

STATEMENT OF  
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U.S. DEPARTMENT OF TRANSPORTATION

BEFORE THE

COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM  
SUBCOMMITTEE ON TRANSPORTATION AND PUBLIC ASSETS  
U.S. HOUSE OF REPRESENTATIVES

HEARING ON

*Status of Toll Interoperability*

SEPTEMBER 30, 2015

Chairman Mica, Ranking Member Duckworth, and Members of the Subcommittee, thank you for the invitation to appear before you today to discuss progress in meeting the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) requirement regarding electronic toll collection (ETC) interoperability. As the Associate Administrator for Operations at the Federal Highway Administration (FHWA), I oversee toll interoperability issues for the Agency. My office provides national leadership for the management and operation of the surface transportation system and is responsible for FHWA's work in the areas of congestion management, Intelligent Transportation Systems deployment, traffic operations, emergency management, and freight management and operations.

Section 1512 of MAP-21 requires that by October 1, 2016, toll facilities on Federal-aid highways implement technologies or business practices that provide for the interoperability of ETC programs. Although MAP-21 did not assign to FHWA any actions necessary for interoperability of ETC systems, the Agency has taken an active role in the implementation of this provision. I am pleased to highlight the Agency's interoperability efforts for you today as well as the progress we have seen the toll industry make toward implementation of the MAP-21 requirement.

Before I do so, it may be helpful to provide some context. Achieving national interoperability of ETC systems is an important issue that affects motorists who travel frequently between regions, such as long distance truckers and those living in close proximity to two or more regions using different ETC approaches. These users must maintain multiple ETC accounts and transponders, or use non-ETC methods of payment, which are often more expensive and may contribute to congestion at toll collection points. Although these users represent a fraction of the tens of millions of users who utilize some kind of ETC approach, nationwide ETC interoperability would allow users to move among toll facilities across the country without having to establish numerous accounts with ETC agencies and carry multiple toll tags. It also would help eliminate confusion among ETC account holders when traveling on various toll facilities.

Prior to FHWA's efforts to implement the MAP-21 requirement, FHWA implemented a toll interoperability provision under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) that was aimed at accelerating progress toward achieving a nationwide interoperable ETC system. FHWA issued a final rule in 2009 specifying interoperability requirements for ETC systems for the facilities that are tolled under the Value Pricing Pilot Program, the Express Lanes Demonstration Program, and the Interstate System Construction Toll Pilot Program. Although FHWA could not effectively establish a national standard at that time, the rule required toll agencies to consider regional interoperability in developing their toll collections systems, which addressed the SAFETEA-LU objective to accelerate progress toward the goal of nationwide interoperability.

The E-ZPass Group is an example of successful regional interoperability. This consortium of 26 toll agencies in 15 States operates the E-ZPass ETC program with a reported 28 million interoperable devices in circulation. These facilities are located primarily in the Northeast and Mid-Atlantic States and account for a significant portion of all U.S. toll transactions.

FHWA remains committed to helping implement the national toll interoperability provision in MAP-21. FHWA believes that a solution identified and developed within the tolling industry presents the best opportunity for achieving interoperability for ETC users, and upon passage of MAP-21, FHWA began engaging with the tolling industry on a regular basis regarding the implementation of the statutory requirement. At both executive and staff levels, FHWA meets regularly with the International Bridge, Tunnel and Turnpike Association (IBTTA). FHWA has held additional outreach meetings with ETC equipment manufacturers and "back office" operating agencies where account and financial functions are handled. FHWA actively monitors developments and efforts within the tolling industry, maintaining open communication channels with IBTTA and equipment manufacturers to review implementation progress and identify any actions that may be needed to help ensure ETC interoperability.

As this Subcommittee likely will hear from other panelists today, this market-driven and industry-led approach has yielded progress toward achieving ETC interoperability nationwide. For example, more tolling agencies are moving to electronic tolling only, where tolls for users without a recognized transponder are collected through license plate recognition and billing (although usually more expensive for users than payment with a recognized transponder tag). The Department's GROW AMERICA proposal would build upon this by requiring that, after October 1, 2016, new toll facilities on Federal-aid highways use only non-cash electronic technology for toll collection. The future effective date is intended to grandfather existing facilities tolled under section 129 of title 23 as well as any new facilities that may already be in advanced stages of development at the time of enactment.

Additionally, the IBTTA established an Interoperability Steering Committee in 2010 and was instrumental in the formation of the National Interoperability Coordination Group. The IBTTA has developed a strategic plan for achieving ETC interoperability, and working with the IBTTA Roadside Operations Subcommittee, developed an open communications protocol based on the data requirements of current ETC transponder tags. The IBTTA approach toward ETC interoperability involves selecting a National Transponder Protocol (NTP) that toll agencies could offer to their users who desire interregional or national interoperability while continuing to

offer traditional local or regional ETC transponders. The toll agencies would agree to read the NTP tags and process interoperable transactions. As a long-term strategy, the toll agencies eventually would transition (through equipment attrition) to using only NTP tags. In September 2014, the IBTTA Board of Directors adopted a resolution accepting this protocol and recommending that all toll agencies make the national protocol available to any customer who desires national ETC interoperability. IBTTA's efforts to date have revealed a need for real-world testing of the national protocol to ensure no interference with existing ETC toll tags such that the national protocol could co-exist with current toll transponders and allow a gradual migration to a single protocol.

For more near-term interoperability, the Alliance for Toll Interoperability (ATI) has established a "Hub" pilot program that allows the exchange of toll transaction information among enrolled toll agencies, providing interoperability to users, including early adopters of the Hub—North Carolina, Georgia, and Florida. ATI also is working on an agreement with the American Association of Motor Vehicle Administrators to establish a business relationship to allow inexpensive license plate lookups that could contribute to the movement toward interoperability. Toll facilities in North Carolina, Georgia, and Florida now accept each other's tags. Similarly, toll facilities in Kansas, Oklahoma, and North Texas accept each other's tags. These are examples of agencies that use different ETC protocols cooperating to offer seamless ETC interoperability to users via advanced roadside readers and coordinated back office billing processes.

ETC tag vendors have developed transponders that include multiple ETC protocols allowing users to be identified correctly across ETC systems that employ different ETC communications protocols. One ETC tag vendor recently introduced a pass that includes five major ETC protocols. The tag allows individual users to establish an account with the ETC tag vendor that will provide interoperability among the Nation's major ETC systems. The ETC tag vendor establishes accounts with each ETC system and handles the billing for the individual user, issuing a single statement (or debiting the user's account) for the tolls plus an administrative fee. An important additional aspect of this technique is the availability of a North Carolina QuickPass tag that offers interoperability with Georgia, Florida, and the E-ZPass Group facilities, which creates full East Coast interoperability on Federal-aid highways for users who need it.

Thank you again for the invitation to appear before you today on behalf of FHWA to discuss the status of toll interoperability. As the toll industry continues to implement effective strategies toward ETC interoperability of toll facilities on Federal-aid highways, FHWA will continue its engagement until a clear path to achieving the desired outcome of national interoperability is in place. I will gladly answer any questions at this time.

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## **Lindley, Jeffrey A**

### **Associate Administrator, Office Of Operations**

On August 31, 2008, Jeffrey A. Lindley became Associate Administrator for Operations. He directs a staff that provides national leadership and advocacy for the development and implementation of strategies and programs to reduce congestion and improve the efficiency and reliability of both freight and passenger movement on the highway system. Before his appointment, he served as the Associate Administrator for Safety from April 2006.

He joined the Federal Highway Administration in 1985 as a Highway Research Engineer in McLean, Virginia. He later held a variety of staff and management positions in both the field and Headquarters. From 1997-2000, he served as the California Division Administrator, where he led the delivery of the nation's largest Federal-aid highway program.

Prior to joining FHWA, he held transportation engineering positions in the private sector and with the U.S. Air Force.

Jeffrey Lindley is a civil engineering graduate of Virginia Tech and received his Master's Degree in Transportation Engineering from the University of Maryland. He is a registered professional engineer in Virginia, a past Chair of the Transportation Research Board's Committee on Freeway Operations and past Chair of the ITS Council of the Institute of Transportation Engineers (ITE).

He has received numerous performance and honor awards, including the Administrator's Award for Superior Achievement, the Richard D. Morgan Leadership Development Award, the ITE M&O / ITS Council Individual Achievement Award, the Fred Burggraf Outstanding Paper Award from the Transportation Research Board, and the Young Engineer of the Year Award from the Washington D.C. Section of ITE.