Digital Driver’s Licenses

Facilitator:
Dave Burhop, Deputy Commissioner/CIO, Virginia Department of Motor Vehicles

Presenters:
Mark D. Lowe, Director, Motor Vehicle Division, Iowa Department of Transportation and AAMVA Chair of the Board

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In an age of airline boarding passes, insurance cards and even the money in your wallet now all being available on your smartphone, this session looks at what is ahead for the digital driver’s license.

Applications to manage your personal information, what the future of driver licensing is beginning to look like. Who is piloting and what are they finding? What do the future models look like? How will it impact Law Enforcement?
Digital Driver’s License (dDL)
June 23, 2015
Mark Lowe, Iowa
Q: Why do we carry driver’s licenses in the first place? What does it do for us?

A: It verifies our identity and privileges to others. It tells others, “I am who I say am.”
Q: Why does it work? Why do people accept it?

A: Because we built enough integrity in the process and security in the that people are accepting it as our word that the person holding it is who they claim to be. They’re taking our word for it and using it as a connection to us.
Boiled down: the basic function of the driver’s license is to *physically* carry and convey information from one person to another over space and time.

It’s something we’ve been doing a long time.

...
The challenge is whether we can move beyond a physical credential and create a real time connection, so we’re only moving information over space and not time, with no middleman.

Iowa’s concept:

http://prezi.com/nz5qwuz5diyo/?utm_campaign=share&utm_medium=copy
Q: Why does a picture of a license have to appear on the screen? Why would an end user have to physically look at the screen?

A: Long term, an image should not have to appear and an end user should not have to look at the screen. The key is to use the mobile device as a connection to the person that authorizes a direct connection and flow of information between us and end users.

The concept of making an image appear on a phone is a transitional concept that bridges the transition from looking at something physical to receiving something electronic.
Q: Do we have concerns?

A: Of course!

- Security
- Compatibility with multiple devices
- Acceptance and adoption
- Physically handling other people’s mobile devices
- Privacy of other information on the mobile device
- Adoption of new interoperability standards
Q: Do we let the concerns hold us back?

A: No, of course not! There are always dark, gray areas when we try something new, but taking the first step shines the light farther down the path and illuminates the dark. We can take on the obstacles if we’re willing to take the first steps.
Questions?
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Journey to a Digital Drivers License

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dDL is part of the new identity story

Mobile apps overtake PC Internet usage in U.S.
- CNN Money February 28, 2014

80% Of All Online Adults Now Own A Smartphone, Less Than 10% Use Wearables
- January 12, 2015

Officer, here's my digital driver's license: Iowa may be first state to create ID app

NSTIC announces new round of funding for password-killing projects
- February 12, 2015
Design to fit the user and the times

Next Iteration?

- What is the best form factor for people? (Mobile)
- How and where will they carry it? (Everywhere)
- How can we ensure the dLD holds value over time & is economically viable? (???)
- How can we secure it? (???)
Needs analysis (functional requirements)

- Issuance value chain
- Security
- Freshness
- Authenticity testing
- Interoperability

- Originate issuance in office
- Originate from the device (trust??)
- Originate online
- Anytime opt-in
- Issue upon renewal
- replacements
Needs analysis (functional requirements)

- Issuance value chain
- Security
- Freshness
- Authenticity testing
- Interoperability

- Encrypted movement of data
- Encrypted storage of data
- Visibly recognizable features
- Protected app code addressing mobile platform
• Issuance value chain

• Security

• Freshness

• Authenticity testing

• Interoperability

• Leverage the always-on nature of mobile platform

• Connectivity to source should create a new level of trust (refreshed)

• Degradation of trust when disconnected

Needs analysis (functional requirements)
- Issuance value chain
- Security
- Freshness
- Authenticity testing
- Interoperability

- Enable authentication in mobile app form
- Leverage channels of the mobile device over time
- Visual/camera based tests
- Tests leveraging source availability
• Issuance value chain
• Security
• Freshness
• Authenticity testing
• Interoperability

• Not just a visual use case anymore
• Optical scanning (i.e. coded images)
• Update info anytime (i.e. organ donor…)
• NFC, Bluetooth
• POS integrations yet to hit the market (future)
Introducing dDLs

✓ Recognizable visually compared to physical DL
✓ Offer mobile option for acquiring a dDL (no visits)
✓ Offer opt-in opportunities to people renewing DLs in person
✓ Start focused on today's existing in-person use cases only
✓ Secure issuance process
✓ Verifiable by law enforcement (and others) with scan-able and covert features
The Journey
start simple and mature over time

Initial Offering/Pilot
(serve today’s in-person uses)

Mature Service
(address more sophisticated uses)

Incremental addition of capabilities

Security
• overt features
• Covert features

Link to Source
• Revoke
• Reinstate
• Organ donor changes
• Address change
• Other…

Scan-ability
• Optical (device camera)
• By dedicated devices
• By mobile device
• Using covert/overt features
• Other non-optical means
• QR codes, bar codes…

Interoperability
• QR Codes
• Covert features
• NFC
• Bluetooth
• Future innovations…
Ensuring Success

- Multi-State collaboration

- Engage important relying parties (i.e. law enforcement, retailers, banks, TSA…)

- Design to fit the need/container… not adapt the card to the phone

- Test for use-ability and effectiveness… rinse and repeat

- Include perspectives from AAMVA, NSTIC and others to be sure we have broad considerations in mind as we design.
Protect DMVs natural place in the bigger digital identity world

Today’s digital world suffers from a lack of trust in our identities. With the trusted in-person identity proofing we desperately need, DMVs are poised to fill this gap.
Thank You

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Questions