Colorado DRIVES: Serving You Better by Seeing You Less

Category: Digital Government: Government to Citizens

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COLORADO
Governor's Office of
Information Technology
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Executive Summary

Serving You Better by Seeing You Less

In 2015, the Colorado Department of Revenue (DOR), Division of Motor Vehicles (DMV) and the Governor's Office of Information Technology (OIT) embarked on a three-year project called the Colorado Driver License, Record, Identification, and Vehicle Enterprise Solution (DRIVES) to completely replace the more than 30-year-old DMV computer systems into a single commercial off-the-shelf (COTS) integrated system. Beyond software system improvements, DRIVES is a first-in-the-nation model for DMV computer systems to be fully vendor hosted, affording additional capacity for disaster recovery, uptime reliability, and 24/7 service. Colorado and its vendor delivered the project on-time and $17 million under budget.

Among the benefits realized with DRIVES is government serving its customers to provide increased customer service. With DRIVES, interfaces are now automated so system data checks occur in real time instead of a user performing manual checks. These practices significantly reduce opportunity for fraud. DMV data used by external agencies, such as law enforcement, were previously run via batch jobs and database replications. It was possible for law enforcement to not have the most recent information about a person whose identity they were verifying. These connections have been replaced with real-time web services, which give law enforcement (both locally and nationally) and other key government agencies access to real-time information about a Coloradan's identity.

One of the core initiatives of this project was to improve self-service options for customers using online portals and third-party services. Reducing wait times in DMV offices is most easily accomplished by reducing the number of customers who need to visit the DMV in person, so the project also set a goal of providing a wide variety of online transaction options. Since going live with the final project phase in August 2018, the Colorado DMV reduced the number of customers who visit its offices and reduced its overall transaction times. Colorado splits its DMV processes between the state, which issues driver licenses and identification credentials, and counties, which perform vehicle services such as titling and registration.

Because of the improvements offered by implementing greater self-service options through DRIVES:
- State offices have absorbed increased customer volume caused by Colorado's rapidly growing population without adding proportionate additional staff.
- County offices now perform transactions in real-time and the customer need not make multiple trips to the DMV to conduct business.

In addition, the DMV now supports new services for both state and county transactions through third-party vendors that it was unable to support in the past. This translates to direct improvement in the government-to-customer experience and it also allows other third-party systems to improve how they serve customers.

Overall, DRIVES improved self-service DMV customer service experiences in Colorado by:
- Increasing the number of self-service options from seven to thirty five;
- Enabling real-time federal data checks for both driver and vehicle services, eliminating the need for follow-up correspondence and return office visits; and
- Providing a shared service model where authorized third-parties can offer DMV services through websites and apps.

Concept

A 21st-century DMV system needs to help customers resolve issues - not simply process basic transactions. As laws around vehicles, identities, and driving privileges get more complex, customers encounter more complex transactions at the DMV. If the DMV does not adapt to these demands, previous efforts to provide customer self-service options will deteriorate and drive people back to standing in line at the DMV offices.

Prior to the Colorado Department of Revenue (DOR) modernizing its DMV systems, the agency had only three transactions that could be performed online. Further, the transactions offered limited functionality that only served customers with the most simple situation. Any deviation from a standard transaction required customers to physically visit a DMV office to resolve issues. This problem was not due to the lack of a desire to provide more services but to a limitation to the processing capabilities of the mainframe systems for additional customer service interactions.

In 2015, the Colorado DOR reached a point at which it realized that the ability to provide 21st-century services to customers on the front-end required a modernization of the platforms on the backend. Updating core system technologies enable enhanced overall customer service by:

- Allowing the DMV to directly provide more customer service options to the public; and
- Allowing authorized third-party customer service tool vendors to integrate with DMV systems.

Significance

The DMV has face-to-face interactions with a greater breadth of customers on a more frequent basis than any other government agency. Most states require vehicle owners to conduct at least one transaction per year with the DMV, and anyone with a state-issued ID or driver license must renew it every four to five years. Unlike those of other high-volume agencies, such as tax and Medicare agencies, DMV transactions are frequently performed in person instead of through the mail. This means DMVs across the United States must have enough physical locations and staff members to handle this high volume of face-to-face interactions.

It has long been a goal of many DMVs to find alternatives to face-to-face transactions that serve their customers. Decades ago, this process started with DMVs allowing customers in good standing to renew their vehicle registrations by mail. Mail-in renewals reduced lines at DMV offices but still required manual mail processing by DMV employees.

In the 20 years since the proliferation of the internet, many DMVs have allowed more

transactions, such as vehicle registration renewals, to be processed electronically and have reduced some of the steps of mail processing. However, even these solutions only provide basic paths for transaction completion. Often, minor deviations to a standard transaction - such as changes of residence, past-due statements, or changes to automobile insurance providers - can invalidate electronic transactions and force customers to physically stand in line at the DMV offices to resolve issues.

In addition to increasing online customer service capability, DRIVES also enables employees to access a single system to sign in and perform a majority of their work. Previously disconnected systems are now connected through automated interfaces so the system verifies data in real time instead of a user performing manual checks. These practices significantly reduce opportunity for fraud.

DRIVES represents a national milestone in private companies hosting major state computer systems outside government infrastructure. The state's vendor, Fast Enterprises LLC, hosts DRIVES in their private data center. This approach affords the ability to take advantage of scaling and private enterprise capabilities to provide disaster recovery, uptime reliability, and 24/7 service.

Impact

Colorado enabled several government-to-customer improvements through the modernization of its core DMV systems. We are very proud that this project was deployed on time and $17 million under budget.

Under the DRIVES project, the [Colorado DMV](#) focused on several specific activities to improve its customer service. Among these are:

- An improved e-Services portal through the state website; and
- Improved interfaces for third-party vendors.

These two combined solutions present a variety of customer-service options that did not exist before.
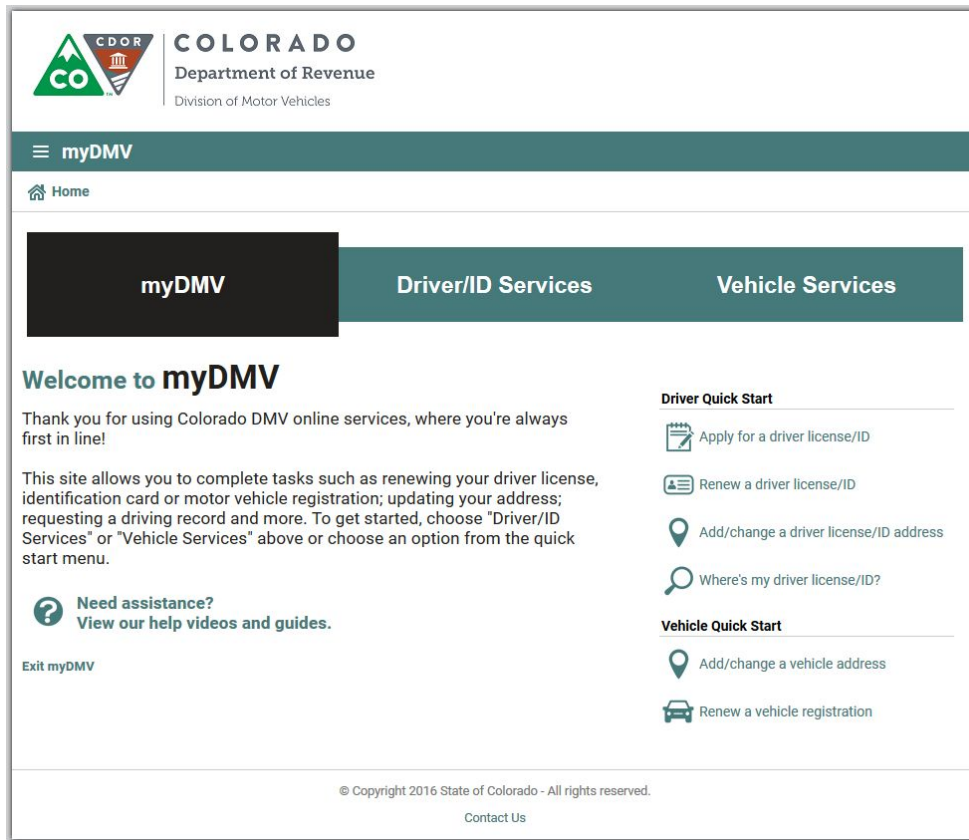
e-Services
Our vendor, Fast Enterprises LLC, has a customer service portal as part of the commercial off-the-shelf (COTS) application it installed. The core DMV application integrates seamlessly with the e-Services application in a way that makes it simple to extend transactions on the internet.
- With the first DRIVES rollout in February 2017, the Colorado DMV improved from having seven to 17 transactions available online. When combined with the additional transactions included in the second DRIVES rollout in August 2018, a total of 35 available transactions are now available with more in the works. Since going live, customers have saved an additional 850,000 trips (over the existing online services) to

the DMV or waiting for mail-in services.

- Last year, the DMV experienced an increase of 100,000 individuals who renewed their driver license or identification card online. As one example of the impact this has in DMV offices, online driver license and identification card renewals saved approximately 6.2 million minutes in FY 2017-18.
- Many of the new e-Services transactions provide complex processing in real time. For example, more than 42,000 customers have paid reinstatement fees online. Upon confirming payment, the system attempts to automatically reinstate the driver's record, reactivating their driving credentials in real-time if there are no other outstanding issues.

Government and selected private agencies outside the DMV also use e-Services to improve their service delivery by accessing a special "third-party access" e-Services portal to confirm information. For example, a health care agency needing to confirm driver license or identification validity can perform such a search without contacting DMV or requiring the customer to visit a DMV. Previously, external agencies relied on static files or direct (often unaudited) access to DMV systems. With DRIVES, these agencies utilize e-Services to retrieve real time information. DRIVES logs all information accesses and the DMV can immediately disable user or agency access if misuse occurs.

In addition to enabling completion of many more online transactions, the DMV also takes advantage of e-Services to speed up in-office transactions. Certain transactions simply must be performed in person at a DMV office, but the Colorado DMV has leveraged e-Services to

optimize these necessary transactions. Using e-Services, customers can now begin the transactions they will later complete in DMV offices. By starting these transactions online, customers eliminate the probability of the two common issues mentioned above. First, the e-Services portal explains the documents required for certain transactions, asking customers questions such as, "Do you have a passport or birth certificate?" At the end of an online transaction, the system generates a list of documents the customer uses as a checklist in preparation for their visit. The second component of these types of e-Services interactions is that the e-Services portal allows customers to enter relevant information online, which eliminates the need for DMV employees to perform data entry while the customer stands at the counter. The system prints barcodes on document checklists allowing DMV employees to scan and prepopulate the customer's information. The clerk need only verify the information, eliminating most of the typing! This process cuts the customer's interaction with the clerk by approximately 40%.

Third-Party Vendor Interfaces
Today's electronic world provides opportunity to access systems through many channels, and DMV systems should be no different. In addition to providing improvements to customer service directly in the new system, the updated DRIVES system also enables third-party vendors greater interaction with DMV. Colorado DRIVES implementation brought increased automation and simplicity to new interface partners, including mobile-application developers, kiosks, and voice-automated systems. In the past, most of these third-party applications did not provide real-time information. Instead, a nightly information load populated data via overnight batch files to synchronize the data between the systems. With DRIVES, these interfaces have been modernized to run real-time web services allowing third-party in-person transactions to take place immediately. The benefits of this approach are numerous – they enable everything from customers renewing their vehicle registrations using kiosks at local grocery stores with the results immediately displayed as Valid in law-enforcement systems to enable two different authorized App providers to offer DMV services through their respective apps.

Impact Summary
Overall, government-to-customer interactions have improved since the Colorado DOR migrated its DMV systems to one modernized system via the DRIVES project. As Colorado's population continues to increase, the need and desire for increased government to customer is critical to serving the population. Because of the success of the Colorado DRIVES project, the DMV is set up for success as it continues integrating future market technologies that improve customer service. The modern DRIVES system is ready to adapt to these emerging technologies.