group: Committee Goals Include: Improve efficiency in communications between agencies/authorities, form a basis of information sharing to address issues before they become problematic, review current DMV language, systems, and processes, with the intention of minimizing potential burden to state DMVs. Committee will also address fleet initiatives. This will provide the vehicle owner information

necessary to support post-paid billing and violations enforcement for those toll patrons who do not have pre-paid or pre-authorized toll accounts.

3. Partnership between ATI, International Bridge, Tunnel & Turnpike Association (IBTTA), I-95 Corridor Coalition (I-95 CC), OMIAIR, E-ZPass Group (E-ZPass) and American Association of Motor Vehicle Administrators (AAMVA) to establish radio frequency identification (RFID) standards for reliability, readability, etc. and test/rate RFID protocols against the established standards. This will provide the basis for identifying one RFID technology as the national interoperability protocol (NIOP) that toll agencies may immediately adopt or evolve using multi-protocol equipment.

Other Program Service Accomplishments:

4. Expand state-to-state conversation concerning Violation Enforcement (VE) reciprocity, provide interested states with details on the New England reciprocity experience, to intentionally reach out to southern states to gauge and cultivate interest in expanding reciprocity agreements, encourage regional collaboration between groups engaging in VE reciprocity agreements. Violation Enforcement Reciprocity Template legislative language was developed and made available for industry use in 2012. This will allow toll regions and states to adopt a uniform approach for handling toll violations across state lines.

5. Participating and supporting the IBTTA IOP Committee: A senior toll facility management group representing different regions of the US and multiple electronic toll collection (ETC) systems, protocols and business rules. To discuss and guide political, public relations, fiscal, business case needs, and impacts that will arise with national ETC interoperability. The sub-committee work includes: Standards for back office, governance, standards for road side and communications & marketing to inform the public of their tolling options. This will allow development of an on-going industry approach to self-governance of the technical, business, administrative and public communications activities required in managing national toll interoperability.

The Members of the ATI Board of Directors and their member organizations are:

- David Machamer, Oklahoma Turnpike, Chair
- David Kristick, Colorado's E-470, Vice Chair
- Diane Gutierrez-Scaccetti, Florida's Turnpike Enterprise
- Samuel Johnson, Transportation Corridor Agencies, California
- Mark Muriello, Port Authority of New York & New Jersey
- Tim Reilly, Central Texas Regional Mobility Authority
- Steve Snider, Halifax Harbour Bridge (Canada)
- Richard Somerville, Maine Turnpike Authority
- Kary Witt, Golden Gate Bridge, California

ATI Interoperability HUB Development History

The members of ATI determined early on that the difficulty of interoperability is not technology related (utilizing transponders and readers) but lies in business rules, customer account management, public education and variations in state legislation. ATI participants recognized that if all tolling

facilities used the same transponder technology today it would still not guarantee national interoperability.

Technology issues are presently the focus of many parties in the tolling industry but require time, testing and funding for viability and agreement on a standard. ATI has chosen instead to develop a voluntary, technology-neutral solution based on account management techniques. After extensive discussions with toll agencies across the United States, ATI decided the best way forward was to develop an open, central data exchange – a HUB – and procured one using an open public process:

A team of agency leaders and toll industry experts donated resources to prepare a specification for proposals which asked vendors to develop a system and test it on a proof of concept, multi-agency platform with no guarantee of future work. ATI received 11 bids from around the world.

The ATI IOP HUB was developed as a central clearinghouse for toll transactions with the following goals:

- Seamlessly exchange and settle transactions from toll customers in multiple states using license plate numbers and eventually transponder numbers from any tolling facility in North America,
- Provide agencies with one location with common integrated finance and business rules to clear all interoperable transactions,
- Open & encourage competition between other regions, agencies or service providers (i.e. rental cars, parking garages, mobile applications and fast food restaurants) to establish interconnected HUBS such as Florida and Texas regional HUBS and regional systems such as E-ZPass and California to meet customer demand and satisfaction
- Require little to no technical alterations on the agency side - all data conversions will be done by the HUB
- Establish a Central HUB that will work today for the large majority of toll agencies,
- Negotiate a low-cost solution that will be to the best benefit of public agencies with limited resources.

Proposals were received for HUB testing and implementation:

- 3M
- ACS, A Xerox Company
- Banc Pass
- Cofiroute, USA
- Cubic Transportation Systems, Inc.
- Electronic Transaction Consultants
- Federal Signals Technologies
- Highway Toll Administration, LLC
- Rent A Toll
- Secure Interagency Flow, LLC
- TransCore

Secure Interagency Flow LLC (a firm formed by Egis Projects and Sanef) was one of three firms to complete the pilot program and was ultimately selected for the HUB contract.

Current ATI Interoperability HUB Status:

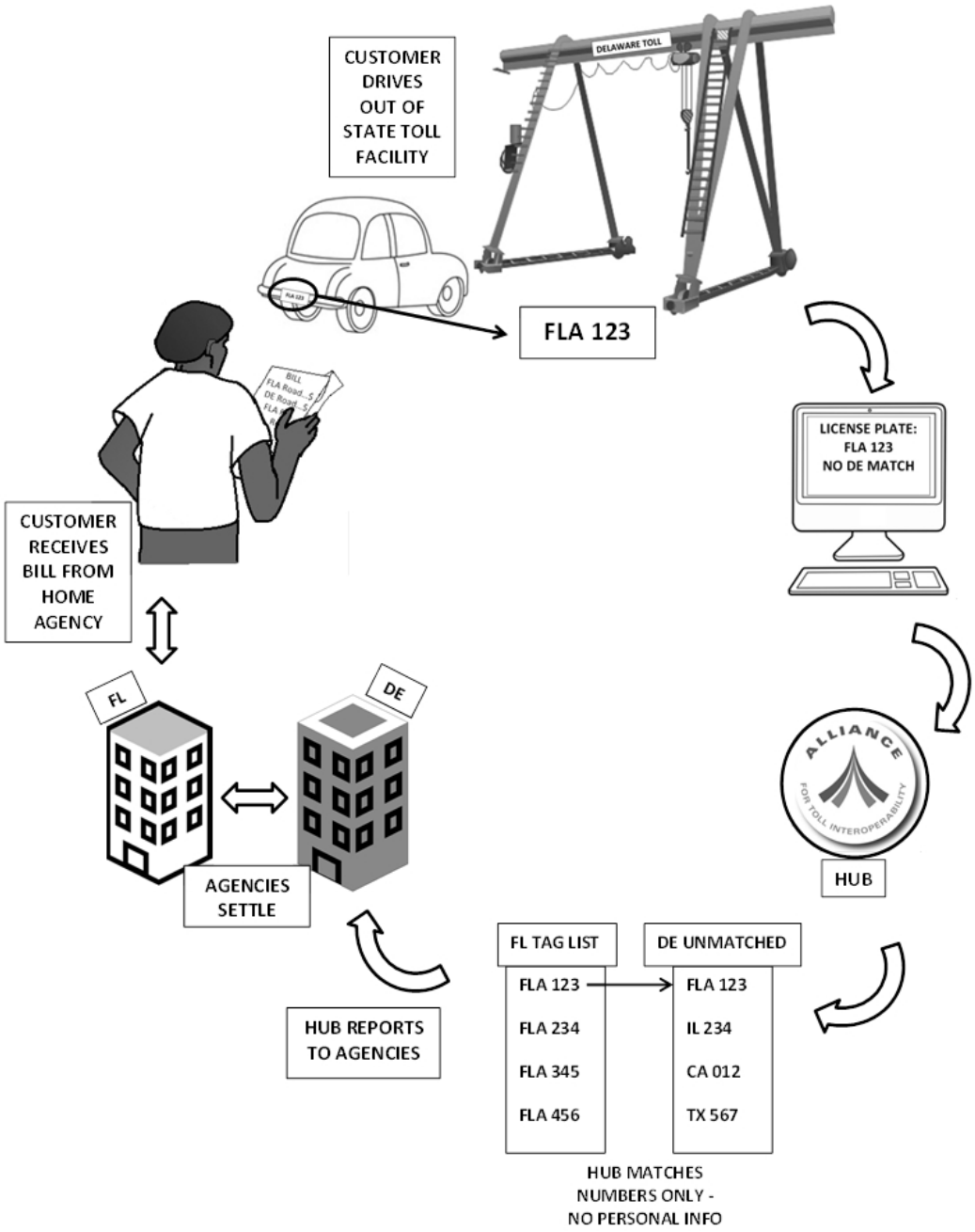
The ATI HUB will go live between Florida and Illinois by November 2015 and will launch with:

- Illinois State Toll Highway Authority (E-ZPass)
- Florida Turnpike Enterprise (SunPass)
- Miami Dade Expressway Authority (MDX) and
- Tampa-Hillsborough Expressway Authority (THEA)

Other agencies contracted for participation include:

- Central Texas Regional Mobility Authority (CTRMA) in Austin, Texas,
- Northwest Parkway in suburban Denver, Colorado, and
- State Toll Road Authority (SRTA) in the Atlanta, Georgia area.

How does the ATI IOP HUB solution for National Interoperability work for the general public?



Fees associated with the HUB:
Recognizing that the costs to participate are significant to some Agencies, ATI has a change order in process that will enable toll agencies to operate for 6 months with the only cost to agency being matched transaction fees. It is anticipated that this period will show the value to the participants and encourage them to continue as ongoing members.

Additional Initiatives:
As mentioned in the Program Service Accomplishments, ATI is working with agency members, with the E-ZPass Group and with AAMVA to establish a common link with state run DMV's. This stands to be a winning solution for both toll agencies, which pay large amounts to companies to look up license plate data, and DMVs which face limited resources and financial operational burden from date look-ups requests.

IBTTA IOP Committee
ATI has been working alongside IBTTA, AMVA, E-ZPass, The Southern Region, The I95 CC and others to assure all our effort are in concert with other. We fully support these cooperative efforts.

Regional Interoperability
The toll authorities in the Central US consisting of the States of Texas, Oklahoma, and Kansas are committed to becoming interoperable. Tolling Facilities within Texas have been interoperable for a number of years. The Oklahoma Turnpike Authority became interoperable with the North Texas Tollway Authority in August 2014 and with the Kansas Turnpike Authority in November 2014. This is made possible since each toll agency has compatible equipment to read the TransCore 6b (Sego) Transponder.

Progress toward interoperability with the Central and Southern US Tolling Facilities
In February 2015 an interoperability meeting was held to discuss steps in becoming interoperable between the central and southern states toll facilities. This meeting was attended by tolling representatives from North Carolina, South Carolina, Georgia, Florida, Alabama, Louisiana, Texas, Oklahoma, and Kansas. Interoperability is made possible in these states because of compatible lane equipment to read toll transponders.
From this meeting a commitment was made to move toward interoperability. A subsequent meeting was held in Orlando, Florida to discuss business rules and internal control documents in June 2015. Since that time a tremendous amount of work has been done to continue these efforts.

Current Status
Inter-local Agreements are underway with the Central and Southern IOP Hubs. It is anticipated that these documents will be finalized and approved by mid-2016. Preliminarily it is projected that in 2017 all tolling facilities previously mentioned will be interoperable in the Central and Southern US.

Efforts in regional peer-to-peer interoperability support the ATI program as the HUB can connect between HUBs and individual agencies to provide full interoperability.

The Future:
ATI recognizes that our HUB may only be a stopgap program that lays a framework to multi-protocol transponder reading at all toll facilities. Even then, there will be a need to establish a clearing house for transactions, even if only for smaller toll agencies. The ATI

network configuration may provide that solution in the future or participate in a broader system. ATI is a not-for-profit group and our goals are flexible as the technology evolves.

Summary:

ATI has successfully developed the data network and contractual structure to enable almost all toll operators in the United States to be inter-operable. It is launching operations in the Fall of 2015 and stands available for use by any public or private-sector toll operator. The ATI IOP HUB initiative is complimentary to the efforts of IBTTA and the National Interoperability committee. The industry at large has responded with action and effort to the MAP 21 legislation. While there is progress on multiple fronts in toll industry, the ongoing efforts, while separate, are complimentary and comprehensively supportive moving toward national interoperability.

The ATI HUB, first using license plates as the common vehicle identifier rather than a single transponder, is not the ultimate answer to national toll interoperability. The ATI HUB does, however, provide a critical part of the solution that is available today. While the ATI HUB may or may not be part of a long-term future competitive solution, our goal is not to lock in a standard or service contractor, but we have in this initiative enabled our industry to improve interoperability services to our customers and comply with the Congressional mandates presented in the MAP-21 legislation.

Biography

James J. Eden

President - Alliance for Toll Interoperability (ATI)
Vice President / National Director of Tolling - AECOM

JJ Eden has over 40 years of experience in tolling and currently serves as the President of The Alliance for Toll Interoperability (ATI) an organization of which he was founding member. JJ is also, Vice President / Director of Tolling for AECOM.
JJ was a founding member of the Interagency Group or E-ZPass. JJ formerly the Chief Operating Officer for the North Carolina Turnpike Authority (NCTA) where he developed the business rules, operating procedures and AET systems for the state's first modern, interoperable toll roads. As Assistant Chief Engineer at the Pennsylvania Turnpike, JJ managed all facilities design, construction and maintenance, including the design of the toll collection and ITS systems. JJ co-authored the industry's first Management Online Maintenance System and was Director of ETC for Lockheed Martin / ACS.