Commonwealth of Virginia October 2015

Report to the Governor and the General Assembly of Virginia

# Assessing the Performance of Virginia's DMV

2015





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April 28, 2016

The Honorable John C. Watkins, Chair Joint Legislative Audit and Review Commission General Assembly Building Richmond, Virginia 23219

Dear Senator Watkins:

In 2014, the Joint Legislative Audit and Review Commission (JLARC) passed a resolution directing the staff to review Virginia's Department of Motor Vehicles. Our report, *Assessing the Performance of Virginia's DMV*, was briefed to the Commission and authorized for printing in October 2015.

On behalf of the JLARC study team, I would like to thank DMV staff and leadership and DMV Select agents for their cooperation and assistance with this study.

Sincerely,

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Hal E. Greer Director

Hal E. Greer Director

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#### WHAT WE FOUND

### Virginia's DMV spending and staffing are similar to other states; spending has increased moderately

Virginia's DMV spending (\$40 per licensed driver) and staffing (0.37 staff per 1,000 licensed drivers) are close to the average of other states with similarly structured motor vehicle agencies. DMV's spending increased a moderate one percent annual-

ly, on average, between FY 2005 and FY 2014, adjusted for inflation. The primary driver of this higher spending was information technology (IT).

### DMV's efforts to minimize error and fraud appear reasonable

DMV appears to be taking reasonable action to minimize the possibility of error and fraud in its transactions through rigorous processes it has put in place. These processes reduce the likelihood that identification will be issued based on fraudulent documentation. DMV's processes are consistent with practices recommended by the American Association of Motor Vehicle Administrators.

#### WHY WE DID THIS STUDY

The Joint Legislative Audit and Review Commission (JLARC) adopted a resolution directing staff to review the Department of Motor Vehicles (DMV). The resolution directs staff to address the cost-effectiveness of services and the agency's role in identity management.

#### ABOUT THE DMV

The Virginia Department of Motor Vehicles is responsible for administering the state's motor vehicle and tax-related laws. DMV provides a wide array of services to Virginia residents and businesses: driver's licenses and vehicle registrations and titles are among the most common. DMV has 75 customer service centers located throughout the state. DMV receives no general fund moneys; it is funded through a portion of the revenue it collects. DMV also contracts with other entities that provide services, including 54 DMV Select offices operated by constitutional officers, town governments, and for-profit entities.

#### DMV IT security concerns need to be addressed

Keeping IT systems secure is an ongoing and growing challenge. DMV's systems hold a substantial amount of sensitive information, including social security and credit card numbers. As of October 2015, DMV has yet to comply with key payment card industry standards that were effective as of January 2015. The Auditor of Public Accounts has cited the need for DMV to make a variety of improvements related to IT security. These include disaster recovery preparations, database security controls for two systems, physical controls of a server room, and regular security audits. DMV is aware of these issues and taking several steps to address the audit items.

#### Virginians have adequate access to in-person service

Ninety-five percent of Virginians live within a 30-minute drive of a customer service center (CSC), and nearly 80 percent live within a 15-minute drive. Although CSCs are located in all areas of the state, they tend to be concentrated in highly populated are-

as. Compared to other states with similarly structured motor vehicle agencies, Virginia has slightly more offices per licensed driver but slightly fewer per square mile.

DMV Selects provide additional access to in-person services and are a cost-effective way for DMV to provide these services. Constitutional officers, who receive financial support for facility and staff costs from the state, operate the majority of Selects. Because DMV does not reimburse Selects for operating costs, transactions cost DMV about half as much at a Select compared to a CSC.

Selects have raised concern in recent years about the adequacy of DMV reimbursement, but the case has not been made based on objective data that increases are needed. Selects have sought and obtained additional reimbursement several times within the past decade. All transactions performed at Selects can also be performed through other service options, and many can be performed online.

# Use of Internet for DMV transactions is steadily increasing, but many people still choose more costly in-person services

Although the use of the Internet for transactions is steadily increasing, many customers still obtain services by going to CSCs. Thirty-three percent of all transactions occur via the Internet, up from 16 percent in FY 2011. Not all services can be obtained online, though, because of requirements to take tests or physically show certain documentation.

Despite the efforts of the General Assembly and DMV to encourage customers to use the cheaper alternative service options, nearly one-fifth of all CSC transactions were by customers who could have conducted the transaction through an alternative option. This equates to about 866,000 customers who paid the walk-in fee to use a CSC, mostly to renew a vehicle registration.

Customers who paid the walk-in fee tended to visit a CSC within either the first or the last five days of the month, which is also when CSCs are at their busiest. These customers not only pay more for service, but they increase wait times for customers whose only option is to obtain in-person service at a CSC.

# Customers at larger CSCs in Northern Virginia face substantial wait times before being served

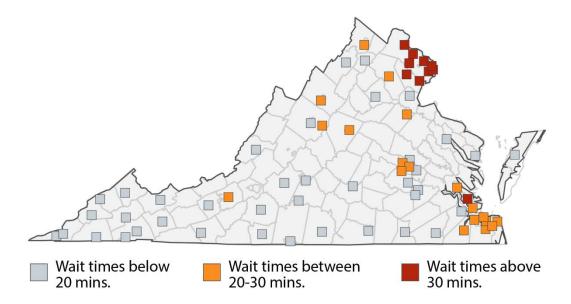
Customers who came to CSCs in FY 2014 waited, on average, 24 minutes after they obtained a customer service ticket. This is longer than DMV's target wait time of 20 minutes, and it does not include the time a customer may spend waiting in line to receive a ticket.

Customers at large CSCs, particularly those in Northern Virginia and those with complex transactions, face substantially longer wait times (see figure). Of the nearly 500,000 customers who waited more than an hour in FY 2014, 80 percent were at large CSCs and half of these were in Northern Virginia. The CSC in Tysons Corner

is the highest volume CSC, averaging 557 customers per day and more than 700 customers on its busiest days. Customers at high volume CSCs in Northern Virginia waited 34 minutes, on average, and 47 minutes at the Arlington CSC.

DMV is beginning to expand its capacity in Northern Virginia by adding two CSCs and relocating several CSCs to larger facilities, which will reduce wait times in the region to some degree. It is unclear, though, by how much this new capacity will reduce wait times.

### Wait times in Northern Virginia and other urban areas often exceed 30 minutes (FY 2014)



Source: JLARC staff analysis of DMV Q-Flow data. Geographic locations provided by Virginia Geographic Information Network.

#### WHAT WE RECOMMEND

#### **Legislative action**

• Direct DMV through the Appropriation Act to develop a proposal to reduce wait times at high volume CSCs, especially in Northern Virginia.

#### **Executive action**

• Develop a plan to ensure IT security audits are performed.

The complete list of recommendations is on page v.

#### **Recommendations Assessing the Performance of Virginia's DMV**

#### **RECOMMENDATION 1**

The Department of Motor Vehicles should identify opportunities to improve training for new staff, to improve guidance for identifying fraud and issuing credentials, and to improve the usability of its policy guidance. The Department of Motor Vehicles should make improvements as identified (Chapter 3, page 21).

#### **RECOMMENDATION 2**

The Department of Motor Vehicles should identify opportunities to improve the quality and accessibility of training for new Select staff and to improve the quality of training for existing Select staff on changes to policies. The Department of Motor Vehicles should make improvements as identified (Chapter 3, page 22).

#### **RECOMMENDATION 3**

The Department of Motor Vehicles should develop a plan to ensure that information security audits required by the Commonwealth Information Security Policy are performed regularly even in the event of staff turnover in information technology security audit positions (Chapter 3, page 24).

#### **RECOMMENDATION 4**

The General Assembly may wish to consider including language in the Appropriation Act to require the Department of Motor Vehicles to develop a proposal to reduce wait times at high volume customer service centers. In developing this proposal, the Department of Motor Vehicles should estimate the costs and benefits associated with options such as (i) closing or regionalizing customer service centers with low customer volume and short wait times that are located near other customer service centers and reallocating resources; (ii) building additional capacity by expanding existing customer service centers, building new ones, or adding DMV Select locations; (iii) installing self-service kiosks; and (iv) expanding the types of transactions for which customers can receive discounts for using alternative services. The Department of Motor Vehicles should submit its proposal to the House and Senate Transportation Committees, the House Appropriations Committee, and the Senate Finance Committee by November 1, 2016 (Chapter 6, page 48).

#### **RECOMMENDATION 5**

The Department of Motor Vehicles should develop and implement a plan to further reduce call center wait times. The plan should consider strategies including (i) converting part-time phone positions to full-time to reduce its call center staff vacancy rate; and (ii) outsourcing some or all of its call center functions to a third party to reduce the call center workload. The Department of Motor Vehicles should submit the plan to the House and Senate Transportation Committees, the House Appropriations Committee, and the Senate Finance Committee by November 1, 2016 (Chapter 7, page 55).

# 1 DMV Operations

**SUMMARY** The Virginia Department of Motor Vehicles (DMV) is responsible for administering the state's motor vehicle and tax-related laws. DMV provides a wide array of services to residents and businesses throughout Virginia; vehicle registrations and titles and driver's licenses are among the most common. Nearly one-third of transactions are performed in person at 75 customer service centers (CSCs) located throughout the state. DMV receives no general fund moneys and derives its funding solely from a portion of the revenue it collects. Like the majority of other states, Virginia provides both driver and vehicle services in one agency. DMV's responsibilities have been expanded over time beyond its original core mission. For example, customers can now obtain birth, death, marriage, and divorce certificates and hunting and fishing licenses at CSCs.

In September 2014, the Joint Legislative Audit and Review Commission (JLARC) adopted a resolution directing a review of the Department of Motor Vehicles (DMV) and a report by December 15, 2015. The resolution directs staff to address multiple items, including the cost-effectiveness of services, satisfaction of customers, and the agency's role in identity management (Appendix A).

To address the study mandate, JLARC staff analyzed data provided by DMV; interviewed DMV staff, customer service center managers, DMV Select agents, staff of several other state agencies, and other stakeholders; surveyed managers of the 75 customer service centers and 54 DMV Select locations; and reviewed studies on a variety of topics related to Virginia's DMV and other states' motor vehicle departments. (See Appendix B for more on the research methods used in this study.)

# DMV administers motor vehicle laws and collects certain tax revenue

DMV is an executive branch agency within the Transportation secretariat. The agency is responsible for administering Virginia's motor vehicle laws, including vehicle titling and registration, driver examination and licensing, monitoring the state's trucking industry, and administering highway safety grants and programs. DMV also collects and distributes transportation-related revenues, such as the fuels tax and the motor vehicle sales and use tax.

#### Vehicle registration is the most common service

DMV processed nearly 17 million transactions for its customers in FY 2014. DMV issued more than six million vehicle registrations—the most common DMV transaction. Other common types of transactions were online record requests, titles, driver's licenses, and compliance-related transactions. These five transactions together accounted for 81 percent of all transactions processed by DMV in FY 2014 (Table 1-1).

...

#### TABLE 1-1

| Type of transaction    |            | # of<br>transactions | % of<br>all transactions |
|------------------------|------------|----------------------|--------------------------|
| Vehicle registrations  |            | 6.6 M                | 39%                      |
| Online record requests |            | 3.1                  | 18                       |
| Titles                 |            | 1.9                  | 12                       |
| Driver's licenses      |            | 1.2                  | 7                        |
| Compliance             |            | 0.8                  | 4                        |
|                        | Subtotal   | 13.6 M               | 81%                      |
|                        | All others | 3.3 M                | 19%                      |
|                        | TOTAL      | 16.9 M               | 100%                     |

#### Vehicle registrations were nearly 40 percent of transactions in FY 2014

Source: JLARC staff analysis of DMV transaction data.

Notes: Beginning July 2016, the volume of driver's license transactions will substantially increase as Virginia drivers begin needing to renew their eight-year licenses. Compliance includes transactions related to reinstatement of driver's licenses after suspension or revocation.

#### DMV customers include individuals, businesses, and governments

DMV serves a variety of customers throughout the state, including Virginia residents, businesses, and state and local governments. DMV's largest customer group comprises individuals who have a Virginia driver's license (5.9 million) or identification card, or own a vehicle that was titled or registered through DMV (7.9 million). Of the nearly five million customers with a transaction in FY 2014, almost all (97.8 percent) were individual customers; approximately two percent were businesses; and 0.04 percent were federal, state, and local governments.

Even though businesses and federal, state, and local governments represent only two percent of DMV customers, they accounted for 15 percent of transactions in FY 2014. The most common transactions for businesses were online record requests and vehicle title or registration transactions.

# Most in-person transactions are performed at customer service centers but some are at DMV Selects

DMV provides a variety of service options including in-person services through CSCs and DMV Selects, online services through DMV's website (more than 40 transactions), phone services through a customer contact center (call center), and mail-in services (Figure 1-1). Nearly one-third of all transactions were performed in one of DMV's 75 CSCs located around the state. Most in-person services were also performed at CSCs. CSCs, and the five mobile customer service centers, or mobile units, are the only service option where customers can obtain the full range of driver and vehicle services. They are also the only DMV locations at which an individual can obtain an original driver's license or learner's permit. State-issued identification cards can be obtained at CSCs, mobile units, or through DMV Connect.

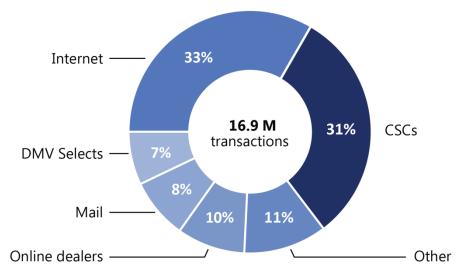
DMV also contracts with other entities that provide services to customers on behalf of DMV. DMV has agreements with motor vehicle dealers, through the Online Dealer program, that grant dealerships authority to issue registration cards, license plates, and decals when they sell vehicles. DMV contracts with motor carriers through the EZ Fleet program to enable these companies to title and register vehicles within their fleet.

#### **DMV** Connect

DMV's service outreach program, DMV Connect, provides services to customers at assisted living facilities and identification cards to incarcerated individuals preparing for release.

DMV Connect uses portable equipment and travel teams of DMV staff.

#### FIGURE 1-1



#### Most transactions occur using the Internet, or in person at CSCs (FY 2014)

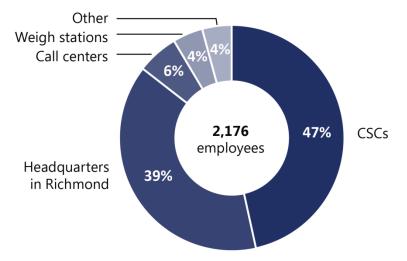
Source: JLARC staff analysis of DMV transaction data.

Note: "Other" includes phone transactions (1%), dealer centers (0.2%), EZ Fleet (0.2%), and several other service types. More than half of Internet transactions were online record requests.

Through the DMV Select program, DMV contracts with constitutional officers, town governments, and for-profit entities that provide customers a subset of services, primarily vehicle titles and registrations. This program has existed since 1928, but the number of locations had declined to 34 as of 2004. DMV subsequently revamped the program and increased the number of DMV Selects to handle routine vehicle transactions, anticipating higher volume in CSCs because of strengthened driver's license requirements. DMV now contracts with 54 Select offices that are located in all regions of the state. These offices processed more than one million transactions in FY 2014.

#### DMV employs 2,200 staff, nearly half at CSCs

DMV employs approximately 2,200 staff, making it the sixth largest state agency in terms of staffing. The majority (nearly 60 percent) of DMV's staff is located in field offices throughout the state, and most other staff are located at DMV headquarters in Richmond (Figure 1-2). Almost half of all staff work at CSCs. Approximately 16 percent of total staff are employed part-time, and two-thirds of the part-time employees work at CSCs.



#### FIGURE 1-2 Almost half of DMV staff work at CSC offices throughout Virginia (2015)

Source: JLARC staff analysis of DMV staffing data.

Notes: Includes total number of full- and part-time, filled staff positions as of March 2015. Other includes commercial driver's license locations, DMV Connect, mobile units, and district law enforcement staff.

#### DMV uses non-general funds for its operations

DMV is funded solely through non-general funds that are derived from a portion of the total revenues it collects. In FY 2014, DMV collected \$2.3 billion in revenue, most of which was from fuels taxes, vehicle sales and use taxes, and registration fees. DMV retains about nine percent of the revenue it collects to fund agency operations. Most (\$1.8 billion) of the revenue collected was remitted to the Commonwealth Transportation Fund for transportation projects, and the remainder was distributed to local governments or other state agencies. The moneys retained are deposited into the Motor Vehicle Special Fund, from which DMV receives appropriations by the General Assembly. DMV's FY 2014 appropriation for operating and capital expenses was \$241 million.

The fees and taxes DMV collects to fund its operations are set by the General Assembly. The largest source of revenue collected in FY 2014 was through vehicle licensing and registration fees (Table 1-2) of which DMV retained 13 percent (\$36.7 million). Other major funding sources include vehicle and driver records fees, driver's license fees, and vehicle titling fees for which DMV retains all or almost all of the revenue collected. Another nine percent of DMV's revenue came from customers who paid late fees (four percent) or reinstatement fees (five percent).

|  |                      |                     | Total revenue             |                      |
|--|----------------------|---------------------|---------------------------|----------------------|
| Revenue source                         | DMV<br>revenue (\$M) | % of DMV<br>revenue | collected<br>by DMV (\$M) | % retained<br>by DMV |
| Vehicle license/registration fee       | \$36.7               | 18%                 | \$279.8                   | 13%                  |
| Vehicle or driver's records fee        | 30.4                 | 15                  | 30.4                      | 100                  |
| Driver's license fee                   | 26.0                 | 12                  | 27.1                      | 95                   |
| Vehicle title fee                      | 25.0                 | 12                  | 25.0                      | 100                  |
| License/registration reinstatement fee | 11.0                 | 5                   | 11.0                      | 100                  |
| Uninsured motorist fee                 | 9.8                  | 5                   | 19.5                      | 50                   |
| Reserved license plate fee             | 9.3                  | 4                   | 9.3                       | 100                  |
| Specialty license plate fee            | 9.0                  | 4                   | 9.0                       | 100                  |
| Late registration renewal fee          | 8.0                  | 4                   | 8.0                       | 100                  |
| Fuels tax                              | 5.9                  | 3                   | 658.1                     | 1                    |
| Subtotal, 10 largest sources           | \$171.1              | 82%                 | \$1,077.2                 | 16%                  |
| Subtotal, other sources                | \$38.1               | 18%                 | \$1,282.1                 | 3%                   |
| Grand total                            | \$209.2              | 100%                | \$2,359.3                 | 9%                   |

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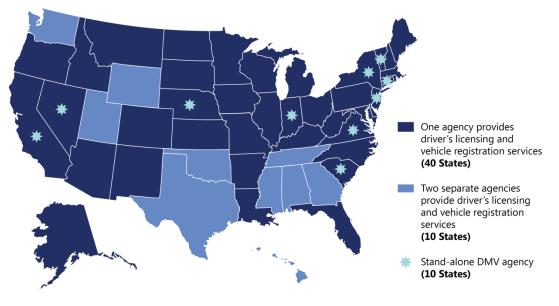
#### TABLE 1-2 DMV generates revenue from fees and taxes (FY 2014)

Source: JLARC staff analysis of revenue data provided by DMV.

Note: Total DMV revenue does not equal total appropriations or spending by DMV. Additional funds are appropriated from the Motor Vehicle Special Fund. The percentage of each source retained by DMV is specified in the Code of Virginia. Almost all revenue not retained by DMV is remitted to the Commonwealth Transportation Fund.

#### FIGURE 1-3

Virginia's DMV is a stand-alone agency that handles driver's licensing and vehicle registration



Source: JLARC staff analysis of other states' Department of Motor Vehicles websites and American Association of Motor Vehicle Administrators (AAMVA) surveys of other states' DMVs. Note: Nine other states have standalone DMVs, and 39 other states handle licensing and registration through a single agency.

# Virginia DMV provides driver's licensing and vehicle registrations like most other states

Like most other states, Virginia provides driver's licensing and vehicle registration in one agency (Figure 1-3). According to staff of the American Association of Motor Vehicle Administrators, a national professional association, this model is efficient and effective as long as there are enough service centers to meet the needs of the population. A key benefit of this model from the state's perspective is that one agency handles all the transactions and has a complete view of the customer's licensure, vehicle, and insurance status. A key benefit from the customer's perspective is the convenience of obtaining these services from one rather than multiple locations. Virginia is one of only 10 states that have a stand-alone agency that performs these functions. Other states have a motor vehicle division performing these functions as a part of a larger multi-function state agency—most often a transportation department.

Virginia's DMV provides many of the same service options as other states. Most other states, including states with a stand-alone agency similar to Virginia, have field offices, provide online services, operate a customer call center, and contract with third parties to provide certain transactions such as vehicle titles and registrations.

Unlike many states, Virginia offers many services through the DMV on behalf of other agencies. Virginia's DMV issues hunting and fishing licenses, E-ZPass transponders, boat registrations, and copies of birth, death, marriage, and divorce certificates. According to staff of the American Association of Motor Vehicle Administrators, other states are working to model Virginia's DMV and partner with other agencies to provide additional services to customers. In states that do not have these partnerships in place, customers have to go to several different government offices in order to conduct as many types of transactions as they could at one CSC in Virginia.

#### DMV's responsibilities have increased over time, mostly through partnerships with other agencies

DMV has assumed increased responsibilities over the last several years (Figure 1-4). In many cases DMV received additional staff and additional revenue, such as fees for processing new transactions or a percentage of the revenue collected, upon assuming new responsibilities. Some functions for which DMV has assumed responsibility are directly related to its mission and to services the agency was already providing. For example, DMV gained authority to issue civil citations for motor carriers that were found in violation of size and weight limits in 2011. DMV assumed responsibility for collecting the wholesale tax on fuels sold in the Northern Virginia and Hampton Roads areas in 2013.

DMV's responsibilities have also expanded over the years beyond its original core mission through several partnerships with other state agencies. DMV staff indicate that these partnerships complement DMV's core services and are an efficient way to provide services to Virginia citizens using existing resources.

#### FIGURE 1-4

| 20 | L1 20                                   | 12 20   | 13 20   | ) <b>14 20</b>                                  | 2016  |
|----|---|---|---|---|---|
|    | Issue civil citations at weigh stations | Issue hunting and fishing licenses & boat registrations | Collect and<br>administer the<br>regional Motor | Issue E-ZPass<br>On-the-Go<br>transponders      | Issue official<br>copies of marriage,<br>death, and divorce |
|    | Operate the state's<br>4-1-1 telephone  |   | Vehicle Fuel<br>Sales Tax                       | Issue official                                  | certificates  |
|    | directory system                        | Ρ   | Provide state crash<br>report data              | copies of birth<br>certificates<br>through CSCs |   |
|    |   |   | Authenticate identities for DSS                 |   | a   |

#### DMV's responsibilities have recently expanded

Source: Interviews with DMV staff, 2013 DMV Transition Manual.

Notes: The Department of Game and Inland Fisheries also processes boat trailer titles and registrations on behalf of DMV. The regional motor vehicle fuel sales tax is paid by distributors in Northern Virginia and Hampton Roads and was previously administered by the Department of Taxation.

Services that DMV provides on behalf of other agencies include

- selling hunting and fishing licenses, and issuing temporary boat registrations, on behalf of the Department of Game and Inland Fisheries;
- issuing copies of birth, marriage, divorce, and death certificates for the Office of Vital Records of the Virginia Department of Health; and
- issuing E-ZPass transponders on behalf of the Virginia Department of Transportation. Plans are underway for DMV to assume responsibility for managing E-ZPass accounts.

Through these partnerships, DMV has sold about 19,000 hunting and fishing licenses and temporary boat registrations, taken in about 35,000 boat title and registration applications from customers, issued about 25,000 E-ZPass transponders, and processed approximately 175,000 birth, death, marriage, and divorce certificates.

DMV and the Health and Human Resources secretariat worked with the Virginia Information Technologies Agency to develop Commonwealth Authentication Services, an electronic identification system, which has been in use by the Department of Social Services since 2013. The system uses information that DMV already maintains on its customers to authenticate the identity of Virginia residents so they can gain access to online services provided by other Virginia state agencies. The goal of the system is to improve the identity authentication process across state agencies, reduce fraud and waste, and make it easier for residents to access online services. DMV staff developed the system, and the Virginia Information Technologies Agency will take over its operation as an "enterprise" system to be used by multiple state agencies. DMV will still be responsible for authenticating resident identities and ensuring that the system contains accurate information about DMV customers.

DMV is developing a partnership with the Office of the Executive Secretary of the Supreme Court of Virginia that will allow DMV to collect delinquent court fines and costs on behalf of courts. DMV will receive payments for fines and fees related to license suspension, and then customers can proceed with the transactions to have their licenses reissued or reinstated.

# 2 DMV Spending

**SUMMARY** DMV spending and staffing per licensed driver seem reasonable compared to similarly structured motor vehicle agencies in other states. Between FY 2005 and FY 2014, DMV's spending increased a moderate one percent annually, on average, adjusted for inflation. The primary driver of spending increases over the decade was IT services—infrastructure and mainframe services. The majority of spending (\$229 million in FY 2014) was on customer service operations. Because of the economies of scale, larger CSCs tend to spend less per transaction than small CSCs.

DMV spent \$229 million in FY 2014. Because this revenue comes solely from fees and taxes paid by Virginia residents and businesses, it is important that DMV use this revenue in an efficient manner. For this study, DMV's spending allocations were examined, along with spending trends over time, both overall and relative to transactions. DMV spending and staffing levels were also compared to spending and staffing by motor vehicle agencies in other states.

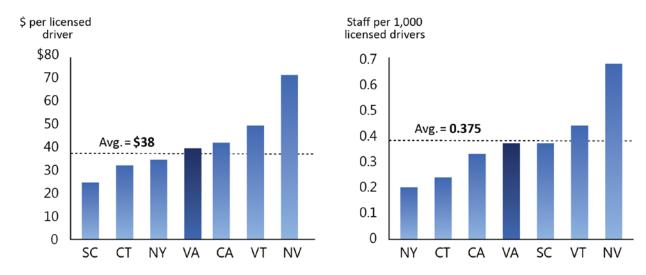
# Virginia DMV spending and staffing are close to the average of other states

Spending and staffing levels at Virginia's DMV seem to fall within a reasonable range compared to spending and staffing levels at motor vehicle agencies in other states that provide both driver and vehicle services. There are many reasons why states may spend more or less than Virginia, including population density, statutory requirements, and specific responsibilities within driver and vehicle services. In 2012 Virginia's DMV spent approximately \$40 per licensed driver. This was slightly above the average of \$38 in states with similar service models, which ranged from a high of \$70 in Nevada to a low of \$25 in South Carolina (Figure 2-1). Virginia's DMV employed more than 2,000 staff, or 0.368 staff per 1,000 licensed drivers. This was just below the average of states with similar agencies, or 0.375 staff per 1,000 licensed drivers.

# Spending increased moderately, primarily due to increases in IT costs

DMV's spending increased moderately over the past decade—about one percent per year, on average, when adjusted for inflation. This equated to a 12 percent or \$25 million increase from FY 2005 to FY 2014. This increase is slightly less than the 15 percent increase across all state agencies (excluding higher education) over the





### Virginia's DMV spending and staffing are close to the average of other states with similar motor vehicle agencies (FY 2012)

Source: JLARC staff analysis of U.S. Department of Transportation, Federal Highway Administration, Highway Statistics, and budget documents from each state.

Notes: States shown have a stand-alone motor vehicle agency responsible for both driver and vehicle services. South Carolina's department is not responsible for motor carrier-related functions; New York's department does not operate fixed weigh stations.

decade. This increase is consistent with the growth in DMV's revenue collections per year during this time period and slightly more than the growth in the number of licensed drivers in Virginia (10 percent).

The largest driver of DMV's spending increase was information technology (IT). Charges to DMV by the Virginia Information Technologies Agency (VITA) were the primary reason for this growth. Staffing—DMV's largest area of spending—and facility costs remained stable during the past decade.

#### IT was major driver of higher DMV spending

IT cost increases accounted for most (70 percent) of DMV's increased spending between FY 2005 and FY 2014 (Figure 2-2). DMV's IT spending increased 74 percent, primarily because of spending growth in three areas:

- charges for IT infrastructure and the VITA mainframe (\$10 million and \$2.5 million increases, respectively);
- cost of consultant services, for planning and developing new IT systems (\$7 million increase); and
- cost of software maintenance (\$2.8 million increase).

#### DMV spending per transaction

DMV's annual spending per transaction fluctuates between \$14 and \$16 (FY 2006–FY 2014). Changes within this range are driven more by changes in the number of transactions DMV processes than by changes in spending, which have been moderate.

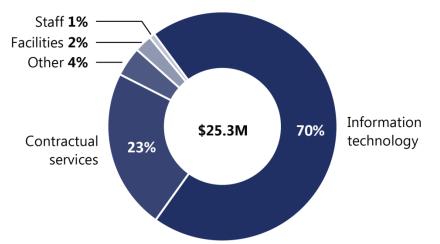


FIGURE 2-2 IT accounted for most of DMV's \$25.3M spending increase (FY 2005–FY 2014)

Source: JLARC staff analysis of expenditure data provided by DMV.

The largest annual percentage increase in IT expenditures (26 percent) was in FY 2009, which was mostly due to a \$6 million increase in VITA infrastructure and mainframe charges for that year. IT expenditures then fluctuated for several years but have increased steadily since FY 2012. Some of the increase in VITA charges in FY 2009 and the fluctuations thereafter occurred because DMV prepays part of its VITA bills for the next fiscal year when funds are available, which increases VI-TA costs in certain years and reduces them the next year. In FY 2009, for example, DMV prepaid VITA \$2.85 million, which accounts for half of the increase in VI-TA infrastructure and mainframe costs that year.

DMV has limited options, at least in the near term, to substantially reduce IT spending without significantly changing service delivery. Over half of DMV's IT budget is for VITA services, and VITA sets the rates for these services. For example, DMV pays VITA to store certain applications and data on VITA's mainframe, which is more than 20 years old. DMV has been trying to transfer its applications and data off the mainframe because the mainframe costs more than using more modern servers and limits DMV's ability to modernize its systems, according to DMV staff. However, because DMV is the largest agency using VITA's mainframe, VITA would likely continue to charge DMV for the mainframe, even if DMV stopped using it. VITA indicated that it would have to substantially increase rates for the smaller agencies that use the mainframe in order to operate the mainframe without the revenue from DMV.

#### Spending on staffing and number of staff have been stable

DMV's largest spending area—staffing—has been relatively stable over time. More than half (53 percent) of DMV's total spending (\$229 million) in FY 2014 was for staff, and spending for staff increased by less than one percent over the past 10 years when adjusted for inflation. Likewise, FTE staffing levels were stable, decreasing one percent from FY 2006 to FY 2015.

Spending on staffing and staffing numbers have both increased in some areas, but the increases have been offset by decreases in other areas. Spending for health insurance increased \$4.7 million (38 percent) from FY 2005 to FY 2014. Decreases in salaries for classified employees (\$2.85 million decrease) and long-term disability insurance (\$1.0 million decrease) offset this increase. Likewise, increases in staffing in certain operational areas, such as law enforcement and vehicle services work centers, were offset by decreases in staffing at CSCs and driver services work centers.

#### Facilities spending has remained stable

Spending on facilities is nine percent of total DMV spending and accounted for just two percent of DMV's total spending increase. Rental costs for leasing 54 customer service centers make up approximately one-third (\$6 million) of DMV facilities costs and 60 percent of CSC facilities costs. The remaining CSC facilities spending was for custodial and maintenance services, utilities, and architectural/engineering services.

DMV's lease costs range from \$36 per square foot in Arlington to \$8 per square foot in Bedford, largely due to regional differences in real estate costs. The eight leased CSCs in Northern Virginia are among the most expensive DMV facilities and represent 30 percent of total annual lease costs.

DMV tends to pay higher rent than other state agencies because CSCs have unique requirements. CSCs need ample parking to accommodate customer volume that ranges from 97 customers per day at small CSCs to 387 per day at large CSCs, on average. CSC locations must have sufficient space for motorcycle testing and access to a safe driving route for road tests. The average rate for CSCs is also skewed by the concentration of CSCs in Northern Virginia, Richmond, and the Hampton Roads areas, where rent is higher. The average cost per square foot across all leased CSCs is \$17, which is higher than the average lease costs (\$14) for all other state agencies. DMV's average lease rate in Northern Virginia exceeds the average for other state offices in Northern Virginia by only \$1 per square foot.

The remaining one-fourth of CSCs are owned by DMV, and most of these are located in higher-cost, urban areas of the state. Thirty-eight percent of the CSCs in Northern Virginia are currently owned (excluding the Pentagon office) and about half in the Hampton Roads area are owned. DMV staff indicate they would prefer to

#### Division of Real Estate Services

Like most state agencies, DMV is required to use the Division of Real Estate Services, which finds rental space, negotiates leases, and collects and submits lease payments on behalf of state agencies. own more facilities in Northern Virginia because rents are high, but it is often not feasible because of the up-front funding that would be required for purchasing or building new facilities. In urban areas, it can be difficult to find facilities with sufficient parking and access to safe driving routes for road tests. (See Appendix C for more information on DMV's process to lease or own CSC facilities.)

#### Majority of DMV spending is for customer service; large CSCs spend less per transaction than small CSCs

By operational area, the majority (\$141 million) of DMV spending in FY 2014 was for customer service operations. This includes spending for DMV's service providers-CSCs, mobile units, DMV Selects, motor carrier weigh stations, and the customer contact call center. It is also for "work centers" at DMV headquarters, which support customer service operations in addition to processing mail and internet transactions.

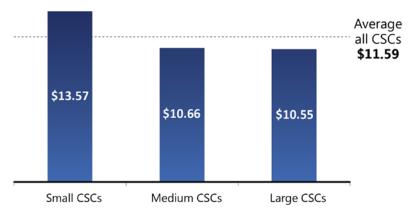
Forty percent of spending on customer service operations (\$57 million) was for CSCs-the service area with the most face-to-face contact with DMV customers. Spending varies widely among CSCs, ranging from \$250,000 for the CSC located in the Pentagon to \$2 million for the CSC in Arlington.

Spending per transaction varies widely across CSCs. Large and medium-size CSCs spend less per transaction than small CSCs due primarily to economies of scale (Figure 2-3). Some small CSCs have very low customer and transaction volumes, but all CSCs are required to maintain at least a minimum staffing level on any given day. In addition to the manager, at least three workers are needed-two to process customer transactions and one to be available for driving tests.

#### CSCs by size

CSCs by size on the basis of customer volume. For purposes of this study, 27 CSCs were categorized as large, 24 as medium, and 24 as small.

#### FIGURE 2-3 Small CSCs generally spend more per transaction than medium and large CSCs (FY 2014)



Source: JLARC staff analysis of expenditure and transaction data provided by DMV.

### 3 Accuracy, Fraud Prevention, and IT Project Management and Security

**SUMMARY** DMV appears to take appropriate action to minimize the possibility that transactions will be processed inaccurately. DMV uses a variety of practices that have been identified as effective by the American Association of Motor Vehicle Administrators to reduce the likelihood of error or fraud and identify inaccurate or improper transactions. These practices include requiring two staff to review and approve documentation to prove a person's identity and legal presence, ongoing reviews and audits by various types of staff to detect errors and fraud, and subjecting staff to criminal background checks prior to being hired. Some CSC managers and Select staff believe that there are opportunities to improve DMV training and guidance. DMV has yet to comply with critical payment card industry standards that became effective in January 2015, and needs to take additional steps to strengthen IT security.

Performing transactions accurately, preventing fraud, and promoting IT security are perhaps the most critical aspects of DMV operations. DMV is charged with authenticating the identity of Virginia residents before they can obtain a learner's permit, driver's license, or identification (ID) card. DMV is also charged with collecting a substantial amount of the state's transportation program revenue through registering vehicles, collecting sales and use taxes from vehicle sales, and other responsibilities. DMV's IT systems, which maintain identifying and financial information (such as credit card numbers), must also be secure to prevent individuals or other entities from illegally obtaining this information.

# DMV's process to issue identification is rigorous and consistent with effective practices

All processes have vulnerabilities; no process can provide total certainty that all transactions will be accurate or fraud will never occur. Processes can be designed, though, to provide confidence that transactions are conducted and credentials are distributed with a high degree of accuracy. The American Association of Motor Vehicle Administrators (AAMVA) has identified certain key processes as being effective. These processes have been developed over time based on responses to previous incidents across the U.S. and in Canada, and incorporating public and private expertise.

#### AAMVA Effective Practices

The American Association of Motor Vehicle Administrators (AAMVA) works with its member jurisdictions to identify practices to help motor vehicle agencies perform their duties effectively, including practices to help motor vehicle agencies prevent and detect fraud.

# DMV's process to issue identification is consistent with AAMVA recommended practices

Driver's licenses and state identification cards are primary sources of identification that are standard and valid nationwide. Because DMV is responsible for issuing these credentials through its CSCs, mobile units, and DMV Connect, it is essential that DMV have proper steps in place to ensure that customers seeking to obtain them present adequate proof of identity and legal status. In the 2001 terrorist attacks in New York and Virginia, several individuals involved held valid identification cards from Virginia and other states. They obtained the Virginia credentials using fraudulent documentation. Since that time, Virginia and all other states have strengthened their requirements.

DMV's verification process for identification is consistent with AAMVA's recommended practices. One key requirement is that at least two staff review and approve documents proving identity and legal presence. This reliance on two staff substantially reduces the potential for staff to help someone fraudulently obtain a driver's license or photo ID because both staff would have to agree to cooperate on fraudulent activity. The customer service representative processing the transaction must review all documents (proving identity, legal presence, Virginia residency, and SSN) for authenticity and enter the information on the customer's application into the MySelect system. A document verifier reviews the application, verifies the authenticity of documents presented as proof of identity and legal presence, and checks information in the system to make sure the information matches.

Another key requirement is that staff approve transactions with a signature, which establishes staff accountability for providing the identification. Both the customer service representative processing the transaction and the document verifier must sign the application.

If the customer service representative and document verifier cannot determine the authenticity of a document used to demonstrate legal presence, they are required to deny the customer the credential or obtain additional assistance. The manager or another document verifier at the CSC or mobile unit can be asked to review the documents. Documents in question can be scanned and sent to the Identification Review work unit at DMV headquarters for further examination. Two-thirds of CSC managers who responded to the JLARC survey reported contacting the work unit at least once a week. On a monthly basis, this work center receives more than 4,500 requests for assistance from CSCs.

# Identification can only be obtained using multiple forms of original documentation

DMV requires that customers present multiple forms of original documentation to CSC staff or mobile unit staff in order to obtain driver's licenses, learner's permits, and photo ID cards (Figure 3-1). This requirement for multiple forms of documen-

**Document verifiers** are experienced staff who have additional training and certification for authenticating documents.

The **Identification Re**view work unit assists CSC, mobile unit, and DMV Connect staff with determining the validity of documents to prove identity, legal presence, and Virginia residency. tation significantly reduces risk of someone fraudulently obtaining credentials. In most cases, customers have to present these documents only once. After a Virginia driver's license or ID card is obtained, customers can present it each time they visit a CSC or mobile unit. However, some customers may have to present these documents again if they

- were not able to obtain the license, permit, or ID card on their first visit (and each subsequent visit until obtained),
- let their license or ID card expire and DMV does not have a current or recent record on file,
- moved outside of Virginia and then moved back,
- never proved legal presence and either let their driver's license or ID card expire or had it revoked or suspended, or
- are in the U.S. temporarily and their limited duration license or ID has expired.

#### FIGURE 3-1

### Customers must present documents to satisfy four criteria to obtain a driver's license, learner's permit, or ID card

| Documents to prove: | Example Documents  |
|---------------------|--|
| Identity ?          | <ul> <li>Birth Certificate</li> <li>Social Security card</li> <li>Photo ID from other state</li> <li>Military ID Card</li> </ul> |
| Legal Presence      | <ul> <li>Birth Certificate</li> <li>U.S. Passport</li> <li>U.S. Certificate of Naturalization</li> </ul>                         |
| Virginia Residency  | <ul> <li>Lease or rental agreement</li> <li>Deed/Mortgage statement</li> <li>Utility bill</li> </ul>                             |
| SSN                 | <ul> <li>Social Security card</li> <li>W-2 form</li> <li>Payroll check stub</li> </ul>   |

Source: JLARC staff review of DMV policy manuals and interviews with DMV staff.

Note: Customers must present two proofs of identity and one proof of legal presence, Virginia residency, and a Social Security number. Proof of a Social Security number is not required for an ID card.

DMV can issue copies of birth certificates, which can be used to prove both identity and legal presence. Customers must present one form of primary identification (such as a driver's license, learner's permit, U.S. passport, or other official state or military photo ID) or two forms of secondary identification (such as certified school records or transcripts issued by a U.S. school or a health care insurance card). Customer service representatives must search the vital records system to find an exact match to the information provided on the customer's application. If a match is found, the CSC manager must review the documentation and the application and grant approval to print the birth certificate by typing their credentials into the automated system. This type of "check" is consistent with AAMVA recommended practices to build features into automated systems that prevent transactions from being completed before the requirements are satisfied.

# DMV uses ongoing and periodic reviews to detect error and fraud

Even the most rigorous processes are not effective all of the time. A comprehensive approach to minimizing errors, therefore, must include efforts to detect transaction errors and fraudulent activities after they occur. These efforts to catch and correct mistakes provide additional confidence in the accuracy of DMV's processes.

DMV's error and fraud detection process includes several steps recommended by AAMVA. Chief among these are routine checks on whether transactions are properly completed, internal audits, and investigations. These routine reviews and more thorough, periodic reviews collectively increase the likelihood that transactions processed incorrectly will be identified and corrected.

# DMV's process to review transactions is consistent with AAMVA recommended practices

DMV routinely reviews transactions for error and fraud using multiple layers of oversight. CSC and Select staff audit transaction records daily to make sure customer applications were properly filled out and signed, information that staff entered into the MySelect system matches information on the customer application, and all documentation is properly accounted for. CSC managers and district managers perform weekly reviews of transaction activity and monthly reviews of financial activity of CSCs. Financial and transaction activity are captured in the MySelect system, including the identity of the customer service representative performing each transaction.

MySelect generates several types of reports that are useful for identifying trends in activity by individual customer service representatives, CSCs, and districts. Some trends, such as an unusually high number of exemptions from the vehicle sales and use tax, may indicate questionable activity. If such a trend is identified, the CSC manager or district manager can investigate further, require additional training for the affected staff, or take disciplinary action.

Staff at DMV headquarters also direct CSCs and Selects to periodically perform quality reviews. These reviews occur throughout the year and may have a broad focus, such as a review of all driver activity during a specified time period, or a more targeted focus, such as a review of issuing birth certificates or E-ZPass transponders several months after CSCs began offering the service. For example, DMV recently reviewed all the transactions that occurred during a week in April 2015. The purpose of the review was to determine whether certain procedures were followed and documents were signed. DMV found that for 97 percent of the driver and vehicle transactions that week, staff followed the procedures and handled the documentation correctly. DMV staff who oversee the quality reviews report that they follow up with CSCs for which errors were identified and may require staff to obtain additional training.

# DMV's process to audit and investigate certain transactions is consistent with AAMVA recommended practices

DMV also conducts audits, and investigations when necessary, of certain transactions. DMV has an Internal Audit Division that, among other responsibilities, is charged with auditing each CSC and Select once every three years. The purpose of these audits is to ensure that revenue transactions are correctly recorded and collected, physical assets, such as computers, are protected and properly used, and building access and security procedures are followed.

DMV also has an Investigation Division with a staff of approximately 70 sworn officers who can make arrests. Having a sizable investigative unit with arrest powers is considered to be an effective practice for helping to both deter and detect fraudulent activity. These investigators have offices within CSCs across the state and are responsible for investigating cases of suspected identity fraud, title fraud, incidents involving agency personnel, and sales and use tax evasion. In calendar year 2014, this division investigated more than 9,000 cases and made more than 600 arrests. More than 250 cases were related to identity fraud or theft and more than 1,300 were related to title investigations, including altered or forged titles. More than 1,200 cases were still active or were referred to other entities for further investigation at the close of 2014.

# DMV's employee training and guidance can be improved to further ensure effectiveness of process

The widely distributed network of employees (75 CSCs, a call center, and five mobile units) and third party agents, such as the 54 DMV Selects, make it important, but also challenging, to ensure all employees are sufficiently trained and have the guidance they need to properly follow the established processes. AAMVA has designated certain activities related to hiring and training that, if followed, make it less likely staff will purposefully or mistakenly fail to execute DMV's processes as intended.

# DMV's human resource policies are consistent with AAMVA recommendations

DMV conducts background checks and has an employee code of conduct. All DMV employees are subject to background checks, and must submit fingerprints as part of the criminal background check. Employees must also follow a code of conduct and a code of professionalism and sign an information security form.

# DMV's training and guidance are detailed and thorough, but some CSC managers report that they need improvement

DMV provides training to CSC and mobile unit employees for each type of transaction they are expected to perform. As recommended by AAMVA, the training is thorough and takes 18 weeks, at a minimum, for staff to be trained to perform transactions. New staff first receive online and then classroom training to learn to process less complex transactions, such as vehicle registrations, address changes, and vehicle and driver transcripts. Staff then begin processing these transactions with the support of coaches. Once they have mastered these transactions, new staff begin training for progressively more complex transactions. This process continues until new staff demonstrate that they can process all transactions.

In their responses to the survey, a majority of CSC managers indicated that training and guidance were effective. However, 17 CSC managers (28 percent) reported that new staff training was only "somewhat" or "slightly effective," or that they were "not sure." Nine managers (15 percent) "neither agreed nor disagreed" that policy manuals and guides to prevent fraud were effective. Three CSC managers (five percent) disagreed that policy manuals and guides to prevent customers from getting credentials without appropriate documentation were effective, and five (eight percent) were unsure. Seven CSC managers (12 percent) did not agree that DMV policies are easy for staff to understand and 14 (24 percent) said they "neither agreed nor disagreed."

One source of frustration among managers appears to be the lack of consolidation of DMV guidance. Instead of one guide for some processes, there are multiple guides that may need to be consulted to complete a single transaction. For example, staff may have to review three separate guides to complete a transaction involving establishment of legal presence.

DMV needs to examine the concerns raised by the CSC managers and consider how training and guidance can be improved to address them. DMV has a procedure review committee that comprises staff from each CSC district and the DMV head-quarters office. This committee should work with CSC managers and with the head-quarters units that develop training and written policies to assess how training for new staff can be improved, and ways policy guidance for identifying fraud and issuing credentials can be strengthened. The committee should also consider how the understandability and clarity of policies can be improved.

#### **RECOMMENDATION 1**

The Department of Motor Vehicles should identify opportunities to improve training for new staff, to improve guidance for identifying fraud and issuing credentials, and to improve the usability of its policy guidance. The Department of Motor Vehicles should make improvements as identified.

# Some Select staff report need for better and more accessible new hire training and better training on DMV policy changes

Because Select offices process a narrower range of transactions, DMV provides Select staff less comprehensive training than CSC staff. When a DMV Select initially opens, Select staff receive one week of classroom training from DMV followed by one week of onsite assistance. When DMV Selects hire new staff, it is the responsibility of the Select office to ensure that they are trained. DMV holds periodic training for new Select staff, but it may not always be offered at a convenient time or location.

Only half of Selects responding to the JLARC survey indicated that they send new staff to training provided by DMV "all" or "most of the time." Some Selects provide training to their own staff. For example, the Lynchburg Select typically provides on-the-job training to new staff. Of the Selects that have sent new staff to training, 75 percent reported the training was extremely or very effective.

Select staff expressed concern about the quality of the training available when DMV policies change and when new policies are made. Thirty percent of Select agents reported training on new policies was only "somewhat effective," while another 16 percent reported it was only "slightly effective." Select staff who responded to the JLARC survey provided a variety of suggestions to help improve training, including

- expanding the time that DMV staff provide onsite training to Select staff when the Select first opens,
- holding conference calls or allowing Select staff to attend some of the meetings for CSC managers when policy changes occur, and
- offering more "hands on" training with step-by-step demonstrations.

DMV staff recently began holding regional workshops for Select staff to provide additional training and assistance to help reduce transaction errors. Most Selects (89 percent) responding to the JLARC survey reported that the training workshops have been extremely or very useful. Despite this progress, the important role that Select staff play in ensuring DMV processes are followed still necessitates additional efforts to improve training available to Select staff. DMV should identify ways to ensure that training for all Select staff is as effective as possible and sufficiently available.

#### **RECOMMENDATION 2**

The Department of Motor Vehicles should identify opportunities to improve the quality and accessibility of training for new Select staff and to improve the quality of training for existing Select staff on changes to policies. The Department of Motor Vehicles should make improvements as identified.

# DMV can improve IT project management and security

DMV manages a substantial amount of sensitive information (such as social security numbers and credit card numbers) on its business and individual customers across more than 30 systems. Some of the systems are housed at VITA, such as the primary mainframe application system used by CSCs that stores customer information, and others are housed at DMV. In today's environment where attempts to illegally obtain sensitive information maintained by governments, universities, and major businesses are common, it is critical that DMV have practices in place to ensure that financial and identifying information it maintains on its customers is protected. A sound IT foundation is necessary to ensure applications and infrastructure—and the data they contain—are secure. This foundation includes ensuring applications are appropriately planned and implemented.

Keeping sensitive information secure is an ongoing and growing challenge. Agencies such as DMV with multiple applications that include sensitive information will always be the targets of cyber criminals. Just as the nature of IT security threats changes quickly, so do the standards and technology available to minimize the risk that sensitive information will be compromised.

#### DMV generally has a reputation for effective IT management but has had a major project terminated and missed a compliance deadline

VITA staff indicated that DMV generally has a sound project management office, but one major project had to be terminated and another has been delayed. DMV attempted a complex, long-term IT project—called CSI—between 2005 and 2011, which ultimately was unsuccessful. DMV hired two different contractors for the project, but both were terminated by DMV because of disagreements over the scope and costs of the work and the details of each contractor's approach. The CSI project was ultimately terminated in May 2011, and DMV began the FACE program inhouse. DMV spent \$28 million on CSI before the project was terminated and replaced by the FACE program. DMV staff indicated that they were able to reuse \$6 million of the hardware and software that had been purchased and use business analyses that had been developed.

DMV has yet to achieve compliance with payment card industry standards effective as of January 2015. Entities that accept credit card payments must maintain compliance with these standards in order to process credit card payments. Achieving full

#### CSI project

The CSI project was initiated in 2005 to modernize and consolidate DMV's major IT systems into one comprehensive, automated system.

#### **FACE** program

The For All Customers and Employees (FACE) program involves a series of IT projects, the goals of which include improving customer service, enhancing security, consolidating disparate applications, and improving integration with other state agencies. compliance is critical for DMV because the agency processed more than 4.6 million credit card transactions with a value of more than \$376 million in FY 2014. Payment card standards were updated in fall 2013. Although they went into effect in January 2014, entities were given a year to reach compliance. Currently, DMV is finalizing the steps to become compliant with the new standards. These steps include converting to new credit card software that will encrypt credit card information and replacing all credit card machines at all CSC windows and DMV Selects. DMV reports it is nearing the point at which it will be in compliance. Until then, the credit card payment process is likely more vulnerable than it will be after achieving compliance. Even when it is in full compliance, DMV will continue to face the ongoing challenge of identifying and responding to evolving threats.

# DMV's systems are designed to be secure, but DMV still needs to address some security concerns

DMV's IT security strategy is multi-tiered and multi-layered. The system is multitiered so that the information that is visible to the user (a customer or a DMV employee) is separated from the database by the application that process the data, and by multiple firewalls. This ensures that the user, whether internal or external, cannot directly access the system where data is stored.

The system is multi-layered so that information is categorized according to "layers" of sensitivity, and users are authorized to access only certain layers. These measures are designed to prevent DMV customers, employees, and contractors from accessing information beyond their level of security clearance. For example, a customer is prevented from accessing another individual's DMV record, and a customer service representative can only access information that is related to the transaction being processed.

As part of its routine audits of state agencies, the Auditor of Public Accounts (APA) audits IT security. In its most recent audit report (January 2015), the APA directed DMV to improve its IT security audit program, its disaster recovery and continuity of operations plan, database security controls (for two systems), and physical and environmental controls of one of its server rooms. These issues are not unique to DMV; many other state agencies were also cited as having deficiencies in one or more of these areas.

DMV is taking several steps to address these deficiencies and improve the security of its IT systems. Specifically, DMV recently hired a new auditor specializing in IT security to restore its IT security audit program. IT security audits, which are required of all agencies by the state's security policy, had not been performed as required because of turnover in this position within DMV's internal audit division. The new auditor has developed a plan to audit all IT systems in phases and has begun auditing the systems in the first phase. DMV should develop a plan to ensure that IT audits will continue to be performed, either through other internal resources or through the use of a consultant, in the event of turnover in this position in the future.

#### **RECOMMENDATION 3**

The Department of Motor Vehicles should develop a plan to ensure that information security audits required by the Commonwealth Information Security Policy are performed regularly even in the event of staff turnover in information technology security audit positions.

To address other IT security deficiencies, DMV has hired a consultant to help the agency evaluate its security program, make improvements to its security policies and procedures, and more clearly define roles and responsibilities for security staff. DMV is also consolidating its servers into one physical location, which will be easier to secure and monitor.

The APA is currently performing its annual audit of DMV, which will include an examination of DMV's progress on taking action to correct past audit findings and a review of the organizational structure of DMV's security program. Any substantive findings will be included in its report, which will be issued at the beginning of 2016.

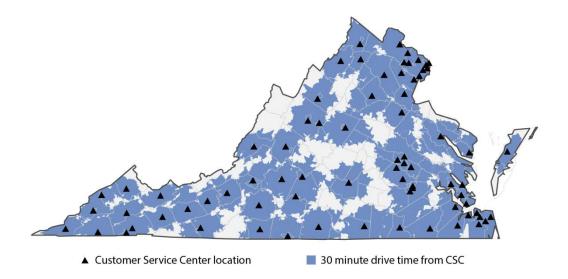
# **4** In-Person Services at CSCs and Selects

**SUMMARY** Customers must have access to customer service centers (CSCs) for some DMV services, such as obtaining a driver's license. Although CSCs are concentrated in areas of the state with high population density, most Virginians throughout the state have adequate access because they live within a 30-minute drive of a CSC. The DMV Select program is a cost-effective way to further increase access to in-person services. DMV does not reimburse Selects for operating costs because many already receive financial support from the Compensation Board. Some Selects still express concerns over the adequacy of reimbursement even though recent legislative changes have increased the rate at which they are reimbursed. Sufficient data does not exist, however, to objectively assess the adequacy of reimbursement. Longer term, concern about reimbursement may be less relevant for a variety of reasons, including the ongoing shift towards Internet transactions.

DMV customers have several options to obtain services in person. DMV directly provides in-person services through customer service centers (CSCs), mobile units, and the DMV Connect program. DMV also contracts with local governments and private businesses to operate DMV Selects that provide certain in-person vehicle transactions. DMV must offer in-person services even though they are more costly to provide than other service options. Certain transactions must be performed in person because original documents must be presented. Individuals who want to pay for their transaction with cash must also use one of the in-person service options. Some individuals simply prefer to obtain services in person even though other options are available. DMV, therefore, needs to balance providing enough access around the state to accommodate customer demand for in-person services with limiting the cost of its operations.

## Virginians appear to have adequate access to CSC services

CSCs are the only location (other than mobile units) where individuals can go to obtain an original driver's license or learner's permit. Of the four in-person service options, the CSCs also process the largest portion of transactions (31 percent of statewide transactions in FY 2014). In comparison, Selects processed seven percent, and the mobile units and DMV Connect program processed less than one percent.



### FIGURE 4-1 Most Virginia residents are within a 30-minute drive of a CSC

Source: Virginia Geographic Information Network analysis of CSC locations. Note: Areas that are not shaded are more than 30 minutes from a CSC.

### Most Virginians live within a 30-minute drive of a CSC

Access to DMV in-person services seems adequate for the vast majority of Virginians. Ninety-five percent of Virginia residents are within a 30-minute drive of a CSC (Figure 4-1), and 79 percent are within a 15-minute drive, according to analysis conducted for this study by VITA's Virginia Geographic Information Network (VGIN). This ensures that most Virginians—even in rural areas—have access to a CSC without driving a long distance. Even though no specific requirements or best practices define an appropriate level of access to a CSC, DMV's goal has historically been to locate CSCs within a 30-minute drive or 30 miles of all Virginia residents, according to DMV staff.

DMV Select offices further improve access to DMV in-person services, such that 99 percent of Virginia residents are within a 30-minute drive of a CSC or Select and 85 percent are within a 15-minute drive. This means that only 72,000 Virginia residents are more than a 30-minute drive from a CSC or Select. Further, DMV's mobile units help fill in gaps in service as they routinely visit the state's lesser-served areas.

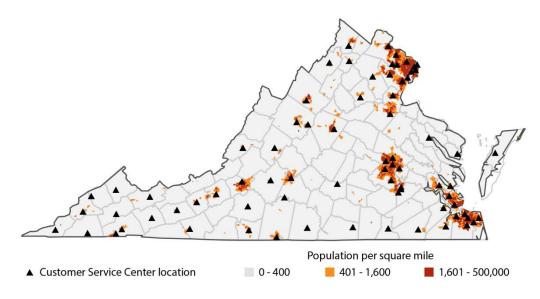
### CSCs in highly populated parts of the state serve far more residents

Although CSCs are distributed statewide to ensure access, they are concentrated in highly populated areas to accommodate customer demand. Almost half of the CSCs (44 percent) are located in the three most densely populated areas of the state: Hampton Roads, Northern Virginia, and Central Virginia (Figure 4-2). The population

### VGIN assistance

VGIN staff provided assistance to JLARC staff by mapping the locations of CSCs and Selects, and determining the percentage of Virginia residents within a 15- and 30-minute drive of a CSC or Select.





Source: Virginia Geographic Information Network analysis of CSC and Select locations and population data.

served is substantially higher in these areas than the population in other parts of the state, and the population per CSC also tends to be much higher. For example, the CSCs in the Northern Virginia planning district serve an average of 218,000 residents, while CSCs in some rural planning districts serve an average of less than 50,000 residents. The CSCs in the Northern Virginia planning district also processed one-fourth of all CSC transactions and served one-fourth of all CSC customers in FY 2014.

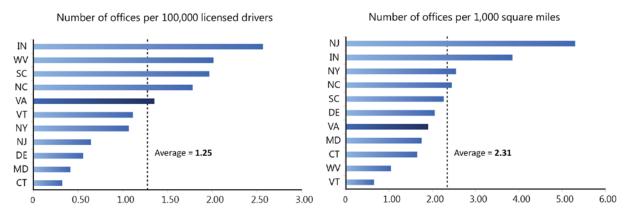
## Virginia's number of CSCs is similar to the average of other states

The number of field offices (CSCs) operated by Virginia's DMV appears similar to comparable motor vehicle agencies in other states. There are many reasons why states may have more or fewer field offices, including the size of the state (square miles), population served (licensed drivers), state requirements regarding which transactions must be completed in person, and state policies regarding access to services.

The number of field offices in Virginia is similar to the average number of offices in other states when calculating the number of offices relative to licensed drivers and square mileage (Figure 4-3). Virginia has slightly more offices than the average for other states relative to licensed drivers, but has fewer offices relative to square mileage.

### FIGURE 4-3

## Virginia's number of CSCs is similar to the average for comparable states, adjusted for number of licensed drivers and square mileage



Source: JLARC staff analysis of data from the U.S. Department of Transportation, Federal Highway Administration, Highway Statistics, June 2014; U.S. Census Bureau; and state agency budget documents.

Note: States included in figure are states with stand-alone motor vehicle agencies (excluding Nevada) for which JLARC staff had data, and other nearby states that have driver and vehicle functions in the same agency. Nevada was excluded because it has more than twice the square mileage of the other states, skewing the average. Offices operated by third party agents (such as Virginia's Selects) are excluded.

### Selects are cost-effective service option for DMV

DMV Selects provide in-person services, but only for vehicle transactions and certain other transactions such as disabled parking placards and driving records. Select customers and transactions increased (14 percent and 11 percent) between FY 2011 and FY 2014. The 54 Selects processed over one million transactions in FY 2014, although the volume varied widely by Select (from 2,029 in Highland to 46,180 in Mineral). The most common transactions at Selects were registration renewals (38 percent) and title issues (24 percent).

### Many Selects use existing state resources to increase access in a costeffective manner

Selects appear to be an efficient way to provide access to in-person services, in part because many are operated by constitutional officers who already receive financial support from the state through the Compensation Board. DMV reimburses Selects 4.5 percent of the first \$500,000 in revenue they collect in transaction fees and motor vehicle sales tax revenue (which are the same fees collected by CSCs), and five percent on amounts above \$500,000. Because DMV does not reimburse Selects for their operating costs—primarily staffing and facilities costs—vehicle transactions cost DMV about half as much to process at a Select compared to a CSC.

In highly populated areas, this lower cost results in a cost-effective way to meet higher demand for in-person services. For example, Selects processed 20 percent of total transactions in the Hampton Roads area and 15 percent in Northern Vir-

### Reimbursement methodologies in other states

Other states that use third-party contractors for motor vehicle services (similar to Selects) reimburse them using two basic methods: a flat fee per transaction, which sometimes varies based on the type of transaction, or a percentage of the revenue collected. Some use a combination of these two methods. The extent to which states have factored operating costs into their reimbursement is unknown.

ginia in FY 2014. In less populated areas, Selects are a cost-effective way to provide residents with access to in-person services. Selects also are a cost-effective way to increase access for residents in 26 rural localities who are more than 30 minutes from a CSC.

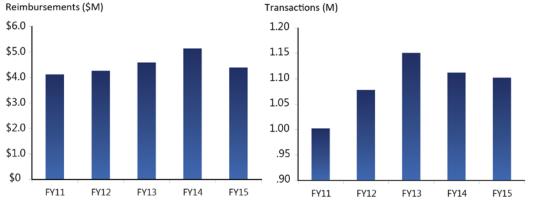
### Select program and reimbursements have changed over time and will likely continue to change

The number of Selects, and the nature and amount of transactions they process, has changed over time. The program's expansion and contraction has allowed the state to adjust its capacity as needed. The most recent major change in the number of Selects occurred when the state began building its capability to implement RE-AL ID. DMV added 20 Select offices to help CSCs handle the increased workload anticipated by implementation of REAL ID. DMV also increased the number of Selects when 11 CSCs were closed due to state budget reductions in 2002. All 11 CSCs eventually reopened.

Select reimbursements and transaction volume have also changed over time. Total reimbursements to Selects increased 25 percent from FY 2011 to FY 2014, adjusted for inflation, but decreased 15 percent in FY 2015. Select transactions increased 15 percent from FY 2011 to FY 2013, but decreased three percent in FY 2014 and another one percent in FY 2015 (Figure 4-4).

#### REAL ID Act of 2005

REAL ID is a federal effort to improve the reliability and accuracy of state-issued identification documents. Implementation of REAL ID in Virginia would have increased customer volume at CSCs, so DMV added Select offices to help build capacity and reduce CSC workloads. Due to various factors, Governor McDonnell and the General Assembly decided Virginia would not pursue full compliance with the act.



### FIGURE 4-4 Select reimbursements and transactions decreased in FY 2015

Source: JLARC staff analysis of Select transaction and reimbursement data provided by DMV.

Average reimbursements per transaction also increased (12 percent) from FY 2011 to FY 2014 but decreased 14 percent from FY 2014 to FY 2015. DMV Selects were reimbursed \$4.62 per transaction in FY 2014, on average. This declined to \$3.98 per transaction in FY 2015. Decreases in average reimbursement are likely due to legislative changes to the motor vehicle sales and use tax and Select reimbursement over the past several years. These changes increased reimbursements to

### Changes to DMV Select reimbursement rate

**Before 2007:** Selects were reimbursed 3.5% of the first \$250,000, and less for higher volumes.

**2007:** Select reimbursement rate increased to 4.5% of the first \$500,000 in revenue collected and 5.0% on amounts above \$500,000.

**2013:** General Assembly raised motor vehicle sales tax rate. Selects received more reimbursement because they were collecting more revenue on behalf of DMV even though the type and amount of work was unchanged.

**2014:** Tax rate—for purposes of Select reimbursement—was adjusted to correspond to the pre-2013 motor vehicle sales tax rate of 3.0%.

**2015:** Tax rate was adjusted—for purposes of Select reimbursement to correspond to current motor vehicle sales tax rate of 4.1%.

The 2014 and 2015 rate adjustments were made through the Appropriation Act. Selects in FY 2014 but reduced reimbursement in FY 2015. Changes made by the 2015 General Assembly should result in an increase in the reimbursement for FY 2016.

Decreases in total reimbursements and transaction volume may be occurring in part because Selects are now processing fewer title transactions—the most profitable type of transaction for Selects. As of March 2014, DMV required franchise dealers to process their title transactions online and not at Selects because it is less expensive for DMV (\$4.62 online vs. \$10.26 at a Select). Smaller dealerships that sell at least 200 cars annually will also be required to process their transactions online by the end of 2015. These changes will result in lower overall reimbursements for some Selects, especially those that have processed a high number of dealer transactions in the past.

## Selects have raised concerns about adequacy of reimbursement, but objective case for higher reimbursement has not been made

Selects have raised concerns in recent years about the adequacy of DMV reimbursements to cover their costs and have sought additional reimbursement; some of their efforts have been successful. None of these changes to reimbursement that were approved, however, have been based on the full range of objective information that would be necessary to evaluate the adequacy of reimbursement.

The objective information needed to evaluate the adequacy of reimbursement would include the actual amount of reimbursement DMV provides and Selects receive, the level of Select staff resources devoted to DMV functions, and the opportunity cost of Select staff time spent on DMV functions. Half the Selects responding to the JLARC survey reported the reimbursement methodology was either not adequate at all or only slightly adequate. Many Selects reported reimbursement amounts that were very different than DMV records. Selects also reported widely varying levels of resources devoted to performing DMV functions relative to the transactions they conduct. For example, one Select reported that it devoted 10 full-time equivalent (FTEs) employees to conduct about 10,000 DMV transactions, for an average of 1,000 transactions per FTE. Another Select reported devoting only one FTE to conduct 18,600 transactions.

Concern about the adequacy of Select reimbursement may become less relevant over time. If the use of Internet services continues to increase over the long term, there may not be the need for as many in-person DMV service options statewide. In the short term, the following factors should be considered in deciding whether to increase reimbursements:

• According to DMV, constitutional officers and private entities still periodically approach DMV to participate in the Select program, are aware of the reimbursement methodology before participating, and can terminate their participation when they choose;

- The Select program, by design, should result in relatively lower reimbursements for Selects compared to the actual cost because the majority (56 percent) of Select agents can utilize existing staff and facility capacity funded by the Compensation Board;
- All transactions performed by Selects can also be performed at CSCs, and most Select transactions can be performed online, over the phone, or through the mail; and
- The long-term trend of using more Internet-based services will likely reduce the need for Selects.

# **5** Alternative Service Options

**SUMMARY** Although use of the Internet for transactions is steadily increasing, many customers still obtain services by going to a Customer service center (CSC). Thirty-three percent of all transactions in FY 2014 occurred via the Internet, up from 16 percent in FY 2011. Not all services can be obtained online, though, because of requirements to appear in person, to take tests or physically show certain documentation. These in-person requirements apply to many of the transactions that younger drivers need, limiting the applicability of alternative service options for younger customers typically inclined to use the Internet. The General Assembly and DMV have attempted to discourage customers from unnecessarily visiting CSCs for transactions that can be performed through cheaper alternative service options. Nevertheless, nearly one-fifth of all CSC transactions were by customers who could have performed the transaction through an alternative option.

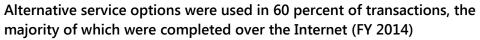
DMV provides services in a variety of ways. Customer service centers (CSCs) and mobile units are traditional DMV service models, but over time, cheaper alternative service options have become available. These options include DMV Select services, and Internet, mail, and telephone services. With the exception of a few transactions (original and reissued driver's licenses, and original identification cards), almost all DMV services can be obtained through one or more of these alternative service options. More than 40 can be performed online.

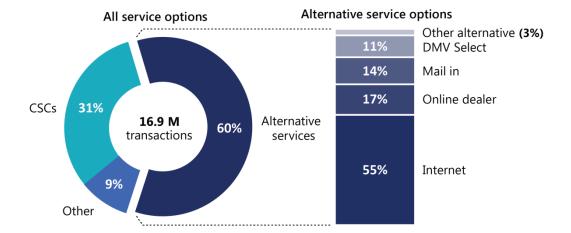
Through the Appropriation Act, the General Assembly directed DMV to increase its use of alternative service options. Through the Code of Virginia, the General Assembly gave DMV authority to

- charge a \$5 walk-in fee for CSC driver's license and vehicle registration renewals that could have been performed through an alternative option, and
- offer a \$1 discount to customers who use the Internet to renew their vehicle registrations.

Alternative service options give customers choices and flexibility, and allow DMV to reduce its operating costs. Continuing to offer all services at CSCs has implications for DMV's spending levels. In-person services at CSCs are by far the most expensive services provided by DMV. Offering all services at CSCs also contributes to long wait times, particularly at large high-volume CSCs in more populated areas. (See Chapter 6.) When customers go to CSCs for services they could obtain through cheaper alternative options, they unnecessarily increase wait times for those who need services that can only be obtained in person.

### FIGURE 5-1





Source: JLARC staff analysis of DMV transaction data.

Note: "Other" includes Auto Auctions, DMV Connect, dealer centers, weigh stations, and several other service types. "Other alternative" includes phone and EZ Fleet transactions. EZ Fleet is an online service that some businesses use to title and register their vehicles.

# More than half of transactions conducted through alternative service options, primarily the Internet

Sixty percent of transactions were processed through alternative service options in FY 2014 (Figure 5-1). Two-thirds of business and individual customers (DMV's largest customer groups) with a transaction in FY 2014 used at least one alternative option. Internet-based transactions are the most common alternative option, followed by online dealer and mail-in services.

Of the most common DMV services—driver and vehicle records requests, vehicle registration renewals, and vehicle titles—the majority were performed through an alternative option. The vast majority of driver and vehicle records requests (94 percent) and vehicle registration renewals (82 percent) were performed through an alternative service option. (See Appendixes D and E for more information on use of alternative services and Internet services by customer age and use of Internet services by region.)

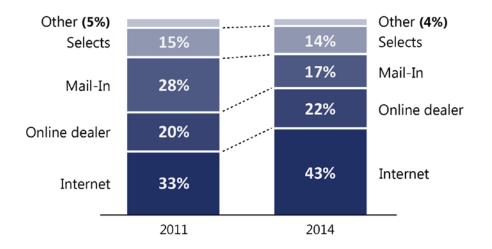
## Use of alternative service options has increased, particularly use of Internet-based services

The volume of transactions processed using an alternative service option has increased in recent years. Overall, transactions processed by DMV through alternative options increased from 42 percent in FY 2011 to 60 percent in FY 2014. Much of this increase is related to driver transcripts provided to businesses. When these transactions are excluded, the increase is less (from 48 percent to 52 percent). The percentage of customers who used at least one alternative option increased slightly over the same period, from 65 percent in FY 2011 to 66 percent in FY 2014.

The increased use in alternative services is driven by the increased use of Internetbased services. Internet transactions more than doubled across all transactions from FY 2011 to FY 2014 and increased by 53 percent when driver transcripts requested by businesses are excluded. Internet transactions have grown as a percentage of total transactions (from 16 to 33 percent) during that time period, and the percentage of customers with transactions who used the Internet for at least one service increased from 38 percent to 44 percent.

The growth in Internet transactions, however, appears to be from customers who are switching from mail-in to Internet transactions, which explains why the overall use of alternative service options has not grown at a faster rate. The percentage of alternative service transactions that were processed through the Internet increased from 33 percent in FY 2011 to 43 percent in FY 2014 (Figure 5-2). In comparison, mail-in transactions declined by 11 percentage points during that time. Use of other alternative options remained about the same.

### FIGURE 5-2 Internet services are a growing proportion of alternative service options (FY 2011–FY 2014)



### Business requests for transcripts

Businesses that participate in DMV's Driver Alert program enroll their drivers and can request their employees' driving records through the program. Participating businesses are sent notification of changes to their employees' records.

Source: JLARC staff analysis of DMV transaction data.

Note: Excludes business requests for transcripts. "Other" includes phone and EZ Fleet transactions.

### FIGURE 5-3 Internet transactions are far less expensive for DMV than CSC transactions based on the unit cost per transaction



Source: JLARC staff analysis of DMV Activity Based Costing annual report, FY 2012. Notes: Driver's license transactions include renewals, duplicates, or reissues. FY 2012 is the most recent report available from DMV. The unit cost for mobile units is included in the unit cost for CSCs.

Continued growth in Internet transactions is desirable because it should result in lower expenditures for DMV over time. All alternative service options are less expensive for DMV than in-person services provided directly by DMV through CSCs and mobile units because of staffing, rent (for some CSCs), utilities, and other fixed costs that are necessary to provide in-person services. Internet-based services are the cheapest of all. For example, registration renewal transactions processed through the Internet are 2.5 times less expensive than CSC transactions (Figure 5-3).

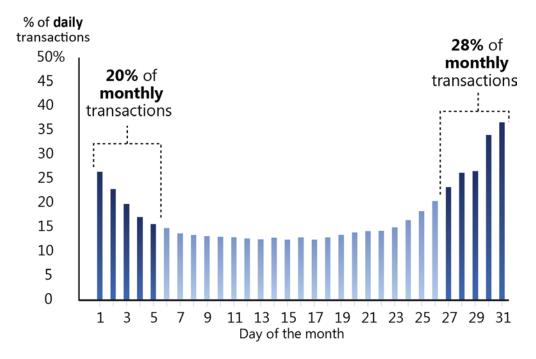
## Many customers who could use alternative service options still choose CSCs

DMV has taken a series of actions on its own to further encourage customers to use alternative options, especially Internet-based services. These actions include

- revamping the DMV website in 2013 to provide (1) more information on services that are available online and (2) a portal for performing these transactions from a computer or mobile device;
- developing a presence on social media sites such as Facebook and Twitter to inform customers of online services, and posting messages to these sites, particularly at the end of the month when CSCs are busiest;
- providing information with renewal notices (registrations and driver's licenses, if applicable) to inform customers that the transaction can be performed online, by mail, and by telephone; and
- launching mobile apps in 2012 that allow customers to perform 20 DMV transactions on their mobile device.

### FIGURE 5-4

Almost half of CSC transactions where a walk-in fee was paid were processed on the first and last five days of the month (FY 2014)



Source: JLARC staff analysis of DMV transaction data, FY 2014.

Despite these actions and those by the General Assembly to encourage use of alternative service options, a considerable percentage of customers still choose to access DMV services in person at a CSC. Nearly one-fifth (18 percent) of transactions at CSCs in FY 2014 were by customers who, despite the availability of alternative options, chose to pay the additional \$5 walk-in fee. This equates to more than 866,000 total customers. The vast majority of these transactions were vehicle registration renewals.

Customers who paid the walk-in fee tended to visit a CSC within either the first or last five days of the month, which is also when CSCs are at their busiest (Figure 5-4). This suggests that many customers may be performing their transaction at a CSC because they waited until the last minute to renew their registration, driver's license, or identification card, or they let their registration expire. Customers who let their driver's license or identification card expire must go to a CSC to renew it if they have not previously proven legal presence. Customers renewing a vehicle registration can still perform their transaction online after it has expired but may choose to go to a CSC because they can obtain their new registration and license plate decals that day rather than waiting to receive them by mail.

Customers who paid the walk-in fee also tend to have other characteristics that suggest they could have used an alternative service option. For example, half of these customers were between 41 and 60, an age group that, according to a Pew Research Center survey, is extremely likely to use the Internet. The majority of customers who paid the walk-in fee used either a credit card or a check, indicating that they could easily have made an electronic payment. Half of these are customers who live in urban areas, where access to the Internet is widely available.

### **Encouraging greater use of alternative service options**

Encouraging more customers to use alternative services alone will not lower DMV's spending. Unless the fixed costs associated with CSC facilities and staffing also decreased, reducing the numbers of customers at CSCs would actually drive up the per-transaction cost. It would also likely lower DMV's revenue by reducing revenue collected from walk-in fees. DMV collected more than \$4.7 million in \$5 walk-in fees, in FY 2014. If customer volume increases substantially, encouraging greater use of alternative services would allow DMV to delay, or not expand, CSC service capacity in the future.

The primary reason to increase the use of alternative service options is to reduce the in-person customer volume at certain CSCs, and thereby reduce wait times. High-volume CSCs, such as those in Northern Virginia, could potentially reduce their wait times if more of their customers used alternative services such as online transactions. The Arlington and Tysons Corner CSCs in Northern Virginia serve the most customers, and 16 percent and 14 percent of their customers, respectively, were charged a walk-in fee. If fewer customers used these CSCs, staff could potentially provide more efficient service to the customers who must perform their transactions at a CSC. (See Chapter 6 for detail on wait times and ways to reduce them.)

# 6 Customer Wait Times at CSCs

**SUMMARY** Customers wait, on average, 24 minutes at a CSC before being served. This excludes time that customers may spend waiting in line to obtain a ticket, which DMV does not track. This wait time is similar to wait times in nearby states but longer than DMV's target of 20 minutes. Ten percent of customers waited more than an hour to be served in FY 2014, and half of them went to a large CSC in Northern Virginia. These large CSCs serve a high volume of customers relative to other CSCs and tend to have a higher proportion of complex transactions, such as original driver's licenses and vehicle titles. DMV plans to increase the number of windows and staff in Northern Virginia by relocating two CSCs and adding two more. To further reduce wait times in Northern Virginia and statewide, DMV should consider closing CSCs with low customer volume and reallocating staff to CSCs with high customer volume and wait times. DMV should also consider introducing self-service kiosks and increasing discounts for using alternative services to reduce the customer volume and wait times at certain CSCs.

Despite a steady increase in the use of the Internet for DMV transactions, many customers still obtain DMV services in person at CSCs. Time that customers spend waiting at CSCs is inconvenient, but also inefficient because the customer could instead be working or doing something better with the time. Wait times and perceived under-staffing at CSCs are frequently cited by customers as reasons for dissatisfaction with DMV services.

When customers arrive at a CSC, they first report to an information desk (Figure 6-1). A customer service representative asks about the transactions they want to perform and ensures that they have the appropriate documents to complete their transaction. If customers have all necessary documents, the customer service representative inputs their information into Q-Flow, an automated ticketing system. After receiving a ticket, customers wait until the system calls their ticket number and directs them to a service window, where another customer service representative assists them with their transactions. For many customers, the time spent waiting is longer than the time being served.

## Wait time for majority of DMV customers is similar to other states

Customer wait and serve times at Virginia's CSCs appear to be in line with wait and serve times reported for field offices by other comparable states for which information was available. However, states track customer wait and serve times in differ-

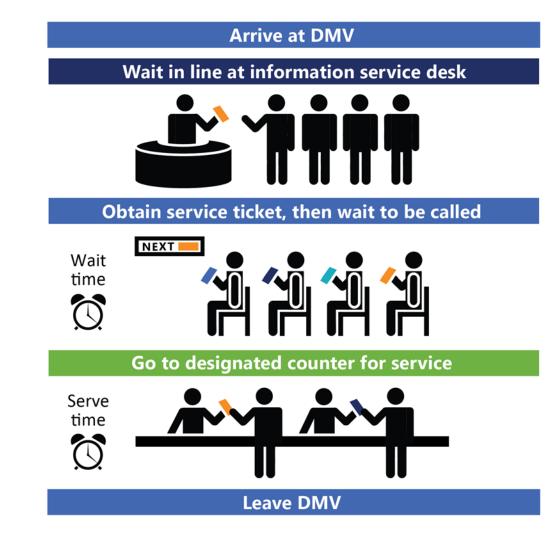
#### Serve times

The average serve time at Virginia's CSCs was eight minutes across all transactions and nine minutes across driver's license transactions.

The average serve time at Maryland's field offices was eight minutes across all transactions, and the average serve time at North Carolina's field offices for driver's license transactions was 11 minutes. ent ways, which makes it difficult to precisely compare the customer experience at Virginia's DMV to customer experience at DMVs in other states. Customers in Virginia waited an average of 25 minutes to obtain an original driver's license compared to 27 minutes in Maryland and 25 minutes in North Carolina, according to data collected by the American Association of Motor Vehicle Administrators in 2012 and 2013.

### FIGURE 6-1

CSC customers must go to information service desk, obtain a ticket, and then wait for number to be called



Source: JLARC staff interviews with CSC staff and reviews of DMV policies. Note: DMV does not collect information on how long customers wait at the information desk. Virginia's average wait and serve times in comparison to other states and the process CSCs use to manage customer wait times suggests that, overall, Virginia's DMV is effectively using its current level of resources to minimize how long a typical customer waits to obtain service.

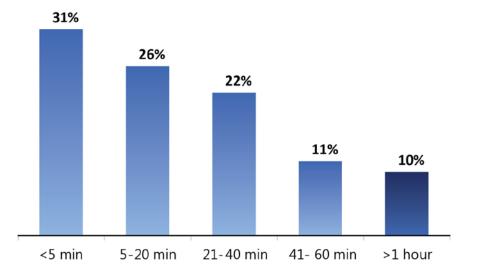
## Customers wait, on average, 24 minutes and are served within nine minutes

DMV does not track how long a customer waits before he or she gets to the information desk. CSC managers estimate, though, that the average customer waits less than five minutes before reaching the information desk on slower days and no more than 10 minutes on busier days. On busy days, however, customers may wait longer: 11 to 20 minutes at 14 CSCs and more than 20 minutes at four CSCs, according to responses to a JLARC survey.

After receiving a ticket, customers waited 24 minutes in FY 2014, on average. This average is longer than DMV's target wait time of 20 minutes. Many customers, however, wait less than the 24 minute average. The median customer waited 15 minutes, and 57 percent of customers waited no longer than 20 minutes. The average wait time is longer than most customers' experience because 10 percent of customers waited more than an hour (Figure 6-2).

### FIGURE 6-2

More than half of customers wait 20 minutes or less, but 10 percent waited more than an hour (FY 2014)



### CSCs can open second information desk

CSCs have the option to open a second information desk, either at their stand-alone information desk or by converting a service window into an information desk, if customer volume is high. In response to JLARC's survey, 12 CSC managers reported opening a second information desk at least once per week.

### Target wait time

DMV's target wait time of 20 minutes is within the range cited as reasonable by DMV customers.

In 2006, 71 percent of customers responded that a wait time of 15-30 minutes was reasonable. (Source: Survey of DMV customers by UVA Center for Survey Research, 2006.)

Source: JLARC staff analysis of DMV Q-Flow data.

Note: Number of customers is based on the number of separate tickets issued.

Once the system called a customer's ticket number and directed them to a service window, the average customer was served in about nine minutes in FY 2014. Half of all customers were served within seven minutes, and 95 percent within 25 minutes. It takes about five minutes on average to serve a customer registering a vehicle—the most common DMV transaction—and 12 minutes to serve a customer titling a car.

## DMV's Q-Flow system allows CSCs to monitor and manage wait and serve times

CSC wait times are reviewed routinely by staff at several different managerial levels within DMV. For example, CSC managers monitor wait and serve times throughout the day using the Q-Flow system. Through Q-Flow, customer service representatives can be assigned certain types of transactions. Tickets correspond to transaction type, and customers are directed to service windows where a customer service representative handling their ticket type is working. The system shows the number of customers waiting and the average and maximum wait time for current customers by ticket type. If the CSC manager notices the wait time is longer than usual for a particular ticket, the manager can assign other staff to serve customers with the same transaction type. They can also assign a supervisor to a window to help serve customers.

Staff at DMV headquarters who oversee customer services also routinely receive reports generated from the Q-Flow system to help them monitor wait times, customer volume trends, and staffing levels across all CSCs. These reports help inform staffing decisions and make strategic changes to service delivery procedures. For example, these reports can help identify CSCs that are in need of expansion or relocation to larger facilities. The Culpeper CSC was recently moved because it outgrew its facility.

## Customers wait longer at CSCs that are large or handle more complex transactions

Average wait times vary substantially by CSC (Appendix F), from under five minutes in several less densely populated areas (Fort Lee, Wytheville, Emporia, Tappahannock, and Pulaski) to more than 40 minutes in highly populated areas (Manassas, Alexandria, and Arlington) (Figure 6-3). Both high customer volume and the complexity of transactions appear to contribute to longer wait times. CSCs that have both a high customer volume and high proportion of complex transactions tend to have the longest wait times.

Large CSCs serve more than 65,000 customers per year.

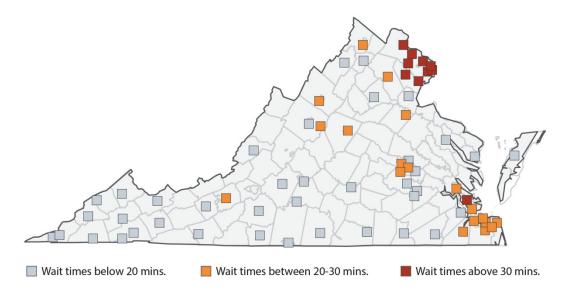
Medium CSCs serve between 30,000 and 65,000 customers per year.

Small CSCs serve less than 30,000 customers per year.

## Wait times are much longer at large CSCs, particularly those in Northern Virginia

Eighty percent of the customers who waited more than an hour went to a large CSC, and half of those customers went to a CSC in Northern Virginia. Large CSCs had an average wait time over 27 minutes; medium CSCs had an average wait time of 18 minutes; and small CSCs had an average wait time of less than nine minutes (Figure 6-4).

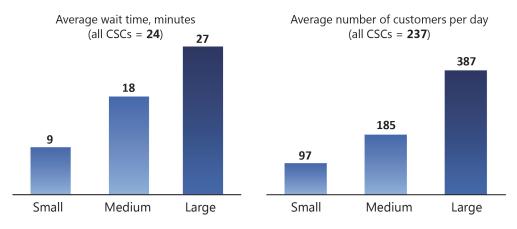
### FIGURE 6-3 Average wait times are highest at CSCs in Northern Virginia (FY 2014)



Source: JLARC staff analysis of DMV Q-Flow data. Geographic locations provided by Virginia Geographic Information Network (VGIN).

### FIGURE 6-4

CSC wait times are highest at large CSCs in Northern Virginia that serve 500 customers per day, on average (FY 2014)



Source: JLARC staff analysis of DMV Q-Flow data.

Large CSCs tend to be in urban areas, where customer demand is also higher. Although daily customer volume fluctuates, it is still much higher on a daily basis in large urban CSCs. Across all CSCs, the average daily customer count was approximately 237 in FY 2014, but the customer count was more than twice that in some large CSCs (Table 6-1). The Tysons Corner CSC, for example, served more than 700 customers on its busiest days.

### TABLE 6-1

Number of customers per hour and per day at some large Northern Virginia CSCs is more than double the average across all CSCs (FY 2014)

|                   |            |         | Customers per day |         | Customers per hour |         |
|-------------------|------------|---------|-------------------|---------|--------------------|---------|
|                   | Avg. wait  | Service |                   | Busiest |                    | Busiest |
| CSC               | time (min) | windows | Average           | days    | Average            | hours   |
| Arlington         | 47         | 17      | 557               | 675-888 | 68                 | 92-138  |
| Tysons Corner     | 34         | 17      | 571               | 701-957 | 68                 | 89-132  |
| Woodbridge        | 32         | 12      | 498               | 511-881 | 62                 | 84-131  |
| Average, all CSCs | 24         | 8       | 237               | 297-429 | 31                 | 60-157  |

Source: JLARC staff analysis of DMV Q-Flow data.

Note: Busiest days and hours correspond to the 10 percent of total days and hours when the CSC was the busiest.

Wait times tend to be longer at large CSCs because, even though they have more service windows than small and medium CSCs, they have a higher number of customers relative to their number of service windows. Large CSCs serve 31 customers per window per day, on average, compared to 26 at medium CSCs and 23 at small CSCs. Larger CSCs also serve slightly more customers (25) per staff than medium (22) and small (21) CSCs, on average. DMV allocates the greatest proportion of its staff to the busiest CSCs (Appendix H), but large CSCs still tend to have higher customer-to-staff ratios.

Large CSCs also tend to use more part-time employees to help ensure greater coverage at the busiest times. In FY 2014, only seven percent of the staff at small CSCs worked part-time, whereas 21 percent worked part-time at medium CSCs and 27 percent at large CSCs.

## Wait times are longer at CSCs that conduct a higher percentage of complex transactions

The other major factor that explains longer wait times is transaction complexity. Complex transactions may require review of multiple documents by the customer service representative or specific authorization from a manager or supervisor, so they often take longer to complete and must be handled by experienced staff.

These more complex transactions tend to have longer serve times, which leads to longer wait times. Complex transactions took, on average, almost 12 minutes to

#### Complex transactions

include combination transactions (vehicle and driver's license), original titles, original driver's licenses or IDs, tests, and transactions related to the reinstatement of driving privileges. (See Appendix G.) complete, while less complex transactions took less than 7 minutes to complete. Customers seeking to complete complex transactions waited an average of 31 minutes, while those with less complex transactions waited approximately 17 minutes.

CSCs with a higher proportion of complex transactions tend to have longer wait times. Eleven CSCs had a higher than average percentage of customers with complex transactions (Fair Oaks, Alexandria, Tysons Corner, Arlington, Sterling, Franconia, Leesburg, Newport News, Fairfax, Williamsburg, and Hampton). All but one of these CSCs (Williamsburg) also had an above-average wait time. Eight of the 11 were in Northern Virginia, and the remaining three were in Hampton Roads.

CSCs with a higher proportion of complex transactions and higher customer volume relative to the number of service windows tend to have the longest wait times. However, transaction complexity appears to have a stronger impact than customer volume. Of the 10 CSCs with wait times over 30 minutes, nine had an above-average proportion of complex transactions, while only six had an above-average number of customers per service window.

# DMV is taking action to reduce wait times but additional action should be considered

DMV is already taking action to reduce wait times statewide, as well as at the busiest CSCs in Northern Virginia. DMV is planning to relocate two CSCs (Arlington and Fair Oaks) to bigger locations and open two additional CSCs (Arlington and Fort Belvoir), which will add at least 22 service windows. Another CSC is also being added at Naval Station Norfolk. DMV staff indicate that the agency intends to increase the number of staff to manage these additional windows; the agency will have to first seek approval from the General Assembly to increase its maximum employment level because the agency is approaching its limit.

DMV is renovating service windows to make it easier for customer service representatives to conduct transactions efficiently. Renovations to facilities in Culpeper, Fredericksburg, Sterling, and Onancock are complete, and the Manassas, Richmond, Franconia, Newport News, and Bristol facilities will be renovated by fall 2016. At some facilities, such as in Fredericksburg, the renovations have resulted in additional service windows. Upcoming renovations in Suffolk, Williamsburg, Covington, Danville, Lexington and Smithfield will all include this new design.

DMV is launching "start anywhere" transactions, which allow customers to begin their transactions online prior to coming to the CSC. DMV has already begun allowing customers to start a name change transaction under this model. Customers fill out their paperwork from a computer or smartphone, and then visit the CSC to show the appropriate documentation. This saves time because the customer service representative does not have to type the customer's information. DMV plans to offer more transactions as "start anywhere" in the future. DMV is also taking steps to fully serve customers in a single visit. These efforts are designed to improve the overall effectiveness of CSC services and may ultimately help reduce customer volume and wait times. For example, when customers come in to renew their registration, the MySelect system searches the system and informs staff if there are other pending DMV transactions, such as a driver's license renewal, that customers could perform while already there. DMV's partnerships with other entities also help reduce the number of customers who are unable to complete their transaction within one visit because they are missing required documents. For example, customers can now purchase official copies of their birth certificate—which is a document commonly used to demonstrate legal presence—from a CSC if they were born in Virginia. CSC staff can also query a national database to verify a customer's birth, if they were born in one of the other 38 participating states.

It is unclear, however, by how much these actions will reduce wait times, particularly at CSCs in Northern Virginia where wait times are longer than 30 minutes on average, and longer than 40 minutes for a few CSCs. DMV should consider several options to further reduce wait times, and a combination of these options is likely the best strategy. Among these options could be attempting to expand the number of DMV Selects in areas with CSCs that have long wait times. Other strategies include reallocating or adding resources, and installing self-service kiosks or offering discounts.

## DMV should assess reducing wait times by reallocating resources from lower volume CSCs and adding additional CSCs

In addition to its current plans, DMV could further build capacity in areas with longer wait times. To help offset some of the financial burden on DMV of adding capacity, CSCs with lower customer volumes and wait times could be closed (Table 6-2) and their staffing resources reallocated to existing CSCs with longer wait times. While 12 CSCs have low customer volume, transaction volume, and wait times relative to the majority of other CSCs, only a few of them are candidates for closure without substantially impacting customer service. Six CSCs are in the Bristol district, and closing more than one or two would have a substantial impact on customer driving times, because most are not located in close proximity to another CSC. Only one other CSC (Fort Lee) in another district is within close proximity to other CSCs, but this location is designed to serve military customers rather than the general public.

Because only a few CSCs appear to be candidates for closure, further regionalizing the coverage areas of small and medium-sized CSCs in less urbanized areas may be a better strategy. For example, several smaller CSCs could be combined into one larger CSC, which would serve a larger geographic area and capitalize on the economies of scale seen at large CSCs. This strategy would require research and planning to identify the best location for the combined CSC and could take up to one year or more, depending on whether suitable existing facilities are available. Mobile unit stops could be increased in these areas to alleviate drive times.

#### Prior CSC closures

DMV closed 12 CSCs statewide in 2002 to help meet mandatory budget reductions that were required of all state agencies. All CSCs were ultimately reopened after public concern. DMV could also consider adding additional capacity—more CSC or Select locations, or more service windows in existing CSC locations—in Northern Virginia. However, either strategy would require extensive analysis and planning to ensure that there is not more capacity than needed to meet customer demand. The impact of DMV's planned additions in Northern Virginia is unknown. The addition of locations or service windows would take several years to adequately plan and develop.

### TABLE 6-2

| CSCs in some regions have fewer customers and transactions, along with low |
|--|
| wait times, but only four are near other CSCs                              |

| csc        | District | Customers<br>FY 2014 | Transactions<br>FY 2014 | Avg. wait time<br>FY 2014 | Other CSC<br>nearby |
|------------|----------|----------------------|-------------------------|---------------------------|---------------------|
| Clintwood  | Bristol  | 11,051               | 15,584                  | 6:02                      | $\checkmark$        |
| Lebanon    | Bristol  | 11,509               | 15,675                  | 7:36                      |                     |
| Gate City  | Bristol  | 18,433               | 26,113                  | 8:56                      |                     |
| Marion     | Bristol  | 19,867               | 27,129                  | 7:30                      |                     |
| Abingdon   | Bristol  | 21,909               | 30,981                  | 7:44                      | $\checkmark$        |
| Bristol    | Bristol  | 22,820               | 32,378                  | 8:25                      | $\checkmark$        |
| Kilmarnock | Hampton  | 18,035               | 24,733                  | 5:27                      |                     |
| Fort Lee   | Richmond | 14,111               | 17,940                  | 3:13                      | $\checkmark$        |
| Emporia    | Richmond | 20,861               | 28,535                  | 3:46                      |                     |
| Courtland  | Richmond | 21,112               | 29,710                  | 7:37                      |                     |
| Covington  | Roanoke  | 18,655               | 26,178                  | 5:19                      |                     |
| Lexington  | Staunton | 18,865               | 26,995                  | 7:47                      |                     |

Source: JLARC staff analysis of customer, transaction, and wait time data provided by DMV, and population data from the Weldon Cooper Center.

Notes: CSCs shown are those with customers, transactions, and wait times within the bottom 25 percent of all CSCs.

## DMV should assess reducing customer volume at CSCs by installing self-service kiosks and offering more customer discounts

DMV could consider installing self-service kiosks for certain transactions to help reduce customer volume at CSCs. Several other states currently use kiosks, according to a survey by the American Association of Motor Vehicle Administrators. Selfservice kiosks could help reduce the number of customers who go to CSCs unnecessarily, such as those who wait until the last minute to renew their vehicle registration (Chapter 5). Some other states use kiosks for registration renewals and other less complex transactions. Some kiosks have the capacity to print registration cards and decals so that customers can obtain them immediately. Kiosks can be set up to accept cash, credit cards, and electronic checks, and they can be placed in a variety of locations. Some states locate kiosks only in their field offices, while others locate them in public places, such as malls and grocery stores, to allow customers access outside of normal business hours.

DMV currently offers a \$1 discount to encourage customers to renew vehicle registrations online. DMV could offer similar discounts for other transactions, such as driver's license renewals. DMV staff report that the \$1 discount for registration renewals has had a positive effect on encouraging use of alternative services, according to survey research and a review of transaction activity.

### **RECOMMENDATION 4**

The General Assembly may wish to consider including language in the Appropriation Act to require the Department of Motor Vehicles to develop a proposal to reduce wait times at high volume customer service centers. In developing this proposal, the Department of Motor Vehicles should estimate the costs and benefits associated with options such as (i) closing or regionalizing customer service centers with low customer volume and short wait times that are located near other customer service centers and reallocating resources; (ii) building additional capacity by expanding existing customer service centers, building new ones, or adding DMV Select locations; (iii) installing self-service kiosks; and (iv) expanding the types of transactions for which customers can receive discounts for using alternative services. The Department of Motor Vehicles should submit its proposal to the House and Senate Transportation Committees, the House Appropriations Committee, and the Senate Finance Committee by November 1, 2016.

# 7 Call Center and Help Desk

**SUMMARY:** The DMV call center provides effective service to individual customers and CSC staff, but Select staff are less satisfied with the service they receive. Although satisfaction with the competency of call center employees is generally high, wait times are commonly reported as a source of dissatisfaction. Call center responsibilities have expanded in recent years, and wait times have increased to more than 12 minutes—well over DMV's seven-minute target. A heavy reliance on part-time staff in two call center locations may contribute to long wait times. To reduce wait times, DMV has installed the MySelect system used by CSCs and Selects and a new workforce management system at the call center. DMV is also in the process of recruiting staff to fill vacant positions. DMV should consider converting some part-time positions to full-time and outsourcing some call center functions to further reduce wait times.

DMV has a Customer Contact Center (call center) that answers more than 280,000 calls per month, the majority of which are from customers with questions about DMV services or transactions they want to perform. Even though the call center represents only about one percent of all DMV transactions, it plays a key role in helping customers, DMV staff, and others obtain information. There are four call center locations: two in Richmond and one each in Altavista and South Boston.

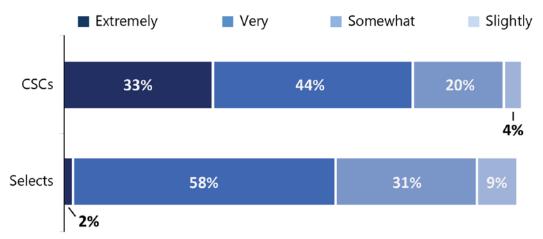
In addition to taking calls from individual and businesses customers, the call center manages the internal DMV Help Desk, which answers calls and emails from CSCs, mobile units, and Selects with questions about transactions they are trying to complete for customers. The call center also handles inquiries related to medical reviews for certain drivers, operates the state's 411 helpline, and manages a state identity authentication line.

# Call center provides effective service to external customers and CSCs, less effective service to Selects

Customers appear to be generally satisfied with the effectiveness of services provided by call center staff. Almost all respondents to a 2015 customer satisfaction survey who had used call center services indicated that they were satisfied with the staff member's level of knowledge, courtesy, and helpfulness. Similarly, the majority (77 percent) of CSCs responding to a JLARC survey indicated that the assistance they receive from the call center Help Desk is "extremely effective" or "very effective." Customer satisfaction survey

In 2015, DMV contracted with the Southeastern Institute of Research to perform a customer satisfaction survey.





Source: JLARC survey of CSCs and DMV Selects, 2015.

In contrast with external customers and CSC staff, 40 percent of Select staff rated the Help Desk as being only "somewhat effective" or "slightly effective" (Figure 7-1). Several Select staff expressed that Help Desk staff may not be as familiar with Selects, especially the restrictions or limitations on Select processes that do not apply to CSCs. One Select staff explained that the Help Desk sometimes supplies incorrect information: "There are people at the Help Desk that do not understand the situation we are in at the Select Offices." More experienced employees are usually assigned to the Help Desk, to manage calls that are more advanced and complex, but some Selects nevertheless experience difficulty obtaining useful information from Help Desk staff to address their problem.

# Call center and Help Desk consistently miss target wait time

The call center has consistently fallen short of its goal to have customers wait no longer than seven minutes. Call center wait times have steadily increased (Figure 7-2). In 2014, the average wait time for a customer contacting the call center was just under 12 minutes. Only 13 percent of customers waited less than the seven-minute target.

This rise in wait times coincided with expanding areas of responsibility for the call center. However, these new areas of responsibility represent a very small portion of their total call volume (approximately one percent each). For example:

• In 2010, the call center began managing calls related to medical review. Customers with certain health concerns must obtain medical approval from DMV before obtaining or reinstating their driver's license. There are approximately 2,000 calls per month related to medical reviews.

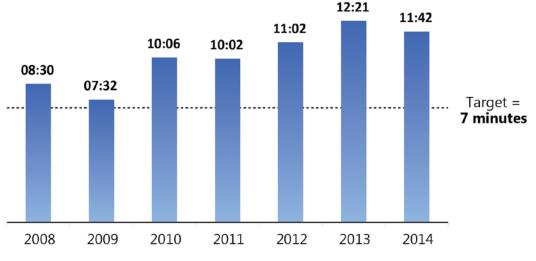


FIGURE 7-2 Wait times steadily increased, and are longer than DMV target

Source: JLARC staff analysis of DMV call center data. Note: Wait times are averages and shown in minutes and seconds.

- In 2011, DMV became the contractor operating the state's 411 helpline. This service is provided by the Richmond location and receives between 2,000 and 3,000 calls per month.
- In 2013, DMV established a call center unit dedicated to Commonwealth Authentication Services (CAS) for Medicaid identity verification. This service is provided by staff in the Richmond location, and it receives between 3,000 and 4,000 calls per month.

Because they represent a small proportion of total call volume, these new responsibilities are not the primary reasons wait times have consistently been longer than the seven-minute target.

Customers report frustration with call center wait times. According to the 2015 survey on customer satisfaction, less than 30 percent of survey respondents who had used this service were satisfied with the promptness with which their call was answered. Forty-four percent indicated that they hung up because the wait time was too long.

A substantial number of customers have been automatically disconnected from the DMV phone system. According to weekly DMV call center reports, more than 30 percent of the calls received during one week in June 2015 ended with a forced disconnection initiated by the automated system. When wait times are high, the system instructs the customer to either visit the DMV website or call back another time, and then disconnects. Most respondents to the 2015 customer satisfaction survey reported that they tried to call more than once before successfully connecting to the automated system.

Timeliness for serving CSC and Select staff, however, may be improving. DMV recently began allowing CSC and Select staff to send questions to the Help Desk by email, in an effort to improve response times. While some CSCs and Selects are very satisfied with this change, some still expressed dissatisfaction with the slowness of service.

CSCs report some benefits of the Help Desk's email policy. When customer service representatives were required to call the Help Desk, they waited on the line until receiving a response. The time spent waiting on the phone was time they could not spend assisting other customers. Now customer service representatives are able to send an email and then help other customers while they wait for a response. However, the email system still takes time, and it is hard to predict how long a customer may have to wait for a response. As one CSC manager explained,

Emailing our Help Desk usually results in a wait time of 5 [or more] minutes just for the email to be received and then you must wait on the response. There is no way to know how long it may take to resolve the customer issue.

Approximately one-third of Selects indicated that the timeliness of DMV's Help Desk was "fair" or "poor." Even though one-third of Selects also report that they usually receive a response from the Help Desk within 30 minutes, many Select customers wait up to an hour or more. This wait time is in addition to time the customer already spent waiting to be called to the service window.

## Staffing difficulties at Altavista and Richmond locations likely contribute to long wait times

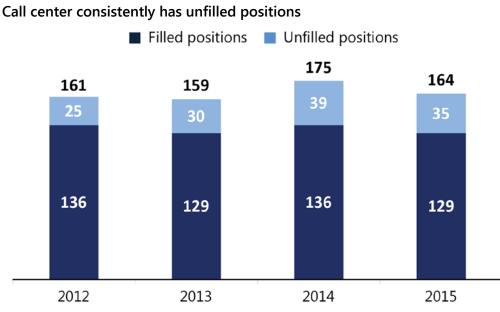
DMV management reports that insufficient staffing has been part of the reason for the call center's lack of success in meeting the wait time target. When the call center took on additional responsibilities, staff were dispersed across different units and locations in the state, and some staff were moved to fill supervisory positions that oversee the new programs. As a result, fewer staff are available to receive calls.

The call center has had difficulty filling vacant positions. DMV management reports that call center units, especially the two in Richmond, experience high staff vacancy rates, making it difficult to maintain adequate coverage of responsibilities. There were 164 positions allocated to all four locations in 2015, but 35 positions (21 percent) were unfilled (Figure 7-3).

The Altavista and Richmond locations have more difficulty maintaining full staffing for their phone positions than the South Boston location. Only 14 percent of South Boston's phone positions were unfilled in 2015, while 27 percent in Altavista and 29 percent in Richmond were unfilled (Figure 7-4). The higher proportion of unfilled positions in Altavista and Richmond may occur because these locations also have a higher proportion of part-time employees (40 and 68 percent) than South Boston (19 percent). Across all locations, part-time positions accounted for about 68 percent

#### Phone positions

In addition to the staff who answer phone calls, the call center employs staff to serve in supervisory and administrative roles. In 2015, approximately 75 percent of call center positions were dedicated to answering the phones. of the phone positions that were unfilled. Call center locations may have difficulty keeping part-time positions filled because they are less desirable than full-time positions, which offer more job stability and health insurance and retirement benefits.

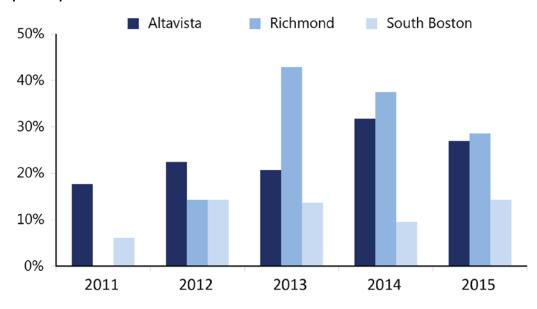


Source: JLARC staff analysis of DMV human resources data. Note: Includes full-time and part-time positions.

### FIGURE 7-4

FIGURE 7-3

### Altavista and Richmond consistently have a higher percentage of unfilled phone positions than South Boston



Source: JLARC staff analysis of DMV human resources data.

Note: Includes full-time and part-time phone positions. Richmond location did not exist in 2011.

# DMV is taking action to reduce wait times but additional action should be considered

DMV is aware of concerns about call center wait times and is attempting to make improvements using technology. These include installing the MySelect system on computers used by call center staff and installing a workforce management system that includes video monitoring capabilities to better supervise call center staff. According to DMV, recent wait time data suggests that these changes are helping, but more time is needed to determine if these improvements will have a significant and long-term impact. DMV is also recruiting additional staff to fill vacancies and improving the desirability of call center positions by allowing staff with a proven record of high performance to telecommute.

Call center wait times are subject to decisions that balance the efficient and effective use of resources with customer convenience. DMV should consider other staffing approaches to further reduce call center wait times, such as converting some part-time positions to full-time or outsourcing some of its call center responsibilities.

## DMV should assess converting some part-time positions to full-time positions

More than two-thirds (19) of the 28 unfilled phone positions in 2015 were parttime. In Altavista alone, 11 of the 14 unfilled phone positions were part-time. Across all locations, 89 percent of the full-time phone positions were filled, compared to only 60 percent for part-time phone positions. Part-time positions would seem to be less desirable to prospective and current employees, and the call center has difficulty keeping these roles filled. Given customers' satisfaction with the knowledge and helpfulness of call center employees, it is important to keep call center staff in their positions as long as possible, rather than continuously training new employees.

As part of its effort to reduce call center wait times, DMV should assess whether to convert more call center phone positions from part-time to full-time to further improve the desirability of these positions and keep trained employees in their roles. This may result in an allocation of fewer total positions available for call center employees, but the result could be more filled positions. Current part-time staff could be hired full-time, which may prevent those who would have pursued other positions outside of the call center in order to work full-time from leaving. Remaining unfilled positions may be more desirable to job seekers if they are fulltime because of the health insurance and retirement benefits and perceived job stability.

## DMV should assess outsourcing some of its call center responsibilities

DMV could outsource some or all of its call center support to a third party, such as a private contractor. Several other states have used outsourcing to reduce call center wait times. DMV calls could be directed to and addressed from these separate locations, especially when call volume and wait times are higher.

Using a third party to manage all or a portion of its call center calls would free up resources that could be (1) allocated to improve the services of the remaining call center operations or (2) directed elsewhere within the agency. DMV would need to establish policies and procedures to ensure that customer records are kept secure and all DMV protocols are followed, but the third party would be responsible for hiring and training employees as well as monitoring their day-to-day performance.

### **RECOMMENDATION 5**

The Department of Motor Vehicles should develop and implement a plan to further reduce call center wait times. The plan should consider strategies including (i) converting part-time phone positions to full-time to reduce its call center staff vacancy rate; and (ii) outsourcing some or all of its call center functions to a third party to reduce the call center workload. The Department of Motor Vehicles should submit the plan to the House and Senate Transportation Committees, the House Appropriations Committee, and the Senate Finance Committee by November 1, 2016.

### New York DMV's partnership with state corrections department

Two of New York's DMV call centers are operated within correctional facilities. Inmates do not have access to customer information, but they answer general questions and direct calls that involve customer information to a DMV call center.

These call centers are projected to answer more than one million calls per year, saving taxpayers \$3.5 million annually.

### A Resolution of the Joint Legislative Audit and Review Commission directing staff to review the Department of Motor Vehicles.

Authorized by the Commission on September 8, 2014

WHEREAS, the Joint Legislative Audit and Review Commission has not previously undertaken a review of the Virginia Department of Motor Vehicles; and

WHEREAS, the Virginia Department of Motor Vehicles has been responsible for vehicle titling and registration, driver licensing, and maintaining driver and vehicle records; as well as collecting Virginia's fuel tax, monitoring the trucking industry, and serving as Virginia's highway safety office; and

WHEREAS, the Virginia Department of Motor Vehicles has been granted broader responsibilities through its involvement in identity management and authentication, and state residency validation; and

WHEREAS, the Virginia Department of Motor Vehicles collects \$2.2 billion in revenue and has an operating budget of \$234 million and authorized staffing level of 2,038; and

WHEREAS, the Virginia Department of Motor Vehicles has more daily face-to-face contact with Virginia's citizens than any other state agency, and also services businesses including vehicle dealers, fuel tax customers, rental companies, and driving schools; and

WHEREAS, the Virginia Department of Motor Vehicles has relationships with several state agencies, including the State Board of Elections, and with many local governments, providing one-stop services to citizens at 57 "DMV Select" service centers, where local governments and private entities contract with the Virginia Department of Motor Vehicles to conduct more than 500,000 transactions annually; and

WHEREAS, the Virginia Department of Motor Vehicles operates 75 customer service centers, some of which are located in state-owned buildings, others are located in privately-owned facilities and leased by the state; and

WHEREAS, Virginia's total population is projected to become more diverse, increase by more than 500,000 people over the next decade, and include more drivers over age 65; and these changes will affect regions and localities differently; and

WHEREAS, the Virginia Department of Motor Vehicles handles transactions that include personally identifiable and sensitive information, such as birth records; now, therefore be it

RESOLVED by the Joint Legislative Audit and Review Commission, That staff be directed to review the Department of Motor Vehicles. In conducting its study, staff shall (i) assess the number, roles, and allocation of staff; (ii) assess the mix of in-person, paper-based, and online transactions and whether they provide timely, accurate, and cost-effective services; (iii) assess the costeffectiveness of the portfolio of state-owned and rented facilities, particularly in higher cost regions of the state; (iv) review the agency's role in identity management; (v) assess the effectiveness of co-

### Appendixes

ordination with other agencies and local governments, and level of satisfaction of citizens and businesses; (vi) review the extent of, and reasons for, variation in cost per transaction, accuracy, wait times, and other key measures, across service centers; (vii) identify practices that should be considered for replication or expansion; (viii) review the short- and long-term impact of changing state demographics—including an increasing an aging and growing population, and increases in numbers of customers with limited English proficiency—on funding, costs, structure, and services; (ix) review the structures and approaches other states use for their DMV function; and (x) review any other issues as appropriate.

All agencies of the Commonwealth, including the Department of Motor Vehicles, Department of Medical Assistance Services, Department of Social Services, Department of Health, State Board of Elections, Virginia Information Technologies Agency, Department of General Services, and Department of Human Resource Management shall provide assistance to the Joint Legislative Audit and Review Commission for this study, upon request. The Department of Motor Vehicles shall furnish information, including departmental records, to JLARC staff as requested in accordance with §§ 30-59, 30-69, and 46.2-209 of the Code of Virginia.

The staff shall complete its work and submit a report of its findings and recommendations to the Commission by December 15, 2015.

### **Appendix B: Research Activities and Methods**

JLARC staff conducted the following primary research activities for this report:

- Structured interviews with DMV staff, several state agencies, and national organizations;
- Quantitative analysis of DMV transactions, spending, staffing, locations, and wait and serve times;
- Surveys of 75 customer service center (CSC) managers and 54 Select agents; and
- Review of documents, reports, and other research.

### **Structured interviews**

Structured interviews were a key research method used for this report (Table B-1).

### TABLE B-1 Multiple interviews were performed for this study

| Entity interviewed                          | Topics covered  |  |  |  |
|---|---|--|--|--|
| DMV administration                          | agency spending and staffing  |  |  |  |
|   | <ul> <li>partnerships with other state agencies</li> </ul>  |  |  |  |
|   | <ul> <li>customer service (CSC, call center, DMV Select operations; training and other<br/>support provided to CSCs, call center, and Selects; policy and procedure<br/>development; monitoring customer satisfaction)</li> </ul> |  |  |  |
|   | <ul> <li>IT security program and policies</li> </ul>  |  |  |  |
|   | <ul> <li>audits and quality reviews</li> </ul>  |  |  |  |
|   | <ul> <li>enforcement and compliance</li> </ul>  |  |  |  |
| CSC district managers,                      | <ul> <li>organization and staffing of CSCs and Selects</li> </ul>   |  |  |  |
| CSC managers, and                           | <ul> <li>changes in customers and transactions over time</li> </ul>   |  |  |  |
| Select agents                               | <ul> <li>most frequently processed transactions</li> </ul>  |  |  |  |
|   | <ul> <li>staff training and guidance on policies and procedures</li> </ul>  |  |  |  |
|   | <ul> <li>reliability of IT systems</li> </ul>   |  |  |  |
|   | <ul> <li>support provided by the DMV headquarters or district offices</li> </ul>  |  |  |  |
| Other state agencies                        | <ul> <li>effectiveness of DMV's coordination with other agencies</li> </ul>   |  |  |  |
| that partner with DMV                       | <ul> <li>purpose, benefits, and challenges of the partnerships</li> </ul>   |  |  |  |
|   | <ul> <li>how information is shared between DMV and the partnering agencies</li> </ul>   |  |  |  |
|   | <ul> <li>training required for DMV staff to process the additional transactions</li> </ul>  |  |  |  |
|   | <ul> <li>agency satisfaction with the partnerships</li> </ul>   |  |  |  |
| Virginia Information<br>Technologies Agency | • operations of DMV's IT system, security compliance, DMV's IT projects, and the Commonwealth Authentication Service (CAS)  |  |  |  |
| Department of General                       | DMV's mix of leased vs. owned facilities  |  |  |  |
| Services                                    | <ul> <li>challenges involved in finding buildings that meet DMV's needs</li> </ul>  |  |  |  |
|   | • guidelines or criteria for determining whether it is more cost-effective to   |  |  |  |

| Entity interviewed   | Topics covered   |  |  |
|--|--|--|--|
|  | lease vs. own a building   |  |  |
| Auditor of Public<br>Accounts (APA)                        | <ul> <li>DMV's implementation of APA's recommendations to address deficiencies related to IT security</li> <li>DMV's ability to keep its data secure</li> </ul>  |  |  |
| Department of Planning<br>and Budget                       | <ul> <li>budget development process for DMV</li> <li>DMV's strategic planning</li> <li>DMV's real estate decisions</li> <li>effectiveness and efficiency of services that DMV provides</li> </ul>  |  |  |
| American Association<br>of Motor Vehicle<br>Administrators | <ul> <li>other state motor vehicle agencies that are comparable to Virginia's DMV in terms of functions and services provided</li> <li>staffing levels of other state motor vehicle agencies</li> <li>identity management and data security challenges</li> <li>effective practices that are used by other state motor vehicle agencies for specific areas where Virginia's DMV could be improved</li> </ul> |  |  |

Note: Other state agencies include Virginia Department of Health, Virginia Department of Transportation, State Board of Elections, and Supreme Court of Virginia.

### **Quantitative analysis**

JLARC staff analyzed several types of data to examine the use of DMV services in recent years and the cost-efficiency of DMV services. Most of the data used for the analysis was collected from DMV and includes: detailed expenditure and staffing data; DMV customer and transaction records; and locations of CSCs, mobile units, and DMV Selects. JLARC staff obtained data and information from several other sources, including population data from the Weldon Cooper Center and the U.S. Census Bureau (American Community Survey), which were incorporated into other data analyses.

### DMV transaction data

DMV transaction-level data was analyzed so that staff could

- understand the general volume of transactions by service option (overall and by region);
- identify CSCs and Selects that have a high or low volume of transactions or customers;
- group CSCs and Selects by size (based on volume of transactions and customers);
- use transaction volume to normalize expenditures for each service option;
- identify the most common transaction types for each service option;
- identify CSCs that have particularly high volumes of certain transaction types;
- determine the proportion of DMV customers using an alternative service option for at least one or all transactions;
- identify regions where use of alternative services is higher than others or has changed over time; and
- identify transaction types for which customers are more likely to use an alternative service option over a CSC.

### DMV spending data

JLARC staff obtained detailed DMV spending data for FY 2005 through FY 2014 to analyze trends in spending over the past 10 years. Spending was adjusted to FY 2014 dollars using the Consumer Price Index. Spending data was analyzed to

- examine changes in total DMV spending over the 10-year period by functional area (such as spending for staff and facilities) and by operational area (such as spending for customer service operations) and
- identify the major cost drivers (such as information technology spending) for years in which spending increased.

Staff analyzed CSC spending overall and on a per-customer and per-transaction basis to control for differences in the size of CSCs.

### DMV staffing data

JLARC staff analyzed DMV staffing levels, in total and by administration (DMV's term for a department or division), and for individual CSCs. DMV provided JLARC staff with overall staffing levels by administration for the past 10 years (July 1, 2005 through July 1, 2014). DMV also provided more specific, employee-level staffing data for the past five years (2011 through 2015), which allowed JLARC staff to assess staffing levels by location, such as by individual CSC. All staffing data provided was "point in time" data (as of July 1 of each year), not the total number of employees during the year. Staffing data was used to

- examine overall staffing trends;
- examine full-time and part-time staffing levels by CSC, the call center, and other DMV departments; and
- identify significant increases or decreases in staffing.

For CSCs, JLARC staff calculated changes in staffing levels over time, the number of transactions and customers per CSC employee, the number of managers versus customer service representatives, and the percentage of part-time staff.

The employee-specific data did not indicate the number of hours each part-time employee worked at each CSC, so JLARC staff converted part-time employees to full-time equivalent employees (FTEs). For FY 2012 through FY 2014, JLARC staff divided each CSC's annual wage expenditures by the average hourly wage for each CSC, and then divided by the total hours a full-time employee works in a year (2,080) to calculate an estimated FTE count.

DMV also provided JLARC staff with data on the number of employees who left DMV employment from 2011 to 2014. This data was used to assess the level of CSC staff turnover by comparing the total number of employees leaving each CSC to the total number of employees in the CSC.

### Analysis of the number and distribution of DMV service locations

JLARC staff worked with staff from the Virginia Information Technologies Agency's Virginia Geographic Information Network (VGIN) to analyze the number and distribution of CSCs and Selects—DMV's main in-person service providers. JLARC staff provided VGIN staff with the ad-

dresses of all CSC and Select offices and VGIN used GIS mapping software to map the locations and determine their proximity to Virginia residents. VGIN staff used population density data to help assess the distribution of locations in urban versus rural areas of the state.

JLARC staff also conducted other analyses to help assess whether the number and distribution of CSCs throughout the state are appropriate. Staff compared the number of CSCs in Virginia to the number in other states (controlling for square mileage and number of licensed drivers) using information available from other state budget documents, square mileage data from the U.S. Census Bureau, and the number of licensed drivers from the Federal Highway Administration. JLARC staff also calculated the number of Virginia residents served by each CSC, on average, using 2014 population data by planning district commission from the Weldon Cooper Center, and analyzed population projections to determine whether average population served by each CSC was expected to increase or decrease. Staff also analyzed CSC transaction and customer volume to help determine whether CSCs or Selects in certain parts of the state have been underutilized.

#### Wait and serve time data analysis

JLARC staff performed an analysis of customer wait and serve times collected from DMV. (See Chapter 6.) DMV provided transaction-level wait time data from FY 2012 through FY 2014. JLARC staff consolidated the transactions into customer-level data. Multiple transactions conducted by one customer at a CSC on the same day with the same ticket number were considered to be a single customer. The data set included several variables for each transaction (Table B-2).

| Variable            | Description   |
|---------------------|---|
| Customer ID         | Unique identifier for each customer, most often the driver's license number.<br>Customers without an identifier were designated "Customer (Unidentified)"   |
| Date                | Date of transaction   |
| Hour                | Hour of the day in which the customer received a ticket   |
| Wait time           | Length of time between a customer receiving a ticket and being called to a customer service counter   |
| Serve time          | Length of time between a customer being called to a customer service counter and the end of their transaction(s)  |
| Transaction time    | Length of time between a customer being called to a customer service counter<br>and the end of the transaction. Note: Transaction time is only different from<br>serve time when a customer completed more than one transaction per ticket. |
| CSC name            | Name of CSC that the customer visited   |
| Ticket number       | Ticket number that the customer received  |
| Ticket type         | Type of ticket that the customer received, based on the nature of the custom-<br>er's transactions  |
| Classification type | Description of transactions   |

### TABLE B-2

| Variable            | Description  |
|---------------------|--|
| Customer service ID | Unique identifier for each customer service representative       |
| Resolution          | Resolution of the transaction, either "Complete" or "Unresolved" |

JLARC staff performed detailed analysis of CSC wait and serve times. Wait and serve times were compared by CSC, size, geographic region, transaction type, ticket type, and over time. Daily customer volumes were compared by CSC. Correlation analyses were performed to determine if wait times by CSC were related to customer volume, transaction types, and staffing measures.

CSCs were divided into categories by size: small, medium, and large. Small CSCs served an average of 30,000 or fewer customers between FY 2011 and FY 2014. Medium CSCs served between 30,000 and 65,000 customers, and large CSCs served more than 65,000 customers during this time period.

Transactions were divided into two categories: complex and non-complex. Complex transactions typically require more documentation and scrutiny than non-complex ones. They may also have a greater risk of fraud, so customer service representatives are required to have additional approval before signing off on them. JLARC staff categorized transactions as complex based on average wait and serve times. Complex transactions tend to have longer wait and serve times (Appendix F).

### Surveys of DMV customer service center managers and DMV Select agents

JLARC staff surveyed all 75 CSC managers and 54 Select agents in Virginia to address several research areas and obtain their input on factors that affect the efficiency and effectiveness of services provided to DMV customers. A total of 61 CSC managers and 45 DMV Select agents responded to the surveys for response rates of 81 percent and 83 percent, respectively.

CSC managers and Select agents were asked for their opinions on the following topics:

- guidance and support they receive from DMV headquarters or the district office;
- usefulness and effectiveness of DMV's written policies and procedures;
- adequacy of staffing and the CSC's ability to recruit and retain qualified staff (CSCs only);
- effectiveness of training provided to their staff (CSCs and Selects), as well as training they have received as a manager or assistant manager (CSCs only);
- resources required to operate the Select and the reimbursement amount received in return (Selects only);
- reliability of the automated IT systems used to serve customers, and the effects of system outages on staff and customers;
- ability to serve customers in a timely manner while ensuring that transactions are appropriately processed and documented;
- customer satisfaction with services; and
- improving CSC and Select services, including practices that they have adopted to provide better services to customers.

#### Review of documents, reports, and other research

For this study, JLARC staff reviewed various documents, reports, and other research including

- recent reports and documents prepared by DMV, including activity-based cost reports and internal studies of DMV programs;
- DMV written policies;
- audit reports issued by DMV's internal auditor, the Auditor of Public Accounts, and other entities that audit DMV; and
- studies of other states' motor vehicle agencies.

In addition, JLARC staff reviewed documents and reports received from the American Association of Motor Vehicle Administrators (AAMVA) about motor vehicle agencies in other states to help understand how they are organized and staffed, as well as best practices used by motor vehicle agencies in other states to ensure efficient and effective services. AAMVA reports also included surveys of other states' performance measures. JLARC staff reviewed these to compare wait and serve times of different states to Virginia.

JLARC staff reviewed two customer satisfaction surveys collected by third party contractors for DMV. (See Chapters 6 and 7.) The Southeastern Institute of Research conducted a customer satisfaction survey on behalf of DMV in February 2015. Researchers contacted adult residents who had a valid Virginia driver's license or ID card, or a vehicle registered in Virginia. Respondents also must have used at least one of DMV's services within the past 12 months. A total of 1,000 customers responded to this telephone survey. Calls were conducted randomly, and the data was weighted by age to reflect Virginia's age distribution.

The University of Virginia Center for Survey Research conducted a telephone survey of DMV customers in 2006. A total of 1,232 interviews were completed. Results of these surveys were used to better understand customer satisfaction with CSC and call center services.

## **Appendix C: Leasing vs. Owning CSCs**

The study mandate (item iii) directs JLARC to assess the cost-effectiveness of the portfolio of stateowned and rented facilities, particularly in higher cost regions of the state. This appendix discusses DMV's process to consider leasing or owning facilities, as well as a comparison of the cost of leasing and owning facilities over time.

#### DMV's building committee assesses whether to lease or own facilities

DMV has a Building Committee made up of several high-level DMV officials—including the Commissioner, Chief Administrative and Finance Officers, Chief Information Officer, Assistant Commissioner of Customer Services, and the Facilities Director—that handles building and property decisions, including assessing the cost-effectiveness of leasing versus owning. This committee meets monthly and assesses all leases two years before they are to expire. For each lease that is expiring, the committee assesses the cost-effectiveness and feasibility of leasing versus owning and whether the location is still appropriate. The committee examines the cost-efficiency of the current lease, customer volume at the CSC, local population projections, and distance traveled by customers who use the CSC. DMV staff indicated that, in most cases, the building committee determines early in the process whether purchasing or building a facility is feasible. For example, the building committee initially considered buying or building a facility to replace the leased CSC in Danville, but decided to continue leasing because customer volume is low and is not expected to increase, and purchasing this facility would require too much of an investment. However, the committee has recommended building two new facilities to replace current facilities in growing urban areas and is working with DGS to build them on surplus state property.

### Leasing provides flexibility

Although leasing may in some cases be more costly than owning, it does offer DMV more flexibility to move the location of a CSC if local population levels change, or if the area in which a CSC is located becomes unsafe or changes in some other way that affects customer service. For example, DMV is relocating the CSC in Suffolk because of increased crime in the area and development growth, which has affected the routes they use to conduct road tests.

### Though owning facilities may be less expensive, up-front costs can be prohibitive

The up-front costs necessary to purchase or build a CSC is often a deterrent to owning more of them, even though this means that the amount DMV pays for rent could likely pay for some CSCs several times over. DMV will pay a total of \$116 million over the life of the current leases it has for CSCs (Table C-1). However, the life of the leases allows DMV to spread these costs over a 10- to 20-year period rather than just a few years. In contrast, the up-front costs for purchasing state surplus property in Williamsburg and constructing a facility for one CSC is expected to cost \$2 million. It is unlikely that DMV would be able to afford the up-front costs to own multiple CSCs within a five- to 10-year period without impacting customer service operations. The agency's sole funding source is the revenue it collects through taxes and fees established by the General Assembly.

### TABLE C-1

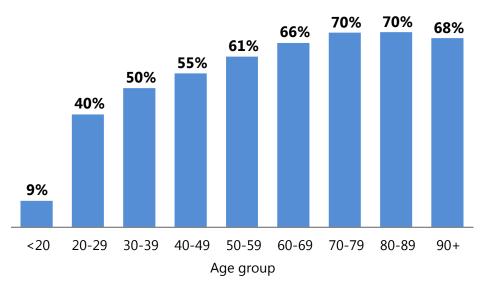
| DMV will pay \$116 million | in rent for CSCs over the | terms of their current leases |
|----------------------------|---------------------------|-------------------------------|
|                            |                           |                               |

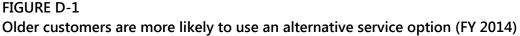
| DMV district  | Average lease rate per square foot for CSCs in district | Total to be paid over<br>terms of CSC leases (\$M) |
|---------------|---|--|
| Richmond      | \$18.02   | \$22.3   |
| Fairfax South | 21.58   | 17.7   |
| Roanoke       | 15.21   | 16.8   |
| Fairfax North | 29.75   | 16.0   |
| Staunton      | 17.76   | 13.0   |
| Portsmouth    | 18.39   | 12.6   |
| Bristol       | 13.09   | 11.9   |
| Hampton       | 16.43   | 5.6  |
| All districts | \$17.22   | \$115.9  |

Source: JLARC staff analysis of facility data provided by DMV.

## **Appendix D: Use of Alternative Service Options Varies by Customer Age**

Younger customers, who might be expected to use more Internet-based services, are performing a lower percentage of their transactions through the Internet and other alternative service options than older customers. Less than half of transactions for customers under the age of 30 were processed through an alternative option in FY 2014 while at least two-thirds of transactions for customers over the age of 60 were processed using an alternative option (Figure D-1).





The lower use of alternative service options by younger customers is related, at least in part, to the types of services they need, some of which have in-person requirements. Typically, customers younger than age 20 need learner's permits and driver's licenses, and these services must be processed in person at CSCs.

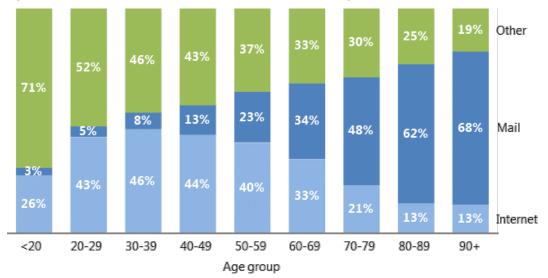
Compared to other age groups, customers between the ages of 20 and 39 are more likely to need compliance services for the reinstatement of driving privileges. These transactions may be easier to resolve in person at a CSC because they are complex, involving multiple requirements and a variety of fees. Nearly 40 percent of suspension and revocation transactions in FY 2014 were for customers between the ages of 20 and 29. Another 25 percent of these transactions were processed for customers between the ages of 30 and 39.

However, when looking at the characteristics of customers who use alternative service options and which options they use, younger customers are more likely to use the Internet (Figure D-2). Use of the Internet was highest in FY 2014 among customers between the ages of 20 and 49 and lowest among those age 70 and older. More customers over age 70 used the mail-in service option.

Source: JLARC staff analysis of DMV transaction data.

#### FIGURE D-2

Customers between ages 20 and 49 used Internet services more frequently, and customers age 70 and older used mail services more frequently (FY 2014)



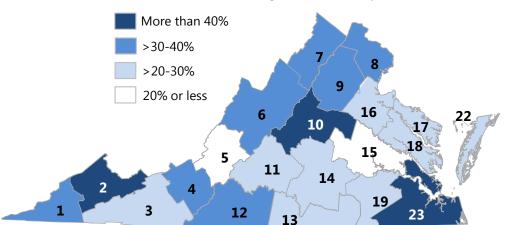
Source: JLARC staff analysis of DMV transaction data.

Note: Percentages shown are of total alternative service transactions. Other includes DMV Selects, online dealer, and phone transactions.

## **Appendix E: Customer Use of Internet for DMV Transactions by Region**

The percent of DMV customers using the Internet to process their transactions in FY 2014 ranged from 48 percent in the Thomas Jefferson planning district to 17 percent in the Roanoke Valley. Only three planning districts had more than 40 percent of customers using the Internet: Thomas Jefferson, Hampton Roads, and Cumberland Plateau in the southwestern part of the state. Two planning districts—Roanoke Valley-Alleghany and Richmond Regional—had less than 20 percent of customers using the Internet to process their transactions.

#### FIGURE E-1 Use of the Internet for DMV transactions varies by region (FY2014)



% of DMV customers using the Internet to process transactions

#### **Planning District Commissions**

- 1 Lenowisco
- 2 Cumberland Plateau
- 3 Mount Rogers
- 4 New River Valley
- 5 Roanoke Valley-Alleghany
- 6 Central Shenandoah
- 7 Northern Shenandoah Valley
- 8 Northern Virginia
- 9 Rappahannock-Rapidan
- 10 Thomas Jefferson
- 11 Region 2000

- 12 West Piedmont
- 13 Southside
- 14 Commonwealth
- 15 Richmond Regional
- 16 George Washington
- 17 Northern Neck
- 18 Middle Peninsula
- 19 Crater
- 22 Accomack-Northampton
- 23 Hampton Roads

Source: JLARC staff analysis of DMV transaction data. Note: Only includes transactions for individual DMV customers.

## Appendix F: Average wait times by CSC

Average annual wait times in FY 2014 ranged from just under three minutes to almost 47 minutes.

### TABLE F-1

### Average wait times by CSC vary (FY 2014)

| CSC             | Avg wait time<br>(minutes) | CSC                | Avg wait time<br>(minutes) |
|-----------------|----------------------------|--------------------|----------------------------|
| Abingdon        | 07:44                      | Fairfax Westfields | 30:37                      |
| Alexandria      | 44:26                      | Farmville          | 11:48                      |
| Altavista       | 10:58                      | Fort Lee           | 03:13                      |
| Arlington       | 46:54                      | Franconia          | 31:07                      |
| Bedford         | 09:17                      | Fredericksburg     | 20:48                      |
| Bristol         | 08:25                      | Front Royal        | 13:37                      |
| Charlottesville | 23:15                      | Galax              | 11:35                      |
| Chesapeake      | 21:28                      | Gate City          | 08:56                      |
| Chester         | 18:13                      | Gloucester         | 13:24                      |
| Chesterfield    | 27:35                      | Hampton            | 27:41                      |
| Christiansburg  | 22:55                      | Harrisonburg       | 24:19                      |
| Clintwood       | 06:02                      | Hopewell           | 09:02                      |
| Courtland       | 07:37                      | Jonesville         | 11:21                      |
| Covington       | 05:19                      | Kilmarnock         | 05:27                      |
| Culpeper        | 14:38                      | Lebanon            | 07:36                      |
| Danville        | 19:37                      | Leesburg           | 30:59                      |
| East Henrico    | 19:23                      | Lexington          | 07:47                      |
| Emporia         | 03:46                      | Lorton             | 34:15                      |
| Fair Oaks       | 29:49                      | Lynchburg          | 14:03                      |

| CSC                | Avg wait time<br>(minutes) | CSC                    | Avg wait time<br>(minutes) |
|--------------------|----------------------------|------------------------|----------------------------|
| Manassas           | 41:32                      | Stafford               | 18:38                      |
| Marion             | 07:30                      | Staunton               | 18:54                      |
| Martinsville       | 13:59                      | Sterling               | 37:39                      |
| Newport News       | 30:58                      | Suffolk                | 22:30                      |
| Norfolk/Military   | 24:05                      | Tappahannock           | 04:40                      |
| Norfolk/Widgeon Rd | 24:42                      | Tazewell               | 06:54                      |
| North Henrico      | 17:36                      | Tysons Corner          | 34:14                      |
| Norton             | 15:51                      | Vansant                | 16:29                      |
| Onancock           | 14:24                      | Virginia Beach–Buckner | 24:22                      |
| Petersburg         | 13:47                      | Virginia Beach–Hilltop | 23:01                      |
| Portsmouth         | 21:44                      | Warrenton              | 25:06                      |
| Pulaski            | 04:56                      | Waynesboro             | 20:54                      |
| Richmond           | 25:34                      | West Henrico           | 22:21                      |
| Roanoke            | 27:48                      | Williamsburg           | 20:05                      |
| Rocky Mount        | 17:34                      | Winchester             | 26:11                      |
| Smithfield         | 18:17                      | Woodbridge             | 32:20                      |
| South Boston       | 09:22                      | Woodstock              | 05:11                      |
| South Hill         | 11:54                      | Wytheville             | 03:37                      |

Source: JLARC staff analysis of DMV wait time data. Note: Times are shown in minutes and seconds

## Appendix G: Transaction complexity, wait times, and serve times

JLARC staff segmented transactions into those that are more and less complex. More complex transactions include transactions with ticket types that indicate combination transactions, original titles, original driver's licenses/IDs, tests, and compliance-related transactions. Less complex transactions include vehicle registration and driver's license renewals.

Complex transactions took, on average, more time to conduct than less complex transactions. Customers also waited longer to obtain services for these more complex transactions.

 TABLE G-1

 Transactions with longer serve times often have longer wait times (FY 2014)

| Ticket type      | Transaction type  | Avg serve time<br>(minutes) | Avg wait time<br>(minutes) |
|------------------|---|-----------------------------|----------------------------|
| More complex     |   |                             |                            |
| Combination      | Vehicle title or registration and a driver's license, permit, or ID card            | 16                          | 29                         |
| Dealer           | Obtain dealer plates, pick up dealer work, dealer titling                           | 16                          | 8                          |
| Title            | Vehicle title indicating ownership of vehicle                                       | 12                          | 21                         |
| Driver's license | Original driver's license, commercial driver's license, ID card                     | 11                          | 25                         |
| Test             | Learner's permit test, motorcycle license test, commercial driver's license tests   | 10                          | 43                         |
| Compliance       | Payment of fees, presentation of documents, etc.<br>to reinstate driver's license   | 9                           | 24                         |
| Less complex     |   |                             |                            |
| Other driver     | License/ID renewal, reissue, duplication, exchange                                  | 8                           | 22                         |
| Other title      | Title replacement, lien satisfaction  | 7                           | 17                         |
| Registration     | Original, renewal, or reissue of registration                                       | 5                           | 17                         |
| Disabled placard | Disabled parking placards, driver and vehicle transcripts, address change           | 4                           | 13                         |
| Priority         | Customers with special needs or extenuating circumstances (manag-<br>er discretion) | 4                           | 4                          |

Source: JLARC staff analysis of DMV Q-Flow data.

## **Appendix H: Staffing by CSC**

DMV appears to allocate staffing to CSCs such that CSCs with more customers tend to also have more staff. The number of staff ranges from three full-time equivalent filled positions at the Clintwood CSC to 27 positions at Tyson's Corner. For calculations shown in Table H-1, JLARC staff converted part-time positions to full-time equivalent positions based on data provided by DMV (average wages paid to part-time CSC staff and total spending for wages for each CSC) and the assumption that full-time staff work a 40-hour week or 2,080 hours per year.

| -                  | -      | Number of   | Average daily | Customer-to-staff |
|--------------------|--------|-------------|---------------|-------------------|
| CSC                | Size   | staff (FTE) | customers     | ratio             |
| Abingdon           | small  | 6           | 105           | 17                |
| Alexandria         | large  | 21          | 454           | 22                |
| Altavista          | small  | 6           | 100           | 17                |
| Arlington          | large  | 24          | 557           | 23                |
| Bedford            | medium | 7           | 130           | 19                |
| Bristol            | small  | 5           | 93            | 19                |
| Charlottesville    | large  | 20          | 319           | 16                |
| Chesapeake         | large  | 18          | 339           | 19                |
| Chester            | large  | 15          | 340           | 22                |
| Chesterfield       | large  | 18          | 407           | 22                |
| Christiansburg     | medium | 11          | 218           | 19                |
| Clintwood          | small  | 3           | 62            | 21                |
| Courtland          | small  | 6           | 102           | 17                |
| Covington          | small  | 5           | 101           | 20                |
| Culpeper           | medium | 7           | 166           | 23                |
| Danville           | medium | 11          | 186           | 18                |
| East Henrico       | large  | 15          | 342           | 23                |
| Emporia            | small  | 5           | 102           | 20                |
| Fair Oaks          | large  | 22          | 382           | 17                |
| Fairfax Westfields | large  | 18          | 354           | 19                |
| Farmville          | medium | 7           | 123           | 18                |
| Fort Lee           | small  | 5           | 31            | 6                 |
| Franconia          | large  | 21          | 430           | 21                |
| Fredericksburg     | large  | 23          | 449           | 20                |
| Front Royal        | medium | 6           | 135           | 24                |
| Galax              | medium | 6           | 128           | 21                |
| Gate City          | small  | 3           | 99            | 33                |

### TABLE H-1 Staffing and customer volume by CSC (FY 2014)

| CSC                    | Size   | Number of<br>staff (FTE) | Average daily<br>customers | Customer-to-staff<br>ratio |
|------------------------|--------|--------------------------|----------------------------|----------------------------|
| Gloucester             | medium | 6                        | 127                        | 21                         |
| Hampton                | large  | 22                       | 364                        | 17                         |
| Harrisonburg           | large  | 13                       | 266                        | 21                         |
| Hopewell               | medium | 10                       | 207                        | 21                         |
| Jonesville             | small  | 4                        | 63                         | 16                         |
| Kilmarnock             | small  | 4                        | 82                         | 20                         |
| Lebanon                | small  | 3                        | 60                         | 20                         |
| Leesburg               | medium | 14                       | 288                        | 21                         |
| Lexington              | small  | 5                        | 104                        | 21                         |
| Lorton                 | medium | 16                       | 330                        | 21                         |
| Lynchburg              | large  | 17                       | 306                        | 18                         |
| Manassas               | large  | 20                       | 426                        | 22                         |
| Marion                 | small  | 4                        | 104                        | 26                         |
| Martinsville           | medium | 11                       | 193                        | 17                         |
| Newport News           | medium | 17                       | 269                        | 16                         |
| Norfolk/Military       | large  | 17                       | 333                        | 19                         |
| Norfolk/Widgeon Rd     | large  | 16                       | 349                        | 21                         |
| North Henrico          | large  | 14                       | 384                        | 28                         |
| Norton                 | small  | 5                        | 107                        | 21                         |
| Onancock               | small  | 6                        | 114                        | 19                         |
| Petersburg             | medium | 10                       | 229                        | 23                         |
| Portsmouth             | large  | 14                       | 297                        | 21                         |
| Pulaski                | small  | 5                        | 102                        | 20                         |
| Richmond               | large  | 20                       | 413                        | 20                         |
| Roanoke                | large  | 27                       | 524                        | 19                         |
| Rocky Mount            | medium | 8                        | 136                        | 17                         |
| Smithfield             | small  | 6                        | 119                        | 21                         |
| South Boston           | medium | 8                        | 120                        | 15                         |
| South Hill             | small  | 5                        | 122                        | 24                         |
| Stafford               | medium | 17                       | 283                        | 17                         |
| Staunton               | medium | 8                        | 189                        | 25                         |
| Sterling               | large  | 16                       | 319                        | 20                         |
| Suffolk                | medium | 15                       | 174                        | 12                         |
| Tappahannock           | medium | 9                        | 134                        | 15                         |
| Tazewell               | small  | 5                        | 122                        | 24                         |
| Tysons Corner          | large  | 27                       | 571                        | 21                         |
| Vansant                | small  | 5                        | 99                         | 20                         |
| Virginia Beach/Buckner | large  | 18                       | 377                        | 21                         |

| CSC                    | Size   | Number of<br>staff (FTE) | Average daily<br>customers | Customer-to-staff<br>ratio |
|------------------------|--------|--------------------------|----------------------------|----------------------------|
| Virginia Beach/Hilltop | large  | 17                       | 304                        | 18                         |
| Warrenton              | medium | 9                        | 168                        | 18                         |
| Waynesboro             | medium | 6                        | 166                        | 26                         |
| West Henrico           | large  | 16                       | 331                        | 20                         |
| Williamsburg           | medium | 7                        | 149                        | 22                         |
| Winchester             | medium | 11                       | 202                        | 19                         |
| Woodbridge             | large  | 23                       | 499                        | 21                         |
| Woodstock              | small  | 5                        | 130                        | 26                         |
| Wytheville             | small  | 5                        | 110                        | 24                         |

Source: JLARC staff analysis of DMV staffing and customer data. Note: Number of staff and average daily customers are from FY 2014. Number of staff includes filled positions only.

## **Appendix I: Agency Response**

As part of an extensive validation process, the state agencies and other entities that are subject to a JLARC assessment are given the opportunity to comment on an exposure draft of the report. JLARC staff sent an exposure draft of this report to the Secretary of Transportation and the Department of Motor Vehicles. Appropriate corrections resulting from technical and substantive comments are incorporated in this version of the report.

This appendix includes the response letter of Department of Motor Vehicles.



## COMMONWEALTH of VIRGINIA

Department of Motor Vehicles 2300 West Broad Street

Post Office Box 27412 Richmond, VA 23269-0001

October 5, 2015

Mr. Hal E. Greer, Director Joint Legislative Audit and Review Commission General Assembly Building, Suite 1100 201 North 9<sup>th</sup> Street Richmond, Virginia 23219

Dear Mr. Greer:

**Richard D. Holcomb** 

Commissioner

Thank you for the opportunity to review and comment on the exposure draft of the Joint Legislative Audit and Review Commission (JLARC) report on the Virginia Department of Motor Vehicles (DMV). We appreciate the time and effort that JLARC staff spent to gain an understanding of DMV's operations, and appreciate the professionalism of your staff throughout the study.

The report sends a clear message that DMV is a dynamic agency that has implemented a number of new initiatives to enhance its services and routinely takes steps to address its challenges. We are excited about all the initiatives we have undertaken in recent years to improve service to both our individual and business customers. From efforts to provide more online transactions and streamline processes, to efforts to modernize our IT infrastructure, these initiatives have resulted in many benefits, not the least of which includes time and cost savings for DMV, its customers, and ultimately the taxpayers. These enhancements allow Virginia companies to focus on their businesses and allow individuals to get on with their busy lives.

We are pleased with the report's conclusions that DMV has rigorous processes in place to minimize error and fraud in its transactions and to ensure the integrity of its identification verification process, and that its processes are consistent with best practices recommended by the American Association of Motor Vehicle Administrators, the trade association for North American motor vehicle agencies. Further, DMV has demonstrated its strong financial management, with only moderate spending increases over the last decade. The report also noted that Virginia's DMV is a model for other state DMVs in its expansive service offerings, notably its partnerships with other agencies to provide value-added services to customers. And, the report cites the convenience of DMV's offices, as the JLARC analysis found that almost all Virginians were within a 30-minute drive for service, whether it be at a CSC, a DMV Select (contractual agent), or through a DMV mobile unit visit.

Mr. Hal E. Greer, Director October 5, 2015 Page 2

The report spends substantial time discussing DMV's customer wait times in its customer service centers (CSCs) and DMV Direct (DMV's call center operation). We are happy with the report's findings that half of our customers waited 15 minutes or less for service, and almost a third waited less than five minutes at our CSCs. Despite these positive results, we recognize that some customers wait longer than we believe is acceptable. As noted in the report, DMV monitors wait times closely and strives to find ways to shorten the wait times. The following list provides just a few examples of initiatives we have implemented or are in the process of implementing that will assist in reducing wait times.

- Through a combination of renovating and relocating some offices, and opening new offices, DMV is poised to expand service window capacity, particularly in northern Virginia, by at least 22 windows. This will help alleviate wait times in some of our busiest offices in the state.
- DMV is partnering with local school systems across the state to enable students to take their learner's permit knowledge test at their school during normal school hours. This eliminates the need for parents to bring their children to a CSC, often on busy Saturdays, to take the knowledge test. This is a time savings for both the families and DMV, and will result in lesser wait times for customers who are required to come to a CSC. We have also begun offering remote testing to private businesses for escort vehicle driver certification.
- CSC front counters are being redesigned in a way that helps minimize customer service representatives' time away from the front counter, shortening customers' serve time. Shorter serve times result in overall shorter wait times for customers.
- CSCs now offer customers the ability to schedule road test appointments, which minimizes the wait time for these customers.
- DMV has begun developing "start anywhere" transactions whereby a customer can begin a transaction at home or wherever they have Internet service, transmit the relevant information to DMV electronically, and have a "pending" transaction waiting for them when they come to the CSC to complete whatever portion of the transaction requires an in-person visit (for example, to show required documentation). The first "start anywhere" transaction name change was successfully implemented in August 2015, and work is underway to create additional ones. These transactions will shorten the customer's time spent at the CSC, while shortening the staff time required to process the transaction.
- Through our EZ Fleet program, companies with fleets of 100 or more vehicles are able to title and register their own vehicles without having to visit a CSC. EZ Fleet customers can put vehicles on the road the same day they purchase them and maximize the use of their resources by not having to send employees to DMV. This frees up CSC staff time to serve customers who are required to visit a CSC.

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- Independent dealers that sell more than 200 vehicles per year have been notified that beginning December 2015, they will be required to use the online dealer program to title and register vehicles. Franchise dealers already have previously been mandated to use the online dealer program. This reduces transactions in our CSCs.
- DMV is also in the planning stage to implement a next-generation queuing system in our CSCs. The new system will enable customers to get "in line" virtually at a CSC from home or anywhere, well before they arrive at the CSC, and thereby minimize the actual wait in the office. It is also expected to have a number of features helpful to customers in planning their CSC visit, such as on-demand self-service status updates, including approximate wait time left, and automated offers to re-route the customer to an alternate CSC that offers a shorter wait time.

While wait times are an important focus to DMV, and the agency will continue to look for ways to shorten customer visits, we do not believe wait times are the only or even the overriding measure of CSC effectiveness. In recent years we have focused particular effort on ensuring that customers are fully served when they come to a CSC. While a customer may come in asking to complete a particular vehicle transaction, our IT system enhancements now allow us to look at the "360 degree view" of the customer's record to determine if there are any other DMV transactions that they could perform while in our office (for example, renewing a driver's license if it is due to expire within a year of the visit). In fact, the system is programmed to provide alerts to our customer service representatives regarding additional issues on a customer's record that may need to be addressed by the customer.

By taking this holistic view, we help reduce the overall number of visits a customer makes to a CSC in a given year, which benefits both the customer and DMV. We believe this eventually will help with our wait times; however, in the short-term, taking more time with each customer may cause increased time in the CSCs for customers. In any case, it clearly provides more thorough and better customer service for those visiting a CSC.

We also are focusing on minimizing the number of customers that come to our CSCs that we have to turn away because they do not have all the required documentation or other precursor steps taken to complete their DMV business. For example, customers would routinely come to DMV to renew their vehicle registration only to learn that they have a vehicle stop on their record because they owe their locality property taxes. The customer would have to leave the CSC to take care of the property tax bill and then come back to the CSC to renew their registration once the tax bill was paid. Now, we allow customers with a vehicle stop for nonpayment of local property taxes to obtain a one-month extension of their registration, during which time they can take care of their tax bill. At the same time, we encourage them to renew their registration online once the tax bill is resolved. In addition, customers who come to DMV and need to prove legal presence but who have not brought acceptable proof, in many cases, now Mr. Hal E. Greer, Director October 5, 2015 Page 4

have the ability to still be served. At the customer's request, DMV can query a national vital records database (Electronic Verification of Vital Events) to certify the customer's U.S. birth if born within one of the 38 participating states. And if they are Virginia born, they can obtain a copy of their birth certificate, which provides proof of legal presence. Further, as of September 21, we can process certain name changes and title transfers because we now are able to issue Virginia death, marriage, and divorce certificates.

These new services, while potentially adding to the length of time the customer spends in the CSC, allows the customer to be served in one visit rather than having to make multiple trips to the DMV. Along this same line, beginning in 2016, our partnership with the Office of the Executive Secretary of the Virginia Supreme Court will enable DMV to accept customer payments of delinquent court fines and costs, which will allow the customer to then complete their DMV business in one visit.

A February 2015 survey revealed customers' priority attributes of their DMV are convenient and efficient service. JLARC acknowledges DMV's efforts to provide an array of service delivery options at convenient locations. We are in the process of developing agency performance measures to reflect increasing efficiencies – reducing repeat customer visits and increasing the completion of multiple customer transactions in a single visit – which are important facets of a customer's overall experience and satisfaction with DMV.

Despite the over-reliance on wait times to assess DMV performance in the report, DMV generally supports the report's recommendations. There are always ways to improve and we believe we have demonstrated our commitment to continuous enhancements in providing customer service, issuing secure credentials, and ensuring the safety of the motoring public.

We have provided technical comments and suggestions under separate cover that we trust will be useful as you finalize this report. Again, DMV appreciates the opportunity to provide these comments.

Sincerely,

Richard D. Holcomb

RDH: lbf

Copy: The Honorable Aubrey Layne Secretary of Transportation



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