Kansas Citizens Benefit From Increased Security

Strengthening the driver license issuance process with facial recognition, verification of applicant information, and migration to Central Issuance

AGENCY
Kansas Department of Revenue
Kansas Division of Motor Vehicles

"We are pleased to add verification of applicant data as another layer of security in our enrollment process. We believe our implementation sets best practices that other States can implement in order to provide their citizens a safer, more secure means of issuing driver licenses and IDs, while laying the foundation for compliance with new federal regulations."

— Carmen Alldritt,
Director of the Kansas DMV

KANSAS' STARTING POINT

In 2002, the Kansas legislature enacted Senate Bill No. 559, which amended the State's driver license application law to require added proof of identity when applying for a driver license. Specifically, the law required that, for the purpose of obtaining a driver license, instruction permit, or identification card, an applicant must *"submit proof of age or proof of identity, or both, and on and after July 1, 2003, a thumbprint or other biometric identifier as the Division of Motor Vehicles may require."* The intent of the change was to strengthen security requirements for obtaining driver licenses and non-driver ID cards and, in doing so, deter driver license fraud and identity theft.

This change in legislative requirements meant that Kansas needed to upgrade its driver license enrollment system. The State had been issuing driver licenses over-the-counter (OTC) from local branch offices, requiring applicants to provide two forms of identification (such as a birth certificate, passport, Social Security card, etc.) when applying for a license. "At times," said Alan Anderson, Chief of the Driver License Bureau, "applicants would use someone else's documents to do this." Because Kansas used an instant issuance system, this meant there was no time to verify identity information and applicants using fraudulent proof-of-identity documents were able to walk out of the DMV with a valid driver license.

In addition, because their system required them to store card materials used to produce the licenses in DMV offices, Kansas was also dealing with issues involving the physical security of their driver license enrollment system. "We'd had some thefts and break-ins…daylight thefts…and were worried about staff being hurt," said Carmen Alldritt, Director of the Kansas Division of Motor Vehicles. There were also internal fraud issues involving the disappearance of security card materials that needed to be addressed.

To help the State upgrade their driver license enrollment system and meet the needs for increased security mandated both by Senate Bill No. 559 and their own internal security issues, Kansas turned to Digimarc to provide the solution.

THE DIGIMARC SOLUTION

Working together, the Kansas Department of Revenue, Division of Motor Vehicles and Digimarc Corporation concluded the solution to the State's increased security needs was three-fold:

- Facial Recognition to ensure individuals applying for a driver license or ID card have not already been issued a valid license under another name or identity.

- Verification of Applicant Data to confirm demographic information provided by the applicant, such as name, address, and Social Security number, is genuine.

- Central Issuance production to afford the State additional time to validate the identity of the applicant, reduce the operational burdens and risk, and provide the added security of centrally-controlled secure card materials.

When implemented as part of a central issuance system, biometric applications support reviews of applicant portraits and proof-of-identity information and prevents the issuance of more than one driver license to an individual. Once cleared, applicant driver licenses are immediately processed, while suspects are forwarded to investigators for further review. Prioritized alerts enable the rapid sorting of suspect portraits to identify legitimate applicants so customer service is not impacted.

Facial Recognition Stops Fraud and Protects Identity

Facial recognition-based biometric identification solutions are well-proven and are becoming increasingly desirable to jurisdictions looking for an effective way of detecting applicants who attempt to fraudulently obtain a duplicate driver license or a driver license under a stolen or assumed name. Digimarc worked with Kansas to develop a verification system to specifically meet the needs of Kansas' driver license fraud investigators. With this system, investigators are no longer required to manually sort through tens-of-thousands of facial images in order to detect and investigate cases of suspected identity theft or fraud. Instead, each night biometric data from applicant photos from all applications made during the day are batched and matched up against the State's entire database of nearly 6.6 million other license applicants. The system checks for possible duplicates and produces a list of suspected fraud cases that is available to the investigator the next morning.

If the investigator determines more in-depth investigation is required, s/he uses facial biometric and data verification tools that have been integrated into the custom-designed Investigator's Workstation.
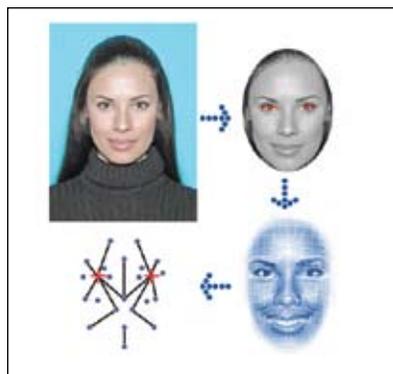
Digimarc verifies an applicant by capturing and comparing their facial features and/or fingerprints with the current DL database.

The investigator can then examine, select, and compare facial images using a variety of computer functions to make the job easier, faster, and more efficient.

Records that clear investigation are released to the central issuance factory to print and mail the driver license to the citizen. With the Kansas "gated issuance" process, those records rejected by the investigator are not manufactured into a driver license until final investigation is resolved.

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> — **Terry Mitchell,** *DMV Investigator*

According to DMV investigator Terry Mitchell, the Digimarc facial recognition system is "catching 12 to 15 cases of suspected fraud weekly," and, since July, 2004, has halted approximately 1,200 cases of attempted identity theft and driver license fraud. Carmen Alldritt, Director of the Kansas Division of Motor Vehicles, stated, "This kind of direct impact on identity security provides a powerful benefit to the citizens of Kansas."

Verification of Applicant Data Confirms Identity

For each DL/ID applicant, the applicant verification system submits key demographic data to an online data service. This data includes the applicant's Social Security number, last name, first name, address,

date of birth and zip code. Data returned for each query includes Yes/No answers to a number of specific questions. These answers are derived from comparing the information submitted by the applicant against a multitude of different public record sources harvested by the online data service. The Digimarc system analyzes the returned information to determine whether a specific applicant should be flagged for further investigation.

Digimarc solutions are designed to crosscheck and verify data supplied by the applicant.

Kansas uses three broad categories of information as indicators to determine whether or not an applicant has supplied correct, truthful information during the application process. They are defined as follows:

• Applicant Social Security number discrepancy

• Applicant personal data discrepancy

• Applicant address discrepancy

The information supplied by an applicant within each of these categories is examined for any discrepancies or irregularity. The discovery of a "wrong" answer flags the operator to examine the results more carefully. To assist with the investigation, operators can drill down further to view additional details within each category.

This means Kansas investigators can check for multiple or stolen identities and multiple license fraud cases–before issuing

a driver license–to ensure the State is only issuing a driver license to an applicant whose identity has been reliably validated.

"We are pleased to add verification of applicant data as another layer of security in our enrollment process," said Carmen Alldritt, Director of the Kansas DMV. "We believe our implementation sets best practices that other States can implement in order to provide their citizens a safer, more secure means of issuing driver licenses and IDs, while laying the foundation for compliance with new federal regulations."

Central Issuance Offers a High-Level of Security

To enable a gated issuance process that allows for verification of identity before a valid ID is issued, Kansas determined to move from an instant, over-the counter (OTC) issuance system to a secure central issuance (CI) system. Unlike an OTC system, which allows applicants to leave the DMV with a valid driver license, a CI system provides investigators with the additional time needed to cross-check and verify applicant information and perform facial recognition comparisons before issuing a driver license. In particular, it allows for the verification of applicant data with third-parties (as required by the Real ID Act) and one-to-many biometric investigation against the State's entire database of facial images. If a suspected case of identity fraud or watch list match is found, or if there are questions concerning legal status or other data presented by the applicant, the investigator can put the production of the driver license "on hold" until the case can be investigated and resolved.

Under the State's new CI system, applicants are issued a temporary driver license, which is good for 60 days. "It bides them through until the new license comes in the mail," said Ms. Alldritt. Licenses are produced

and mailed to the citizen within three business days following their application at the DMV. Citizen response to the new system has been overwhelmingly positive with most commenting favorably about the increased security and identity theft protection afforded by the new process. This response was engendered, in part, by the State's very informative communication campaign explaining the new system, and the positive press they received as a result.

Another advantage to the CI system is that secure card materials are no longer stored at local DMV offices, which has cut down on theft and internal fraud. "The problem [materials theft] disappeared after Day One of the new system," said Terry Mitchell, DMV investigator. It has also relieved the state of the burden of tracking OTC material inventory, allowing branches more time to serve customers.

Central Issuance
Over-The-Counter
Hybrid
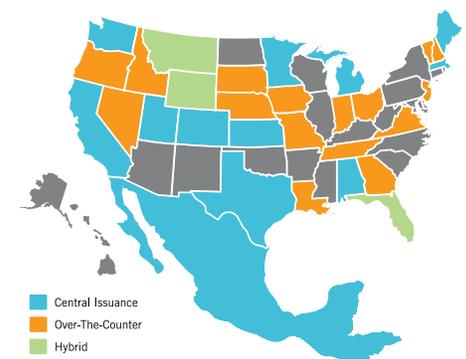
Digimarc operates four secure central issuance factories and produces more than 33 million high-quality credentials each year, including 80% of all centrally issued driver licenses in the U.S.

Finally, in making the transition to a CI system, Kansas took the opportunity to add new linked and layered features to the State's driver license and ID cards, such as multi-colored optical features, ghost images, and digital watermarks that greatly increased the security of the card.

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The one anticipated downside–the increased postage and mailing costs–turned out to be a non-issue that was more than compensated for with operator productivity that increased customer throughput, which went from an average of 14 minutes per applicant to and average of 7 minutes with the CI system.

Today, Kansas staff is more than pleased with the new CI system. System downtime has decreased dramatically, customer service has improved, security has greatly increased, and "Card quality is unbelievable," said Carmen Alldritt.

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We're ready to help

For more information on how Digimarc can help your agency, visit www.digimarc.com or contact Digimarc Corporation at +1.800.344.4627 or govtsales@digimarc.com

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ABOUT DIGIMARC CORPORATION

Digimarc enables trusted relationships through innovative technologies that secure and advance your most important economic and social relationships. Digimarc solutions for government-issued IDs help protect citizen identities, secure commercial transactions, and enhance homeland security and personal safety.

As the leading provider of driver license issuance systems, Digimarc is a trusted partner and expert in meeting the needs of driver license and ID issuers today and into the future. We are the only company focused on the growing demands of this market, and have seen our customers through every major transition in the history of driver licenses, including the move to digital IDs and central issuance systems, biometric secured IDs, and the use of digital watermarking as a critical security feature.

Digimarc solutions help citizens to trust that their identities are secure and that their driver license is a highly valuable credential that will gain them access to a wide range of services and privileges, such as boarding an airplane, purchasing age-restricted products, securing employment, obtaining credit, opening a bank account and more.

For nearly 50 years, Digimarc has provided secure, reliable, best value solutions that enable governments to deter counterfeiting, enhance traffic safety and national security, combat identity theft and fraud, and facilitate the effectiveness of voter ID programs. Digimarc delivers more than 60 million secure identification documents each year for two-thirds of the U.S. States and more than 20 countries worldwide, including the United Kingdom, Canada, Russia and New Zealand.

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