

Minnesota Vehicle Title and Registration System

December 2020 Quarterly Review

February 2021

Financial Audit Division

OFFICE OF THE LEGISLATIVE AUDITOR

STATE OF MINNESOTA

Financial Audit Division

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February 2021

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Members
Driver and Vehicle Systems Oversight Committee

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Tarek Tomes, Commissioner and State Chief Information Officer Minnesota IT Services

This report represents the results of the Office of the Legislative Auditor's quarterly review of the Vehicle Title and Registration System (VTRS) project through December 1, 2020. Our last project report was issued in September 2020. The objectives of this review were to actively monitor and report on VTRS in accordance with *Laws of Minnesota* 2019, First Special Session, chapter 3, art. 2, sec. 32. The law requires our office to review the VTRS implementation project, stakeholder engagement, and decommissioning of the legacy motor vehicle systems. For each of these areas, the law requires our office to identify any concerns or risks that could jeopardize the project.

This review was conducted by Mark Mathison (IT Audit Director) and Joe Sass (IT Audit Coordinator).

We received the full cooperation of the Department of Public Safety, Minnesota IT Services, and FAST Enterprises staff while performing this quarterly review.

Sincerely,

Lori Leysen, CPA

Deputy Legislative Auditor



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Report Summary

The 2019 Legislature directed the Department of Public Safety (DPS) and Minnesota IT Services (MNIT) to replace Minnesota's Licensing and Registration System (MNLARS) with a vendor-produced software application, following the recommendations of the *Independent Expert Review of MNLARS*. The law outlined an aggressive project timeline for the new Vehicle Title and Registration System (VTRS), with an initial launch by the end of calendar year 2020. The law also required full implementation of VTRS and a complete decommissioning of MNLARS and the legacy motor vehicle systems by the fall of 2021.

The Legislature defined DPS as the owner of VTRS and made the agency responsible for the final decisions on functionality. MNIT is the technical lead on the project and is responsible for the final decisions on the implementation of technology products, services, and staffing. DPS and MNIT awarded the VTRS contract to Fast Enterprises, LLC (FAST) on June 27, 2019, and signed a contract for both software and implementation services on August 7, 2019. FAST also supplied the state's driver licensing system, which went live on October 1, 2018.

In November 2020, DPS, along with MNIT and FAST, (1) stopped using MNLARS, (2) began using the first of two installments of the new Vehicle Title and Registration System, and (3) upgraded the state's driver licensing system. With these changes, and utilizing the FAST platform, DPS now operates a single, unified, driver and vehicle system known as Minnesota Drive (MNDRIVE). DPS, MNIT, and FAST will continue project work through the fall of 2021, as they add additional features to the system and decommission MNLARS and the legacy motor vehicle systems.

The 2019 Legislature dissolved the MNLARS Steering Committee and created the Driver and Vehicle Systems Oversight Committee.² The new committee is responsible for overseeing the VTRS project and the decommissioning of MNLARS and the legacy motor vehicle systems. The law requires DPS and MNIT to provide quarterly updates to the oversight committee. The law also requires the Office of the Legislative Auditor (OLA) to provide quarterly reviews on the project implementation, stakeholder engagement, and MNLARS decommissioning. For each of these areas, the law requires OLA to identify any concerns or risks that could jeopardize the project.

Complex computer system development projects are fraught with technical and nontechnical risks. As the project leaders, DPS and MNIT are responsible for continuously assessing risks and developing appropriate mitigation strategies. DPS and MNIT also are responsible for keeping the Driver and Vehicle Systems Oversight Committee apprised of both project status and risks. In these quarterly reviews, OLA intends to assist the oversight committee by reporting on risks that do not have mitigation strategies that are commensurate with the underlying risks.

² Laws of Minnesota 2019, First Special Session, chapter 3, art. 2, sec. 34.

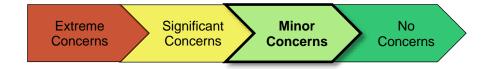
¹ Laws of Minnesota 2019, First Special Session, chapter 3, art. 2, sec. 35.

OLA intends to carry forward and update risks from previous quarters, unless we believe the agencies have sufficiently minimized those risks. We will incorporate newly identified risks, so that each new quarterly report will represent the current condition.

Conclusions

DPS, MNIT, and FAST completed their first major milestone on November 16, 2020, with the initial release of MNDRIVE. The first rollout was completed prior to the legislative deadline and within the defined project budget. Although the rollout was largely successful, the agencies and vendor are working to resolve minor technical problems and functional deficiencies. We discuss the rollout and these issues in this report.

Following the rollout, we noted risks affecting system stakeholders that could impact the success of the project. We also carried forward a risk from our previous quarterly report that requires legislative review and potential action. Finally, we identified an additional concern regarding a shift of work to deputy registrars and the question of adequate compensation. Collectively, OLA assesses these risks and concern as minor given the minimal impact to the project and potential opportunities for mitigation.



Our review found four risks that currently have not been completely mitigated and one project-related concern that requires further examination:

- RISK 1: System performance issues and lack of timely notifications to users about those issues may undermine users' confidence in the system.
- RISK 2: DPS and MNIT have not finalized a contract for ongoing support and maintenance for the new system.
- RISK 3: Certain legislative requirements could negatively impact the VTRS project.
- RISK 4: A lack of timely updates on DPS web pages about system changes could cause confusion and user frustration.
- CONCERN 1: The new system, with new or changing business processes, may renew concerns about the adequacy of deputy registrar compensation.

December 2020 Quarterly Review

Project Status

The VTRS project met its initial implementation date within the defined project timeline and budget. DPS, MNIT, and FAST continue to make changes to the system to resolve some minor defects and deficiencies.

The VTRS project met its initial implementation date, completing the first rollout of VTRS on November 16, 2020. DPS, MNIT, and FAST continue to resolve known system defects and deficiencies, ensuring that the system remains stable and can meet user performance expectations. As the system stabilizes, the project team will shift its focus to providing periodic functionality updates and to planning and development for VTRS Rollout II, currently scheduled for October 1, 2021.

We identified four risks that could impact the long-term success of the system, and one concern that renewed with the newly implemented system. We discuss these items further in the *Risks and Concerns* section:

- RISK 1: System performance issues and lack of timely notifications to users about those issues may undermine users' confidence in the system.
- RISK 2: DPS and MNIT have not finalized a contract for ongoing support and maintenance for the new system.
- RISK 3: Certain legislative requirements could negatively impact the VTRS project.
- RISK 4: A lack of timely updates on DPS web pages about system changes could cause confusion and user frustration.
- CONCERN 1: The new system, with new or changing business processes, may renew concerns about the adequacy of deputy registrar compensation.

Project Plan

The FAST project plan defines major project deliverables and a basic timeline for each project phase. Successfully completing these deliverables, on time, helps provide assurance that the project stays on track. In accordance with the FAST contract, the successful completions of these phases are requirements for scheduled payments. To date, all deliverables have been completed according to the schedule.

The project defined two major milestones. The first milestone, VTRS Rollout I, was completed on November 16, 2020. This milestone—serving as the MNLARS replacement—included system functionality to support vehicle title and registration, dealer electronic vehicle titling and registration, fleet management, vehicle permits,

imaging of vehicle transaction documents, and management of licensed dealers. The second major milestone, VTRS Rollout II, remains on track to meet its scheduled date of October 1, 2021. This rollout includes functionality for the International Fuel Tax Agreement (IFTA) and the International Registration Plan (IRP) for the trucking industry.

Successful completion of these major milestones requires more than delivering system functionality on or before the defined timelines. Success may be a dynamic variable that can be defined in several different ways. Success should, however, consider the extent to which all technical, business, and human objectives have been met. DPS had set a variety of methodologies to help define success. For example, after the rollout on November 16, 2020, DPS evaluated the completeness of approximately 250 requirements defined within the FAST contract.

VTRS Rollout I

Although only a short time has passed since the initial VTRS rollout on November 16, 2020, a variety of agency leaders and stakeholders have been generally pleased with the new system. In its first day of operations, the newly combined system of vehicle titles, registrations, and driver licenses processed more than 21,000 transactions and accounted for more than \$3.2 million in taxes and fee collections.

In general, DPS, MNIT, and FAST have only encountered relatively minor issues or concerns with the new system. We discuss some of the rollout issues on page 7.

Leading up to the VTRS rollout, the project successfully completed its testing, data conversions, and system transition plans. The project had also adequately addressed earlier concerns surrounding prioritization, testing, and conversion that we reported in our September 2020 quarterly review.³ While the project met most of its training objectives, some associated risks remained as the rollout approached.

Prior to the rollout, the project followed best practices, holding two calls whereby key stakeholders, project leads, and executive leaders had the opportunity to state their support for, or express concerns with, moving forward with the rollout—commonly referred to as a go/no-go decision. These calls included:

- 1. Governor Tim Walz.
- 2. DPS's and MNIT's leadership.
- 3. Leaders from the Deputy Registrar Business Owners Association and the Minnesota Deputy Registrars Association.
- 4. Leaders from the Minnesota Automobile Dealers Association.

³ Office of the Legislative Auditor, Financial Audit Division, *Department of Public Safety and Minnesota IT Services – Minnesota Title and Registration System – September 2020 Quarterly Review* (St. Paul, September 10, 2020), https://www.auditor.leg.state.mn.us/fad/pdf/fad20-09.pdf.

Also attending these discussions, as interested parties, were representatives of the Blue Ribbon Council on Information Technology, the Driver and Vehicle Systems Oversight Committee, and the Office of the Legislative Auditor.⁴ Stakeholders and state leaders unanimously decided to move forward with the rollout.

On Friday and Saturday, November 13 and 14, 2020, approximately 20 deputy registrar offices participated in a "soft launch" of the new system. These offices processed a limited number of live transactions in the new system, helping to prove system functionality and identify potential issues before the system rollout to the entire deputy registrar community.

Training

Initial training for MNDRIVE kicked off in mid-June with a series of online self-paced training modules. Stakeholders were encouraged to take an initial assessment to help them gauge their current understanding of the system, allowing them to advance beyond some of the preliminary modules where they may have already been proficient. Beginning in September, DPS and FAST provided additional training content, including job-specific modules, and an environment where all users could practice entering transactions.

Reports on training progress were distributed weekly, which provided project leadership and supervisors with an idea of who—deputy registrars or DPS staff—was or was not keeping up with the training. Project and agency leaders had taken steps to make training a priority.

Despite these efforts, as of November 8, 2020, only approximately one-half of all the deputy registrar offices had completed the required training. With one week remaining before the rollout, we believed that success of the system would greatly depend on individual deputy registrar preparedness and familiarity with the new system. Fortunately, by the rollout date, nearly 88 percent of deputy registrar offices had completed, or nearly completed, the training requirements.

In an effort to determine how prepared deputy registrars were for the first rollout of VTRS, we surveyed 881 staff of the deputy registrars between October 27 and November 3, 2020. Responses from 278 staff showed that although 45 percent ranked themselves as being slightly to completely unprepared for the November 16, 2020, rollout, approximately 78 percent rated the quality of the training they received as average or above average. Additionally, the survey showed that 77 percent were confident that the new system would better meet the state's needs and successfully replace MNLARS. Deputy registrar comments focused on not having enough time to complete the training—or needing more time due to COVID-19, training content being too lengthy, and the desire for in-person training.

⁴ Governor Tim Walz established the Blue Ribbon Council on Information Technology with the signing of Executive Order 19-02 and extended the council through Executive Order 20-77. The members of the council include private and public sector information technology experts who advise the Governor, the Lieutenant Governor, the Minnesota IT Services (MNIT) Commissioner, and the state Legislature on issues relating to cybersecurity, data management and privacy, and modernization projects.

A follow-up discussion with one of the respondents, after the rollout, confirmed that the training met expectations, covering most of the transactions that were encountered during the first week. However, this respondent reiterated that in-person training could have been beneficial, but recognized that COVID-19 had changed the training plan. They also commented that, while the training focused on the steps to complete a transaction within the new VTRS system, the training did not always address business process changes outside of the information technology system. With MNDRIVE introducing more than fifty changes to business processes for the deputy registrars, they commented that additional training that focused on these changes could have been beneficial.

Data Conversion

Previous OLA quarterly reports expressed our concerns leading up to VTRS Rollout I regarding data conversion from MNLARS and the legacy systems. Meetings with the VTRS project team members, along with regular reconciliation reports, provided us with increased confidence that the team had a sound approach to conversion and working with the potentially troublesome data. For some problematic or missing data, team members were also able, as part of the conversion processes, to flag particular records for validation and verification during the next encounter with the vehicle's owner.

While it is still early within the system conversion to draw complete conclusions, the most significant issue related to data conversion from MNLARS to VTRS appears to have been one that affected the ability for deputy registrars to reinstate some impounded vehicles. Although this issue affected less than 0.10 percent of registered vehicles, a deputy registrar had told us that they had turned away some members of the public due to this deficiency. DPS and FAST had fixed this issue shortly after rollout, on November 20, 2020.

A previous OLA audit report identified multiple examples of integrity issues with the base value within MNLARS.⁵ Historically, DPS was limited on making corrections to a vehicle's base value or manufacturer's suggested retail price if it resulted in a registration tax that was more than the previous year. However, recent changes in law allowed DPS to make corrections of errors, provided that it sends written notifications to the owner.⁶ No base values or manufacturer's suggested retail prices were changed as part of the data conversion from MNLARS into VTRS. To correct known errors, DPS manually identified inaccurate base values in MNLARS and made those corrections within MNLARS prior to conversion.

We confirmed that DPS's manual processes had addressed vehicles identified with inaccurate base values in our previous reports. However, with manual processes, there is a greater chance that those processes might not have been consistently applied, potentially missing some inaccurate data. While FAST regularly queries a third-party service provider, based upon the unique vehicle identification number, for

⁵ Office of the Legislative Auditor, Special Review, *MNLARS Transaction Accuracy* (St. Paul, September 25, 2018), 53, https://www.auditor.leg.state.mn.us/sreview/mnlarsaccuracy.pdf.

⁶ Laws of Minnesota 2020, chapter 74, art. 2, sec. 2.

manufacturer's information—including manufacturer's suggested retail price—DPS has not yet developed a process for identifying and correcting potential errors in base values.

While not a specific requirement, it may be beneficial for DPS to identify the total number of vehicles that subsequently required corrections. It may also be beneficial to quantify the cumulative changes in registration taxes that could be anticipated due to its corrections.

System Accessibility

Our previous quarterly report expressed some concerns that DPS and MNIT had not adequately tested if the new system would meet accessibility requirements (i.e., if the system would be usable by persons with certain disabilities). Since our report, the agencies gained confidence that FAST's core platform meets state accessibility standards based upon successful testing performed on the Minnesota Department of Revenue's GenTax System. GenTax is also a FAST product, developed upon the same core platform as VTRS. However, DPS utilizes different web-based functions, such as those used by vehicle dealers and the public, which have yet to be tested. This gap was shared with DPS and MNIT leaders, and plans are underway to perform some additional testing during the second phase of this project.

Rollout Issues - Defects and Deficiencies

With the implementation of a new system the size of VTRS—combined with an upgrade to the driver system—small problems should be expected. Fortunately, the initial rollout of VTRS on November 16, 2020, experienced relatively short-lived and manageable issues. DPS, MNIT, and FAST have been transparent about issues experienced during and after the rollout. Deputy registrars can view lists of current and resolved problems at any time within the MNDRIVE application. This allows system users to identify if the issue that they are experiencing has been previously identified before reporting, view potential solutions, and find out when the project intends to fix or resolve the issue. The project team is also investigating methodologies to provide similar information to its automotive dealer stakeholders.

Deputy Registrars did report issues regarding system latency, slowdowns, and screens that failed to load properly during the week of November 16, 2020, and into the week of November 23, 2020. DPS, MNIT, and FAST identified different sources of these slowdowns:

Scanned images – Upon rollout, approximately two-thirds of deputy registrars
were scanning documents and submitting them electronically within the system.
Some deputy registrars had configured their scanners to produce images at a
quality much higher than necessary, producing large data files that needed to be
transmitted over the network to central computer servers. These large data files
contributed to the system latency or slowdowns experienced during the first two
weeks following rollout. Deputy registrars did not receive guidance regarding
scanning settings related to image quality and file type. Had this guidance been
provided, this issue may have been avoided.

- Number of users Project leaders told us that they saw higher than anticipated numbers of concurrent users within the system after rollout. FAST had stated that the existing driver services infrastructure would be able to handle the additional load from the vehicle transactions. However, shortly after the rollout, MNIT and FAST found the infrastructure to be undersized and found it necessary to add additional technology resources to improve system performance. The number of average concurrent users and load on the system could decrease as DPS off-boards temporary staff and as deputy registrars adjust their staffing levels to meet demand. We anticipate that MNIT and FAST will continue to analyze system load and performance in an effort to fine-tune system resources and balance performance with costs.
- Combined transactions impacting both driver and vehicle services FAST
 identified potential performance issues present within its core system that
 occurred when finalizing certain transactions that bridged both the driver and
 vehicle modules. The vendor is working with its developers in its central office
 to address these issues.

We believe that the agencies and FAST can and will resolve these performance-related issues. However, as these issues occurred, timely notifications to stakeholders did not always occur. Without timely notification of service interruptions, deputy registrars and other stakeholders can be left with uncertainty. We discuss this risk further in Risk 1 on page 15.

Project Budget

The Legislature provided \$52.67 million in a one-time appropriation for the development and implementation of VTRS.⁷ The project continues to be operating under budget with a projected surplus.

As of November 16, 2020, project expenditures totaled approximately \$22.6 million. Payments to FAST continue to make up the largest portion of project expenditures, totaling approximately \$18.9 million. Total expenditures for DVS and MNIT staff (salary, benefits, and overtime) were approximately \$2.2 million. Expenditures for contractors, including deputy registrars participating in the project as subject matter experts and testers, were approximately \$500,000. While technology costs increased over last quarter, they remained significantly under the project's original budget and accounted for \$120,000 of total project expenditures. As discussed in previous VTRS quarterly reports, DPS and MNIT intend to invest in system resiliency to ensure that the system can continue to meet the needs of its various stakeholder groups. We expect that these system resiliency costs will be applied to the technology costs budget. With the completion of Rollout I, we expect approximately \$8 million in additional payments to FAST. Because VTRS Rollout II is smaller in both scope and timeline, payments to FAST for Rollout II are expected to total approximately \$8.5 million.

⁷ Laws of Minnesota 2019, First Special Session, chapter 3, art. 1, sec. 4, subd. 4(c).

⁸ Technology costs include expenditures for technology items, such as server hardware, computer equipment, and software. DPS and MNIT originally budgeted \$3.8 million for these costs.

Temporary Staffing

As discussed in our September 2020 quarterly report, DPS budgeted for temporary staff to reduce the ballooning backlog of MNLARS vehicle title applications prior to VTRS Rollout I.⁹ Since our last report, DPS increased the Fiscal Year 2021 budget for these temporary staff from \$700,000 to approximately \$1.9 million. DPS indicated that this would fund as many as 140 temporary staff through December 31, 2020. However, DPS told us that they were unable to onboard the desired number of temporary staff in early November, and instead, have approximately 100 temporary staff helping to reduce the MNLARS vehicle title application queue. Upon the launch of VTRS, DPS had approximately 76,500 titles in its work queue. DPS anticipated completing the remaining MNLARS title applications in December 2020.

Fiscal Year 2022 Project Budget

Because VTRS Rollout II is scheduled for October 1, 2021, the agencies must plan for and budget project costs for Fiscal Year 2022. Current budget documents for Fiscal Year 2022 only show contractually obligated FAST payments and an estimate of DPS staffing. Based upon these budgets, no MNIT resources or new technologies are currently expected to be needed for the project after July 1, 2021—the beginning of Fiscal Year 2022.

Maintenance and Operational Costs

Proper maintenance and support of VTRS is critical to the long-term success and health of the system. The contract between DPS, MNIT, and FAST outlines expected annual software maintenance costs to be approximately \$2 million for the combined driver and vehicle components. The contract also allows the agencies to customize a support model. The level of support that the agencies choose will affect overall support costs. DPS and MNIT were to choose the final maintenance and support model, and amend its contract with FAST, prior to the first rollout of VTRS. However, as of December 1, 2020, the subsequent amendments to the contract with FAST have not occurred. We discuss this risk further in Risk 2 on page 16.

Additionally, the maintenance and operations budget must include DPS and MNIT staffing costs, as well as technology costs associated with maintaining and supporting the overall system. Planned improvements for system resiliency may also affect overall support costs based on additional server, storage, and connectivity requirements.

Although maintenance and operational support costs are budgeted separately from the VTRS project, DPS and MNIT must ensure that expected costs do not exceed available funds. The Legislature intends for DPS and MNIT to support system maintenance and operations using a dedicated driver and vehicle services technology account funded by technology surcharges, certain fees, and money generated from the sale of driver and

⁹ Office of the Legislative Auditor, Financial Audit Division, *Minnesota Vehicle Title and Registration System – September 2020 Quarterly Review* (St. Paul, September 10, 2020), 14, https://www.auditor.leg.state.mn.us/fad/pdf/fad20-09.pdf.

vehicle record data. ¹⁰ Current forecasts from transaction technology fees anticipate an estimated \$39.8 million in receipts for fiscal years 2022-2023.

DPS and MNIT are developing mechanisms to allocate maintenance and operational support costs to both the driver services and vehicle services business units. Previously, when each had their own separate system, allocation of costs were much simpler. However, now that both the driver and vehicle systems reside within a unified MNDRIVE system, separating costs for technology, staffing, and maintenance and support may be more difficult. We would encourage agency leaders to consider the extent and expected level of accuracy needed for allocation purposes. To help ensure consistency and support for the decisions, the allocation methodologies should be well documented and approved by agency leaders.

Project Reporting

Minnesota Statutes 2020, 16E.0466, subd. 2, requires MNIT to submit comprehensive project portfolio reports—annually by October 1—to the chairs and ranking minority members of the House of Representatives and Senate committees with jurisdiction over state government finances. These reports must itemize:

- 1. The information technology cost associated with the project, including the information technology cost as a percentage of the project's complete budget.
- 2. The status of the information technology components of the project's development.
- 3. The date the information technology components of the project are expected to be completed.
- 4. The projected costs for ongoing support and maintenance of the information technology components after the project is complete.

As we looked to validate VTRS information within the recently released 2020 report, MNIT reminded us that the VTRS project would not be included within this specific legislative report. The statutory requirements are defined to only report projects initiated since the last report. The VTRS project had a start date prior to October 2019, such that it was not captured in the 2020 report, but rather, was included within the 2019 report. The 2019 report included estimated ongoing support and maintenance of the VTRS information technology components to be \$4.25 million annually. While the report does not clarify how the annual amount was derived, we anticipate that this amount did not include DPS and MNIT staffing costs, as well as technology costs associated with maintaining and supporting the overall system.

MNIT is also required, under *Minnesota Statutes* 2020, 16E.01, subd. 3(f), to report to the Legislature all active projects by January 15 of each year. MNIT indicated that the status of the VTRS project will be included within its January 2021 report.

¹⁰ Laws of Minnesota 2019, First Special Session, chapter 3, art 2.

Stakeholder Engagement

DPS continued engaging key stakeholders in project testing, training, change management, and rollout activities.

DPS serves a broad variety of stakeholder groups. Within these groups exists great diversity, such as among the state's 174 deputy registrar offices, or between large, franchised, chain, and small independent vehicle dealers. Therefore, a single business process or solution may not be ideal for all stakeholders. To help ensure inclusiveness of its stakeholders, DPS has taken steps to obtain feedback from its wide array of stakeholders, such as by including subject matter experts (SMEs) from deputy registrars and the Minnesota Automobile Dealers Association within the project, and by continuing to provide communication updates on the project.

Due to COVID-19, VTRS stakeholder engagement activities remained online throughout Rollout I. This included online training modules, a practice learning environment, and MNDRIVE Minute webinars. In our survey of deputy registrars, some expressed desire for in-person training. As the project shifted from the development and testing stages to the final go-live preparations with its first rollout, stakeholder engagement focused on communicating system and business process changes, as well as logistics for launch preparation and rollout.

Deputy Registrars

In preparation for VTRS Rollout I, DPS drafted changes to its Deputy Registrar Appointee Agreement and gathered stakeholder feedback on the proposed changes. The new agreement includes language describing a requirement to use scanners to digitize vehicle transaction documents at the point of acceptance in order to improve the timeliness of the issuance process. The agreement also introduced a requirement for deputy registrars to purchase and utilize commercial-quality laser printers capable of printing on specialized materials for temporary vehicle permits. We had reported last quarter that DPS had only finalized about two-thirds of the agreements. As of November 24, 2020, DPS finalized nearly 90 percent of the agreements and was working with deputy registrars to finalize the remaining outstanding agreements.

DPS had engaged staff from four deputy registrar offices as project subject matter experts. These deputy registrar SMEs brought a wealth of field experience and knowledge to the project. However, prior to Rollout I, three of the four deputy registrar SMEs had left the project to pursue other opportunities. The loss of these key persons not only impacted the availability of resources leading up to the rollout, but may also have caused some long-term impact on the project, as these deputy registrars helped to make decisions affecting business processes. While these SME's are not as critical to the second rollout of VTRS, without these deputy registrars present to justify and support system decisions to their fellow deputy registrars, acceptance of the system or specific processes may be more challenging.

For VTRS Rollout II, a limited number of deputy registrars process IFTA and IRP trucking industry transactions. DPS plans to work with these deputy registrars as the project moves towards that next major rollout.

With the rollout of VTRS, we have encountered increased comments regarding the shift of work from the backend (previously performed by DPS) to the front end (now performed by deputy registrars). Inevitably, this raises concerns about the adequacy of compensation. While this concern does not impose a direct risk to the VTRS project, the changes from the project implementation may require DPS and the Legislature to respond to these concerns. We discuss this further on page 20.

Vehicle Dealers

VTRS Rollout I created changes in business process and system usage for approximately 3,500 vehicle dealers across the state. Despite these changes, DPS has reported seeing high numbers of vehicle title and permit applications in the first two weeks following rollout. However, DPS also noted that a small number of dealers had not yet registered a user in the system. To help ease the transition for dealers, DPS decided to gradually phase in new requirements and processes for issuing temporary vehicle permits. While delaying this requirement was beneficial for dealers because it allowed them to deplete stock of the existing yellow temporary vehicle permit forms and acclimate to the new system, dealers needed to begin using VTRS to issue temporary vehicle permits by January 1, 2021. While this delay was instituted to benefit dealers, the current law did not give DPS the leeway to delay the permit requirement. We discuss this risk further in Risk 3 on page 16.

A limited number of dealers have begun using the system's Electronic Vehicle Title and Registration (EVTR) functionality as part of a pilot to submit transactions directly from their dealer management systems, eliminating the need for manual, paper-based forms, and double entry by deputy registrars. DPS plans to expand the number of dealers and software vendors utilizing EVTR in January 2021. While this is a positive move for all parties involved, we encourage DPS to cautiously expand the user-base and ensure that all software vendors have gone through full testing and review.

In recent governance meetings, representatives from the Minnesota Automobile Dealers Association have praised DPS and the project team for its engagements and interactions, noting drastic improvements from the MNLARS project.

Law Enforcement

Leading up to the November 16, 2020, rollout date, DPS continued its efforts to engage with representatives from the law enforcement community. DPS worked with its Bureau of Criminal Apprehension (BCA) division to ensure that law enforcement officers understood the impacts of the rollout, particularly related to the phased transition to the new temporary vehicle permits and a behind-the-scenes shift from using MNLARS data to MNDRIVE data. After the rollout, a BCA representative stated that there were no significant issues affecting law enforcement and their access to data.

Trucking Industry

VTRS Rollout II focuses on functionality for the International Fuel Tax Agreement (IFTA) and the International Registration Plan (IRP) for the trucking industry, further consolidating DPS's disparate legacy systems into MNDRIVE. The MNDRIVE Program Director intends to work with the Minnesota Trucking Association, similarly to the engagements with other stakeholder groups prior to Rollout I.

MNLARS and Legacy Systems Decommissioning

MNIT appears ready to begin decommissioning major components of MNLARS. However, some minor decommissioning tasks were overlooked as part of the system transition.

The Legislature directed DPS and MNIT to fully decommission MNLARS and the remaining legacy systems by the fall of 2021. MNIT has decommissioning plans in place and appears ready to begin retiring the systems replaced by VTRS Rollout I after a short transition period confirms the success of the rollout. MNIT indicated that they will be performing reviews of its decommissioning plans to ensure that they contain sufficient detail. We plan to review the decommissioning activities in greater detail in future quarterly reports as MNIT begins the work to retire MNLARS and the other legacy systems.

While most decommissioning work will begin after a transition period, some decommissioning needed to occur as part of the system transition. For example, the project team needed to implement procedures to prevent inappropriate use of its legacy systems, ensuring that, as of November 16, 2020, all new transactions are processed through MNDRIVE. Steps also needed to be taken to remove obsolete content and references from web-based resources. However, we noted that some DPS web pages were not timely updated and contained outdated information, potentially leading to stakeholder confusion. We discuss this risk further in Risk 4 on page 19.



Risks and Concerns

To conduct our review, we interviewed representatives from DPS, MNIT, FAST, and deputy registrars. We surveyed deputy registrars and attended DPS stakeholder meetings and calls. We also reviewed project documents, including project risk logs and mitigation strategies. Finally, we discussed project risks with the vendor that was selected to perform the statutorily required external risk assessment.

Based on our work, we identified four risk areas that collectively pose a minor risk to the VTRS project. We also make note of one concern that was revived with the system implementation. It is important to note that DPS and MNIT are actively managing many technical and nontechnical project risks. The items discussed in this section are those risks and concerns that we believe need a more thorough assessment and/or mitigation strategy.

Project Risks

RISK 1: System performance issues and lack of timely notifications to users about those issues may undermine users' confidence in the system.

This risk is new for this quarter.

During the first two weeks of operation, some system performance issues led MNDRIVE users to experience latency, slowdowns, and screens that did not properly load data. While minor system performance issues can occasionally be expected, it is essential that when system issues do occur, appropriate stakeholders should be notified at the start, upon resolution, and, if necessary, with regular status updates. However, in some instances, DPS communications did not follow standardized incident notification processes, resulting in missed or untimely notifications.

For MNLARS, legislators required DPS and MNIT to produce a "communications plan for transparent reporting on MNLARS outages and slowdowns to system stakeholders." The communications plan developed by agencies identified that an initial stakeholder notification should be sent "as soon as possible," with updates "every 60 minutes until resolution." Upon full restoration of the service, the plan notes that a final resolution notification should be sent to stakeholders, including a "root cause analysis, total impact, and any additional information regarding the service outage or slowdown." The notification procedure as developed by DPS and MNIT served to provide stakeholders with valuable and necessary information affecting their ability to

¹¹ Laws of Minnesota 2018, chapter 101, sec. 2, subd. 2.

¹² Department of Public Safety and Minnesota IT Services, *MNLARS Quarterly Update*, *April 30*, *2018* (St. Paul, April 30, 2018), 27, https://mn.gov/mnit/assets/mnlars-quarterly-update-4-30-18_tcm38 -338277.pdf.

perform business transactions on behalf of DPS, reinforcing the mutual partnership between DPS and its stakeholders.

Upon the launch of MNDRIVE, DPS, MNIT, and FAST had not continued to follow these procedures. Rather, in some cases, when problems occurred, the MNDRIVE administrators utilized functionality within the FAST product to send broadcast notices to those actively using the system. These communications, however, were missed by a variety of stakeholders, and may not be effective if the system is not available.

Late or missing notifications can undermine user confidence in both the MNDRIVE system and their partnership with DPS. We recommend that DPS, MNIT, and FAST supplement its broadcast notifications with processes that adhere to industry best practices.

The MNDRIVE Program Director is aware of these concerns and is putting procedures in place to ensure that timely notifications are sent to stakeholders.

RISK 2: DPS and MNIT have not finalized a contract for ongoing support and maintenance for the new system.

This risk is new for this quarter.

The initial contract between DPS, MNIT, and FAST—for the configuration and integration of VTRS—provided options for the state to select, and lock into pricing, support and maintenance for three years after the completion of VTRS Rollout II. Per the terms within the agreement:

The State shall incorporate its selected support plan and associated fees via amendment to this Contract no later than the Rollout 1 go-live date.

Although DPS and MNIT had internally finalized its support and maintenance model in September 2020, they did not formalize this internal agreement with FAST before the VTRS Rollout I go-live date. While the state has until October 2021 to procure future support and maintenance from FAST, options and pricing may now be different. We recommend that DPS and MNIT contract for support and maintenance before rolling out the second phase of VTRS.

RISK 3: Certain legislative requirements could negatively impact the VTRS project.

This risk has been carried forward from last quarter.

Certain regulations have the potential to impact the project's timelines and budget. In some cases, however, changes introduced by VTRS may conflict with current laws. Legislative action or attention may be required to address these potential risks.

REAL ID

The United States Department of Homeland Security delayed the REAL ID enforcement deadline to October 1, 2021.¹³ This provided DPS with one additional year to provide Minnesotans with REAL ID compliant driver licenses and identification cards, to be used before they are allowed to board a commercial aircraft or access certain federal facilities. In late March 2020, the Legislature also provided DPS with \$2.4 million to hire temporary staff in order to reduce the turnaround time for driver licenses and identification cards to 45 days. Given the extended timeline and additional funding, risks associated with REAL ID were mitigated for the first rollout of the system. However, given that money for temporary staff was only available until January 31, 2021, and expired eight months before the new REAL ID enforcement deadline, the risks of a surge in workloads, and the potential impact to the project, may have been pushed to the second phase of the project. OLA will continue to work with the agency to monitor this risk.

Self-Service Report

The 2019 Legislature directed DPS to examine ways in which the vehicle and driver systems could include self-service options. However, the law does not include a due date for DPS's report, nor does it require implementation of self-service as part of the VTRS project. Rather, the law simply requires DPS to conduct research and report its findings to the Driver and Vehicle Systems Oversight Committee.

As of December 1, 2020, DPS had not yet reported to the oversight committee, but it had researched ways to satisfy this requirement and had a report draft nearly completed. If this report is finalized and submitted to the oversight committee prior to the full implementation of VTRS, the committee will need to carefully consider how adding self-service functionality prior to Rollout II may affect the VTRS project scope, timeline, and budget.¹⁴

Temporary Vehicle Permits

Rollout I of VTRS included a shift for vehicle dealers from paper-based processes to online system-based data entry. This includes a new format for temporary vehicle permits that is generated by and printed out of VTRS. This new format, which is printed on durable paper and mounts in the license plate holder, replaces the previous yellow forms that hung in the left side of a vehicle's rear window until the owner received new license plates and registration stickers. The new format offers several advantages to law enforcement. However, dealers must obtain the new paper, ensure that they have a compatible laser printer, and be proficient in using VTRS. Because of this change, DPS

¹³ See the REAL ID Act of 2005—Title II, Division B of the Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Tsunami Relief, Public Law 109-13, 119 Stat. 231, 302 (May 11, 2005), codified as 49 *U.S. Code*, sec. 30301 (2006). For information on the enforcement deadline, see 85 *Federal Register*, pp. 23 and 205 (2020).

¹⁴ The Department of Public Safety submitted its research report to the Driver and Vehicle Systems Oversight Committee on December 14, 2020.

sought and obtained a change to the law that define temporary permits. However, the effective date of those changes in law conflicted with VTRS project plans.

In an effort to ease the transition to VTRS, particularly for its many small or independent dealers, DPS delayed requiring dealers to use the new permits generated out of the system until January 1, 2021, which allowed dealers to deplete their current stock of temporary permit forms and gave them additional time to learn and adjust to VTRS. However, recent changes in law, initiated by DPS, required these temporary permits to be placed where the rear license plate would normally be found on January 1, 2021, or on the date of VTRS Rollout I, whichever occurred first. ¹⁵

The law did not appear to give DPS the leeway to phase-in the new temporary vehicle permit format and placement. Instead, it was required "upon the initial deployment" of VTRS on November 16, 2020. DPS leadership was aware of this conflict and, we are told, have informed some members of the Legislature.

Federal Odometer Disclosure Regulation

State odometer disclosure laws do not accurately reflect federal regulations. State and federal laws require disclosure of the true mileage of a vehicle upon transfer to a new owner. Current Minnesota law dictates that, when making a written disclosure, an individual transferring a motor vehicle must adhere to specific federal regulations, as amended through October 1, 1998. However, in 2019, updates were made to the applicable federal regulations that have not yet been recognized by Minnesota statutes. Other amendments made to the federal regulations since 1998, which do not pose significant risk to the project, have also not been reflected in state law.

The 2019 federal updates became effective January 1, 2021, and require mileage disclosures for 20 years for vehicles manufactured during or after 2011. Previous requirements only required ten years of disclosure.¹⁷

Because these federal changes affected all states, FAST had modified its core system to adhere to the federal regulation for all of its customers. The MNDRIVE Program Director told us that, although MNDRIVE could be configured to align with state law, DPS plans to adhere to the federal regulation.

Although DPS sought modifications to the state law during the 2020 legislative special sessions, the law was not amended. We recommend that DPS continue to work with the Legislature to align state odometer disclosure laws with federal regulations.

Online Driver License Knowledge Testing Software

Legislation enacted in July 2020 required DPS to implement online driver license knowledge testing software by November 1, 2020, and allowed DPS to use up to \$450,000 from the VTRS project funding appropriation for this purpose. Within our

¹⁸ Laws of Minnesota 2020, Second Special Session, chapter 2, sec. 2.

¹⁵ Laws of Minnesota 2020, chapter 100, sec. 6.

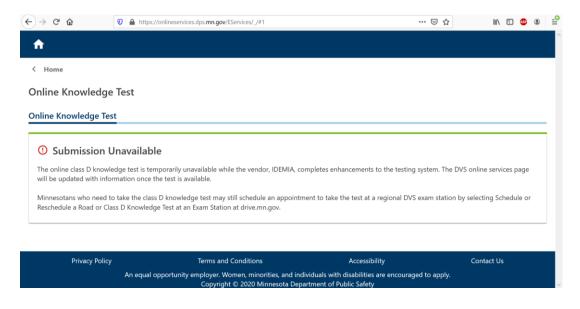
¹⁶ Minnesota Statutes 2020, 325E.15.

¹⁷ 49 CFR, sec. 580 (2019).

last quarterly report, we cautioned that this new requirement, with a deadline shortly before the major release of VTRS, could pose risks and challenges.

Although DPS worked with its vendors to deploy a solution on October 8, 2020—nearly one month before the November 1, 2020, deadline—that solution required additional development to address some business and security needs. DPS disabled this service on November 2, 2020, and it remained under development and unavailable as of December 1, 2020.¹⁹ OLA will continue to work with the agency to monitor this risk.

Exhibit 1: DPS Web Page Notifies Visitors that its Online Knowledge Testing is Temporarily Unavailable



SOURCE: Minnesota Department of Public Safety website, accessed December 1, 2020.

RISK 4: A lack of timely updates on DPS web pages about system changes could cause confusion and user frustration.

This risk is new for this quarter.

After VTRS Rollout I, DPS had updated most of its website to reference the new system and to provide hyperlinks to the public and to dealer-specific online portals. However, as of December 1, 2020, we noted that some DPS web pages contained obsolete references, potentially leading to stakeholder confusion. Most significantly, the DPS Driver and Vehicle Services homepage contained a hyperlink to a Motor Vehicle Dealers information page that consisted of outdated and obsolete information. We also found that the legacy online portal, Driver and Vehicle Services (DVS) E-Support, was still available via its

¹⁹ DPS and its vendors reactivated the service and made it available to the public on December 15, 2020.

vanity URLs and contained no message stating that the system was in read-only mode or being decommissioned.²⁰

Because some of the website addresses had not complied with MNIT's architectural standard—by using ".org" domains rather than standardized "mn.gov" or "state.mn.us" domains—it is plausible that they were overlooked during the update process.

DPS should review its website to ensure that each of its web pages contain up-to-date information for stakeholders. Additionally, DPS's vanity URLs should forward internet traffic to its new systems. The legacy system portals should be either disabled or, if kept online, be read-only information resources with highly visible statements notifying users that the system has been replaced and will be decommissioned, and provide links to the current system. Finally, use of internet domains and web addresses outside of standardized architecture should be limited.

Additional Concern

CONCERN 1: The new system, with new or changing business processes, may renew concerns about the adequacy of deputy registrar compensation.

This concern is new for this quarter.

With the previous MNLARS system, deputy registrars sought to increase fees to help compensate for an overall increase in the average time needed to complete transactions. The rollout of MNDRIVE brings renewed comments from deputy registrars regarding the shift of work from the backend (previously performed by DPS) to the front end (now performed by deputy registrars). Deputy registrars contend that, while MNDRIVE should make the review and approval processes performed by DPS more efficient, deputy registrars are now shouldering more of the burden of the work on data entry and scanning. Moreover, deputy registrars have stated that MNDRIVE introduces more clicks, more entry screens, and subsequently, more time into their process.

When we put forth recommendations in a previous MNLARS quarterly report for DPS to consider having deputy registrars scan documents—which DPS provided as an option for deputy registrars beginning with the rollout of its new system—we acknowledged that this may increase the workload for deputy registrars. We further suggested that DPS should study the merits of shifting more work to deputy registrars.²² As part of its

²⁰ Vanity URLs are simplified website addresses, usually used to redirect visitors from one location to another and meant to be descriptive and memorable. For example, the DPS E-Support portal was available at both dvsesupport.org and mndvsesupport.org.

²¹ Minnesota House of Representatives – Session Daily, "Still waiting on aid from state, registrars ask for fee increases," May 19, 2019, https://www.house.mn/SessionDaily/Story/13790, accessed December 1, 2020.

²² Office of the Legislative Auditor, Financial Audit Division, *Department of Public Safety and Minnesota IT Services – MNLARS Quarterly Report Verification – Title Backlogs and System Funding* (St. Paul, April 3, 2019), 12, https://www.auditor.leg.state.mn.us/fad/pdf/fad1907.pdf.

decision to change its scanning processes, some project team members had suggested that scanning could ultimately save time and money for deputy registrars.

While it may still be too early in the transition period to accurately assess how the new system and processes may change the levels of work effort, it will be important for DPS to begin planning for how this can be achieved once the work stabilizes. Key Performance Indicators (KPIs) and other methodologies that can assist with managing productivity and measuring the levels of effort for different types of transactions and business processes should be considered.

With the FAST solution, MNDRIVE introduces additional reporting functionality that enables DPS to better capture transaction metrics for study. While rudimentary reports are currently being used, DPS is planning to develop more robust performance reports. DPS should make this KPI data and reports available to its deputy registrars for their own review and process improvement within their offices. Moreover, DPS should perform independent studies to verify the accuracy of these system metrics. With accurate, objective data, DPS, deputy registrars, and the Legislature can then work to determine if deputy registrar compensation is adequate.

Risk Response from Agencies

OLA discussed the risks within this report with both DPS and MNIT. We have not asked the agencies to prepare a written formal response to these risks, as the project is ongoing and dynamic. The agencies may incorporate some details on risk mitigation strategies within their quarterly reports or during testimony at Driver and Vehicle Systems Oversight Committee meetings.







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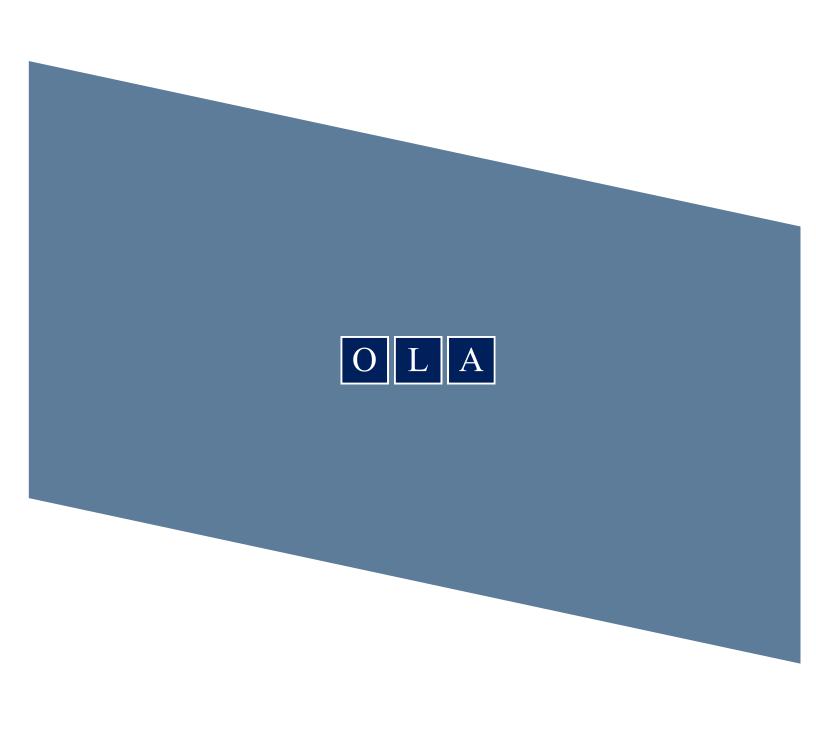
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