Report to the Governor and the General Assembly of Virginia

Operations and Performance of Virginia's Department of Elections

2018





Joint Legislative Audit and Review Commission

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Summary: Operations and Performance of Virginia's Department of Elections

WHAT WE FOUND

Virginia uses a fairly robust process to maintain its voter registration list, but can further improve process and guidance

Maintaining the accuracy of Virginia's list of 5.5 million registered voters is critically important, but also extremely difficult. The dynamic nature of the registration list makes it extremely difficult to maintain a completely accurate list and to reliably quantify the accuracy of the list.

However, available evidence suggests the list is likely mostly accurate because (1) most individuals on the list are the same from year to year, and (2) ELECT uses fairly comprehensive sources and robust procedures to maintain the list. ELECT does not, though, make full use of available data sources to fully ensure the accuracy of the list. ELECT has historically allocated less than one staff position to maintaining the registration list. ELECT also has not provided adequate guidance to the 133 general registrars about how to decide whether to add or remove a voter from the list.

WHY WE DID THIS STUDY

In 2017 the Joint Legislative Audit and Review Commission (JLARC) directed its staff to study the operation and performance of the Department of Elections.

ABOUT THE DEPARTMENT OF ELECTIONS

The Virginia Department of Elections (ELECT) is responsible for supervising the local administration of elections in Virginia. Elections are administered by general registrars and local electoral boards, which are responsible for operating polling locations on election day and for numerous other functions during the rest of the year.

IT system maintained by ELECT is not sufficiently functional or reliable

The state's IT system (VERIS) used to maintain the voter registration list and interact with general registrars is not sufficiently functional or reliable. The system does not provide all of the functionality registrars need to administer elections effectively. The system has longstanding reliability problems that continue to slow processing speed during peak usage.

ELECT requested and is now receiving from the General Assembly an additional \$1 million annually from FY18 through FY22 to improve the system. However, many of the major improvements have yet to be implemented. More broadly, the decision in FY17 to rebuild rather than replace the system did not adequately consider several key factors. Several other states are also rebuilding or replacing their elections IT systems to address the same challenges facing VERIS.

ELECT's oversight does not provide full assurance of election integrity and uniformity, though guidance and training is generally useful

To be effective, state supervision of local election administration should consist of meaningful oversight, and guidance and training for local elections officials to ensure that elections are conducted with integrity and uniformity. ELECT conducts a few oversight activities to ensure that elections are effectively administered. However, it does not adequately focus on overseeing the local functions that, if not performed properly, pose a risk to uniform and legally compliant elections in Virginia. For example, ELECT oversight has not sufficiently focused on key functions such as assigning voters to legislative districts and precincts, or precinct operations on elections day.

ELECT generally provides useful guidance and training to help general registrars administer elections, but some material has not been timely, correct, or sufficient to address questions from registrars. The current commissioner is taking several positive steps to address these deficiencies.

ELECT has lacked continuity of leadership and is susceptible to political influence

Under the previous commissioner, there were significant concerns about inadequate management, lack of strategic leadership, and political bias, according to ELECT staff. Under the current commissioner, management has improved. However, the recent improvements are at risk due to the lack of continuity of leadership across administrations. ELECT has three appointed positions—more than many other agencies—and the top three leadership positions traditionally turn over with each administration. In addition, ELECT lacks a classified position to ensure continuity of operations across administrations. Further, because the number of political appointees is unusually high, ELECT continues to be susceptible to political influence.

Summary assessment of ELECT operations and performance

Topic	Criteria used by JLARC to assess topic	Assessment
Matau	Sources used for information matching are comprehensive	•
Voter registration list maintenance	Procedures used for information matching are robust	•
	Guidance to registrars ensures uniformity in making changes to list	\bigcirc
	System provides needed functionality for registrar activities	•
VERIS IT system	System is sufficiently reliable & responsive	•
	System has been developed & managed effectively	•
C	Oversight conducted to ensure election integrity & uniformity	•
Supervision of local election	Guidance provided to ensure election integrity & uniformity	•
administration	Training provided to ensure election integrity & uniformity	•
	Agency is effectively managed to ensure positive organizational culture	e •
	Agency has clearly defined job roles and expectations for staff	•
Internal agency management	Agency has adequate policies and procedures	•
management	Agency structure has reasonable number of appointed positions	\circ
	Agency structure has clearly defined division of responsibilities	•

WHAT WE RECOMMEND

Legislative action

- Withhold additional funding for VERIS pending satisfactory status report on system improvements
- Direct ELECT and VITA to hire a third party to conduct a comprehensive assessment of the feasibility, costs, and benefits of replacing VERIS
- Direct ELECT to develop a plan to provide greater oversight of election integrity and uniformity
- Direct ELECT to create a permanent, full-time director of operations position to be filled by a classified employee
- Eliminate the appointed positions of chief deputy commissioner and confidential policy advisor

Executive action

- Work with DMV and experts, and allocate at least one full time staff position, to improve maintenance of the voter registration list
- Improve the written guidance and training to general registrars on topics such as adding or removing voters from the registration list, and assigning voters to precincts
- Consolidate the Election Services and Community Relations divisions

The complete list of recommendations is available on page v.

Recommendations and Options: Operations and Performance of Virginia's Department of Elections

RECOMMENDATION 1

The Virginia Department of Elections should improve its process for updating the state's voter registration list by using the USPS National Change of Address data at least twice a year. (Chapter 2)

RECOMMENDATION 2

The Virginia Department of Elections should work with experts to assess and improve the name-matching algorithm used as part of its list maintenance program. (Chapter 2)

RECOMMENDATION 3

The Virginia Department of Elections should convene a workgroup to review the electronic voter registration process through the Virginia Department of Motor Vehicles. The workgroup should identify changes that would improve the accuracy of voter registration information and the efficiency of the process. The workgroup should submit a report and recommendations to the House and Senate Privileges and Elections Committees by July 1, 2019. (Chapter 2)

RECOMMENDATION 4

The Virginia Department of Elections should allocate at least one full-time staff position to maintaining the voter registration list. (Chapter 2)

RECOMMENDATION 5

The Virginia Department of Elections should conduct formal, periodic reviews to identify opportunities to improve the list maintenance process. (Chapter 2)

RECOMMENDATION 6

The Virginia Department of Elections should develop written guidance and a training module for general registrars on how to verify whether a voter should be removed or added to the voter registration list and the processes to be used to correct inaccuracies on the list. (Chapter 2)

RECOMMENDATION 7

The General Assembly may wish to consider amending § 24.2-404 of the Code of Virginia to require the Virginia Department of Elections (ELECT) to conduct periodic assessments to ensure that voters are assigned to the correct state legislative and congressional districts based on their residential addresses. ELECT should share the results of its assessment with registrars and ensure that these voters are correctly assigned. (Chapter 2)

RECOMMENDATION 8

The General Assembly may wish to consider amending the Code of Virginia to require that localities report to the Virginia Department of Elections (ELECT) all local boundary agreements. ELECT should consider these agreements when conducting periodic assessments of voter assignments. (Chapter 2)

RECOMMENDATION 9

The Virginia Department of Elections, in consultation with the Virginia Division of Legislative Services, should provide written guidance for general registrars on how to assign legislative districts for those voters whose residential addresses fall into different districts depending on the map used. (Chapter 2)

RECOMMENDATION 10

The General Assembly may wish to consider including language in the Appropriation Act to direct the Virginia Department of Elections to work with the Virginia Geographic Information Network to ensure that all general registrars use Geographic Information System technology to assign voters to districts and precincts. (Chapter 2)

RECOMMENDATION 11

The Virginia Department of Elections should develop a detailed, written status report regarding improvements to the Virginia Election and Registration Information System through September 2018. The report should be submitted to the Virginia Information Technologies Agency, the House Appropriations and Privileges and Elections Committees, and the Senate Finance and Privileges and Elections Committees by November 1, 2018. (Chapter 3)

RECOMMENDATION 12

The General Assembly may wish to consider including language in the Appropriation Act to withhold additional funds allocated for FY20 to rebuild the Virginia Election and Registration Information System pending satisfactory progress implementing improvements for which additional funding was provided in FY18 and FY19. (Chapter 3)

RECOMMENDATION 13

The General Assembly may wish to consider including language in the Appropriation Act directing the Virginia Department of Elections (ELECT), in consultation with the Virginia Information Technologies Agency, to comprehensively assess whether to replace or rebuild the Virginia Election and Registration Information System by examining the feasibility, costs, and benefits of each option. ELECT should consult external experts with recent experience helping other states rebuild or replace their elections information systems. (Chapter 3)

RECOMMENDATION 14

The General Assembly may wish to consider including language in the Appropriation Act directing the Virginia Department of Elections (ELECT) to develop and implement a plan to provide greater oversight of local elections administration. The plan should detail strategies ELECT will use to (i) identify and assess major risks to election integrity and (ii) conduct activities to provide greater confidence that these risks are being mitigated. ELECT should submit its plan to the House and Senate Privileges and Elections Committees by July 1, 2019. (Chapter 4)

RECOMMENDATION 15

The Virginia Department of Elections should develop and implement (i) a process for developing, updating, reviewing, and approving the guidance provided to general registrars and (ii) an internal reference guide and a process for keeping records of the guidance provided to registrars. (Chapter 4)

RECOMMENDATION 16

The Virginia Department of Elections (ELECT) should develop clear guidelines, both for ELECT staff and for general registrars, on which types of questions should be answered by ELECT staff and which should be directed to the Office of the Attorney General. (Chapter 4)

RECOMMENDATION 17

The Virginia Department of Elections should (i) ensure that training topics reflect the training needs of local elections officials and prior elections issues and problems; (ii) ensure that training is accurate and sufficiently detailed to be useful to local elections officials; and (iii) make training available in a variety of formats, including online. (Chapter 4)

RECOMMENDATION 18

The Virginia Department of Elections (ELECT) should develop and implement a formal training program for new staff, to include (i) training on job-specific responsibilities, (ii) an overview of elections administration in Virginia, and (iii) training on ELECT's administrative policies and procedures. (Chapter 5)

RECOMMENDATION 19

The General Assembly may wish to consider including language in the Appropriation Act directing the Virginia Department of Elections (ELECT) to create a permanent, full-time position of director of operations subject to the Virginia Personnel Act (§ 2.2-2900 et seq.). The position should be responsible for managing day-to-day operations at ELECT and ensuring (i) fulfillment of the agency's mission and responsibilities; (ii) compliance with state and federal elections laws and regulations; and (iii) compliance with ELECT's business, administrative, and financial policies. (Chapter 5)

RECOMMENDATION 20

The General Assembly may wish to consider amending § 2.2-2905 of the Code of Virginia to eliminate the appointed positions of chief deputy commissioner and confidential policy advisor for the Virginia Department of Elections. (Chapter 5)

RECOMMENDATION 21

The Virginia Department of Elections should consolidate its Election Services and Community Relations and Compliance Support divisions into a single division that provides guidance and training and conducts oversight of general registrar operations. (Chapter 5)

OPTION 1

The General Assembly could amend the Code of Virginia to assign the Department of Elections exclusive authority to add and remove voters from the state's voter registration list. (Chapter 2)

1 The Virginia Department of Elections

SUMMARY The Virginia Department of Elections (ELECT) is responsible for supervising the local administration of elections in Virginia. Elections are administered by general registrars and local electoral boards, which are responsible for operating polling locations on election day and for numerous other functions during the remainder of the year. ELECT supervises elections by providing oversight, guidance, and training for registrars and local board members. State supervision of local election administration is critical to ensure that elections are administered uniformly throughout the state, in accordance with state and federal laws, and that ballots are counted accurately. Responsibility for maintaining an accurate voter registration list is shared between ELECT and general registrars. ELECT operates the Virginia Election and Registration Information System (VERIS), which is used to maintain the statewide registration list and carry out numerous other election functions. ELECT is relatively small compared to other state agencies, with 47 staff and total spending of \$12 million in FY17.

In 2017 the Joint Legislative Audit and Review Commission (JLARC) directed its staff to study the operation and performance of the Department of Elections (ELECT), which had not been comprehensively reviewed by JLARC since 1998. The mandate for this study directed JLARC staff to review whether ELECT

- adequately supervises and coordinates the administration of elections;
- sets appropriate training standards and provides adequate training for general registrars and local electoral board members;
- employs adequate practices to ensure voter registration information is accurate and up-to-date;
- administers the Virginia Election and Registration Information System (VERIS) in an effective, efficient, and secure manner; and
- is organized, staffed, and structured to ensure efficient and effective operations. (See Appendix A for the study mandate.)

To address the study mandate, JLARC staff interviewed ELECT staff, general registrars and local electoral board members, State Board of Elections members, elections interest groups in Virginia, and national experts in voter registration lists; surveyed ELECT staff, general registrars, and local electoral board members; analyzed ELECT spending and staffing data; and reviewed research literature on a variety of election administration topics. (See Appendix B for the research methods used in this study.)

Virginia has a locally administered, state-supervised process of elections

Virginia's electoral system consists of four key entities: the State Board of Elections, ELECT, local boards of elections, and general registrars. These state and local entities ultimately must work together to administer elections effectively. Most states have similar arrangements whereby elections are administered locally but supervised centrally by the state.

In any given year, multiple elections for state, local, or federal constitutional offices can occur. These include

- state elections for the House of Delegates, Senate, and governor's office;
- local elections for boards of supervisors and city and town councils, school boards, and local constitutional offices such as the commissioner of revenue, clerk of the circuit court, sheriff, and commonwealth's attorney;
- federal elections for Congress and the presidency; and
- primary elections to determine nominees for general elections.

Elections in Virginia typically include a general election in November for state, local, and federal offices and primary elections in June. Some cities and towns hold local elections in May, and there may be special elections whenever vacancies occur in a state, local, or federal office. Voter turnout can vary substantially depending on the type of election. Approximately 4.2 million Virginians voted in the November 2016 general election, when candidates for the Senate of Virginia, Congress, and the presidency were on the ballot. By contrast, about 541,000 Virginians voted in the June 2018 primary elections.

Elections are administered locally by general registrars and local electoral boards

In Virginia, elections are administered in each locality by a general registrar and a local electoral board. Local administration consists of operating polling locations on election day and then transmitting vote tallies to ELECT (Figure 1-1). Registrars and local boards have numerous responsibilities in preparation for election day, including

- recruiting and training volunteer poll workers;
- preparing and distributing ballots to each precinct;
- sending out and counting absentee ballots;
- finalizing and distributing to each precinct a list of eligible voters; and
- ensuring that precincts have adequate numbers of voting equipment, ballots, poll workers, and other election day materials.

For the rest of the year, general registrars maintain the voter registration list in their locality and purchase and maintain voting equipment as needed, among other responsibilities.

FIGURE 1-1 Virginia's locally administered, state-supervised electoral system has four key entities

		ELECTION DAYS	REMAINDER OF THE YEAR	
	State Board of Elections	Certifies state and federal election results	Convenes as needed	
STATE LEVEL	State Department of Elections	Receives and reports vote tallies from general registrars Receives questions	Develops, maintains, and provides guidance to general registrars Provides support as requested to general registrars Develops and provides training to general registrars and local boards of elections Develops training materials for general registrars to use with poll workers	
LEVEL	Local General Registrars (x133)	and complaints from voters, interest groups, media, and others Operates precincts where citizens can vote	Maintains statewide list of registered voters Assigns voters to precincts Purchases and prepares voting equipment Recruits and trains poll workers to administer elections in each precinct	
LOCAL LEVEL	Local Boards of Elections (x133)	Certifies local election results	Convenes as needed	

SOURCE: Code of Virginia and interviews with ELECT staff and general registrars.

General registrars are appointed to four-year terms by their locality's electoral board. Each locality has an electoral board that consists of three members appointed by the chief judge of the local circuit court. By statute, two members of the local board must be of the political party that won the most recent gubernatorial election; the third member must be from the opposing political party (§ 24.2-106). Local electoral board members are appointed to staggered three-year terms.

ELECT and the State Board of Elections are responsible for supervising local election administration

The regulations promulgated by the State
Board of Elections cover aspects of elections administration such as (1) procedures for approving or denying voter registration applications; (2) procedures for conducting recounts; and (3) eligibility standards for voters, ballots, and candidates.

Under the Code of Virginia, ELECT has broad authority to supervise and coordinate local election administration. To ensure that elections are administered uniformly throughout the state and consistent with state and federal laws, ELECT is responsible for supervising and coordinating the work of general registrars and local electoral boards. ELECT is required by statute to "make rules and regulations and issue instructions and provide information consistent with the election laws" to local elections officials (§ 24.2-103). ELECT makes available written guidance materials and helps general registrars and local board members answer questions related to state, federal, and local elections.

ELECT is also required to maintain a training program for general registrars, local electoral board members, and local poll workers. ELECT conducts annual training sessions for registrars and board members and provides training standards and materials that registrars use to train poll workers.

The State Board of Elections is ultimately responsible for supervising elections, though it delegates the vast majority of its responsibility to ELECT. The state board consists of three members appointed by the governor to four-year terms. Two members of the state board must be of the political party that won the most recent gubernatorial election; the remaining member must be from the opposing political party (§ 24.2-102).

Effective state supervision is essential to ensure uniformity, legality, and accuracy

The uniform, legal, and accurate administration of elections requires ensuring that, in accordance with federal and state laws and standards,

- each eligible Virginia resident has the same opportunity to register to vote;
- each registered voter has the same opportunity to cast a ballot in an election;
 and
- ballots are counted accurately.

State and federal elections laws govern how elections are to be administered, and a critical purpose of state supervision is to ensure that local elections officials understand and adhere to these laws. The Code of Virginia sets forth requirements for a broad range of electoral functions, including

- qualifications, locations, times, and ways for voters to register;
- circumstances under which individuals must be removed from the voter registration list;
- requirements for operating polling locations on election day, such as polling hours and the numbers of voting machines and poll workers needed;

- procedures for providing and counting absentee and provisional ballots; and
- deadlines by which local electoral boards and the State Board of Elections must tabulate and certify elections results.

Four key federal laws establish requirements for numerous aspects of the electoral system (Table 1-1).

TABLE 1-1 Four laws set forth federal requirements for administering elections

Federal law	Description
Military and Overseas Voter Empowerment Act (2009)	• Streamlines absentee voting procedures for overseas civilians and members of the armed forces by requiring electronic access to parts of the election process
Help America Vote Act (2002)	Requires states to implement a computerized system to store and manage the official voter registration list
	 Provides funding for states to improve election administration, including the purchase of voting equipment
N. C. IV. B. C. C. A.	Establishes voter registration procedures for federal elections
National Voter Registration Act (1993)	 Permits use of driver's license applications for voter registration applications
(1993)	Sets guidelines for voter removal programs
Uniformed and Overseas Citizens Absentee Voting Act (1986)	Allows overseas civilians and members of the armed forces to register to vote and vote by mail

Because the state's elections system is locally administered, the potential exists for inconsistency in how general registrars and local electoral boards accept or deny voter registration applications; allow voters to cast in-person, absentee, or provisional ballots; or tabulate election results. Inconsistency can cast doubt on the integrity of the electoral process and the legitimacy of an election outcome (even if the outcome is not actually affected), create a perception that an election was administered for the political gain of one party or candidate, or result in different treatment of similar voter circumstances across localities. If local elections officials deviate from law or standard practice, ineligible individuals may be allowed to vote or eligible voters may be disenfranchised, and the state may be vulnerable to lawsuit. Effective state supervision can minimize error and inconsistency across localities.

State supervision is especially critical given the wide range in size, staffing, and technical expertise of the 133 general registrars' offices. For example, Fairfax County has more than 740,000 registered voters, 243 precincts, and 30 full-time staff in the registrar's office. Highland County has less than 1,800 registered voters, six precincts, and a general registrar without any supporting staff.

ELECT and local elections officials share responsibility for the voter registration list

ELECT and general registrars share responsibility for maintaining an accurate statewide list of the roughly 5.5 million individuals registered to vote in Virginia. ELECT has statutory responsibility to "maintain a complete, separate, and accurate record of all registered voters in the Commonwealth" (§ 24.2-404). Registrars are responsible for registering every resident of their locality who is qualified and applies to vote and maintaining accurate and current voter registration records (§§ 24.2-417 and 24.2-114 12).

The voter registration list undergoes constant revision as new voters are added, existing registrations are updated to reflect address changes, and voters are removed if they are no longer living in Virginia, deceased, convicted of a felony, or judged mentally incapacitated by a court. To ensure the voter registration list remains as accurate and current as possible,

- ELECT conducts an initial review of new voter registrations to verify their eligibility. Registrars are required to make the final decision on whether to approve or deny an individual's voter registration.
- ELECT is required by statute to identify potentially ineligible voters through data exchanges with state, local, and federal entities as well as other states.
- General registrars are responsible for reviewing the names of potentially ineligible voters identified by ELECT, verifying that they are ineligible, and removing these voters from the registration list. Registrars can also remove any ineligible voters they identify (subject to state and federal laws).

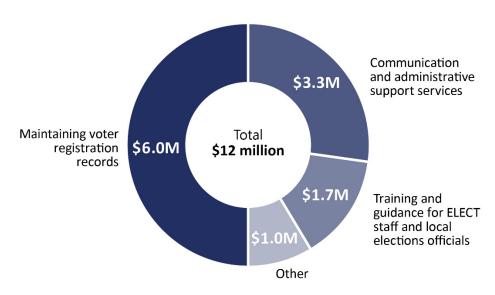
ELECT operates the key IT system for administering elections in Virginia

ELECT operates the Virginia Election and Registration Information System (VERIS), the web-based IT system used to carry out a range of functions that are critical to administering elections. ELECT and registrars use VERIS primarily to maintain a statewide list of registered voters, but the system is used to perform a variety of other functions. Registrars use VERIS to assign voters to precincts and state and federal legislative districts. The system is also used by localities on election day to transmit election results to ELECT.

ELECT has 47 staff organized into four divisions

ELECT's spending and staffing levels are modest compared to many other state agencies. ELECT spent a total of \$12 million on its operations in FY17 (Figure 1-2). Half of this spending was for operating and maintaining VERIS, including to maintain voter registration records. A little more than half of funds for ELECT's operations are federal Help America Vote Act funds, and most of the remaining funding comes from state general funds.

FIGURE 1-2 ELECT spending totaled \$12 million in FY17

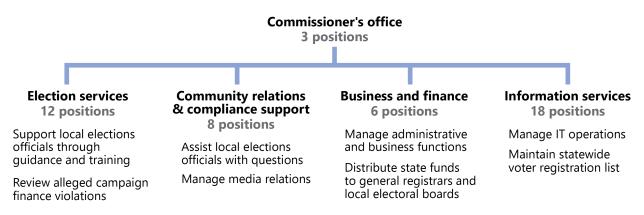


SOURCE: JLARC analysis of data from ELECT.

NOTE: Excludes \$5.9 million in "pass-through" funds to localities for general registrar and local electoral board member compensation. "Other" includes a range of functions to ensure uniform and legal elections.

ELECT employs 47 people, including five part-time staff. ELECT is led by the commissioner of elections—the state's chief election official—who is appointed by the governor; the current commissioner was appointed in February 2018. ELECT comprises four main departments or offices (Figure 1-3), the largest of which are Information Services (responsible for VERIS and other IT functions) and Election Services (responsible for training, policy development, and other functions).

FIGURE 1-3
ELECT is organized into four divisions



SOURCE: Information from interviews with ELECT staff; ELECT organizational chart. NOTE: Includes part-time staff.

2 Ensuring Accuracy of Virginia's Voter Registration List

SUMMARY The state's list of 5.5 million registered voters is likely mostly accurate, though the accuracy of the list cannot be fully quantified. Most of the list does not change on a yearly basis, and the Virginia Department of Elections (ELECT) uses a fairly robust process to maintain the list. The accuracy of the voter registration list could be further improved through several enhancements to the list maintenance process. ELECT's guidance for general registrars about adding and removing voters from the list is inadequate, and as a result, registrars have considerable discretion when deciding whether to add or remove a voter from the list. Guidance should be improved so that decisions about adding or removing voters is more uniform across the Commonwealth's 133 localities. In a few localities, some voters have been inadvertently assigned to the wrong legislative district. ELECT and general registrars have recently worked to correct these errors. Several steps should be taken to minimize the likelihood of these errors occurring in the future, including clarifying that ELECT's supervisory role entails periodically assessing whether district assignments are correct.

The accuracy of Virginia's voter registration list is critical to ensuring that elections in Virginia are legal and valid. An accurate registration list contains (1) all legally eligible voters, (2) no ineligible voters, (3) up-to-date names and addresses of eligible voters, and (4) the correct legislative district and precinct assignment based on the voter's address. An accurate voter registration list helps ensure that only legally eligible voters cast ballots in an election, and that voters cast ballots in the correct federal, state, and local races.

In maintaining registration lists, there is an inherent tension between ensuring that the list is accurate and ensuring that it does not disenfranchise any eligible voters. Giving priority to keeping the registration list accurate—and particularly keeping ineligible voters off the list—increases the risk that eligible voters will be mistakenly removed or denied their registration. Conversely, giving priority to ensuring no eligible voter is disenfranchised increases the risk that ineligible voters will be mistakenly added to the list or allowed to remain on it. Assessing precisely where a state's list maintenance process falls along this continuum is not practical, but the tension between disenfranchisement and eligibility underscores the challenges of maintaining a completely accurate registration list.

To be eligible to vote in Virginia, individuals must be legal citizens of Virginia and over the age of 18, but not have been convicted of a felony or found mentally incapacitated by a court. The information about each eligible voter must be accurate, particularly the home address, which is used to assign a precinct where voters cast their vote on election day.

The voter registration list for each locality is used to generate pollbooks for each precinct on election day. Whether voters are on the pollbook for their assigned precinct determines whether they can cast an in-person ballot at their polling location, an absentee or provisional ballot, or not vote at all. An accurate registration list is also important for running elections efficiently. General registrars use voter registration lists to determine the resources needed on election day, and large numbers of ineligible voters on a locality's list could result in more polling locations, poll workers, voting machines, and other materials than are actually needed on election day. Virginia's voter registration list maintenance process only partially meets the evaluation criteria (Table 2-1).

TABLE 2-1
Voter registration list maintenance process only partially meets criteria

Criteria used to evaluate voter registration list maintenance process	
Data sources for information-matching are comprehensive Procedures for information-matching are robust	
KEY ■ = Fully meets criteria	

Accuracy of voter registration cannot be fully quantified

The dynamic nature of the voter registration list makes it extremely difficult to maintain a completely accurate list. Inaccuracies are inherent to registration lists and result from the time lag in the process of collecting data and updating the list to reflect new registrations, updating changes of address, and removing voters who lose their eligibility. In a highly mobile modern society, it is virtually impossible to maintain a completely accurate list of 5.5 million voters.

These difficulties with maintaining a completely accurate registration list also apply to reliably quantifying the accuracy of the list. Independently assessing the accuracy of the list would be a substantial and complex undertaking. Such an effort to quantify the accuracy of the list would involve nearly the same activities and level of effort that the Virginia Department of Elections (ELECT) uses to maintain the list (discussed in the next section). Furthermore, even if the accuracy of the list could be quantified at a given point in time, the assessment would almost immediately be out-of-date.

Even attempting to quantify the accuracy of the list in a single locality is complex. The state's general registrars were unable to estimate the accuracy of the list for their locality. As part of its survey of registrars, JLARC staff asked registrars to estimate the number of ineligible voters on their locality's registration list and the number of voters mistakenly removed or denied their application to register. The majority of registrars could not

Achieving the goal of a simultaneously 100 percent accurate and 100 percent complete voter registration list is virtually impossible.

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quantify the "error rate" for the list in their locality. Some registrars did provide information, but in most cases it was based on anecdotes or examples (such as examples of voters remaining on the list years after moving out of the state) that could not be extrapolated into an estimate of the percentage of the locality's list that is accurate.

Available evidence suggests list is mostly accurate

Although the overall accuracy of the state's voter registration list cannot be fully quantified, two factors provide important insight into the overall accuracy of the list. First, the magnitude and types of changes to the list impact its accuracy. A voter registration list that remains relatively unchanged over time, with few new voters registering and few existing voters moving or losing their eligibility, is more likely to remain accurate. Second, a voter registration list is more likely to be accurate if there is a robust list maintenance process used to regularly update the list to reflect changes in voter eligibility.

For this study, JLARC staff conducted a survey of general registrars. 106 of Virginia's 133 registrars (80 percent) responded.

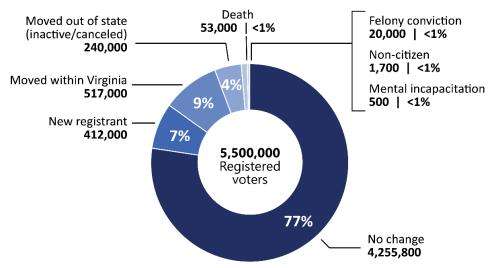
The survey included questions about the guidance and training ELECT provides, maintaining the statewide voter registration list, and the VERIS IT system.

(See Appendix B for more information about this survey.)

Most of voter registration list stays the same from year to year

Much of Virginia's voter registration list remains stable from year to year. About 4.3 million of the 5.5 million (77 percent) individuals on the list remain eligible to vote in Virginia and continue to live at the same address year to year (Figure 2-1). Compared to the total number of registered voters in Virginia, relatively small proportions are new registrants (7 percent), move out of state (4 percent), or are removed because of being deceased, convicted of a felony, being a non-citizen, or found mentally incapacitated by a court (less than 1 percent each). One of the most frequent reasons for changes to the list—moving within Virginia—affects where and in which races an individual can vote, but not whether they are eligible to vote.

FIGURE 2-1 Most of Virginia's voter registration list does not change each year



SOURCE: JLARC analysis of ELECT voter registration and removal data, FY17.

NOTE: Number of voters who moved within Virginia is based on a rough, upper-bound estimate provided by ELECT.

Virginia's voter list maintenance process is fairly robust

Even if the state's voter registration list is relatively accurate at a given point in time, it will soon be less accurate if not maintained using a robust approach due to continuous changes in voters' circumstances. A robust approach to list maintenance uses multiple information sources (for example, information from DMV on identity and address, information from the court system about felony convictions). It also uses these sources frequently enough to keep up with changes in voters' actual circumstances.

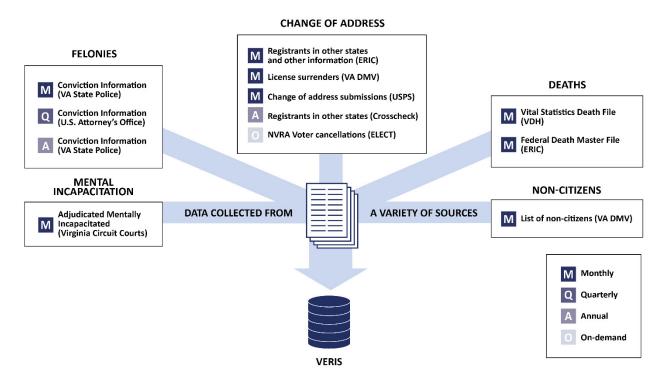
VSP felony conviction data sometimes includes incorrect social security numbers and individuals who were charged with a felony but convicted of a lesser charge. The Department of Corrections and the Virginia Compensation Board also maintain data about felony convictions that ELECT does not currently use. However, according to ELECT staff, these data largely duplicate felony data from VSP and contain similar types of errors.

ELECT makes extensive and regular use of data sources recommended by experts and required by statute to identify individuals who should be removed from or added to the list (Figure 2-2). The department uses the U.S. Postal Service (USPS) National Change of Address database and the list of license surrenders from the Virginia Department of Motor Vehicle (DMV) to identify voters who move their place of residence. ELECT also receives data from the U.S. Social Security Administration Master Death File and Virginia Department of Health vital records, which are used to identify deceased voters and prevent fraudulent use of their identity for voting. The U.S. Attorney's Office and Virginia State Police (VSP) regularly provide data that identifies state or federal felony convictions for removal from the registration list.

ELECT also partners with other states to maintain accurate information about individuals moving into, or out of, Virginia. ELECT participates in two multistate data exchange partnerships—Virginia is one of only nine states nationwide that participates in both partnerships. Through these partnerships, Virginia exchanges data with 38 other states and Washington, D.C. to identify individuals registered to vote in more than one state or who have relocated to another state. By participating in both partnerships, ELECT meets the statutory requirement to request voter registration data from each of the five states bordering Virginia (§ 24.2-404 4).

ELECT is a member of the Electronic Registration Information Center (ERIC), a nonprofit multistate partnership that provides sophisticated data-matching services to improve the accuracy of voter registration lists. Through ERIC, ELECT accesses voter registration and motor vehicle data from 23 states and Washington, D.C. ERIC collects voter registration and motor vehicle data from all member states every two months, then uses a data-matching process to identify voters who are registered in more than one state or may have relocated. ELECT also participates in the Interstate Voter Registration Crosscheck Program (Crosscheck), a program managed by the office of the Secretary of State of Kansas. Through Crosscheck, ELECT exchanges voter registration data with 25 other states.

FIGURE 2-2 ELECT regularly obtains data from multiple state and federal sources



ELECT also uses its own data-matching process, or algorithm, to verify that the voter registration list and other data sources are referring to the same individual. For example, an individual may be "Robert" in one database and "Bob" in another. Experts recommend developing and using algorithms to help rectify differences across information sources. Algorithms can be written to produce a percentage likelihood (based on other information included in the database) that data from multiple databases are referring to the same person. Even the most sophisticated algorithm has limits, though, and human interpretation and discretion are recommended by national list maintenance experts to make a final decision about whether to add or remove an individual from the list.

Potential exists for disenfranchisement or voter fraud

Even the most robust list maintenance process cannot fully prevent disenfranchisement or voter fraud. Disenfranchisement occurs when individuals who are eligible to vote are mistakenly denied registration or removed from the registration list. This can occur when ELECT uses incorrect information to maintain the voter registration list, or when ELECT uses correct information to make an incorrect conclusion, such as when the name-matching process leads to the wrong individual being removed from the list. These mistakes can deprive individuals of their legal right to vote, create frustration, and require administrative effort to correct. There is no reliable way to quantify how often voter disenfranchisement occurs in Virginia.

Voter fraud, when an individual who is ineligible to vote casts a ballot, could occur in several ways. Several scenarios are related to inaccurate information in the voter registration list:

- An individual is not eligible to vote—because of court action—but
 casts a vote. For example, an individual has been convicted of a felony or
 found mentally incapacitated, but the change in their eligibility status is not
 detected through the list maintenance process.
- An individual is not eligible to vote—not a resident of Virginia—but casts a vote. For example, an individual who had been a legal resident of Virginia moves to another state, but their change of residence is not detected through the list maintenance process.
- An individual fraudulently uses the identity of a person who is no longer a resident of Virginia to cast a vote. Again, if the change of residence is not detected through the list maintenance process, the individual could cast a vote.
- An individual fraudulently uses the identity of a deceased person to cast a vote. An eligible voter has died, but the death record is not detected through the list maintenance process.
- An individual who is not a U.S. citizen fraudulently affirms their citizenship and subsequently casts a vote. A noncitizen falsely claims U.S. citizenship when registering to vote and subsequently casts a vote.

It is nearly impossible to quantify the likelihood or occurrence of voter fraud in Virginia. It is likely that some instances of voter fraud occur but are not discovered or do not result in fraud convictions. There are anecdotes of voter fraud in Virginia, but JLARC staff were not presented with any verifiable evidence of large-scale voter fraud of this type. Because the vast majority of elections in Virginia are won by relatively large margins of victory, for most races there would have to be a substantial number of instances of single-ballot voter fraud to result in the wrong person being elected to office. (Appendix C provides more information about the margins of victory in Virginia elections.)

ELECT has varying ability to verify citizenship when individuals register to vote. The more rigorous verification occurs at DMV and through ELECT's online registration portal. When individuals obtain driver's licenses or identification cards from DMV, ELECT has the ability to verify citizenship of voters through data collected by DMV on individuals who report a noncitizen status when seeking these credentials. DMV also requires proof of legal presence for U.S. citizens (e.g., birth certificate) and for legal noncitizens (e.g., permanent resident card). Most individuals establish legal presence by providing their birth certificate; this information is provided monthly to ELECT, giving the department the ability to verify citizenship for these individuals. Similarly, when individuals register to vote on ELECT's website, they are required to provide their DMV-issued driver's license number. ELECT then uses DMV data to determine whether the individual was previously identified as a noncitizen. ELECT uses this information to prevent noncitizens from registering to vote or to remove them from the registration list. Over the past three years, ELECT has removed a total of 2,783 noncitizens from the voter registration list. There are likely more noncitizens on the registration list, but quantifying the total number of noncitizens on the list is complicated by the broader challenge all government agencies nationwide face in trying to verify citizenship.

Individuals can also register to vote by completing a paper registration form at numerous local, state, and federal government offices. ELECT is less able to verify the citizenship of individuals registering to vote in this way. For these registrations, ELECT relies heavily on individuals to affirm their citizenship, with a warning that falsely claiming to be a citizen constitutes felony voter fraud. ELECT also determines whether individuals were previously identified as noncitizens before forwarding their names to the appropriate registrars for final determination of their registration eligibility. To ensure noncitizens are not on the voter registration list, statute requires ELECT to apply for access to the federal Systematic Alien Verification for Entitlements (SAVE) program database and the State Board of Elections to promulgate regulations for the department's use of SAVE data (§ 24.2-404 E).

In recent years ELECT has not used SAVE data to verify citizenship status, and this decision appears reasonable. According to ELECT staff, SAVE data is of limited value because it includes only individuals living in the U.S. with a legal immigration status; it does not include undocumented immigrants. Checking the SAVE database requires an alien identification number or other information related to their legal noncitizen status that, by itself, would disqualify an individual from registering to vote. In addition, due to inherent lags in the process of updating the citizenship status of documented immigrants, there is a risk that the SAVE database contains the names of individuals who have since become U.S. citizens. According to ELECT staff and national list maintenance experts, the inaccuracies in the SAVE database could result in the inadvertent disenfranchisement of U.S. citizens. Since 2015, ELECT has formally notified the House and Senate Privileges and Elections Committees of its decision not to use SAVE data and the reasons for this decision.

Data from SAVE, the Systematic Alien Verification for Entitlements program, allows federal, state, and local government agencies to verify the legal non-citizenship status of individuals.

List maintenance process could be even more rigorous and comprehensive

Given the inherent difficulty of maintaining an accurate voter registration list, there is an ongoing need to reassess and improve the process used to correct inaccuracies in the list. Although Virginia has a relatively robust list maintenance process, there are opportunities to make greater and more rigorous use of data.

ELECT does not use available data as frequently as possible or match data with sufficient rigor

While ELECT makes extensive use of data to maintain an accurate voter registration list, it is not using available data as frequently as it could. Once a year in June, ELECT accesses the USPS National Change of Address data to identify voters who have moved. During the year between accessing the USPS data, individuals may move, and their change of address may require assigning them to a different precinct or locality or moving them to inactive status if they have moved out of the state. If an individual moved in July, for example, he or she may be registered to an incorrect precinct for an election occurring that November. The record may be updated when the individual notifies the DMV or general registrar of the change of address, but not all individuals provide this notification. Other states access USPS National Change of Address data more frequently than Virginia. ELECT staff are aware of this and acknowledged that accessing the USPS data more frequently would allow more timely identification of voters who have moved within or out of Virginia. ELECT also indicated doing so will require careful assessment of when to update the list given the various local, state, and federal elections schedules.

RECOMMENDATION 1

The Virginia Department of Elections should improve its process for updating the state's voter registration list by using the USPS National Change of Address data at least twice a year.

Although ELECT uses an algorithm to match the data it obtains on potentially ineligible voters, the algorithm is not sufficiently rigorous to minimize the risk of mistakenly identifying ineligible voters. The algorithm compares multiple identifiers (for example, social security number, full name, date of birth, and residential address) to produce a percentage likelihood that individuals in multiple databases are the same. However, ELECT staff are unaware of how the algorithm was developed. ELECT staff have tried to improve the algorithm over time, but have used "trial and error" rather than outside expertise as recommended by the research literature on list maintenance. The algorithm also sometimes causes confusion among some general registrars when trying to use it to make a decision about the registration list. It is likely the algorithm could be improved and cause less confusion if it were reviewed by data-matching

experts. To do so, ELECT should work with consultants or researchers with expertise in name-matching techniques to assess and improve its algorithm.

RECOMMENDATION 2

The Virginia Department of Elections should work with experts to assess and improve the name-matching algorithm used as part of its list maintenance program.

Some data from DMV may be incomplete or inaccurate

Though it streamlines the process of registering or updating an existing registration for citizens, the coordination between ELECT and DMV sometimes results in inaccurate information being sent to registrars. In July 2016, the two agencies began using an automated process to manage new and updated voter registrations submitted through DMV. Voters can register or update their address electronically, and the new address is transmitted electronically to ELECT and then registrars, who must approve the change in the Virginia Election and Registration Information System (VERIS). The new automated process improved the accuracy of the voter registration list because ELECT staff and registrars no longer need to decipher poor handwriting, which previously resulted in registration errors. The new process is also more efficient because ELECT and DMV no longer need staff to sort and mail paper registrations forms each day; DMV staff estimated saving about \$300,000 in FY16 due to reduced staffing and postage costs.

However, the electronic voter registration process through DMV has created the potential for new inaccuracies and resulted in new inefficiencies for registrars.

- The change-of-address process is sometimes complicated by erroneous or incomplete addresses provided by DMV customers and sent to registrars, especially for post office boxes, out-of-state addresses, and vague or incomplete addresses in Virginia. Registrars then must work to verify that each individual has a valid Virginia address before approving their registration.
- Voters sometimes inadvertently indicate that they are not citizens when updating their registration electronically through the DMV. This occurs even though voters are required to confirm their noncitizen status before completing the transaction. This appears to occur most commonly in parts of Northern Virginia. Registrars then must send these voters a notice that their registration will be canceled.
- Registrars regularly receive address updates for voters who have not changed their address and new registrations for voters who are already registered. Registrars then must spend time processing these transactions.

The electronic registration process through DMV has also created new inaccuracies and inefficiencies when individuals move to a different locality and update their voter registration address. Under the process designed by ELECT, these individuals are not asked if they have been convicted of a felony, adjudicated mentally incapacitated, or

are a citizen. Because the Code of Virginia requires registrars to maintain a complete registration record for every voter registered in their locality (§ 24.2-114), registrars must request the original registration form from the voter's previous locality. Many registrars expressed concerns about the time and costs of requesting these records, or providing them to other localities. Registrars also cited several instances when individuals with felony convictions were able to update their voter registration address.

There are differing interpretations of whether the Code of Virginia requires voters to be asked if they have been convicted of a felony, adjudicated mentally incapacitated, or are a citizen when updating their voter registration electronically. Multiple statutory provisions relate to this process. ELECT released a technical bulletin to registrars in June 2018 in an attempt to clarify the confusion among registrars about how to process these registration updates, but the bulletin did not address the multiple statutory provisions regarding the process for registration updates.

Given the potential inaccuracies and inefficiencies resulting from the electronic voter registration process through DMV, the state should review this process and identify any ways to improve its accuracy and efficiency. In July 2018, ELECT and DMV provided registrars a live demonstration of the electronic registration process at DMV and an opportunity to ask questions and suggest changes to the process. ELECT should continue this effort by convening a workgroup consisting of selected staff from DMV, general registrars' offices, and the Office of the Attorney General. The workgroup should determine what changes, if any, should be made to the electronic registration process through DMV to ensure that it provides accurate voter registration information and that registrars can efficiently process these transactions. The workgroup should specifically examine whether clarifications are needed to the Code of Virginia regarding questions about felony convictions, mental incapacitations, and citizenship. Findings from the workgroup, including any suggested changes to the DMV registration process, should be submitted to the House and Senate Privileges and Elections committees.

RECOMMENDATION 3

The Virginia Department of Elections should convene a workgroup to review the electronic voter registration process through the Virginia Department of Motor Vehicles. The workgroup should identify changes that would improve the accuracy of voter registration information and the efficiency of the process. The workgroup should submit a report and recommendations to the House and Senate Privileges and Elections Committees by July 1, 2019.

Less than one ELECT staff position is allocated to list maintenance

Historically, various staff in the ELECT IT department have been assigned responsibility to maintain the voter registration list part-time. This responsibility has been in addition to managing VERIS and its interactions with general registrars, and performing other IT functions such as maintaining VERIS security. ELECT's current staffing

does not sufficiently prioritize the voter registration list; effective list management would likely require a full-time staff position with support from current IT staff. The department's former chief information officer said IT staff did not have sufficient time to focus on managing the list maintenance process or improving its accuracy by, for example, identifying additional sources of data. Going forward, ELECT should ensure it has at least one full-time position responsible solely for maintaining the accuracy of the voter registration list.

RECOMMENDATION 4

The Virginia Department of Elections should allocate at least one full-time staff position to maintaining the voter registration list.

ELECT does not formally review data and list maintenance process to identify opportunities for improvement

In part because there has not been a staff person exclusively tasked with list maintenance, ELECT has yet to implement any formal, ongoing effort to review and improve its list maintenance process. Some type of periodic review or continuous improvement program is recommended by national list maintenance experts. A key responsibility of the staff position tasked with maintaining the voter registration list should be to continuously review the quality of the data on the list and the list maintenance process to identify improvement opportunities.

A formalized review focused on continuous improvement would provide useful insights into how effectively the list maintenance process is

- preventing ineligible voters from registering,
- removing ineligible voters from the registration list in a timely manner,
- approving the registration applications of eligible voters, and
- ensuring that eligible voters are not mistakenly removed from the registration list.

Reviews could assess how long voters remain on the registration list after dying, or how long felons remain on the list after their conviction and how many—if any—vote before their rights are restored. Reviews could also focus on localities with registration lists more likely to have data quality problems due to a more mobile population and consequently a high volume of voters being added to or removed from the registration list.

ELECT should begin conducting more formalized reviews of voter registration list data and the list maintenance process. A first step in conducting these types of reviews would be to "clean" the data so that it can be further analyzed. This would identify any gaps in the data (e.g., voter records with incomplete information) or issues with how the data is maintained that would complicate further analysis. An example of an

issue that complicates analysis is that, according to ELECT staff and general registrars, some voters have multiple unique identification numbers in the VERIS database.

After the data has been cleaned, ELECT should conduct the reviews. The initial reviews could be done using a relatively small random sample of the voter registration list and focused on a particular issue, such as whether deceased voters are being removed in a timely manner. When these initial reviews identify potential data problems, the reviews could be expanded to a larger portion of the registration list. The results of these reviews should be used to improve the quality of the data on the list and refine the list maintenance process as needed.

RECOMMENDATION 5

The Virginia Department of Elections should conduct formal, periodic reviews to identify opportunities to improve the list maintenance process.

Ensuring uniformity is difficult without sufficient state guidance or centralization

Even with the best data sources and name-matching procedures, there is still a need for human judgment to ultimately decide whether to ad or remove an individual from the voter registration list. Though the state manages much of the list maintenance process, each of the state's 133 general registrars (or their staffs) makes the final decision about the eligibility of individuals to vote in Virginia. In interviews, national experts indicated that a primary role for states is to standardize the decision-making process and provide clear guidance to help localities decide whether to add or remove names. (See Appendix B for information about JLARC interviews with national elections experts.) Because this judgment is being applied by many people in Virginia, there must also be adequate guidance about how to apply this judgment so that decisions about adding or removing voters from the list maintenance are made uniformly across the state.

ELECT's guidance to registrars about adding or removing voters is not adequate to ensure uniformity across localities

ELECT provides only minimal guidance to general registrars about how to review and verify that voters should be removed from the registration list or denied their application to register. The elections handbook provided by ELECT does not include a specific section detailing precisely how registrars should conduct reviews. (See Chapter 4 for more information about the handbook.) ELECT also does not provide registrars any training on how to determine whether to add or remove voters to the list. Registrars report not being aware of any guidance from ELECT on what to consider when conducting these reviews. More than three-fourths of registrars responding to the JLARC survey reported having some or a lot of discretion in deciding whether a voter

should be removed from the registration list. Several registrars reported that this process differs for registrars across the state. Others reported using "gut judgment" or "basic common sense" to make these decisions.

This lack of guidance or training likely results in a lack of uniformity across localities in how registrars decide whether to add or remove an individual from the list. One example of the consequences of inadequate guidance is that voters in similar circumstances are treated differently. For example, according to general registrars, two registered voters in different localities who were incorrectly removed from the registration list for being deceased when they in fact were still alive faced very different processes to be reinstated:

- In locality A, the voter was asked to show proof of identity to the registrar and the registrar reinstated the voter's registration status at that time;
- In locality B, the voter was told to contact the federal agency that provided the state the data that mistakenly indicated the voter was deceased. The voter was told their registration could not be reinstated at that time. Instead, the registrar would wait until the voter rectified the mistake in the federal data and was advised of the correction during the next data update.

More and better guidance would likely improve the statewide uniformity of decisions about adding or removing a voter. About one-third of registrars responding to the JLARC survey cited a need for additional or better guidance in processing new or updated registrations or removing ineligible voters from the registration list.

RECOMMENDATION 6

The Virginia Department of Elections should develop written guidance and a training module for general registrars on how to verify whether a voter should be removed or added to the voter registration list and the processes to be used to correct inaccuracies on the list.

State could consider centralizing list maintenance process

Modern technology presents the state with an opportunity to centralize list maintenance decisions, and thereby substantially increase the uniformity in list maintenance statewide. One option for improving the uniformity of list maintenance decisions is to centralize this function within ELECT. Decades ago, voters registered to vote almost entirely through their local registrar's office using paper applications. Registrars also had a more intimate knowledge of the residents and voters within their localities. Today, the vast majority of voter registrations and updates occur electronically through DMV or on ELECT's website. Registrars today are also less intimately familiar with the larger and significantly more mobile populations found in most parts of Virginia. Given these changes, there may be diminished value in having local registrars make the final determination about individual eligibility to vote.

One state uses a centralized process to maintain their voter registration list. The state of Alaska adds, updates, and removes voters from the registration list with data used to distribute oil revenue dividends to residents.

With 133 registrars responsible for deciding when to add or remove voters from the registration list, achieving uniformity is difficult. The additional guidance and training envisioned in Recommendation 6 will likely make the process of adding and removing voters more uniform statewide. However, registrars will still inevitably apply this guidance in differing ways—or ignore the guidance altogether. For example, many registrars do not follow guidance from ELECT on the use of obituaries to remove deceased voters from the registration list. The elections handbook developed by ELECT states that obituaries should not be used because they can lead to mistaken removals from the registration list, especially in large communities; obituaries do not include key information needed to verify the identity of a voter, such as their social security number and current address. However, more than two-thirds of registrars responding to the JLARC survey reported using obituaries in the past 12 months to verify whether or not to remove a voter from the registration list. The most effective way to ensure uniformity would be to assign these responsibilities to a single unit within ELECT.

OPTION 1

The General Assembly could amend the Code of Virginia to assign the Department of Elections exclusive authority to add and remove voters from the state's voter registration list.

Some voters have been assigned to the wrong legislative districts

According to recent analysis by ELECT, the vast majority of voters are assigned to the correct legislative district. However, ELECT did find that less than one percent of voters may have been assigned to the incorrect district as of 2018. ELECT staff identified 9,140 voters at 7,565 addresses (out of approximately 5.5 million registered voters) who appear to have been assigned to the wrong congressional or state legislative districts. ELECT has recently been providing general registrars with the names and addresses of voters who appear to be assigned to the incorrect districts. Registrars are being asked to verify and correct any errors. The actual number of voters confirmed by registrars as having been assigned to the wrong legislative districts, and the number of incorrect assignments that have been corrected, are unknown.

Under statute, general registrars are required to assign voters to the correct local, state, and federal election districts and precincts, in accordance with their residential addresses. Registrars are required to reassign voters whenever election districts or precincts change (§ 24.2-114 13), which can happen during redistricting or as new residential development occurs. Registrars also must assign voters to election districts and precincts when they register for the first time or change addresses.

ELECT does little to ensure local officials assign voters to the correct districts and precincts

Although assigning voters to the correct districts and precincts is the responsibility of general registrars, ELECT has a broader supervisory role in statute to ensure the legality and purity of elections (§ 24.2-103). However, ELECT does not conduct ongoing reviews of the accuracy of voter assignments. (See Chapter 4 for more information on ELECT's supervision of local election administration.) According to ELECT staff, the department was aware of voters being assigned to the wrong legislative districts more than two years before assignment problems manifested in the November 2017 elections. ELECT undertook a statewide review of voter assignments only after the issue received substantial media coverage following the election.

ELECT learned in March 2015 that some voters were assigned to the wrong state House districts in the Stafford and Fredericksburg area. ELECT staff assisted local elections officials with correcting the errors, but did not verify that the errors were corrected. Voters in the area were still incorrectly assigned for the November 2017 election.

Both the current and previous ELECT commissioners have interpreted statute as not giving ELECT the authority or responsibility to ensure that registrars are assigning voters to the correct districts and precincts. Given the importance of assigning voters to the correct districts, and the potential statewide implications if voters are not assigned correctly and subsequently vote in the wrong races, the state should have an ongoing role in ensuring that voters are correctly assigned. The General Assembly may wish to expressly require in statute that ELECT regularly assess the accuracy of district assignments. Assessments could be done once every two or three years, but should be more frequent than once every 10 years. The results of these assessments should be shared with registrars, and ELECT should ensure that registrars correctly assign voters to districts.

RECOMMENDATION 7

The General Assembly may wish to consider amending § 24.2-404 of the Code of Virginia to require the Virginia Department of Elections (ELECT) to conduct periodic assessments to ensure that voters are assigned to the correct state legislative and congressional districts based on their residential addresses. ELECT should share the results of its assessment with registrars and ensure that these voters are correctly assigned.

Sources used for district assignment contain discrepancies

The vast majority of voters potentially assigned to the wrong legislative districts are clustered along localities' boundaries. This results from discrepancies between state and local definitions of locality boundaries. The locality boundaries that form the basis for the statutory boundaries defining state legislative and congressional districts do not always match the locality boundaries as defined by localities themselves.

The discrepancies between state and local definitions of locality boundaries stem from two factors. First, some localities have informal agreements about the location of a mutual boundary that deviate from locality boundaries as defined by the state. In many cases, these agreements are documented, but in some cases the agreements are not formalized in writing or through local ordinance. These local boundary agreements make it difficult for ELECT on its own to resolve precinct assignments problems. At minimum, though, ELECT should be aware of all local boundary agreements and incorporate them into its assessment of whether voters have been assigned to the correct legislative district.

RECOMMENDATION 8

The General Assembly may wish to consider amending the Code of Virginia to require that localities report to the Virginia Department of Elections (ELECT) all local boundary agreements. ELECT should consider these agreements when conducting periodic assessments of voter assignments.

The second factor contributing to discrepancies between state and local definitions of locality boundaries is that the state and localities do not always use the same maps. One map is used by the Virginia Division of Legislative Services under the auspices of its responsibility to provide staff support to the redistricting process. This map is based on U.S. Census Bureau GIS data, which forms the basis for Virginia's state legislative and congressional districts as defined in statute.

In some cases, localities map their jurisdictional boundaries using GIS data that is not from the U.S. Census Bureau. State and locality maps are generally the same, but there are slight differences. If a general registrar (or ELECT) has been using the census map at one point, and another mapping source at other times—or has never used census maps—these slight differences can result in a small number of residential addresses falling within different boundaries, depending on which map is used (Figure 2-3).

Chapter 2: Ensuring Accuracy of Virginia's Voter Registration List

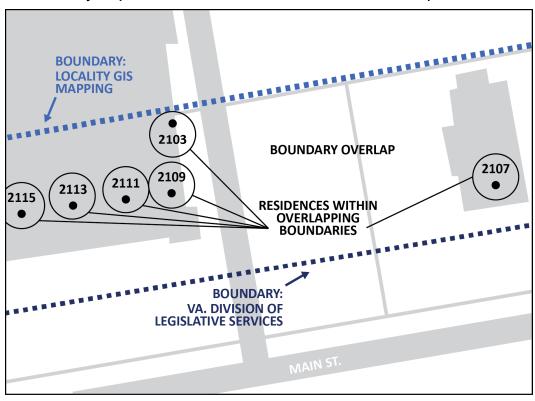


FIGURE 2-3
Some locality maps result in different boundaries than state map

SOURCE: General registrar, 2018.

These slight differences between the state and locality maps result in—at minimum—confusion and additional administrative effort for general registrars. These differences also at times require registrars to use judgment and discretion to decide which legislative district to assign voters at residences that fall in different boundaries on state and locality maps.

RECOMMENDATION 9

The Virginia Department of Elections, in consultation with the Virginia Division of Legislative Services, should provide written guidance for general registrars on how to assign legislative districts for those voters whose residential addresses fall into different districts depending on the map used.

GIS technology is insufficient or unavailable to some registrars

Not all localities use GIS software to draw precinct boundaries and assign voters to legislative districts. Some registrars still assign voters though manual processes, such as using paper maps and physically driving around the locality. VERIS lacks an adequate mapping capability that would allow registrars to electronically draw precinct boundaries and assign voters to legislative districts and precincts. As a result, there is a lack of

uniformity and consistency across the state in how localities draw precinct boundaries and assign voters to precincts, according to ELECT staff. Some registrars work with their local IT department to use GIS software for mapping, but some registrars do not have access to mapping software through their localities. The manual, paper-based process for drawing district lines is inefficient, prone to error, and has resulted in erroneous legislative district assignments.

VGIN—the Virginia Geographic Information Network—was established in 1997 as the state's formal coordinating body for geographic information systems for state agencies and local governments. The state through its provision of the VERIS system should make available technology to minimize the likelihood that voters are assigned to the incorrect legislative district and precinct. According to ELECT staff, the department is planning to use additional funding from the General Assembly to integrate GIS software into VERIS. (See Chapter 3 for more information about VERIS and ELECT's effort to improve its functionality.)

Until GIS is incorporated in VERIS or its replacement, GIS should be made available to registrars through the Virginia Geographic Information Network (VGIN) within the Virginia Information Technologies Agency. ELECT and VGIN could work together to identify general registrars with insufficient access to GIS software and develop a plan to ensure they have access. The General Assembly may wish to direct them to develop and implement such a plan.

RECOMMENDATION 10

The General Assembly may wish to considering including language in the Appropriation Act to direct the Virginia Department of Elections to work with the Virginia Geographic Information Network to ensure that all general registrars use Geographic Information System technology to assign voters to districts and precincts.

3 Virginia Election and Registration Information System

SUMMARY The Virginia Election and Registration Information System (VERIS) is not sufficiently functional or reliable. The system does not provide all of the functionality registrars need to administer elections effectively. VERIS has longstanding reliability problems that continue to slow its processing speed during periods of peak usage. To improve the performance of VERIS, the Department of Elections (ELECT) requested and is now receiving from the General Assembly \$1 million annually from FY18 through FY22. However, few of the major improvements have been implemented yet. More broadly, the decision to rebuild rather than replace VERIS did not adequately consider several key factors. The state should reexamine ELECT's decision to rebuild rather than replace VERIS by conducting a comprehensive assessment of the feasibility, costs, and benefits of replacing the system.

The Virginia Election and Registration Information System (VERIS) is the state's centralized elections IT system that ELECT manages and makes available to general registrars. VERIS is used to maintain the state's list of registered voters and carry out several other functions that play a critical role in administering elections. However, VERIS does not perform perhaps the most important electoral function—recording and tabulating ballots. This function is the responsibility of general registrars, who purchase and maintain the voting equipment (which are now "optical scan" machines that tabulate paper ballots cast by voters).

To be an effective elections IT system, VERIS should meet at least three key criteria. It should provide all the functions needed to prepare for and administer an election. The system should be reliable and sufficiently responsive. The system should be developed and managed effectively over time. VERIS only partially meets these criteria (Table 3-1).

TABLE 3-1
VERIS only partially meets criteria for system effectiveness

Criteria used to evaluate VERIS's effectiveness	Assessment
System provides needed functionality for registrar activities	•
System is sufficiently reliable and responsive	•
System has been developed and managed effectively over time	•
KEY ■ = Fully meets criteria ■ = Partially meets criteria = Does not mee	et criteria

VERIS is not sufficiently functional or reliable

For this study, JLARC staff conducted a survey of general registrars. 106 of Virginia's 133 registrars (80 percent) responded to the survey.

The survey included questions about the guidance and training ELECT provides, maintaining the statewide voter registration list, and the VERIS IT system.

See Appendix B for more information about this survey.

Registrars are only moderately satisfied with VERIS as the state's IT system for administering elections. Only 19 percent of registrars responding to the JLARC survey reported being satisfied with the application overall. The remainder of registrars reported being somewhat satisfied or dissatisfied (55 percent, 24 percent, respectively).

The dissatisfaction with VERIS stems from a long history of system challenges. The application was adopted from another state more than a decade ago and has since been modified to attempt to meet the needs of the state's registrars. The system continues to lack certain functionality and be unreliable.

VERIS provides most, but not all, needed functionality

VERIS provides most, but not all, of the functionality that general registrars need to administer elections in Virginia. The system provides a broad range of functions, including those related to voter registration, geographic alignment of streets with precincts and districts, and recording and transmitting election results on election night (Table 3-2). These functions allow registrars to perform many of the key activities needed to administer elections.

TABLE 3-2 VERIS supports a broad range of election functions

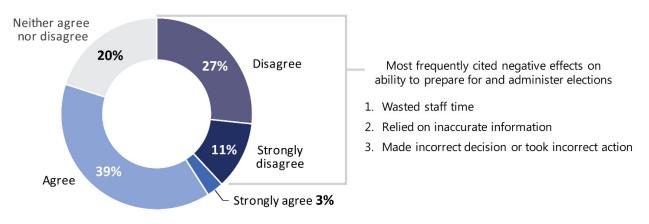
Function	Description
Voter registration	Adding, updating, and canceling voter registrations Verifying eligibility to vote by matching data Generating a list of voters for use on election day
Candidate qualifications and petitions	Recording and managing names of offices and information on candidates
Street segment, precinct, and district management	Adding and updating geographic information for assigning residential addresses to legislative districts and precincts Managing the boundaries for (1) local, state, and federal districts and (2) precincts and their associated polling places
Absentee voting	Approving, denying, and managing absentee voting applications and absentee ballots
Election results	Recording election results for each race on the ballot Modifying election results to correct any discrepancies found during certification

SOURCE: Information provided by ELECT.

However, VERIS lacks the functionality to adequately perform some key election administration functions. For example, the system contains only a rudimentary mapping component, making it difficult for registrars in VERIS to create and assign voters to precincts. Paper documents must be scanned in smaller batches to prevent system outages, which makes scanning relatively time-consuming. Many of the pre-programmed

reporting functions are redundant and do not fully meet the needs of registrars to extract information from VERIS. System screens are not intuitive, making it more likely that registrars will enter information incorrectly. Registrars noted that lack of full functionality in these areas resulted in wasted staff time and, in some cases, relying on inaccurate information or making incorrect decisions. Overall, only about 40 percent of registrars agreed or strongly agreed that VERIS provides them the functionality they need to prepare for and administer elections (Figure 3-1). Twenty-seven percent disagreed and another 11 percent strongly disagreed.

FIGURE 3-1 Less than half of registrars agree that VERIS has all needed functionality



SOURCE: JLARC survey of Virginia general registrars, May 2018.

System still has ongoing reliability problems

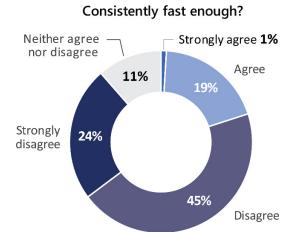
VERIS has a pattern of unreliability in recent years that has made it difficult for registrars to efficiently process voter registration transactions and perform other required election tasks. For example:

- During the 2014 election, the results reporting function was inoperable due to a high volume of users.
- Near the October 2016 registration deadline, a surge of online applications overwhelmed VERIS's server capacity, causing the system to crash. This led to a lawsuit that resulted in the state extending its voter registration deadline.

When asked about VERIS's operation during the last 12 months, the majority of general registrars disagreed or strongly disagreed the system was consistently operational or fast enough to allow them to work efficiently (Figure 3-2). Registrars reported that VERIS processes certain transactions slowly and is prone to crashing, particularly during times of peak usage before and on election day. For example, VERIS's recently implemented scanning feature processes slowly and occasionally causes the whole application to slow down or crash.

FIGURE 3-2
A majority of registrars disagree that VERIS is consistently available or fast enough

Neither agree nor disagree 13% Strongly disagree 24% Disagree



SOURCE: JLARC survey of Virginia general registrars, May 2018.

VERIS appeared to fare better during the 2017 elections, and several general registrars reported that the system's processing speed and reliability improved somewhat during the first half of 2018. Additional funds have been made available for further improvements. ELECT received \$1 million in FY18 to begin improving VERIS, including to make it more reliable during periods of peak demand. ELECT is using these funds to purchase additional servers to increase its capacity. ELECT is also relying on cloud technology to improve VERIS's scanning capabilities.

Virginia has recently improved voting equipment security. Virginia no longer uses "touch screen" voting machines, which are not as secure as paper ballots being fed into an optical scan system machine, which are now required to be used in all localities. Virginia is also implementing a post-election audit protocol to periodically test result accuracy.

It is not clear whether VERIS will be sufficiently reliable even with the new server capacity. The new servers will have an upgraded operating system, more memory, and faster processors. ELECT plans to have the servers integrated and ready for use prior to the November 2018 elections. However, it is not clear that this additional server capacity will meet the much higher demand for system resources in the time preceding and during the 2020 presidential election.

Election information system security is also an ongoing, and increasingly high-stakes, priority. Along with many other states, Virginia is seeking to ensure that its system can withstand malicious attacks. ELECT received \$218,000 in FY18 to implement two-factor authentication, which requires users to enter a user name and password *and* use a hardware device to access the system. As part of the JLARC review of the Department of Elections, staff retained a consultant to review the security of VERIS and the results of that review have been shared with the Department.

Additional federal funding for election information system security will be available in the near term. Under federal legislation enacted in March 2018, Virginia will receive \$9.1 million in HAVA grant funds for improving the security of state and local elections systems. Including the required five percent state match of \$454,000, ELECT

would receive a total of \$9.5 million. Under HAVA, Virginia will have discretion over how to allocate these funds between VERIS, local voting equipment, and other state and local elections security initiatives.

Decision to rebuild VERIS, rather than replace it, was based on incomplete assessment

VERIS was not originally built for use by Virginia and has had challenges since its inception. VERIS is modeled after another state's statewide voter registration system and has been used in Virginia since 2007. According to ELECT and VITA staff, VERIS was designed poorly which undercuts the efficiency and reliability of the system. VERIS's internal configuration slows processing speeds and makes the system vulnerable to crashes. The system's user interface is poor. According to general registrars, the visual layout is poorly arranged, and data input screens are crowded and confusing.

To address VERIS's challenges, ELECT requested funds to begin rebuilding VERIS. The request was based on ELECT's assessment of whether to rebuild or completely replace the system and the determination that rebuilding was the best strategy. In response to ELECT's request, the General Assembly committed to appropriating \$1 million annually from FY18 to FY22 to rebuild VERIS. With these funds, ELECT staff are working to improve reliability and security, provide additional reporting capabilities, improve the user interface, and integrate GIS mapping. These funds are in addition to nearly \$49 million appropriated for development and maintenance of VERIS between FY08 and FY19 (adjusted for inflation). Spending on VERIS increased by 23 percent in FY17, and funding increased five percent for FY18, and 40 percent for FY19.

Assessment of rebuilding or replacing VERIS did not adequately consider key costs and benefits

ELECT's determination to rebuild VERIS was based on an assessment that concluded that rebuilding would cost \$5 million and replacing would cost \$31 million. However, the comparison was incomplete for three key reasons:

 ELECT did not collect information from multiple vendors about the cost of replacing the system. Instead, ELECT made a rough estimate of the cost to replace VERIS using a single Microsoft product that was still in development and would need extensive customization. There is not a large marketplace of commercial elections information systems, but releasing a request for information would have allowed multiple vendors to propose potential solutions based on current technology.

- ELECT did not fully account for the potential benefits of replacing VERIS, especially the improvements in general registrar functionality, reliability, and security that could be obtained in a newer IT system. Given the critical nature of the elections administration function in Virginia, these benefits are extremely important and should have played a major role in the decision about whether to rebuild or replace VERIS.
- ELECT did not fully account for the lifecycle costs of the rebuild or replace options. For example, ELECT's estimate of replacing VERIS did not account for the savings that could occur by employing fewer IT staff to manage and maintain the system. This is a significant omission, given that ELECT has 23 highly compensated IT staff and contractors working to rebuild the system at an annual staffing cost of approximately \$4 million.

The assessment of rebuilding or replacing VERIS was conducted by a CIO who recently resigned, and the request for funding was submitted to the General Assembly under the previous commissioner. Consequently, none of the ELECT leadership who concluded that rebuilding VERIS was the correct path are still at the agency.

As of early August, much of the work to rebuild the VERIS system was still in the planning phase; consequently, there had yet to be substantial, noticeable improvements in the system. A new CIO was hired in August 2018 to replace the prior CIO who departed in May 2018.

The upcoming November 2018 elections necessitate an actionable near-term plan to make VERIS as functional and operational as possible. ELECT should submit a detailed status report to VITA and the General Assembly regarding the improvements made to date using the VERIS funding allocated for FY18 and FY19. The status report should also detail all planned improvements. Depending on whether there has been sufficient progress with planned system improvements, the General Assembly may wish to consider withholding all or some of the VERIS funding planned for FY20 and beyond.

RECOMMENDATION 11

The Virginia Department of Elections should develop a detailed, written status report regarding improvements to the Virginia Election and Registration Information System through September 2018. The report should be submitted to the Virginia Information Technologies Agency, the House Appropriations and Privileges and Elections Committees, and the Senate Finance and Privileges and Elections Committees by November 1, 2018.

RECOMMENDATION 12

The General Assembly may wish to consider including language in the Appropriation Act to withhold additional funds allocated for FY20 to rebuild the Virginia Election and Registration Information System pending satisfactory progress implementing improvements for which additional funding was provided in FY18 and FY19.

Virginia should reexamine the decision to rebuild VERIS

Given the incomplete assessment of whether to replace or rebuild VERIS and the critical functions the system provides, a fundamental reexamination is warranted. The complexity and challenges of replacing such a key IT system would be significant. However, modern information technology has many advantages over older technologies and over the long term, having a more functional, operational, and secure system could be worth the cost and difficulty of transition.

Virginia's voter registration system challenges are not unique. Other states, too, have been seeking to improve their systems. States such as Texas, South Carolina, Wisconsin, and Michigan have recently sought to rebuild or replace their elections systems. The goals of these efforts were generally to improve system functionality and stability using advanced technology, and to ensure the voting systems can withstand the everchanging threats to election systems security. (Appendix D provides more information about efforts in selected states to rebuild or replace their state elections IT systems.)

VITA is vested in statute with authority to "provide oversight for executive branch agency efforts to modernize... information technology" (§ 2.2-2007). Consistent with this role, ELECT should work in consultation with VITA to reexamine the 2017 decision to rebuild, rather than replace, VERIS. The reexamination should more comprehensively assess the feasibility, cost, and benefits of continuing to rebuild VERIS compared to replacing it. The assessment should include a review of other states' recent experiences rebuilding or replacing their elections information systems and a comprehensive assessment of the current IT market. ELECT should retain external experts to advise them in making the decision.

RECOMMENDATION 13

The General Assembly may wish to consider including language in the Appropriation Act directing the Virginia Department of Elections (ELECT), in consultation with the Virginia Information Technologies Agency, to comprehensively assess whether to replace or rebuild the Virginia Election and Registration Information System by examining the feasibility, costs, and benefits of each option. ELECT should consult external experts with recent experience helping other states rebuild or replace their elections information systems.

Chapter 3: Virginia Election and Registration Information System

4 State Supervision of Local Election Administration

SUMMARY To be effective, state supervision of local election administration should consist of meaningful oversight, and guidance and training for local elections officials to ensure that elections are conducted with integrity and uniformity. The Department of Elections (ELECT) conducts some oversight activities to provide confidence that elections are effectively administered, but does not monitor several key election functions. ELECT should transition to a risk-based oversight model that focuses on functions that, if performed poorly, pose the greatest risk to uniform and legal elections in Virginia. ELECT generally provides useful guidance, but some guidance in recent years has not been timely, correct, or sufficient to address questions from registrars about Virginia's election law. Similarly, ELECT's training is generally helpful, but training sessions have not always included correct, sufficiently detailed, and relevant information for local elections officials. ELECT has taken several positive steps to address these deficiencies, and could further improve its guidance and training by developing procedures for how they should be developed and maintained.

The Code of Virginia requires the State Board, through the Department of Elections (ELECT), to "supervise and coordinate the work of the county and city electoral boards and of the registrars to obtain uniformity in their practices and proceedings and legality and purity in all elections" (§ 24.2-103 A). The state's supervisory role consists of three key activities: oversight, guidance, and training. Effective supervision is essential to instill full confidence in electoral processes and election results.

ELECT's supervision of local election administration only partially meets the criteria used to evaluate its effectiveness (Table 4-1). However, the recently appointed commissioner is implementing a number of initiatives that will likely lead to improvements. The majority (72 percent) of general registrars responding to the JLARC survey reported that ELECT's supervision and support has begun to improve after his arrival.

For this study, JLARC staff conducted a survey of general registrars. 106 of Virginia's 133 registrars (80 percent) responded.

The survey included questions about guidance and training ELECT provides, maintaining the statewide voter registration list, and the VERIS IT system.

(See Appendix B for more information about this survey.)

TABLE 4-1
State supervision of local administration only partially meets criteria

Criteria used to evaluate effectiveness of state supervision	Assessment
Oversight to ensure election integrity and uniformity	•
Guidance to ensure election integrity and uniformity	•
Training to ensure election integrity and uniformity	•
KEY ■ = Fully meets criteria	= Does not meet criteria

ELECT conducts some oversight, but it is insufficient to verify integrity and ensure uniformity

Effective supervision requires verifying that localities are individually and collectively administering elections with integrity and in a uniform manner. The Code of Virginia does not specifically define supervision to include oversight activities by ELECT that would help to ensure election integrity and uniformity. It does, however, assign ELECT responsibility to conduct several oversight activities, such as collecting information on certain election functions.

ELECT oversees some local functions for candidates and election day preparation, but not for registration and election day operations

ELECT conducts oversight activities for some but not all of the major functions performed by the state's 133 general registrars (Table 4-2). Among ELECT's most valuable oversight activities are in preparing for an election: approving the types of voting equipment that localities can purchase and verifying the accuracy of each locality's ballot before it can be used in each election. As required by 2017 legislation, ELECT is also developing a process for localities to periodically audit the accuracy of voting equipment.

ELECT collects information required by state law but the information is not used to conduct meaningful oversight to improve elections administration. For example, ELECT requires registrars to certify that they have trained their poll workers before an election, but does not assess whether that training was done effectively. ELECT also collects summaries of each registrar's annual performance evaluation, but does not review the summaries to identify areas where registrars may need additional training or guidance.

TABLE 4-2
ELECT does not conduct meaningful oversight activities of most key local functions

Function		Oversight conducted by ELECT
	Maintaining accurate voter registration list	Χ
Voter registration	Assigning voters to districts & precincts	Х
	Generating pollbooks for election day	Х
Candidates for election	Identifying offices for upcoming election	Verification ^a
	Candidate requirements	Χp
	Campaign advertising	Adjudication of allegations
	Purchasing voting machines & e-pollbooks	Approval ^a
	Ballot development and printing	Verification ^a
	Precinct alignment with district boundaries	X
	Precinct assignment and allocation	Χ
Preparing	Poll location selection & design	Χ
for election	Poll worker selection	Х
	Poll worker training	Χp
	Absentee ballot distribution	Х ^с
	Certifying voting equipment accuracy	Х
Election day	Precinct operations	Х
	Ensuring only eligible voters cast votes	Х
	Distributing provisional ballots as needed	Х
	Voter complaint resolution	Х
	Tallying votes	Х
Post-election	Canvass of final election results	Х
	Conduct recounts / contested elections	Х
	Periodic audit of accuracy of election outcomes	Pending ^d
A -l ' - ' -1 1 '	Office management	Site visit
Administration	Registrar performance	Χb

SOURCE: Code of Virginia, elections handbook, and interviews with local registrars and state elections staff, 2018.

ELECT conducts site visits to general registrars' offices but these visits provide little oversight value. ELECT staff inspect each general registrar's office several times each year, using a checklist that emphasizes assessment of the physical aspects of the registrar's office. For example, the checklist requires reviewing handicap accessibility and the ease of finding and identifying the office itself, as well as whether there is sufficient office space (Figure 4-1). While evaluating these aspects of a registrar's office has some value, there are many local functions that are much more important to effectively administering elections; moreover, these elements on the checklist are

^a ELECT is statutorily required to conduct oversight activity. ^b ELECT collects some information from registrars.

^c ELECT collects information as required by the U.S. Department of Justice. ^d Guidance is pending from ELECT to general registrars about how to conduct post-election audits.

FIGURE 4-1 ELECT's site visits do not sufficiently focus on critical local electoral functions

	LIAISON SITE VISIT				
	IRGINIA *				
	ARTMENT LECTIONS				
Locality:			Date		
General Registrar			VRAV R	egion	
FT Office Staff			PT Offic	e Staff	
Registered Voters			Precincts Places	/Polling	
voters		Fair	Good	Excellent N	leed Improvement
Accessibility / Handica	ар 🗆				icea improvement
comments Need to che	eck with GR	_	_	_	
Office Easy to Find			\boxtimes		
Comments Office is e	asy to find located	d off of the ma	in street.		
Office Clearly Identifia	ble 🗌		\boxtimes		
Comments Sign is visi	bility on the front do	or of the building	ng		
Office Space					
	ce is very small and led they know it is a		Electoral Boa	rd Member	
Private Area for In-Person A	bsentee Voting	\boxtimes			
Comments .Have sma	II partitions to separ	rate the voter.			
Private area for Meeting	with the Voter 🛛				
Comments Would have	e to take them in th	e GR's office fo	or privacy		
Sufficient Storage space for	Voting Equip.				
Comments Storage sp	ace is minimum. V	Vorking on it wi	th the EBs		
Central Absentee Pred	cinct(CAP)	res – Onsite	☐ Yes – Offsite	☐ No CAP	
Comments					
EQUIPMENT					
Voting System		VENDOR:			
Poll books:	EPB- State Solution	n 🗆 EPB -V	endor 🗆 Paper	Poll book	
COMMENTS:					
Locality Scans VR App	lications	s 🗆 No	COMMENTS:		
Evaluation					
ADDITIONAL COMMENTS	Annual Training:	GR and A	ssistant did not atte	nd.	
	Budget is consider	ed before atten	ded Training		
	EPB:	Had to bud	get for EPB and will	not use what is o	offered by elect.
	EPB Training:	Chairman	atten	ded. He thought	it was informative
GOALS		- II WIII WII	actori	IIV tilvuglit	
Registrar Liaison			Date		

SOURCE: Department of Elections, 2018. Dark rectangles used to redact personally identifiable information.

not likely to change from one site visit to the next. It is unclear how this information is used by ELECT in its supervisory role. ELECT staff have noted that site visits were intended, to improve the relationship between general registrars and ELECT staff and provide insight into registrars' needs.

ELECT conducts no oversight of several local functions that warrant state-level attention. At least one of these oversight gaps—ensuring that voters are assigned to the correct legislative districts—would be addressed by implementing Recommendations 7, 8, and 9 in Chapter 2. Other local functions, such as operating precincts on election day, resolving voter complaints, and tallying votes (including in-person, absentee, and provisional) are important enough to warrant oversight by ELECT. Improper performance of these functions could impact the outcome of elections and result in lawsuits.

ELECT's current oversight activities are not sufficient to identify areas where elections administration is not uniform statewide or where localities are not adhering to state and federal elections laws. Because the administration of elections is complex and nuanced, there are many ways in which the state's 133 general registrars and boards of election could perform elections activities differently from one another or inconsistent with elections laws. ELECT also cannot proactively identify problems registrars may be having with certain elections administration functions; as a result, ELECT has difficulty tailoring its guidance and training to registrars' needs.

ELECT's oversight approach should be driven by most substantial risks to integrity and uniformity

Given the state's strong interest in ensuring all citizens of Virginia have equal access to voting and that all votes are counted accurately, ELECT should transition to a risk-based oversight model. Its oversight activities should be primarily focused on preventing, identifying, and remediating the greatest risks to election integrity and uniformity (See Appendix E for information on how some other states oversee local elections.) Selection of these activities can be informed by

- the likelihood that noncompliance with elections laws or guidance could result in incorrect election outcomes, voter fraud, problems that prevent people from voting, or lawsuits;
- the complexity of the function being performed; and
- the extent to which localities have had compliance problems in the past.

ELECT could also direct more of its oversight activities toward registrars with less experience administering elections.

ELECT should improve its oversight of several elections functions performed at the local level. More rigorous oversight should be conducted to ensure that voters are assigned to the correct legislative districts and that registrars are adding and removing voters from the voter registration list appropriately. (See Recommendations 6-10 in Chapter 2.) These complex functions are not always performed uniformly throughout the state.

ELECT should also use risk-based criteria to assess whether oversight is needed in other areas. For example, ELECT should consider conducting more oversight of how registrars administer absentee and provisional ballots. These are complex functions, and at least two registrars indicated that they knew some registrars implemented these functions differently. ELECT should also consider the need to verify that localities have a sufficient number of polling locations, poll workers, and voting machines, because an insufficient number of these resources could increase wait times on election day. In some parts of Virginia, voters have experienced long wait times, most recently during the 2016 presidential election.

An initiative created by the current commissioner—the Virginia Elections Benchmark Index Workgroup—can likely contribute to ELECT's efforts in this area. The workgroup is planning to develop benchmarks regarding registrar operations and performance. These benchmarks will be used to more objectively measure the performance of registrars and the state's administration of elections overall. The benchmarks could also be used to identify which registrars could benefit from assistance or improvement, and in which key functions of elections administration. Each registrar's performance compared to these benchmarks could inform ELECT's efforts to move toward risk-based oversight activities. The commissioner has also hired a data analyst to help ELECT better use the information it collects.

RECOMMENDATION 14

The General Assembly may wish to consider including language in the Appropriation Act directing the Virginia Department of Elections (ELECT) to develop and implement a plan to provide greater oversight of local elections administration. The plan should detail strategies ELECT will use to (i) identify and assess major risks to election integrity and (ii) conduct activities to provide greater confidence that these risks are being mitigated. ELECT should submit its plan to the House and Senate Privileges and Elections Committees by July 1, 2019.

ELECT's guidance has been generally useful and is improving

The Code of Virginia requires ELECT to "issue instructions and provide information consistent with the election laws to the electoral boards and registrars to promote the proper administration of election laws" (§ 24.2-103). To meet this requirement, ELECT develops written guidance materials (sidebar) and provides clarification in response to questions, usually by email or phone. Guidance is provided primarily by two policy analysts and other staff in the Elections Services division, and five registrar liaisons in the Community Relations and Compliance Support division.

Effective guidance is critical to ensuring that elections are conducted uniformly across the state and that general registrars understand how to administer elections in compliance with state and federal laws. Each year there are multiple changes to state statute that registrars must understand and implement. Administering elections consistent with state and federal laws can be difficult, especially for registrars with less experience or those new to the role. Sixty percent of registrars responding to the JLARC survey described themselves as less than fully familiar with how to administer elections before being appointed.

ELECT's primary written guidance documents include an election handbook, a 400+ page hand book for general registrars and local board.

ELECT's guidance is generally useful, but it has not always been timely, correct, or sufficient to clarify election law

ELECT's guidance has generally been useful to the state's registrars. About one-third of registrars responding to the survey said the guidance they received when contacting ELECT over the past year was "fully useful" (Figure 4-2). More than half of registrars reported it was "somewhat useful." Registrars said that ELECT is helpful when responding to basic inquiries related to certain IT issues, felony voter eligibility, absentee ballot procedures, and special election procedures.

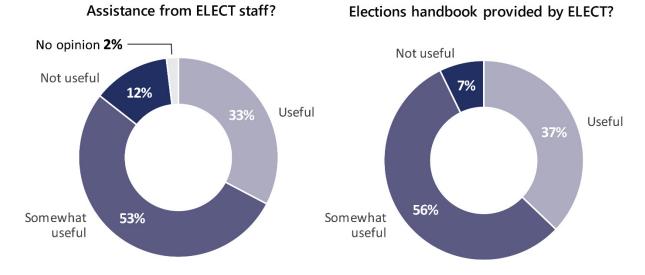
About one-third of registrars responding to the survey also described the elections handbook as fully useful. More than half of the registrars reported that it was somewhat useful. Several registrars said the handbook is a particularly useful resource for new registrars, and that they refer to certain sections, such as those related to absentee balloting, frequently. However, registrars and electoral board members also cited parts of the handbook that needed to be improved. For example, several mentioned that the handbook was out of date and included inaccurate information. Others indicated it was difficult to use, too long, confusing in some sections, and that some information was hard to find.

ELECT's primary written guidance documents include an election handbook, a 400+ page handbook for general registrars and local board members, which covers a broad range of topics; the VERIS Step by Step documents, which provide guidance on how to use VERIS; and the "What If" document, which is primarily used by poll workers on election day and for training.

I use [the handbook]
constantly.... I'm new so
I found it a great resource of how to break
down parts of the job.

- General registrar

FIGURE 4-2 Assistance and the elections handbook have been generally useful to registrars



SOURCE: JLARC survey of general registrars, 2018.

When I have requested guidance in interpreting code, I rarely get a straight-forward, cut and dried explanation.
Rather, I just get the code section recited to me with no clear interpretation.

General registrar

However, ELECT has not always provided guidance in a timely manner. For example, among registrars who rated the guidance as less than fully useful, the most frequently cited reason was because ELECT staff did not provide a timely response. Registrars cited instances of not being able to get in touch with ELECT staff on the phone, and some said that by the time they received a response from ELECT, they had already received a response elsewhere (such as from another registrar). For example, numerous registrars sought clarification and guidance for months from ELECT about how to process voter registration updates completed electronically at DMV. (See Chapter 2 for more information about registration updates submitted electronically at DMV.)

ELECT has not always provided correct guidance. For example, ELECT staff have provided incorrect guidance to registrars seeking clarification on several topics, including when provisional ballots should be handed out or whether certain candidates for office need to fill out statements of economic interest. ELECT has also given incorrect guidance to staff of political campaigns, resulting in confusion and wasted time for certain campaigns.

CASE STUDY: Incorrect guidance given to staff of political campaigns

Several candidates in the 2017 Republican gubernatorial primary were told, incorrectly, that the first candidate to submit their petitions would be listed first on the ballot. Based on this information, staff for two candidates camped out on the doorstep of the Department of Elections the weekend before petitions were due so their candidate could be listed first on the ballot. Staff were later informed that anyone submitting their petitions to ELECT by noon on Monday would be considered as having filed simultaneously and the ballot order would be determined by lot.

ELECT staff also have not always revised written guidance to reflect changes to statutory requirements. The elections handbook is typically updated annually, but it was not updated in 2017, and therefore did not reflect statutory changes made during the 2017 General Assembly session. The "What If" guide provided to registrars for the May 1, 2018 elections included incorrect dates for when voters could vote at their old polling location after moving out of the precinct.

ELECT has not always provided guidance about how to interpret the Code of Virginia. Under the previous commissioner, registrars who requested help interpreting the Code were often told by ELECT staff that they were not permitted to provide legal advice and were therefore unable to help—even though the requests were not related to any ongoing litigation. Several registrars said they have often been told by ELECT to talk to their county or city attorney for clarifications of state elections laws. Registrars also noted that at times ELECT staff provided guidance over the phone, making it less useful for registrars because there was nothing in writing for future reference.

One of the primary reasons for deficiencies in ELECT's guidance is that ELECT has experienced substantial turnover within the Elections Services division over the past

My local attorney is not an elections professional—ELECT should be capable of making code interpretations in order to instruct me on the legal/proper way to proceed in a given situation.

- General registrar

four years, resulting in a significant loss of institutional knowledge. Staff in key positions now have relatively limited experience in elections administration in Virginia. Between FY14 and FY17, nine staff in Elections Services left the agency, including policy analysts and campaign finance staff responsible for providing guidance to registrars. These staff had a combined 68 years of experience at ELECT.

Instances of less-than-fully-useful guidance create the *risk* that registrars will take incorrect actions or make incorrect decisions, but there is not any definitive evidence that this has impacted the administration of an election. The most frequently cited negative effect of problems with guidance was wasted staff time; registrars typically find answers to their questions through other means (usually by asking other registrars). Few registrars reported taking an incorrect action or making an incorrect decision from following ELECT's guidance. Part of the reason for this may be that the majority of registrars responding to the survey reported they only rely on ELECT or the elections handbook about once a month, or even less often. Registrars reported that assistance from general registrars or electoral board members in other localities was more valuable than assistance provided by ELECT.

ELECT has recently implemented initiatives to improve guidance, but additional improvement is still needed

In recent months, ELECT's commissioner has taken several steps to make the guidance from ELECT more timely and useful for registrars. To improve the timeliness of responses to registrar questions, ELECT is requiring its staff to acknowledge receipt of a question or request within 24 hours and notify registrars when they will be out of the office. The commissioner is also requiring staff to sign and adhere to ELECT's telecommuting policy, and requiring staff to forward their office phones to their personal phones when telecommuting. The commissioner told JLARC staff that telecommuting policies had not been consistently enforced in recent years, and that some ELECT staff had been less responsive to inquiries from registrars while telecommuting.

ELECT is issuing written "technical advisories" to provide additional guidance to registrars. During the first six months of 2018, ELECT issued 17 technical advisories to inform registrars about various issues. ELECT staff recently updated and reformatted the elections handbook to make it more user-friendly. The length of the handbook has been reduced, and it includes icons directing readers to important sections. ELECT staff are in the process of updating the "What If" guide for poll workers. ELECT now provides registrar liaisons with a list of frequently asked questions on upcoming elections issues so they can be prepared to answer registrars' questions.

Although these steps have the potential to improve the guidance ELECT provides, to maintain these improvements, ELECT should further develop and document its process for providing guidance. ELECT's provision of prompt and accurate guidance has also been hindered in recent years by a lack of procedures for when guidance must be reviewed and approved by management or the State Board. Review and approval could reduce the risk that ELECT staff will provide incorrect guidance and help ensure that

timely guidance is provided regarding new or complex policy questions. ELECT's current process for providing guidance does not require ELECT staff to maintain an internal reference guide. Through such a document, ELECT staff could improve the consistency of responses to similar questions over time, even if ELECT experiences high staff turnover as in the recent past.

RECOMMENDATION 15

The Virginia Department of Elections should develop and implement (i) a process for developing, updating, reviewing, and approving the guidance provided to general registrars and (ii) an internal reference guide and a process for keeping records of the guidance provided to registrars.

In addition, according to registrars, ELECT staff routinely decline to provide guidance that ELECT characterizes as "legal advice," but the basis for this characterization is unclear and inconsistent. ELECT staff and registrars both need clear guidelines on which types of questions can be answered by ELECT staff and which types staff should direct to the Office of the Attorney General.

RECOMMENDATION 16

The Virginia Department of Elections (ELECT) should develop clear guidelines, both for ELECT staff and for general registrars, on which types of questions should be answered by ELECT staff and which should be directed to the Office of the Attorney General.

ELECT's training has been generally helpful, but could be more relevant and accessible

The Code of Virginia requires the State Board to "ensure that the members of the electoral boards and general registrars are properly trained to carry out their duties" (§ 24.2-103 B). Statute further directs the board to offer training annually, or more often, as it deems appropriate. ELECT meets this requirement by providing one annual two-day training conference for registrars and local electoral board members. General registrars are required by statute to attend the training annually, and local board members are required to attend training in the first year of their three-year appointment and each subsequent reappointment. As with guidance, statewide training is a critical means by which a state can promote compliance with election laws and support integrity and uniformity in elections administration.

Training has been generally helpful, but not always correct, sufficiently detailed, or needed by registrars

The majority of general registrars and electoral board members responding to the JLARC survey found nearly all of the sessions at ELECT's 2017 training conference

to be at least somewhat helpful. Registrars found parts of the annual training session useful, and several said that, even though not all sessions were useful, they generally learn something at the training. Registrars identified several training sessions that were particularly useful, including sessions on absentee balloting, campaign finance, and budget preparation.

However, not all training at the 2017 conference was correct. Nearly half of registrars said ELECT's training could be improved by being more consistent with elections laws. Several registrars noted that one training session on provisional voting included information that was not consistent with state law. In addition, not all the training was detailed enough to be useful. Nearly two-thirds of registrars and almost half of electoral board members said ELECT's training could be improved with more detailed information. Several registrars indicated that the legislative update session is important but needs to provide more information on the impact of new laws and how elections will be affected.

Not all the training was needed because it was not directly relevant to the elections responsibilities of registrars. Nearly half of registrars and electoral board members said training could be improved through sessions that are more relevant to their day-to-day elections responsibilities. Recent training conferences have included topics that were not specific to Virginia, such as national trends in absentee voting and analyzing election data, and many registrars indicated that these sessions are not useful because they are not as relevant to their day-to-day operations. Registrars indicated Virginia-specific training on topics that directly affect how they administer elections, such as the use of VERIS and its reports, would be more useful.

Process to develop training has not been sufficiently rigorous and training has not been sufficiently accessible

Part of the reason the training has not always been correct, sufficiently detailed, or relevant is that ELECT lacks a structured process to identify training topics and develop materials. In recent years, training topics have been selected with little input from registrars. ELECT has solicited registrar input through a registrar workgroup, but that input has not always been used to determine training topics. ELECT staff also have not always considered other relevant information when selecting training topics, such as problems in recent elections or common types of guidance that registrars request from ELECT. Recent trainings have included inaccurate information because the presentations were not systematically reviewed by ELECT staff beforehand for accuracy and clarity. One ELECT staff member reported having to "take over" a training session because the presenter was providing inaccurate information.

The current commissioner has begun to institute improvements in training. For example, the presentations for the 2018 training conference were reviewed by ELECT staff for accuracy before the conference. ELECT is planning to coordinate its annual training sessions with the annual training conference conducted by the Voter Registrars Association of Virginia (VRAV). This has the potential to improve future training

ELECT holds an annual training conference. In 2017, the conference featured 24 separate training sessions. The conference included general sessions that covered topics relevant to both registrars and electoral board members, sessions specifically for board members, more basic introductory sessions for newer registrars, and more advanced or in-depth sessions for more experienced registrars.

I always come away with some new knowledge of how to do a task better or more efficiently.

- General registrar

The time for each session was ... too short to give more than an overview of each topic.

- General registrar

through greater input from registrars. It will also allow ELECT to leverage the efforts of VRAV, which often provides training on the same topics covered by ELECT.

ELECT should continue to improve its process of identifying training needs of registrars and developing a formal plan to meet these needs. The coordination with VRAV will facilitate this process. ELECT staff indicated interest in using a more formal process for identifying registrars' training needs and developing a plan to meet those needs.

Just-in-time training is an approach that gives individuals the information they need right when they need it. In elections administration, for example, registrars could receive training on administering provisional ballots in the weeks before an election.

More broadly, ELECT's training has been limited to what can be provided in person during the two-day annual conference. This is in contrast with research that concludes that training is most beneficial when it is provided as close in time as possible to when people will use the training—also known as *just-in-time* training (sidebar). Nearly half of the registrars responding to the JLARC survey cited a need for more frequent sessions throughout the year. More than 60 percent of registrars and 45 percent of electoral board members indicated that training would be more accessible if it were provided online.

Other states make greater use of these types of training methods. For example:

- Maryland provides an annual training conference and some just-in-time training right before an election for last-minute questions. Training is also provided outside the annual training conference through a mix of webinars and on-site training at local boards.
- Tennessee provides an annual training session for certified elections officials and regional training sessions once a year. The state is also trying to make more use of training via conference calls.
- Wisconsin provides training videos on its website and offers webinars to local elections officials.

ELECT should provide additional voluntary training to registrars and electoral board members on specific topics as needed throughout the year. This training could be provided in a variety of formats, including online and regional training sessions. Training could be provided by ELECT staff who have expertise in specific areas. Where applicable, the training should be provided as close to when it would be used as possible. ELECT may need to allocate additional staff to developing training materials; currently, ELECT allocates less than one full-time staff position to training. ELECT may be able to reallocate existing staffing resources by implementing Recommendation 21 in Chapter 5.

RECOMMENDATION 17

The Virginia Department of Elections should (i) ensure that training topics reflect the training needs of local elections officials and prior elections issues and problems; (ii) ensure that training is accurate and sufficiently detailed to be useful to local elections officials; and (iii) make training available in a variety of formats, including online.

5 ELECT Management and Organization

SUMMARY Management of the Department of Elections (ELECT) has improved since the current commissioner was appointed in early 2018. This is in contrast to the problematic management of the agency under the prior leadership. Under the current commissioner, most staff are now satisfied with their jobs and with ELECT's organizational culture and management. While job roles and expectations are clear for current ELECT staff, new staff receive minimal training. ELECT should create a formal training program for new staff, many of whom come to ELECT without experience in election administration. ELECT has some, but not all, policies and procedures for carrying out its business, administrative, and financial management functions. The recent improvements in ELECT's management are at risk in the future due to the likely turnover of agency leadership. ELECT also has more appointed positions than many other agencies, which increases the risk that ELECT's function would be affected by political influence. To ensure that ELECT operates in an efficient, effective, and apolitical manner over the long term, the General Assembly should consider (1) creating a classified position of director of operations responsible for internal management and (2) eliminating the appointed positions of Chief Deputy Commissioner and Confidential Policy Advisor. Two key divisions within ELECT that interact with general registrars have similar, overlapping responsibilities, which creates confusion among ELECT staff. ELECT should consolidate these divisions and clarify staff responsibilities.

To be efficient and effective, ELECT should be well managed to ensure a positive organizational culture in which staff are productive and satisfied with their jobs. Staff need to clearly understand their job responsibilities and expectations. ELECT needs to have adequate policies and procedures for its business, administrative, and financial management functions. It should have an organizational structure with a reasonable number of appointed positions, given its overall size and apolitical mission of ensuring the integrity and uniformity of elections. The organizational structure should also have clearly defined divisions of responsibilities between its major internal units. ELECT has recently made management improvements but only partially meets the criteria used to evaluate its management and organization (Table 5-1).

TABLE 5-1
ELECT partially meets internal management and organization criteria

Criteria used to evaluate ELECT agency management and organization	Assessment
Agency is effectively managed to ensure a positive organizational culture	•
Agency has clearly defined job roles and expectations for staff	•
Agency has adequate policies and procedures for its business, administrative, and financial management functions	•
Agency structure has reasonable number of appointed positions for its size and mission	0
Agency structure has a clearly defined division of responsibilities between internal units	•
KEY ■ = Fully meets criteria ■ = Partially meets criteria □ = Does not meet crite	ria

Management of ELECT was ineffective but has begun to improve

As of June 2018, the vast majority of ELECT staff believe the agency is generally well managed. For example, most staff responding to the JLARC survey believe ELECT has a culture of efficiency and effectiveness (85 percent) and that current management puts staff in a position to be productive in their jobs (82 percent). Staff are generally satisfied with working for ELECT (Figure 5-1).

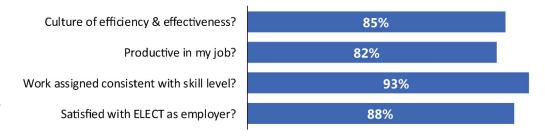
These results are in stark contrast to concerns expressed by ELECT staff and general registrars about the previous agency leadership. As indicated in interviews and surveys of ELECT staff and registrars, there was substantial concern about the management of the agency under prior leadership. These concerns included inadequate management of ELECT staff and a lack of strategic leadership. There appears to be considerable improvement in the management of the agency under the current commissioner (Table 5-2).

For this study, JLARC staff conducted a survey of all 31 classified staff at the Department of Elections. 28 ELECT staff (94 percent) responded to the survey.

The survey included questions about staff's job satisfaction, how effectively ELECT fulfills its mission, and internal management under the current and previous commissioners.

(See Appendix B for more information about this survey.)

FIGURE 5-1
ELECT staff report the agency is well managed under the current commissioner



SOURCE: JLARC survey of Department of ELECT employees, June 2018.

TABLE 5-2 ELECT staff described recent improvements in agency management

ELECT staff comments – current commissioner

"There has been a noticeable change to a more strategic style of management."

"It is [now] easy to understand what is expected, how to accomplish tasks, and the definition of success."

"The current Commissioner has outlined several clear strategic initiatives and priorities."

"Clear expectations, a strive for excellence throughout our work, and support for making the right call. That's due to [the current commissioner]."

ELECT staff comments - prior commissioner

"There was neither adequate operational management nor strategic leadership. It seemed like a rudderless ship that got caught in storm after storm."

"Management seemed very scatter-shot."

"Under the previous commissioner ... there was a void of management."

"Working at ELECT under the previous Commissioner was fraught with difficulty. I have stayed on because I am passionate about what can be done in state government."

SOURCE: JLARC survey of ELECT staff, 2018.

ELECT's relationship with the State Board of Elections appears to be improving as well. Interviews with board members and ELECT staff, as well as minutes from prior meetings, revealed that the relationship had been contentious over the last few years. None of these issues, though, seemed to stem from the board's composition, size, or authority. It appears that the relationship between the board and ELECT staff is improving under the current commissioner.

States have numerous board of elections structures. However, there was no evidence that these different board structures directly led to more effective departmental operations.

Job roles and expectations are generally clear, but ELECT provides minimal training for new staff

ELECT staff currently receive adequate guidance on how to perform their jobs. Nearly 90 percent of staff said they have a clear understanding of what is expected of them, and three-fourths said they have received sufficient guidance from management to do their job well. About two-thirds of staff said their written job descriptions accurately reflect the work activities they are asked to perform.

Although job roles and expectations are generally clear for *current* ELECT staff, *new* staff will likely have difficulty learning their roles and expectations. ELECT provides minimal training for new staff, most of whom come to ELECT without prior elections administration experience. Just one-fourth of staff responding to the JLARC survey said they had experience administering elections before working at ELECT. Elections administration is a broad field, and there are numerous state and federal laws, state regulations, and policies developed by ELECT or the State Board of Elections that ELECT staff must understand. As a result, it can be difficult to hire individuals with relevant prior experience in elections administration.

VREO certification is Virginia's version of the Registered Elections Official (REO) Program from the National Association of Elections Officials. The REO complements the association's other certification programs and includes state-specific programs on state laws, procedures, and court decisions. Elections officials must complete two consecutive years of the training course to become certified.

Without sufficient training, new staff may have difficulty learning how to do their jobs or complying with agency administrative practices. Several staff described receiving only the text of state and federal elections laws—and little or no guidance from their supervisor—when starting at ELECT. The main exception appears to be the Community Relations and Compliance Services division. The manager of this division and the supervisor of the liaison unit indicated they provide ongoing training to their staff, and the liaisons in this division are encouraged to obtain their Virginia Registered Election Officials (VREO) certification (sidebar).

ELECT should develop a formal training program for new staff. The training program should include training on job-specific responsibilities and an overview of elections administration in Virginia, including the primary responsibilities of local elections officials and the role and responsibilities of ELECT and the State Board of Elections. Part of this training could include visits to one or more registrar offices to understand how a local office operates. Part of the training could also include working as a poll worker or observing precinct operations on election day. Training should also include an overview of ELECT's administrative policies and procedures.

RECOMMENDATION 18

The Virginia Department of Elections (ELECT) should develop and implement a formal training program for new staff, to include (i) training on job-specific responsibilities, (ii) an overview of elections administration in Virginia, and (iii) training on ELECT's administrative policies and procedures.

ELECT has some but not all policies and procedures for key functions

ELECT has some but not all policies and procedures needed to ensure it effectively carries out its business, administrative, and financial management functions. ELECT lacks adequate policies and procedures for its primary responsibility of supervising local elections administration through oversight, guidance, and training for local elections officials. (See Chapter 4 for information about ELECT's supervision of local elections administration.) ELECT has been updating its administrative policies and procedures, along with its administrative manual, which had not been updated since 2011 and had not been used in recent years. The new administrative manual includes an updated policy that prohibits staff from participating in political activity, which is important for staff whose job is to administer elections, as well as updated policies on hours of work, employee leave, workplace harassment, and telecommuting. ELECT has also developed a policy covering time allocation for IT staff working on projects. The commissioner has taken steps to better enforce the telecommuting policy (including for IT staff), which had not been consistently followed in recent years.

ELECT is in the process of developing documentation of its financial management procedures but still lacks a written procedure for ensuring that it properly distributes state funds to general registrars and local electoral boards. A report by the Auditor of Public Accounts, issued in 2016 for the FY13-FY15 period, found that ELECT lacked clearly documented policies and procedures for multiple critical financial management areas, including reimbursement payments for localities, reconciliations of the state's accounting systems, payroll functions, and processes for reporting information to the Virginia Retirement System. ELECT has developed procedures to address many of those financial management functions but still needs to finalize procedures for providing reimbursement payments to localities. (See Appendix F for spending information.) The Auditor of Public Accounts is currently conducting an internal control audit of ELECT, which will provide additional insight into the progress ELECT has made and whether additional procedures need to be developed.

ELECT lacks continuity of leadership

The recent progress in agency management is at risk if the historical trend of governors appointing a new commissioner continues. ELECT has historically lacked the continuity in management staff needed to ensure that ELECT effectively carries out its core functions over the long term. In recent decades, ELECT has had a new agency head every four years as each new governor took office. (Lack of continuity is exacerbated by having key leadership positions filled by political appointees, which is discussed in the following section.)

Until 1999, ELECT had a director of operations, which was a classified staff position responsible for internal agency management. According to ELECT staff, this classified position and its longtime occupant were critical to ensuring relatively stable and apolitical operations at ELECT—even as new leadership was appointed and staff were tasked with implementing new elections initiatives. ELECT staff also said that in recent years the chief information officer—who worked at the agency for seven years but recently left—was the primary source of continuity when agency leadership changed.

Many other agencies with appointed leadership maintain continuity of internal management across administrations by having at least one classified senior position (or in most cases several) tasked with agency management. These positions are classified under the Virginia Personnel Act and cannot be removed at the sole discretion of the governor. For example, two agencies (the Departments of Treasury, and Rail and Public Transportation) have chosen to create a classified position for the purpose of succession planning and ensuring the long-term stability of the agency's operations.

The General Assembly could consider directing ELECT to create a permanent, full-time classified position of director of operations. Such a position would improve the continuity of ELECT's operations and its overall ability to carry out its core functions of supervising and coordinating the local administration of elections. Creating this position is also critical to improving ELECT's management of the Virginia Election and Registration Information System (VERIS), which should receive sustained focus

from a director of operations. (See Chapter 3 for information about ELECT's management of VERIS.)

The director of operations position should have two primary responsibilities. First, the position should ensure that ELECT carries out its core functions effectively and efficiently and consistent with state and federal elections laws and regulations. Second, the position should enforce ELECT's administrative policies, including policies on telecommuting and involvement in political activities. In creating the position, ELECT should work with the Departments of Human Resource Management, and Planning and Budget to determine the appropriate responsibilities and salary range.

RECOMMENDATION 19

The General Assembly may wish to consider including language in the Appropriation Act directing the Virginia Department of Elections (ELECT) to create a permanent, full-time position of director of operations subject to the Virginia Personnel Act (§ 2.2-2900 et seq.). The position should be responsible for managing day-to-day operations at ELECT and ensuring (i) fulfillment of the agency's mission and responsibilities; (ii) compliance with state and federal elections laws and regulations; and (iii) compliance with ELECT's business, administrative, and financial policies.

Organizational structure has too many appointed positions and lacks clearly defined divisions

ELECT consists of four main divisions and employs 47 staff, including five IT contractors. The divisions are Election Services, Community Relations and Compliance Support, Business and Finance, and Information Services. The agency is sufficiently small that it is not as vulnerable to many of the structural challenges that confront larger organizations. However, two aspects of ELECT's structure create problems that can be solved by relatively simple structural changes.

Unusually high number of appointed positions is not warranted and raises risk of politicizing election administration

ELECT has more appointed positions than is typical for many state agencies. ELECT has three appointed staff positions: commissioner, chief deputy commissioner, and confidential policy advisor, all appointed by the governor under statutory authority (§ 2.2-2905). Having the governor appoint the head of an agency is standard practice in Virginia, but not all agencies have two additional appointed positions. Several agencies, including some with hundreds of staff, have no appointed staff other than the agency head. ELECT is an outlier in its own secretariat: it has three appointed staff while the other agencies have one or two. These agencies also have far more total authorized staff (Table 5-3). Furthermore, the rationale for ELECT's two additional appointed positions is unclear.

TABLE 5-3
ELECT has more appointees than other agencies in Administration Secretariat

	Positions		Ratio of appointed	
Agency	Appointed	Total	to total positions	
Department of General Services	2ª	667	1/334	
Virginia Information Technologies Agency	1	240	1/240	
Department of Human Resource Management	2 ^b	122	1/61	
Department of Elections	3	43	1/14	

SOURCE: Appropriation Act and data from the Department of Planning and Budget and the Department of Human Resource Management.

NOTE: Number of appointed positions as of summer 2018. The Compensation Board is also in the Administration Secretariat and is authorized to have 21 positions and an executive secretary. ^aConfidential policy advisor was vacant from 2015 to 2018. ^bDepartment had one appointed position from 2014 to 2018.

Having three appointed positions in general—especially for an agency with fewer than 50 staff—can have several negative effects. Chief among these may be that agencies that already struggle to have continuity over time are more vulnerable because key leadership positions are likely to be replaced every four years. Another negative effect is that the political party of the governor may exert too much influence on the agency's operations, which are largely defined by statute and regulation and should not vary substantially without statutory changes. To ensure public confidence in the integrity of Virginia's electoral system and the outcome of elections, it is critical that ELECT remain apolitical in carrying out its core functions of providing education for local elections officials and assuring uniform, legal, and accurate elections. The presence of several political appointees may increase the risk of political influence or create the perception that ELECT is politically biased toward one political party.

Under the previous agency leadership, there was a perception among some staff and general registrars of political bias. This bias was reflected in decisions about some policies or aspects of agency operations. According to current and former ELECT staff, leadership created an environment in which one party was openly supported over the other.

The individuals currently in the chief deputy commissioner and confidential policy advisor positions appear to be undertaking important tasks and not exerting undue political influence. Still, there does not appear to be a sufficient basis for maintaining these positions given the potential for political influence and negative perception.

To ensure that ELECT operates in an effective, efficient, and apolitical manner, the General Assembly could require that ELECT eliminate the appointed positions of the chief deputy commissioner and the confidential policy advisor. The two roles would be subsumed under the director of operations position. (See Recommendation 19.)

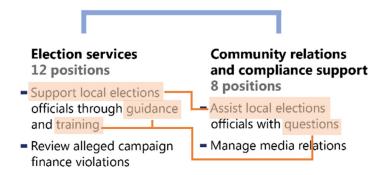
RECOMMENDATION 20

The General Assembly may wish to consider amending § 2.2-2905 of the Code of Virginia to eliminate the appointed positions of chief deputy commissioner and confidential policy advisor for the Virginia Department of Elections.

Election Services and Community Relations divisions have overlapping responsibilities

The two divisions within ELECT that interact most frequently with general registrars have similar and overlapping responsibilities. The differences in responsibilities between these two divisions are not well documented or clearly defined. According to interviews with employees in each division, both divisions work with local elections officials. Both divisions provide very similar services to local election officials. The Election Services division provides "support," "guidance," and "training." The Community Relations and Compliance Support division works to "assist" and "answer questions" (Figure 5-2).

FIGURE 5-2 Elections Services and Community Relations and Compliance Support divisions have overlapping responsibilities



SOURCE: JLARC interviews with ELECT staff, 2018.

These overlapping responsibilities have resulted in confusion among staff. Several staff disagreed that the division of responsibilities between Election Services and Community Relations and Compliance Support was clear to them (Table 5-4). Several staff in these two divisions also disagreed or strongly disagreed that their position descriptions reflected the work they are asked to perform, which adds to this confusion.

TABLE 5-4
ELECT staff expressed confusion about division roles and responsibilities

ELECT staff comments

"Who is responsible for answering which questions (between elect admin and liaisons)?"

"I am unsure on the division of responsibilities with the Compliance division. More communication and understanding of how involved the liaison should be in issues after they are reported would help greatly."

"I am not clear on the role of the new Liaison division."

"Sometimes [I] have to correct or take ownership of duties that were originally assigned to Election Services."

SOURCE: JLARC survey of ELECT staff, 2018.

To improve services to general registrars and reduce confusion among ELECT employees, ELECT should combine the two divisions into a single division that provides guidance and training and conducts oversight of general registrar operations. The new division could also house other functions currently performed by Election Services, such as those related to special elections, petitions, and constitutional amendments. During this process, ELECT should clarify the responsibilities of each staff person and clearly and thoroughly document how employees should perform their work. If there is substantial overlap, the roles and responsibilities of the liaisons should be reevaluated to determine whether they should be reallocated to other functions, such as training. Remaining functions related to campaign finance and media relations should be placed elsewhere within the agency.

RECOMMENDATION 21

The Virginia Department of Elections should consolidate its Election Services and Community Relations and Compliance Support divisions into a single division that provides guidance and training and conducts oversight of general registrar operations.

Appendix A: Study mandate

A Resolution of the Joint Legislative Audit and Review Commission directing staff to review the operation and performance of the Department of Elections.

Authorized by the Commission on July 10, 2017

WHEREAS, the Department of Elections serves a critical role promoting accurate, fair, open, and secure elections for the citizens of the Commonwealth; and

WHEREAS, the Department (a) supervises and coordinates the work of local electoral boards and general registrars to ensure uniform and legal elections processes, (b) proposes and administers regulations and provides guidance as necessary to promote proper elections, and (c) sets training standards and ensures that electoral board members and general registrars are properly trained; and

WHEREAS, the Department maintains the Virginia Election and Registration Information System (VERIS) that contains information about 5.5 million registered Virginia voters, and the Department is bringing more of its information technology services "in-house"; and

WHEREAS, the Department is authorized to employ up to 43 staff and is appropriated \$14.3 million for FY 2018 to provide electoral services, reflecting recently increased appropriations for VERIS and administrative services; and

WHEREAS, federal Help America Vote Act funds have historically been used to assist with modernizing election systems and technology, but these funds are projected to be depleted by FY 2019; and

WHEREAS, appropriate budgetary and financial management practices are a critical aspect of effective agency operations; and

WHEREAS, the Joint Legislative Audit and Review Commission (JLARC) completed a limited review of VERIS in 2008 but has not fully reviewed the Department of Elections since 1998; now, therefore be it

RESOLVED by the Joint Legislative Audit and Review Commission that staff be directed to review the operation and performance of the Department of Elections. In conducting its study, staff shall review whether the Department (i) adequately supervises and coordinates the administration of elections; (ii) sets appropriate training standards and provides adequate training for local electoral boards and general registrars; (iii) adequately fulfills all statutory reporting requirements in a timely manner; (iv) appropriately maintains required lists of registered voter information and employs adequate practices to ensure they are accurate and up-to-date; (v) effectively, efficiently, and securely administers VERIS; and (vi) is organized, staffed, and structured to ensure efficient and effective operations, including internal financial management and records keeping. JLARC staff may review other issues and make recommendations as appropriate.

All agencies of the Commonwealth, including the Department of Elections, State Board of Elections, Virginia Information Technologies Agency, local electoral boards, and general registrars shall provide assistance, information, and data to JLARC for this study, upon request. JLARC staff shall have access to all information in the possession of state agencies pursuant to § 30-59 and § 30-69 of the Code of Virginia including all documents related to disciplinary proceedings or actions of the boards. No provision of the Code of Virginia shall be interpreted as limiting or restricting the access of JLARC staff to information pursuant to its statutory authority.

JLARC shall complete its work and submit a report of its findings and recommendations to the Commission by December 15, 2018.

Appendix B: Research activities and methods

JLARC staff conducted the following primary research activities:

- structured interviews with current and former staff at the Virginia Department of Elections (ELECT), members of the State Board of Elections, general registrars and local electoral board members, staff from other Virginia state agencies, state elections officials in other states, and experts on voter registration and list maintenance in Virginia and nationwide;
- surveys of (1) general registrars and local electoral board members and (2) ELECT staff;
- quantitative analysis of data on ELECT spending and staffing levels and election outcomes;
 and
- review of research literature and other documents.

Structured interviews

Structured interviews were a key research method used by JLARC staff in conducting research for this report. JLARC staff conducted interviews with over 55 individuals throughout its review. In addition, JLARC staff were present at five meetings of the State Board of Elections, attended and observed part of ELECT's 2018 annual training conference, and observed the June 2018 primary election at several precincts in Goochland County.

Current and former staff at ELECT

JLARC staff interviewed 13 current staff members at ELECT:

- the current commissioner,
- three staff from the Election Services division,
- four staff from the Community Relations and Compliance Support division,
- five staff from the Information Services division, and
- one staff person from the Business and Finance division.

JLARC staff interviewed the managers of each ELECT division to learn about the primary functions of each division and the issues they are facing. Interviews were also conducted with other department staff to obtain information on

- their job responsibilities and how they spend most of their time,
- the training and guidance they receive to do their job,
- any barriers to performing their job effectively,
- any duplication between their division and other ELECT divisions,
- how well they are able to work with other ELECT staff and divisions,
- whether ELECT has been effectively led by the commissioners and state boards they've worked under, and
- whether ELECT effectively fulfills its role to supervise and support local elections administration.

Staff were selected for interviews based on their division, position, and years of service at ELECT.

In several cases, multiple interviews were conducted with the same ELECT staff. For example, the team conducted numerous interviews each with the current commissioner and the former chief information officer (CIO). Interviews with the current commissioner were critical to understanding the challenges facing ELECT and ongoing and planned initiatives to improve the department's management and performance. Interviews with the former CIO were critical to understanding

- the Virginia Election and Registration Information System (VERIS), including its functions, limitations, and initiatives to improve its performance;
- ELECT's list maintenance programs, including the data it uses to maintain an accurate voter registration list, its algorithm for name-matching, and strategies and practices for improving the accuracy of the registration list; and
- the challenges facing ELECT and strategies for improving its management and performance.

JLARC staff interviewed three former ELECT staff: the previous commissioner and two policy analysts. The purpose of these interviews was to understand how the department operated under previous administrations and learn more about management concerns under the last administration that were raised by some registrars and ELECT staff.

Current members of the State Board of Elections

JLARC staff contacted the three current members of the State Board of Elections as part of the study. Staff conducted interviews with two Board members, including the chairman and vice chair. Interview topics included the roles and responsibilities of the board, the relationship between the board and ELECT under the former and current commissioners, the extent to which ELECT is meeting its statutory responsibility to supervise elections, VERIS, and the state's governance structure for elections.

General registrars and local electoral board members

Throughout the study, JLARC staff spoke or corresponded with a total of 35 general registrars throughout the state. JLARC staff conducted individual interviews with 14 general registrars. These interviews included in-person interviews conducted onsite at registrar offices and phone interviews. Registrars were selected for interviews based on locality size, geographic location, and length of tenure as a general registrar. The purpose of the interviews was to learn about the responsibilities of registrars and how a registrars' office operates, and obtain their opinions on the guidance and training provided to them by ELECT. Registrars for the following localities were interviewed:

- Alexandria City
- Buchanan
- Charlotte
- Fairfax

- Fredericksburg City
- Hanover
- James City County
- Lexington City

- Loudoun
- Richmond City
- Sussex
- Virginia Beach City

Interviews were also conducted with two local electoral board members, and the purpose of these interviews was similar to the registrar interviews.

Staff also conducted two interviews with the president of the Voter Registrars Association of Virginia (VRAV), who is also a general registrar, and a phone interview with a group of eight registrars selected by the VRAV president.

Other state agency staff

Interviews were conducted with staff at several Virginia state agencies:

- Auditor of Public Accounts (APA)
- Department of Corrections (DOC)
- Department of Motor Vehicles (DMV)
- Virginia Compensation Board (VCB)
- Virginia Information Technologies Agency (VITA)

These interviews were conducted to obtain information on a wide range of study issues. APA staff were interviewed about their 2016 financial audit of ELECT and the department's progress in implementing the report's recommendations. Staff at DOC and VCB were asked about their data on individuals with felony convictions, and how this data could be used as part of ELECT's effort to maintain an accurate voter registration list. Staff at DMV were interviewed to obtain information on their role in registering voters, and their experience working with ELECT to automate the voter registration process through DMV. Staff at VITA were interviewed to obtain information on the security of VERIS and other IT issues.

Staff with other state departments of election

JLARC staff conducted phone interviews with state elections staff in six other states. States were selected based on their proximity to Virginia or their similarity to Virginia in terms of how the elections administration function is structured at the state and local levels. Interviews were conducted with state elections staff in Maryland, Tennessee, and Rhode Island to discuss the types of guidance, training, and oversight provided, and to obtain information on their list maintenance activities. Additional interviews were conducted with state elections staff in Texas, South Carolina, and Michigan. These interviews focused specifically on their information technology systems and list maintenance processes.

Experts on voter registration and list maintenance in Virginia and nationwide

JLARC staff interviewed voter registration list maintenance experts and stakeholders with the National Association of State Election Directors, the Center for Election Innovation and Research, the Bipartisan Policy Center, the Electronic Registration Information Center, the New Virginia Majority, and the Virginia Voter's Alliance. Topics discussed included

- reliable data sources for voter information,
- standards for data matching,

- states' role in standardizing the practices of local elections officials to add or remove voters from state voter registration lists, and
- transparency of procedures for adding and removing voters.

Surveys

JLARC staff conducted surveys of two groups for this study: (1) general registrars and local electoral board members, and (2) current ELECT staff.

Survey of general registrars and local electoral board members

JLARC staff conducted a survey of all 133 general registrars and most of the 399 local electoral board members in the state. Email addresses for some board members were not available, so JLARC staff sent surveys to the 361 board members for whom addresses were available.

Registrars and board members were asked about the following topics on the survey:

- Guidance and assistance provided by ELECT, including the usefulness of ELECT's assistance and written guidance, the reasons it was not fully useful (if applicable), the effects of deficient assistance or written guidance on their ability to prepare for and administer elections, and any areas where additional or improved guidance from ELECT is needed
- Training provided by ELECT, including satisfaction with training sessions provided during ELECT's 2017 training conference, opinions on how training could be improved or made more accessible, the usefulness of ELECT's poll worker training materials, and the effects of deficient training on their ability to prepare for and administer elections
- Extent to which ELECT effectively fulfills its role to supervise and support local elections administration, and how its effectiveness has changed (if at all) since the current commissioner was appointed

In addition, registrars only were asked about the following topics:

- Voter registration and list maintenance, including their level of confidence in the accuracy
 of their voter registration list, the reasons for being less than fully confident in its accuracy
 (if applicable), the information sources used to maintain their list, and the accuracy and efficiency of ELECT's processes for adding and removing voters from the registration list
- VERIS, including their level of satisfaction with its functionality and performance, and the impact of any deficiencies in VERIS
- Estimates of the numbers of (1) ineligible voters on the voter registration list for their locality and (2) voters mistakenly removed from the registration list or denied their application to register during the past year

A total of 106 registrars responded to the survey, for a response rate of 80 percent. The response rate for the electoral board survey was 41 percent, with 149 board members responding.

Survey of current ELECT staff

JLARC staff surveyed all 31 classified staff at ELECT (wage staff and appointed positions were excluded from the survey). A total of 28 staff responded to the survey for a response rate of 94 percent. Staff were asked about the following topics:

- ELECT's management of them as employees, including the sufficiency of guidance from management on how to do their job, the amount and type of work they are assigned, and whether management has changed under the new commissioner
- Job satisfaction, including pay, opportunities for advancement, ELECT's work culture, their relationship with coworkers, and whether they are considering leaving ELECT
- Their division within ELECT, including whether staff collaborate and have the knowledge and skills to perform their work, whether the distinction between their division and other ELECT divisions is clear, and whether their division effectively fulfills its responsibilities
- Adequacy of staffing levels and whether their division has problems with recruitment and retention (for ELECT supervisors only)
- ELECT as an organization, including whether the current commissioner works to foster a culture of efficiency and effectiveness and motivates staff, whether staff collaborate across the department, whether there is partisanship within the agency, and whether ELECT effectively fulfills its role to supervise and support local elections administration

Because the department had a relatively new commissioner when the survey was administered, the survey asked for staffs' opinions about these topics under the former commissioner, and whether management had improved under the new commissioner.

Quantitative analysis

JLARC staff analyzed data on spending, staffing, and election results for this study. JLARC staff worked with staff at ELECT to analyze data on spending to compare annual operation costs. JLARC staff worked with staff at the Department of Human Resource Management (DHRM) to analyze data on staffing to compare annual staffing levels and turnover. JLARC staff obtained election results data from the ELECT to analyze November general elections outcomes.

ELECT spending

JLARC staff used ELECT data to analyze the department's spending on its operations over the past 10 years. For this analysis, JLARC staff excluded state general funds that were passed through to localities for the compensation of general registrars and local electoral board members or federal Help America Vote Act (HAVA) grant funds for various elections administration purposes. JLARC staff examined the change in annual spending on ELECT operations between FY08 and FY17.

JLARC staff also analyzed ELECT's expenditures of HAVA funds since it first spent funds in FY04. For this analysis, JLARC staff examined the change in annual HAVA spending in Virginia, the annual percentage of HAVA funds passed on to localities and spent by ELECT on its operations, and the types of spending by localities and ELECT using HAVA funds.

For these spending analyses, JLARC staff adjusted dollar amounts for inflation using the Gross Domestic Product Implicit Price Deflator (GDP deflator) from the Federal Reserve Economic Data at the Federal Reserve Bank of St. Louis.

ELECT staffing

JLARC staff obtained staffing data from DHRM to analyze staffing levels and turnover at ELECT. Staff used the data to calculate total staffing levels at ELECT—filled and vacant positions—at a point in time for each of the past 10 years (typically June 30 of each year). JLARC staff also used the data to identify individual staff who left ELECT over the last five years, and calculate the years of experience of staff who left. Finally, JLARC staff calculated an overall agency turnover rate for all Virginia state agencies and compared ELECT's rate to other agencies.

Election outcomes

JLARC staff used election results data from ELECT to analyze the margins of victory for Virginia elections. The analysis focused on November general elections with at least two contestants between 2008 and 2017 for

- congressional elections for the U.S. House of Representatives;
- state legislative elections for the House of Delegates and Virginia Senate; and
- statewide elections for governor, lieutenant governor, attorney general, and U.S. Senate.

The resulting analysis included 504 contests. JLARC staff calculated the difference between the candidates receiving the highest and second-highest number of votes.

Review of documents and research literature

Throughout the study, JLARC staff reviewed various documents and the research literature to obtain background information on elections administration and inform its analysis of study issues.

Document reviews

JLARC staff reviewed numerous documents related to election administration in Virginia and the U.S. during the course of the study:

- State election laws and regulations, including the Code of Virginia, Virginia Administrative Code, and State Board of Elections policies
- Federal election laws and guidance, including the Help America Vote Act of 2002, the Uniformed and Overseas Citizens Absentee Voting Act of 1986, the Military and Overseas Voter Empowerment Act of 2009, and best practices and other guidance materials from the U.S. Elections Assistance Commission (EAC)
- Guidance documents developed by ELECT staff for local elections officials, including the GREB Handbook (2016 and 2018 versions), What If guide, Election Day Guide, VERIS Step by Step documents, guidance documents on specific elections topics (e.g., conducting a recount, and technical advisories released to all general registrars
- Training materials developed by ELECT for local elections officials and poll workers
- Standard operating procedures (SOPs) for internal ELECT functions

- ELECT's administrative manual for staff
- Telecommuting agreements for ELECT staff authorized to telecommute
- Employee work profiles for all ELECT staff

JLARC staff also reviewed documents on various aspects of elections administration from the Pew Research Center, National Conference of State Legislatures, and National Association of Secretaries of State.

Literature reviews

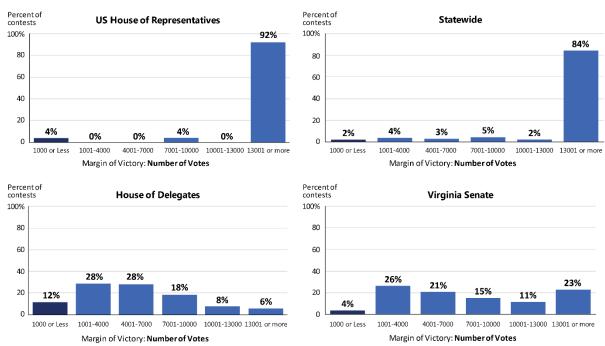
The team reviewed the research literature to obtain background information on topics such as election reform, voter wait times, voter turnout, and recounts. Numerous documents related to one area of research in particular—voter registration list maintenance—were reviewed by JLARC staff during the study, including

- EAC's Voluntary Guidance on Implementation of Statewide Voter Registration Lists
- National Research Council of the National Academies' Improving State Voter Registration Databases
- Peer-reviewed journal articles on how to assess the effectiveness of voter registration list maintenance

Appendix C: Election margins of victory

Between 2008 and 2017, the vast majority of November general election races in Virginia were won by a substantial margin of victory (Figure C-1). Approximately 90 percent of races for the U.S. House of Representatives and statewide races for governor, lieutenant governor, attorney general, and U.S. Senate were won by more than 13,000 votes; less than five percent of these races were won by 1,000 votes or less. Among races for the House of Delegates and the Virginia Senate, more than 90 percent were decided by more than 1,000 votes. Less than 10 percent of these races were won by 1,000 votes or less. Over the past 10 years, six general election contests have been decided by less than 100 votes, including four since 2013. There have only been two general election contests won by less than 15 votes; both were House of Delegates contests in 2009 and 2017.

FIGURE C-1 Most state and congressional races are decided by large margins of victory (2008-2017)



SOURCE: JLARC analysis of ELECT data.

NOTE: Includes only November general elections with at least two contestants. Statewide races were for governor, lieutenant governor, attorney general, and U.S. Senate.

Appendix D: Other states' elections IT systems

The Help America Vote Act (HAVA) of 2002 requires all states to have a computerized system for maintaining their statewide voter registration list. While some states had systems prior to 2002, many states implemented these systems after passage of HAVA. More than two-thirds of states (34 of 50) now have elections IT systems that are estimated to be at least 10 years old. A total of 16 states have updated or replaced their systems in the past 10 years, either by redesigning their existing system or contracting with a vendor to develop and purchase a new system. Numerous issues with a legacy elections IT system can prompt a state to update or replace it, including the high cost of maintaining an older system, performance problems, and challenges with securing an older system against cyberattacks.

Michigan

In 2012 state elections officials in Michigan decided to upgrade the legacy voter registration system in order to improve the security of the system. According to staff with the Michigan Bureau of Elections, the state chose to upgrade its legacy system using in-house IT staff and contractors. The project was split into two phases, and is scheduled to be completed in 2019. Michigan state elections staff consider the project largely successful because system users have been engaged through statewide training during the upgrading process. The state is providing local election officials with comprehensive manuals, online training material videos, and a voter registration helpdesk to address training needs.

Michigan state elections staff said the main challenge has been the volume and complexity of the work. The system's underlying software is complex, and was rolled out to all 1,600 elections clerks statewide. To date, Michigan has spent approximately \$10 million on the project.

South Carolina

In 2008, South Carolina considered whether to replace or update its voter registration and election management system. Based on the age and limited functionality of the system, the state decided to replace it with a new customized system. Following a request for proposals, South Carolina hired a developer and the new system was implemented in late 2011. The state owns the software for the system but pays for system support.

According to staff with the South Carolina State Election Commission, the development of a customized registration and election management system was successful but provided several lessons. For example, staff emphasized that such projects often take longer and cost more than expected, in part because it can be challenging to determine the functional requirements of a new system based on the needs of local elections officials. Staff with the Election Commission also emphasized the importance of clearly stating in the contract the functional requirements and procedures for testing the functionality of the system because changes are costly.

Texas

Texas worked with an IT consultant to analyze its legacy voter registration system after maintenance costs increased and the system crashed during periods of peak demand. IT consultants found the underlying system code was too complex to be rebuilt. Based on the IT consultant's conclusion, Texas decided to completely replace its voter registration system beginning in 2013. The process took about two years and cost \$14 million. State officials report being satisfied with the new system and believe the new system is sufficiently better than the prior system, making the transition time and costs worth it. Importantly, state's voter registration system in Texas is not used by all local elections officials to process voter registration transactions; officials in some localities process transactions in their own registration systems and upload their registration lists to the state system each day.

Appendix E: Oversight activities in other states

There is no federal or academic guidance on the types or extent of oversight states should exercise over local elections administration, and states differ in the types and extent of oversight they conduct. JLARC staff interviewed one state—Maryland—that has staff dedicated to conducting oversight of local boards of election and one state—Tennessee—that conducts oversight specifically of voter registration activities.

Maryland

The Maryland State Board of Elections has six regional managers (including one supervisor) who conduct audits and perform other oversight activities of local boards of election (Table E-1). Many of their audits are related to information technology. For example, regional managers perform monthly audits of workstations used by the local boards of elections to ensure and maintain the highest levels of security while also providing formal desktop, applications, and networking support to the local boards. The state also audits the logic and accuracy testing performed by the local boards to ensure they are adhering to testing procedures. The state audits and oversees the local voter registration function, and there is a process in place for localities to audit other localities' voter registration processes. State staff also monitor local poll worker training sessions and provide assistance to local boards, such as assisting with the evaluation of election day polling places proposed for use during elections.

TABLE E-1
Oversight activities conducted by the Maryland State Board of Elections

Oversight activity	Description		
Computer audits	Perform monthly audits on a minimum of 10 percent of local workstations that are connected to the state network or running state applications		
Logic & accuracy audits	Audit the logic and accuracy testing performed by the local boards of election to ensure testing procedures are adhered to. A minimum of five scanning units, ballot marking devices, and electronic pollbooks are audited by regional managers. The audits include (but are not limited to) the inspection of results tapes to ensure expected results from testing are recorded.		
Post-election audits	Assist local boards of election in completing post-election tasks that must be performed and submitted to the State Board of Elections prior to election certification. Tasks include examining a percentage of scanning unit result tabulation tapes, Voter Authority Cards generated from electronic pollbooks, and absentee canvass results to ensure accuracy.		
Statewide Election Management System (SWEM) oversight	Provides direct oversight of the SWEM system at each local board. SWEM is used across the state to tabulate, transmit and report election results. Oversight includes maintaining security requirements (passwords), archiving election results data, and performing quality "readiness" checks prior to configuring networks for upcoming elections.		

SOURCE: Regional Manager Roles & Responsibilities, Maryland State Board of Elections.

The Maryland State Board of Elections has limited enforcement authority over local boards. The state does not have direct personnel authority over local boards, but it can require local boards to submit corrective action plans or require them to hire additional staff. If local boards fail to do what they are expected to do, and the state has to do it for them, the state can bill the locality for the cost.

Tennessee

Tennessee conducts oversight of the voter registration practices of local election commissions in order to verify the accuracy of voter registration applications. State law requires local election commissions to review 10 percent of their voter registration applications every quarter (up to a maximum of 200 applications) to identify any deficiencies that could invalidate the application, such as a missing signature or date of birth. Local election commissions are also required to identify the number of cases where a registered voter with a deficient registration application subsequently voted in an election. Local election commissions document this information on a form that must be submitted to the Tennessee Secretary of State's office (Figure E-1), which then conducts audits of selected localities to verify the accuracy of the voter registration files. Tennessee statute also gives the state elections coordinator the authority to review county election procedures if needed.

FIGURE E-1 Tennessee voter registration inspection form

Republican County Election Commissioner(s)	The second secon	Democratic County Election Commissioner(s)	State Election Office Use Report Received:	
No Signature	If Unable to Sign - No Witness	Completed Form in Pencil	Gender Commence Comme	
Citizenship Question	TN Residency Question	Will Be 18 Years Old Question	Felony Question	
	Legal Address Blank or PO Box	No Place of Birth (unless Federal VR Form)	No Social Security #	
is the wastelm statused all the sequent mesoner process principles.		ency Breakdown by Category **** No Date of Birth		
Administrator: Number of deficient registrations identified where the individual has voted in an election				
Total number of new registrations inspected (at least 10 % of the registration forms received in this quarter not to exceed 200)		Number of new registrations found deficient		
a public meeting held at e signed this report below	(time) on inspected random voter	(date), the members of registration applications processed in ou	our County Election Commission who r county for deficiencies.	
	Name of County	County Voter Registration Insp	33111137312	

Form Revised 10/23/2013

SOURCE: Tennessee Secretary of State.

Appendix F: ELECT spending and staffing trends

Since the mid-2000s, ELECT has relied on two primary funding sources: state general funds, and federal grant funds provided through the Help America Vote Act (HAVA) of 2002. Under HAVA, states can use grant funds for several purposes, including

- replacing punch card and lever voting machines in local polling sites;
- developing and operating a statewide computerized voter registration system;
- educating voters about voting procedures, rights, and technology;
- training local elections officials and poll workers; and
- broadly improving the administration of elections.

States have broad discretion over how to allocate HAVA funds across the above purposes, including the extent to which funds are used for building and maintaining state elections IT systems versus purchasing local voting equipment.

Annual spending by ELECT averaged \$11.7 million over the past decade

Total annual spending by ELECT on its operations has fluctuated over much of the past decade (Figure F-1). Annual spending averaged \$11.7 million between FY08 and FY17 (adjusted for inflation). Spending more than doubled between FY10 and FY11, increasing from \$5.7 million to \$14.5 million. Spending nearly doubled again in FY13 over the previous year, then declined substantially to a little under \$10 million in FY14. Annual spending in more recent years has been closer to the 10-year average.

FIGURE F-1 ELECT spending on operations has fluctuated widely at times



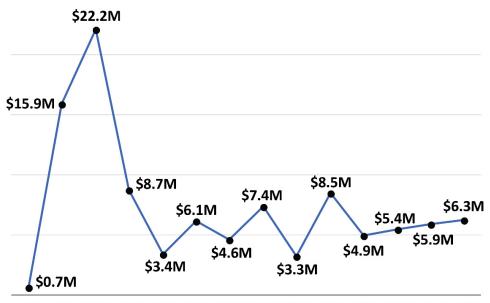
SOURCE: JLARC analysis of data from ELECT.

NOTE: Excludes funds passed through to localities. Adjusted for inflation.

ELECT and localities have spent \$103 million in federal HAVA funds since FY04

Virginia spent a total of \$103.2 million in HAVA funds between FY04 and FY17, when these funds were depleted. Annual spending from HAVA funds averaged \$7.4 million during this period and fluctuated widely during the first few years funds were spent (Figure F-2). HAVA spending peaked at \$22.2 million in FY06, and more than one-third of Virginia's cumulative HAVA spending occurred during the FY05-FY06 period. HAVA spending was much closer to the annual average in subsequent years.

FIGURE F-2 HAVA spending peaked in FY06 and was much lower in subsequent years



FY04 FY05 FY06 FY07 FY08 FY09 FY10 FY11 FY12 FY13 FY14 FY15 FY16 FY17

SOURCE: JLARC analysis of data from ELECT. NOTE: Adjusted for inflation.

Nearly 60 percent of Virginia's HAVA funding (\$58.1 million) was spent on ELECT operations, while the remaining \$45.1 million was passed on to localities. Of the HAVA funding passed onto localities, approximately 85 percent (\$38.4 million) was spent to purchase new voting equipment to comply with the standards set in HAVA. Almost all of the nearly \$60 million in HAVA funds spent by ELECT on its operations was used for IT systems and compensation for department staff. ELECT spent approximately \$38.6 million in HAVA funds on IT systems between FY04 and FY17, primarily for acquiring and operating VERIS. The department spent an additional \$11.8 million on salaries and benefits for staff during this period.

The percentage of HAVA funds passed onto localities by ELECT has declined considerably over time (Figure F-3). Localities spent substantial portions of HAVA funds in FY05 and FY06, and nearly half or more of funds during the FY09-FY11 period. As a result, nearly all of the \$45.1 million in HAVA funds passed onto localities was spent prior to FY12. HAVA spending by localities totaled just \$1.4 million in subsequent years, with little or no spending during FY16 and FY17. By contrast, since FY12 ELECT has spent an average of \$5.8 million annually in HAVA funds on its own operations.

9% 26% 39% 48% 52% 56% 69% 91% 91% 92% 93% 98% 100% 100% 91% 74% 61% 52% 48% 44% 31% 2% 9% 8% ros ^t06 A-100 100 170 ^ to 4 102 ■ Local spending ■ ELECT spending

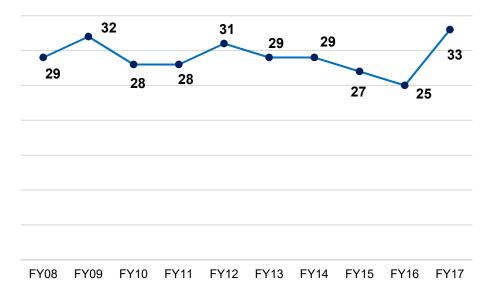
FIGURE F-3 Localities have spent a declining percentage of Virginia's HAVA funds

SOURCE: JLARC analysis of data from ELECT.

ELECT staffing has increased in recent years

Total ELECT staffing was relatively stable through most of the past 10 years, but increased sharply in FY17 (Figure F-4). The number of classified staff at the department hovered close to 30 through FY14 before declining in the following two years. Total staff increased by eight in FY17, and an additional five staff have been added in FY18, bringing the total number of classified staff to 38. ELECT also began contracting with a vendor in FY17 to provide five additional IT staff. Much of the increase in ELECT's staffing over the last two years reflects the additional IT staff hired following the department's decision to begin operating and maintaining VERIS entirely with ELECT staff.

FIGURE F-4
Total ELECT staffing has increased since FY16



SOURCE: JLARC analysis of data from ELECT. NOTE: Excludes part-time staff.

Appendix G: Agency responses

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 Virginia's Secretary of Administration, the Virginia Department of Elections, the Virginia Information Technologies Agency, the Virginia Department of Motor Vehicles, and the Virginia Division of Legislative Services. Appropriate corrections resulting from technical and substantive comments are incorporated in this version of the report.

This appendix includes a response letter from the Virginia Department of Elections.



COMMONWEALTH of VIRGINIA DEPARTMENT OF ELECTIONS

Christopher E. "Chris" Piper Commissioner Jessica N. Bowman Deputy Commissioner

Mr. Hal E. Greer Director 919 East Main Street Suite 2101 Richmond, VA 23219

Re: Response of the Virginia Department of Elections to the Exposure Draft

Dear Mr. Greer:

We appreciate the opportunity to review the Exposure Draft of the Joint Legislative Audit and Review Commission's (JLARC) report on the Operations and Performance of Virginia's Department of Elections and we thank the Commission's staff for their professionalism and courtesy throughout the review.

I also want to thank JLARC for their recognition that new leadership has already taken positive steps which begin to address many of the recommendations. The Department intends to work closely with the General Assembly to review suggested legislation and secure adequate resources to help address many of the recommendations.

We take the Commission's recommendations seriously and will give them the highest level of consideration as we continue to improve the performance of election administration throughout the Commonwealth. The staff of the Department is committed to promoting and supporting secure, accurate, fair and open elections for the citizens of the Commonwealth.

Sincerely

Christopher E. Piper

Commissioner

cc: The Honorable Keyanna Conner Secretary of Adminstration



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