Digital Identification and Proof of Licensure

Texas Department of Public Safety

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Study on Digital Identification and Proof of Licensure

Purpose of the Report

In 2015, the Texas Legislature enacted Senate Bill (SB) 1934 mandating the Texas Department of Public Safety (Department) conduct a study on digital identification and proof of licensure. The bill directs the Department to:

- determine the feasibility of altering state requirements to allow the use of a digital form of a driver license,
- evaluate the risks to personal information a digital driver license might create, and
- survey electronic driver license policies in other states.

This report addresses the three specific deliverables mandated in the legislation, and presents the Department's findings and recommendations on the next steps to address the potential use of digital driver licenses in Texas.

Legislative Charge

Section 411.951, Senate Bill 1934 (2015) mandates:

(a) the department shall conduct a study:

(1) determining the feasibility of altering state requirements for the issuance of a driver license to allow a person to use a digital form of a driver license displayed on an electronic device to prove that the person has a driver license;

(2) evaluating risks to personal information security that a system described by Subdivision (1) might create; and

(3) surveying and evaluating electronic driver license policies in other states.

(b) Not later than September 1, 2016, the department shall submit a detailed report of its findings and recommendations to the legislature.

(c) This section expires January 1, 2017.

Executive Summary

Given the continued shift of consumers toward mobile computing solutions, multiple states are beginning the process of evolving the driver license (DL) into a digital version. At least twelve states have enacted legislation regarding digital driver licenses, and the movement to digitize will likely continue as consumers demand more mobile technologies and services. In Texas, the Department provides driver license and identification card services to approximately six (6) million people annually. A digital driver license solution has the potential to offer greater convenience, as well as, be more secure while providing a platform to deliver new value added services.

Implementation of a digital DL will require amending the Texas Transportation Code to establish the digital version as a valid form of identification. In addition, it must be recognized that the Texas DL has moved beyond just a license to drive to become the primary credential to prove a person's identity. This requires that any digital DL solution considered by the state must provide the functionality necessary to authenticate DL information when the DL is accessed to ensure the license's validity if the Texas DL is to remain the trusted identity credential. Solutions that can deliver on improved levels of assurance and security over a physical DL hold promise as a new tool to assist the Department in protecting the people of Texas and increasing the accessibility of services.

While digital driver license solutions offer the Department an opportunity to identify potential benefits associated with mobile technologies, because available solutions to digital DL's remain largely unproven, the Department recommends creating a pilot program that includes conducting a technical pilot, and if successful, conducting functional pilots before the Department provides final recommendations. To determine the best possible solution with the least risks to the State and its constituencies, it is crucial the Department thoroughly test possible solutions through well formulated pilot projects.

Approach

The Driver License Division (DLD) of the Department established a cross functional working group to conduct the Digital Identification study and prepare this legislative report. The team consisted of members from various Department divisions including: DLD, Texas Highway Patrol, Office of General Counsel, Information Technology and Cyber Security. The purpose of this working group was to discuss project deliverables, agree on recommendations, and provide oversight of this legislative report. The working group held multiple conference calls to solicit input from other states that are considering, or have implemented, a digital form of a DL.

In addition, the Department completed a Request for Information (RFI) allowing vendors to present their vision of existing and potential digital driver license solutions. A total of five (5) vendors responded to the RFI with four (4) vendors demonstrating potential solutions. The working group utilized information gathered from its own research, feedback from other states, and vendor demonstrations to develop this report and provide the Legislature with recommendations for the potential use of a digital DL in the state of Texas.

While the working group researched all available digital DL solutions, a key driver of the analysis was to ensure any proposed solution aligned with the Department's vision to "Proactively protect the citizens of Texas in an ever changing threat environment" and the goals to

- combat crime and terrorism,
- enhance highway and public safety,
- enhance statewide emergency management, and
- enhance public safety licensing and regulatory services.

These become particularly salient when discussing the opportunity to digitize the Texas DL. Through the current in-person identity "proofing" process necessary to obtain a Texas DL, the Department has become the de facto identity authentication organization as driver licenses are now more than a printed authorization to drive, but also represent proof of a person's identity. As identity theft continues to grow, ensuring both the validity of the Texas DL and the security of a person's information become essential to ensure the Department issued driver licenses remains the trusted credential of choice to prove identity. This focus on protecting the people of Texas provided the foundation upon which the working group built its recommendations.

Feasibility of Altering State Requirements

A digital form of a DL can be authorized through a handful of amendments to the Texas Transportation Code. Chapter 521 "Driver's Licenses and Certificates" of the Texas Transportation Code is the primary statute governing the issuance of Driver Licenses. The following are recommended changes needed to support the use of digital driver licenses in the state:

1. ***Amending section 521.001 to change the definition of "Driver's License***".

   The current definition of a "driver's license" as indicated in Chapter 521.001 of the Transportation Code is as follows:

   > "Driver's license" means an authorization issued by the department for the operation of a motor vehicle. The term includes:
   > (A) a temporary license or instruction permit; and
   > (B) an occupational license.

   Because "digital" is a new form of driver license not previously addressed in statute, it is recommended that the definition of "Driver's license" be amended to specify that the term includes both the physical and digital forms. While Commercial Driver Licenses and Personal Identification Certificates are not explicitly referenced as part of SB 1934 (84R) , it is also recommended that section 521.101 and section 522.003 also be amended to specify digital forms of both Personal Identification Certificates and Commercial Driver Licenses respectively. Amending these three (3) definitions will support the digitization of all forms of identification issued by the Department, and allow state requirements outlined in Chapter 521 and Chapter 522 to be applicable to driver licenses, personal identification certificates and commercial driver licenses.

2. ***Amending section 521.001 to include a definition of "Digital License".***

   Any digital driver license solution has to go beyond simply displaying a picture or copy of a driver license on an electronic device. To ensure the validity of the DL, a digital license must contain the same level of security and authentication for it to remain a trusted identity credential. For this reason, the Department recommends establishing a definition of "digital license" that requires the use of a Department issued or authorized mobile application. A Department issued mobile application

could provide the functionality to authenticate the license and limit the ability to counterfeit or possess a fraudulent digital driver license.

3. ***Adding new statutes to the Texas Transportation Code to address situations unique to a digital form of a driver license.***

   Other challenges may arise with the use of a digital driver license which may be mitigated through statutory language. This includes limiting unauthorized searches of content on wireless devices during consumer or law enforcement interactions, not precluding the need for a person to present a physical form of the driver license, and limiting liability to telecommunication providers in the event of wireless device failure. Therefore, the following statutory changes are recommended:

   a. The display of a digital version of a driver license or ID card on a wireless communication device does not constitute effective consent for a law enforcement officer, or any other authorized person, to access the contents of the wireless communication device, except to view the driver license or identification card information.

   b. The authorization of the use of a wireless communication device to display a driver license or identification card information does not prevent government or private entities from requiring a person to provide a physical version of the driver license or identification card.

   c. A telecommunications provider, as defined by Utilities Code Section 51.002, may not be held liable by the customer for the failure of a wireless communication device to display driver license or identification card information under this Subsection.

4. ***Amending section 521.121 of the Texas Transportation code to allow the Department by rule to approve data elements for use and display on the digital form of the driver license.***

   A digital driver license expands the potential for additional data elements that can be rendered, via an application or carried in a digital watermark, without requiring additional space as they would on printed materials. However, section 521.121. "General Information on Driver License" is restrictive and limits what information can be displayed on a driver license. Section 521.121 Subsection (e) states, "Except as provided by this section, a driver license issued under this chapter:

   (1) Must:
   (A) be in the same format;
   (B) have the same appearance and orientation; and
   (C) contain the same type of information; and
   (2) may not include any information that this chapter does not reference or require."

To utilize the potential for additional data elements available with a digital form of a driver license, it is recommended that amendments be made to allow the Department to approve the display or use of the information on a digital driver license that could benefit the people of Texas. To accomplish this, the subsection can be amended to add:

> The Department may establish by rule, changes to the format, appearance, orientation, levels of authentication and data elements for use on a digital form of driver license.

The following table outlines additional state requirements that remain applicable to both the physical and digital versions of a driver license, but should not require modification as a result of the recommended changes outlined above.

Statute	Section	Text
Texas Transportation Code	521.002 - CONVENIENCE TO PUBLIC.	The department shall implement its duties under this chapter in the manner that provides the greatest convenience to the public.
Texas Transportation Code	521.025 - LICENSE TO BE CARRIED AND EXHIBITED ON DEMAND; CRIMINAL PENALTY.	(a) A person required to hold a license under Section 521.021 shall: (1) have in the person's possession while operating a motor vehicle the class of driver license appropriate for the type of vehicle operated; and (2) display the license on the demand of a magistrate, court officer, or peace officer.
Texas Transportation Code	Sec. 521.059 - IMAGE VERIFICATION SYSTEM	(a) The department shall establish an image verification system based on the following identifiers collected by the department under Section 521.142(b): (1) an applicant's facial image; and (2) an applicant's thumbprints or, if thumbprints cannot be taken, the index fingerprints of the applicant.
Texas Transportation Code	Sec. 521.121. GENERAL INFORMATION ON DRIVER LICENSE.	(a) The driver license must include: (1) a distinguishing number assigned by the department to the license holder; (2) a color photograph of the entire face of the holder; (3) the full name and date of birth of the holder; (4) a brief description of the holder; and (5) the license holder's residence address or, for a license holder using the procedure under Subsection (c), the street address of the courthouse in which the license holder or license holder's spouse serves as a federal judge or state judge.
Texas Transportation Code	Sec. 521.121. GENERAL INFORMATION ON DRIVER LICENSE.	(b) The driver license must include a facsimile of the license holder's signature or a space on which the holder shall write the holder's usual signature in ink immediately on receipt of the license. A license is not valid until it complies with this subsection.
Texas Transportation Code	Sec. 521.121. GENERAL INFORMATION ON DRIVER LICENSE.	(c) The department shall establish a procedure for a federal judge, a state judge, or the spouse of a federal or state judge to omit the license holder's residence address on the license and to include, in lieu of that address, the street address of the courthouse in which the license holder or license holder's spouse serves as a federal judge or state judge. In establishing the procedure, the department shall require sufficient documentary evidence to establish the license holder's status as a federal judge, a state judge, or the spouse of a federal or state judge.

Statute	Section	Text
Texas Transportation Code	Sec. 521.121. GENERAL INFORMATION ON DRIVER LICENSE.	(e) Except as provided by this section, a driver license issued under this chapter: (1) must: (A) be in the same format; (B) have the same appearance and orientation; and (C) contain the same type of information; and (2) may not include any information that this chapter does not reference or require.
Texas Transportation Code	Sec. 521.1211. DRIVER LICENSE FOR PEACE OFFICER	(a) In this section, "peace officer" has the meaning assigned by Article 2.12, Code of Criminal Procedure. (b) Notwithstanding Section 521.121(a), the department by rule shall adopt procedures for the issuance of a driver license to a peace officer that omits the license holder's actual residence address and includes, as an alternative, an address that is in the municipality or county of the peace officer's residence and is acceptable to the department. (c) To be issued a driver license under this section, a peace officer must apply to the department and provide sufficient evidence acceptable to the department to establish the applicant's status as a peace officer. On issuance of the license, the license holder shall surrender any other driver license issued to the holder by the department. (d) If the holder of a driver license that includes an alternative address moves to a new residence or if the name of the person is changed by marriage or otherwise, the license holder shall, not later than the 30th day after the date of the address or name change, notify the department and provide the department with the number of the person's driver license and, as applicable, the person's: (1) former and new addresses; or (2) former and new names. (e) If the holder of a driver license that includes an alternative address ceases to be a peace officer, the license holder shall, not later than the 30th day after the date of the status change, apply to the department for issuance of a duplicate license. The duplicate license must include the person's actual current residence address.
Texas Transportation Code	Sec. 521.123. DESIGNATOR ON LICENSE ISSUED TO PERSON UNDER 21 YEARS OF AGE	The department shall: (1) designate and clearly mark as a provisional license each original driver license issued by the department to a person who is under 18 years of age; and (2) for each original, renewed, or duplicate license issued to a person who is under 21 years of age: (A) indicate "UNDER 21" on the face of the license; and (B) orient the information on the license to clearly distinguish the license from a license that is issued to a person who is 21 years of age or older.
Texas Transportation Code	Sec. 521.1235. DESIGNATOR ON LICENSE ISSUED TO VETERAN	(a) In this section, "veteran" means a person who: (1) has served in: (A) the army, navy, air force, coast guard, or marine corps of the United States; or (B) the Texas National Guard as defined by Section 437.001, Government Code; and (2) has been honorably discharged from the branch of the service in which the person served.

Statute	Section	Text
		(b) The department shall include the designation "VETERAN" on a driver license issued to a veteran in an available space either on the face of the driver license or on the reverse side of the driver license if: (1) the veteran requests the designation; and (2) the veteran provides proof of the veteran's military service and honorable discharge. (c) The department shall provide to the recipient of a driver license with a veteran's designation the informational paper described by Section 521.011 at the time the license is issued.
Texas Transportation Code	Sec. 521.125. MEDICAL AND EMERGENCY INFORMATION ON LICENSE	(a) On the reverse side of a driver license, the department shall: (1) print: (A) "Allergic Reaction to Drugs: _____"; (B) "Directive to physician has been filed at tel. #"; (C) "Emergency contact tel. #"; and (D) if space allows, any medical information provided by the license holder under Section 521.142(h); (2) include to the right of the statements under Subdivisions (1)(B) and (C) a surface on which the license holder may write the appropriate telephone number; and (3) include to the left of each of the statements under Subdivisions (1) (B) and (C) a box that the license holder may use to indicate for what purpose the telephone number applies. (b) In addition to the requirements of Subsection (a) (1) (D), if space allows, the department shall indicate any medical information by a uniform symbol or code on the face of the license in the space where the department indicates a restriction or endorsement.
Texas Transportation Code	521.126 – ELECTRONICALLY READABLE INFORMATION	(a) The department may not include any information on a driver license, commercial driver license, or personal identification certificate in an electronically readable form other than the information printed on the license and a physical description of the licensee.
Texas Transportation Code	521.126 – ELECTRONICALLY READABLE INFORMATION	(b) Except as provided by Subsections (d), (e), (g), (i), and (j), a person commits an offense if the person: (1) accesses or uses electronically readable information derived from a driver license, commercial driver license, or personal identification certificate; or (2) compiles or maintains a database of electronically readable information derived from driver licenses, commercial driver licenses, or personal identification certificates.
Texas Transportation Code	521.126 – ELECTRONICALLY READABLE INFORMATION	(e) The prohibition provided by Subsection (b)(1) does not apply to a financial institution or a business if the information is accessed and used only for purposes of identification verification of an individual or check verification at the point of sale for a purchase of a good or service by check.
Texas Transportation Code	730.004: PROHIBITION ON DISCLOSURE AND USE OF PERSONAL INFORMATION FROM MOTOR VEHICLE RECORDS	Notwithstanding any other provision of law to the contrary, including Chapter 552, Government Code, except as provided by Sections 730.005-730.007, an agency may not disclose personal information about any person obtained by the agency in connection with a motor vehicle record.

Risks to Personal Information Security

There are three (3) primary risk areas to personal information created with the implementation of a digital version of a DL/ID. The first risk is to non-driver license related data on a person's electronic device if it is presented during a consumer or law enforcement interaction. The other two risks are associated with protecting the DL/ID data itself, regardless if that data is in motion or is at rest.

Protection of data at rest secures the data when it is not traveling over the network, such as protecting data stored on file servers, desktops, and electronic devices. Whereas, protection of data in motion ensures that data traveling over networks cannot be criminally intercepted or stolen. While the development of the digital DL/ID is still in its infancy, each of these risk areas are being addressed by the various vendors in the marketplace as outlined below:

1. ***Risk to Non-driver license related data***

   A common concern people have with the use of a digital driver license is an agent of the government taking a phone and removing it from the presence of its owner, increasing the potential of an unlawful search of the electronic device. This concern is the impetus behind the recommendation for new legislation, outlined above in section 3a.

   However, vendors propose to alleviate this concern through a variety of approaches. One solution is to lock the phone when the digital application is open, thus preventing anyone from viewing other content on the phone. Another solution is the ability to address this issue through the use of wireless communication protocols, such as Bluetooth and Near Field Communication (NFC) that allow the transmission of DL/ID data wirelessly between a private or government application and the consumer's digital application. In law enforcement, this will limit liability by eliminating the need for the officer to handle a person's phone, and increase the safety of both parties as the individual and law enforcement can confirm each other's identity's prior to the officer leaving their vehicle. However, even with these measures to reduce risk, litigation in criminal prosecutions related to search and seizure authority under the federal and state constitutions should still be expected.

2. ***Risk to driver license "data in motion"***

   The movement of data over unprotected networks is often considered the primary security risk to personally identifiable information (PII). With the advent of e-commerce, enormous amounts of resources have been developed to encrypt data in motion to ensure the security of payments. As the industry matures, technologies such as Transport Layer Security (TLS), TCP/IP Secure Socket Layer (SSL), HTTP/HTTPS, and SSL/VPN have become very effective techniques to secure the transmission of data. These same security standards and industry best practices are being incorporated into digital DL/ID mobile applications.

In addition to these security standards, effective application and web service message design limits the need to transmit sensitive data. When designed correctly, web services act as a gateway between the backend trusted application and the less trusted client components on the wireless device. This allows the backend to perform the processing of sensitive data so there is no need for its transmission. Even when sensitive information does need to be transmitted, the use of secure web services technologies such as using Simple Object Access Protocol (SOAP) over HTTPS allows the entire message to be encrypted. In this way, data in motion does not pose the highest risk in most cases, but rather it is data at rest that often lacks appropriate protection and is of higher risk to individual's personally identifiable information.

3. ***Risk to driver license data at rest***

   Given the technologies currently available to protect data in motion, data "at rest" creates a greater risk to personally identifiable information (PII). Because this data is "stationary", it is much easier to decode and more attractive to potential thieves because it is the centralized database where financial and personally indefinable information normally reside. Data encryption is the first approach considered to secure data that resides in databases and file structures. It limits access to only those individuals who possess the right encryption keys, preventing anyone from accessing the data that doesn't have these keys. Encrypting the data at rest also removes the worry about lost devices or a change in device ownership, as the data on the device remains encrypted and cannot be physically compromised.

   Along with the encryption of any data held on the physical device, there are additional layers of security unique to a digital driver license. The device itself can require a Personal Identification Number (PIN) or biometric marker to access the phone or electronic device. In addition, digital driver license vendors are requiring at least two-factor authentication to prove a person's identity prior to accessing driver license data through the application. With two-factor authentication, a user's identity is verified based on user credentials, like those issued via registration of the application; along with a password and biometric information like a real-time photograph, fingerprint, or signature. Two-factor authentication coupled with encrypting any data stored on the device mitigates the risk to data at rest.

With the advances in wireless communication and encryption technologies, the digital DL/ID application has the potential to be more secure than the physical version. The digital application would allow the DL/ID to be more than a static image or digital reproduction and provide advanced identity authentication, real-time data validation, and enhanced security features, such as digital watermarks, to make counterfeiting and fraud increasingly difficult.

Survey of Other States

At least twelve states, including Texas, have submitted or passed legislation related to digital driver licenses. Most legislation centers on examining the feasibility of using

electronic devices to display DL/ID information digitally. Two states, however, are in the process of implementing digital DL/ID solutions.

The Iowa Department of Transportation completed phase one (1) of a pilot project in late 2015 and is currently in phase two (2) of the pilot. Their approach is to provide a mobile application to authenticate users before accessing the driver license and validates key data elements to ensure the integrity of the credential.

Alabama allows individuals to download a digital version of their driver license into existing digital wallets upon license renewal. Alabama's digital version is a reproduction of the original driver license and does not provide the additional security or validation that a standalone mobile application can provide.

Given the shift of consumers toward mobile computing solutions and the number of states already assessing the use of digital driver licenses, the Department is confident the idea will continue to spread nationally. The following tables summarize current initiatives and legislation in other states:

Initiatives

State	Description	Status
Iowa	Iowa is leading the nation in the digital driver license space completing phase one (1) of a pilot program in 2015. The pilot included approximately 100 Iowa state employees utilizing the digital form of ID. This format requires several layers of security clearance for the user, including a real-time photograph for biometrics, and a unique PIN. The face of the digital license has several unique security features including a rotating 3D image to help prevent counterfeiting and fraud.	Pilot
Alabama	Allows customers the option to download a digital copy of their DL to be stored in Apple Passbook or Google Wallet upon renewal. The customer is still issued a hard copy of their license, and this is strictly a voluntary program. The identification is accepted by police officers during a traffic stop in the state of Alabama and the front and back of the license are displayed in the digital format.	Implemented

Legislation

State	Legislation	Description	Status
Tennessee	HB 556 109th Legislative Session	Authorizes the Department of Safety and Homeland Security to develop an electronic driver license system in which licensees may participate; permits development of a mobile application to display images of driver licenses on cell phones; allows electronic driver licenses to be accepted in lieu of physical driver licenses. - Amends TCA Title 55, Chapter 50.	Passed

State	Legislation	Description	Status
California	AB 221 2015-2016 Regular Session	The Legislature passed a bill authorizing the Department of Motor Vehicles to develop a mobile application to access a digital ID. The bill requires the Department of Motor Vehicles to study the feasibility of creating a digital mobile driver license application for smartphone use. The bill requires the study to consider the security of personal information, compliance with federal standards, and the limitations of available technology.	Passed
Arizona	SB 1237 52nd Legislative Session	The Legislature is considering SB 1237 that directs the AZDOT to develop, pilot or implement virtual or electronic credentials, records, procedures, processes and systems as the director deems necessary to carry out the functions and duties of the department.	Passed Senate, not House
Delaware	SCR 4 148th General Assembly	Legislature passed that directs the Division of Motor Vehicles to study and consider issuing optional digital driver licenses for Delaware motorists. Currently working on implementing a pilot program in which DMV employees use digital licenses.	Passed
Kentucky	HJR 44 2016 Regular Session	The Legislature is considering a resolution that directs the Transportation Cabinet to study the feasibility of a system to allow operators to "display their license on a portable device."	Introduced, did not pass
Illinois	SJR 11 99th Regular Session	The Legislature passed a resolution that directs the Legislature to create an Electronic Driver License Task Force to study the feasibility of a digital/mobile DL.	Passed
New Jersey	Senate Bill 2695 216th Legislature	The Legislature is considering a bill that directs the Motor Vehicle Commission and the Office of Information Technology to submit to the Governor and the Legislature a report concerning the feasibility of electronic driver licenses. There is no deadline for the submittal of the report.	Passed
North Dakota	HCR 3036 Sixty-fourth Assembly	The Legislature is considering a resolution that directs the Legislative Management to study issues related to authorizing and issuing digital driver licenses.	Passed
Utah	HB227 61st Legislature	Requires the Driver License Division and Department of Technology Services to conduct a study and report findings and recommendations regarding electronic driver licenses.	Passed

As indicated above, there are at least eight (8) other states assessing the potential use of digital driver licenses along with existing solutions implemented in Iowa and Alabama.

Study Findings

Various digital driver license solutions are available; however, they remain largely untested as Alabama is the only state to have implemented a solution and Iowa is still in the piloting process. The vendor approach to digital driver licenses, as presented to the Department, includes both customer and law enforcement mobile applications that utilize biometric markers to verify user identity. The customer's mobile application retrieves information from the latest system of record and renders the driver license on the device for display. Transmission of user information between the customer and law enforcement application can occur via Near Field Communication (NFC) or Bluetooth, so an officer does not have to physically touch a user's phone to get the information they need. Ideally, this information could be shared prior to the officer leaving their vehicle; however, this functionality is still in the development phase and is not currently being tested in any state.

As consumers continue to consolidate items of importance on their mobile devices, the natural evolution for the identification credential is to move to a mobile platform. Given the Department's stated goals to combat crime and terrorism and to enhance public safety licensing and regulatory services, the Department recommends any digital driver license solution adopted by the state must provide multi factor user authentication and "backend" license validation to ensure the integrity of the credential.

Benefits of the digital DL/ID

The growth of handheld devices and the proliferation of mobile applications continue to drive consumer adoption of mobile technology and services. These high rates of adoption provide the Department an opportunity to leverage the benefits associated with mobile technology and transform service delivery with significant benefit to customers and the Department. A digital driver license solution has the potential to be more convenient, secure, and provide a foundation for people to eventually prove identity online, reducing fraud. A digital solution could allow for a personalized experience when interacting with private or government entities, requiring less time, money, and effort from customers. Driver license customers could receive real time notifications of coming expiration dates, check license statuses, and pay fees from any mobile device. Driver licenses and identification cards could be renewed and updated remotely, allowing all changes to be reflected immediately with no need for the person to wait for a new card. The digital driver license application could even allow people to manage a range of state issued credentials such as License to Carry, or integrate with other state agencies requiring identity proofing without the person needing to visit multiple state offices.

Conducting a digital DL pilot would allow the Department the ability to identify potential cost saving and revenue opportunities. The use of a digital driver license application could reduce the demand for physically printed cards, card layout changes could be accomplished online, and the Department could electronically reinstate driving privileges or initiate driver license related enforcement actions. In addition, since driver license information could be

accessed and delivered via the application, there is the possibility to expand customer self-service offerings. All of these benefits offer potential cost savings to the Department.

Obstacles to the digital driver license

While most issues preventing implementation of digital driver licenses are being resolved through the technology community, there are obstacles that will need to be addressed before wider adoption can occur. At a federal level, digital driver licenses will need to be addressed within federal "Real ID" requirements. Having both a physical and digital license and multiple digital licenses across many devices may not meet Real ID requirements as they are currently written. As a result, the Transportation Security Administration (TSA) will not currently accommodate a digital license at security checkpoints.

There is also the challenge of digital driver licenses being accepted outside of the issuing state. The American Association of Motor Vehicle Administrators (AAMVA) has a working group of jurisdictional and federal government members currently creating a set of interoperable technology standards and policies to help improve federal and cross state ability to accept, read, and verify digital driver licenses. To support these efforts and address other challenges yet to be uncovered, well-formed state pilots and collaboration with other jurisdictions and industry will be required. However, even if the above obstacles are able to be removed, states will have to continue to issue physical licenses into the foreseeable future due to consumer preference and access to mobile devices.

Recommendations

As consumers continue to use their smartphones and electronic devices as their primary means of interaction, stronger mobile utilization offers the Department an opportunity to make accommodations in service delivery. Moving forward, the Department proposes a phased approach beginning with a technical pilot to assess and prepare existing Department infrastructure to support a digital driver license solution, and to test various use cases that might arise in-state or nationwide. If the technical pilot is successful, it could then be expanded to include a functional pilot involving a subset of customers downloading and utilizing the mobile application. To allow for this pilot, a new statute to the Texas Transportation Code could be added as follows:

Digital Driver License Pilot Program: (a) The department by rule may establish a digital driver license pilot program. The term of the pilot program may not exceed two years, and is dependent upon funding provided by the legislature.

(b) Under the pilot program, the department may enter into a contract with an organization or entity to provide digital driver license services, as described by Subsection (c).

(c) Complete pilot driver license program comprised of one or all of the following phases:

> (i) conduct assessment of the existing Department infrastructure and identify changes required to support implementation of a digital driver license solution;
>
> (ii) upgrade infrastructure according to findings from section (i);

(iii) deploy customer version of mobile driver license application in production environment to internal Department users for use case testing and technical pilot. Digital driver license solution must offer user authentication and verification of driver license to ensure validity;

(iv) evaluate and present results of limited technical pilot to Department. Upon Department approval, expand implementation to small volunteer end user group and implement law enforcement version of the application for functional pilot;

(v) prepare report on pilot results and final recommendations for review by Public Safety Commission and Legislature.

Conclusion

The Texas Driver License and Identification Card are the most widely accepted identity documents within the state. A digital DL/ID solution has the potential to:

- improve the assurance of a person's identity which helps prevents fraud and protects privacy,
- increase the accessibility of services,
- enhance the consumer retail experience, and
- optimize government resources.

However, digital DL/ID solutions are in the early stages of implementation and remain largely unproven. As a result, the Department must move cautiously, methodically, pilot available solutions thoroughly, and assess results before final recommendations can be proposed.