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Report to the Governor and the General Assembly of Virginia

Total Compensation for State Employees

2017

JLARC
JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION

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Summary: Total Compensation for State Employees

WHAT WE FOUND

Compensation for state employees is generally comparable to market, but for some jobs, the state pays less than other employers

The combined value of the salaries and benefits for current state employees is, on average, nearly equivalent in value to what is provided by other public and private sector employers in the state. This is primarily due to the state's relatively generous health insurance benefits, which make up for state salaries that tend to lag the market by about 10 percent on average.

Salaries are the most visible and costly component of compensation, and are therefore a significant state investment. Overall, state employee salaries are competitive with what other employers pay. Some jobs, however, have average salaries far below the market for these occupations, including jobs that perform essential government services and functions such as protecting public health and safety and managing public funds.

WHY WE DID THIS STUDY

In 2017, the Joint Legislative Audit and Review Commission directed staff to study the total compensation provided to Virginia state employees, including cash compensation and benefits. This study was recommended by the General Assembly's Commission on Employee Retirement Security and Pension Reform. The study resolution directs JLARC staff to compare the value of total compensation in Virginia to other employers, and to research ways to improve recruitment and retention. This is the third study of state employee compensation conducted by JLARC staff since 2008.

ABOUT STATE EMPLOYEE COMPENSATION

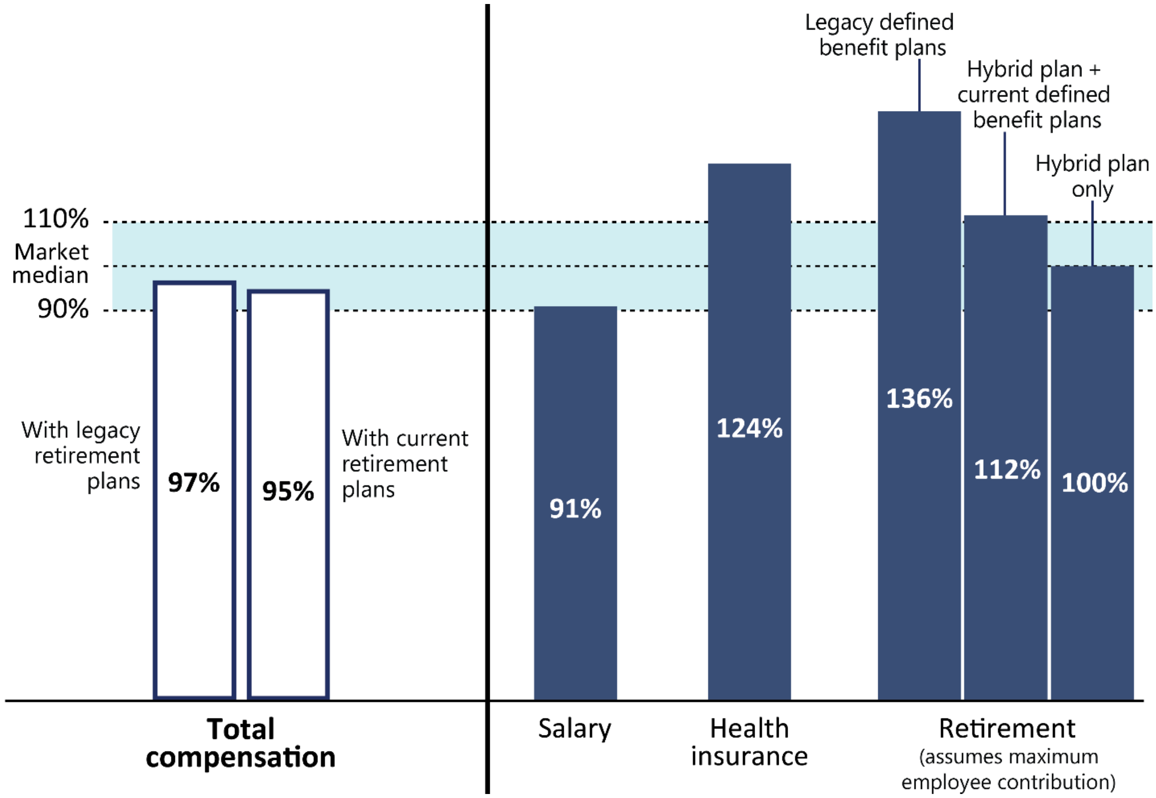
The state compensates its more than 105,000 full-time employees with salaries and benefits, such as health insurance and retirement. The state spent $7.0 billion in FY17 on compensation for its salaried "classified" employees, which are the focus of this study. Salary is the largest portion of state employee compensation, accounting for nearly two thirds of the state's total compensation expenditures.

Salaries play key role in agencies' ability to maintain a qualified workforce

A majority of state agencies indicated that they have difficulty filling open positions, attracting even minimally qualified applicants, and retaining qualified employees. Despite statewide turnover being in line with national trends, a majority of agencies report these challenges for some specific jobs. An inability to pay competitive salaries was identified by agency leaders as the primary reason for recruitment difficulties, and dissatisfaction with salary, along with lack of career advancement opportunities, was the most common reason given by employees who indicated they may leave their current job in the coming year. These challenges can be severe in specific job roles, and employees in some of the jobs with significant challenges also have below-market salaries.

Agencies are experiencing the greatest challenges recruiting and retaining employees in health care, health and safety inspection, public safety, and information technology jobs. Several agencies report an inability to perform above the minimum expectations due to these staffing issues, rendering them less able to perform the public health, public safety, or regulatory functions for which they are responsible.

Virginia's combination of cash compensation and benefits is comparable to market



SOURCE: Mercer comparison: Virginia total compensation to total compensation provided by other public and private employers in Virginia, 2017.
NOTE: Value of hybrid retirement plan assumes that all employees maximize voluntary contributions. Data is not available on actual voluntary contributions of other employers, so the comparison is based on the maximum potential value. Salary and health insurance figures include employees in all types of retirement plans, as retirement benefits do not affect these elements of compensation.

State-level investments in employee salaries could be more effective

Investments in employee salaries are costly, but they are also foundational to state government's ability to operate effectively and carry out the numerous programs and services that it operates with public funds. Even a one percent salary increase amounts to about $45 million when provided to all classified state employees, underscoring the importance of making cost-effective investments in salaries.

The state's periodic salary increases tend to be uniform across all employees, rather than directed toward occupations for which salary increases are most needed. Moreover, when salary increases are not provided regularly, employees are statistically more likely to leave the state workforce. The lack of prioritization and consistency limits the cost effectiveness of the state's investments.

State employee salaries could be more strategically managed if they were provided at regular intervals and prioritized for jobs that exhibit the most pressing workforce challenges. Individual state agencies could more effectively manage their workforce challenges on their own if state agency leaders had greater authority and flexibility to differentiate salary increases among their employees based on factors such as experience and performance.

State budget process deprioritizes needed investments in salaries

In most cases, decisions about whether or not employees will receive a salary increase, as well as the amount of the increase, are made during the state budget process. The structure of the state budget process, however, does not obligate decision-makers to consider whether additional investments in state employee salaries are warranted, and decision-makers do not have sufficient information to decide whether or how to increase salaries by different percentages across employees.

Employee compensation currently competes with every other discretionary item in the state budget and is prone to being set aside for other priorities. Without a means to prioritize employee salaries in the budget process, it is more likely that they will not be consistently funded, potentially creating or exacerbating workforce challenges.

Prioritizing employee compensation is the responsibility of the governor, as the Chief Personnel Officer of Commonwealth. The most effective approach for ensuring adequate funding of state employee salaries is for the governor to prioritize them at the beginning of the budget process. The General Assembly could consider requiring that information on the need for and amount of salary increases be provided to the governor before the budget process begins, based on analysis and reporting provided by state agencies and the Department of Human Resource Management.

WHAT WE RECOMMEND

Legislative action

- Require the Department of Human Resource Management (DHRM) to convene a workgroup of state agency leaders to develop a methodology for prioritizing salary increases for jobs with the most significant workforce challenges.
- Require DHRM to report to the governor, through the Secretary of Administration, on priorities for increasing state employee salaries before the start of the budget development process each year.
- Grant agencies more authority to differentiate among employees in their distribution of centrally appropriated salary increases.

Executive action

- DHRM should collect improved data on agencies' difficulty recruiting job candidates.
- DHRM should evaluate how agencies can improve career advancement, and therefore employee compensation.
- DHRM should provide training to all agencies on how to improve career advancement and use their funding to more strategically manage their workforce through compensation and workplace flexibilities.

The complete list of recommendations is available on page v.

Recommendations: Total Compensation for State Employees

RECOMMENDATION 1
The Department of Human Resource Management (DHRM) should (i) identify where career ladder programs already exist across state agencies and (ii) identify which job roles could most benefit from new or improved career ladder programs. DHRM should use this information to work directly with agencies to develop new or more effective career ladder programs. (Chapter 3)

RECOMMENDATION 2
The Department of Human Resource Management (DHRM) should configure the state's electronic recruitment management system to allow agencies to capture consistent and accurate data on (i) the time it has taken agencies to fill positions and (ii) the number of, and reasons for, declined job offers. DHRM should regularly communicate with agency human resource staff and managers to provide feedback and assistance to agencies to ensure they provide complete and accurate information for these categories of data. (Chapter 3)

RECOMMENDATION 3
The General Assembly may wish to consider including language in the Appropriation Act requiring the Department of Human Resource Management to convene a workgroup of state agency leaders to develop a methodology for determining the base amount of funding that should be appropriated for state employee salary increases each year. The methodology should take into account (i) recruitment and retention trends for each state job role, (ii) the value of each job role's median salary and total compensation as compared to the market, (iii) the extent to which workforce challenges can be addressed by salary increases, and (iv) the impact on state agency operations of workforce challenges in each job role. (Chapter 4)

RECOMMENDATION 4
The General Assembly may wish to consider appropriating funds for the Department of Human Resource Management to contract with a third party consultant to periodically update calculations of how the value of Virginia's total compensation compares to the value of other employers' total compensation, including salaries, bonuses, and fringe benefits. (Chapter 4)

RECOMMENDATION 5

The General Assembly may wish to consider amending § 2.2-1201 of the Code of Virginia to require the Department of Human Resource Management to provide a report that specifies (i) the job roles that should receive higher salary increases based on their recruitment and retention challenges; (ii) the amount by which other job roles' salaries should be increased, if at all; and (iii) cost estimates for funding the proposed increases. The report should also include supporting information on recruitment and retention trends, the functions performed by each job role, the number of employees and distribution of job roles across state agencies, and how the salaries for each job role compare to salaries paid by other employers. The report should be submitted through the Secretary of Administration to the governor and the House Appropriations and Senate Finance committees, by the last day in August in the first year of every biennial budget. This Code change would require technical amendments to eliminate the reports currently required under §§ 2.2-1201 A.15 and 2.2-1202. (Chapter 4)

RECOMMENDATION 6

The General Assembly may wish to consider including language in the Appropriation Act requiring the Department of Human Resource Management to conduct analysis on the effect of salary increases from the previous two biennial budgets on recruitment and retention of state employees. Analysis should focus on job roles with previously-identified recruitment and retention challenges and the effect of salary increases, or lack thereof, on recruitment and retention. This information should be included in a biennial report to the governor and the House Appropriations and Senate Finance committees at the end of August in the first year of every biennial budget. (Chapter 4)

RECOMMENDATION 7

The General Assembly may wish to consider including language in the Appropriation Act granting agencies the option to increase individual employee salaries by different percentages, within the total amount appropriated for salary increases for each job role. The Appropriation Act should require the Department of Human Resource Management to specify, through policy, the factors that agencies should consider when determining salary increases for individual employees. These factors should include experience, job responsibilities, and performance. (Chapter 4)

RECOMMENDATION 8

The General Assembly may wish to consider including language in the Appropriation Act (i) directing the Department of Human Resource Management (DHRM) to establish guidelines for performance-based pay models and (ii) allowing agencies to implement performance-based pay models within the guidelines established by DHRM. (Chapter 4)

RECOMMENDATION 9

The Department of Human Resource Management should develop and offer training and support for all state agency human resources staff on how to (i) maximize the use of pay practices and salary data; (ii) manage staffing issues and handle employee complaints; (iii) identify and address workforce challenges; and (iv) align salaries based on individual factors. This training should be mandatory for each agency's human resources manager. (Chapter 4)

1 Overview of State Employee Compensation

SUMMARY State agencies are charged with a diverse array of missions, mandates, and objectives, and they rely on a diverse range of occupations to operate successfully. In order to effectively recruit and retain qualified employees, the state provides salaries and benefits that, taken together, are intended to be comparable to the compensation provided by private sector employers. Virginia spent $7 billion on state employee salaries and benefits in FY17, accounting for approximately 13 percent of the overall state budget. Given the size of the state's investment and the importance of having qualified employees, effective employee compensation policies are necessary to manage and carry out state agencies' diverse missions. The governor and General Assembly establish and fund statewide compensation policies, but individual agencies have some flexibility to use compensation to meet their specific workforce needs.

In 2017 the Joint Legislative Audit and Review Commission (JLARC) directed JLARC staff to study the total compensation provided to Virginia state employees, including cash compensation and benefits. The study was a recommendation from the Commission on Employee Retirement Security and Pension Reform (sidebar). The mandate directs JLARC to (1) compare the value of total compensation provided to state employees to that provided by other large employers that recruit employees for similar occupations; (2) research how best to improve recruitment, retention, and motivation of state employees; and (3) identify cost-effective approaches to ensure agencies can employ an effective workforce. (See Appendix A, the mandate for this study.)

The **Commission on Employee Retirement Security and Pension Reform** was created by the General Assembly in 2016 and directed to study, report, and make recommendations on a variety of topics, including state employee compensation.

The 21-member commission includes legislators, citizen-appointees and ex-officio members from state government agencies.

A variety of research activities were conducted to complete this study. JLARC contracted with Mercer, a consulting firm with experience assessing total compensation, to assist with many aspects of this study. Mercer evaluated the total compensation provided by the state to classified employees, and compared it to the compensation provided by private employers, the federal government, Virginia local governments, and other state governments. To better understand the recruitment and retention challenges faced by agencies and the role of compensation in these challenges, JLARC staff interviewed state agency staff in Virginia and other states; conducted a survey of state agency directors, human resources managers, and state employees; and analyzed state employment data to better understand agency and occupation-specific workforce challenges. (See Appendix B for the research methods used in this study.)

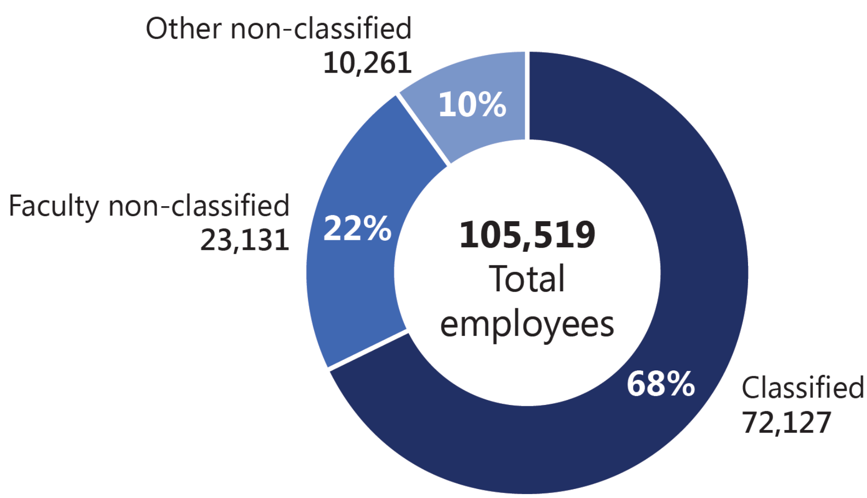
Virginia employs a large and diverse workforce to accomplish agency objectives

The **maximum employment level** is the state's authorized number of full-time, salaried employees.

Non-classified employees are not the focus of this study because they are not subject to the statewide compensation policies and other human resource policies that are addressed by this study.

The state has a maximum employment level of about 105,000 full-time, salaried employees (sidebar). State employees work in a broad range of agencies and occupations, and are categorized as either classified or non-classified, with higher education faculty and administration making up the majority of non-classified employees (Figure 1-1). There are approximately 72,000 classified jobs, but the number of actual employees was about 62,500 in FY17 due to vacant positions. These classified employees are assigned to specific job roles under the state's hierarchy of job classifications. Classified employees are subject to the Virginia Personnel Act and the state's compensation and human resources policies. Although classified employees are the focus of this study, some of the findings and recommendations may be applicable to non-classified employees as well (sidebar).

FIGURE 1-1
Majority of full-time, salaried positions are classified (FY17)



SOURCE: JLARC analysis of Department of Human Resource Management (DHRM) employee data, FY17.
NOTE: Includes unfilled full-time positions. Excludes wage employees, temporary employees, and contractors. Other non-classified employees include judges, legislative staff, appointed positions, and employees of independent agencies.

The 2005 **Higher Education Financial and Administrative Operations Act** allowed colleges and universities to convert certain salaried non-faculty positions from classified to non-classified, resulting in an almost 15 percent decrease in the size of the classified workforce since FY07.

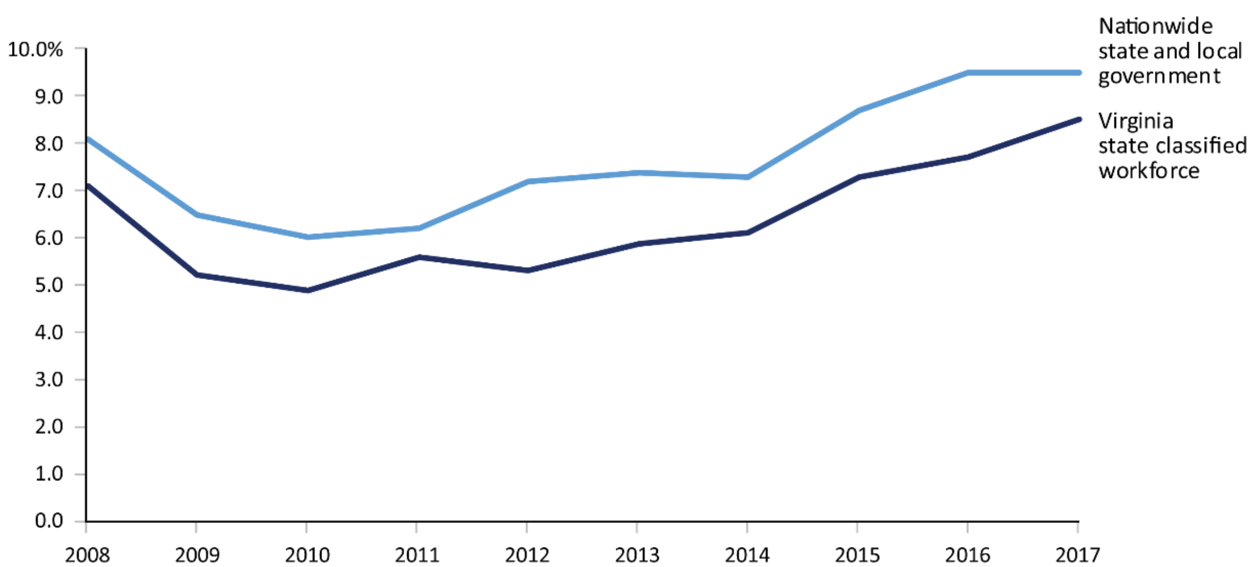
The size of the state workforce has been stable over time and is average in size compared to other state governments. The total number of state employees has increased by about one percent in the past 10 years, with the only significant change being a shift in the proportion of classified and non-classified employees (sidebar). Virginia ranks 28th nationally in state employees per capita, with 1.5 full-time equivalent employees per 100 people. With a maximum of around 105,000 salaried employees, the state is the second largest public employer in Virginia. The state workforce is substantially larger than local governments; Fairfax County, the most populous county in the state, employed 12,335 staff in 2016, not including teachers. Several state agencies, including the Virginia Department of Transportation and some public universities, are among the state's largest employers, across both the public and private sectors.

While the total size of the classified workforce has remained relatively stable, employees leave their state jobs each year for retirement, other jobs, or for other personal reasons (more than 9,000 employees in FY17). This turnover requires agencies to recruit new employees to fill these jobs. Virginia's voluntary turnover rate, which primarily includes employees who leave for other jobs (sidebar), has been increasing in recent years, but this trend is in line with national benchmarks (Figure 1-2). Voluntary turnover for all state and local governments (9.2 percent) was higher than Virginia's (7.9 percent) on average over the past three years. The three-year average vacancy rate for full-time classified positions was 13.2 percent and varied by job role. There is no nationwide vacancy rate benchmark for comparison.

Vacancy rate reflects the percent of full-time positions that are unfilled by a permanent employee.

Voluntary turnover occurs when an employee chooses to leave the state workforce for reasons other than retirement, dismissal, long-term disability, or death.

FIGURE 1-2
Virginia's voluntary turnover rate followed the same trend as state and local governments nationwide (FY08–FY17)



SOURCE: JLARC analysis of DHRM employee and personnel transaction data, FY08–FY17, and Bureau of Labor Statistics Job Openings and Labor Turnover Survey, FY08–FY17.

The state's classified workforce is concentrated in a few agencies. Two-thirds of classified employees are employed by just 10 state agencies (Table 1-1).

TABLE 1-1
Nearly two-thirds of state classified workforce is concentrated in 10 agencies

Agency	Number of employees	Percentage of total classified workforce
Department of Corrections	10,998	17.6%
Department of Transportation	7,461	11.9
Department of Behavioral Health and Developmental Services	6,047	9.7
Virginia Community College System	3,363	5.4
Department of Health	3,188	5.1
Virginia Commonwealth University	2,677	4.3
Department of State Police	2,589	4.1
Department of Motor Vehicles	1,887	3.0
George Mason University	1,658	2.7
Department of Social Services	1,555	2.5
Total for top 10 agencies	**41,423**	**66.3%**

SOURCE: JLARC analysis of DHRM employee data, FY17.
NOTE: Excludes wage employees, temporary employees, and contractors.

Occupational family is a broad grouping of jobs that share similar vocational characteristics.

Career group identifies a specific occupational field common to the labor market.

Job role describes a broad group of occupationally related positions that represent different levels of work or career progression.

The occupations in the state's classified workforce are diverse and include many positions that require specialized skills. The state's job classification system consists of seven occupational families:

- Administrative services (30 percent of the classified workforce);
- Education and media services (seven percent);
- Engineering and technology (nine percent);
- Health and human services (12 percent);
- Natural resources and applied science (five percent);
- Public safety (21 percent); and
- Trades and operations (15 percent).

The federal **Standard Occupational Classification** system is managed by the Bureau of Labor Statistics, and is used to classify workers in occupational categories for the purpose of collecting, calculating, and disseminating data. It includes over 800 occupational titles.

The state's seven occupational families are divided into 56 career groups and 289 job roles (sidebar). Multiple job roles exist for some occupations that are similar in nature but require different levels of experience. For example, Program Administration Specialist I, II, and III are three distinct job roles, but the levels (I, II, and III) reflect escalating knowledge, skills, and responsibilities. The 10 job roles with the largest numbers of employees account for more than 40 percent of all classified staff (Table 1-2). Certain job roles include multiple job titles, as defined by the federal Standard Occupational Classification system (sidebar). For example, the Forensic Science Specialist II job role includes three titles: forensic photographer, forensic scientist trainee, and fingerprint technician supervisor. This classification system was implemented on the recommendation of a temporary legislative commission in 2000.

TABLE 1-2
More than 40 percent of state classified workforce is concentrated in 10 job roles

Job role	Number of employees	Percentage of total classified workforce
Administrative and office specialist III	6,395	10.2%
Security officer III	5,814	9.3
Transportation operator II	2,361	3.8
Direct service associate II	1,953	3.1
Administrative and office specialist II	1,880	3.0
Program administration specialist I	1,843	2.9
Program administration specialist II	1,535	2.5
Housekeeping and/or apparel worker I	1,412	2.3
Information technology specialist II	1,323	2.1
Financial services specialist I	1,285	2.1
Total for top 10 job roles	**25,801**	**41.2%**

SOURCE: JLARC analysis of DHRM employee data, FY17.
NOTE: Excludes wage employees, temporary employees, and contractors.

Some of these job roles require specialized skills or advanced degrees and are in a wide variety of fields. For example, the state employs more than 3,000 information technology specialists across nearly all state agencies, and more than 500 scientists in many different scientific fields. There are also more than 1,200 nurses, nurse practitioners, and physician assistants who work for the state. As of FY16, one-third of classified employees had at least a bachelor's degree, and one in 10 had at least a master's degree. For many of these job roles, the state is only one of many employers competing for qualified employees, underscoring the importance of offering competitive salaries and benefits.

Total compensation for state employees includes salaries and benefits

There are five key elements of compensation for Virginia employees:

- cash compensation (salary and cash bonuses);
- health insurance;
- retirement (including retiree health insurance credits);
- paid leave; and
- other benefits (including life insurance and disability coverage).

Preferred provider organization (PPO) plans use a group of doctors, hospitals, and other providers who agree to provide services under the plan.

Consumer-driven plans tend to have lower monthly premiums but members have higher out-of-pocket costs with the goal of incentivizing more cost-effective health care choices because members pay more of the actual cost of services. Providers typically must be in-network to be covered.

Nearly all classified employees receive an annual salary, and all full-time employees are eligible for health insurance, retirement, leave, and other benefits. Typically, salary accounts for 80 percent of an employee's total compensation. The median salary for classified state employees was $44,413 as of August 2017. Bonuses are used by most agencies, but the extent varies significantly across agencies and largely depends on the availability of funding.

Virginia's salary structure underwent significant changes in 2000 after the state's effort to reform employee compensation. These changes resulted in the current job classification structure, in which all job roles are assigned to one of nine broad pay bands that each have a minimum and maximum salary. These pay bands replaced a more structured, prescriptive system of pay bands in which employees received salary increases by moving to a new "step" within the pay bands on the basis of tenure or performance. The broader pay bands were designed to provide agencies with the flexibility to manage employee salaries based on many factors, including performance. However, the performance-based pay policy that was part of this compensation reform has never been funded or fully implemented. Agencies conduct performance evaluations each year but lack the authority to use discretionary funds to change employee salaries based solely on performance. Moreover, the General Assembly has not appropriated funds to be used for performance-based pay since compensation reform took place in 2000.

Defined benefit retirement plans, often called pension plans, provide employees with a guaranteed retirement benefit, typically based on a formula using the employee's average final compensation and years of service. These plans are typically insured by the federal government.

Defined contribution retirement plans, which are similar to a 401K, are funded by contributions from the employee or employer (or both), typically as a percentage of annual income. The value of the account fluctuates with investment gains or losses.

Employees can choose one of four different comprehensive health insurance plans. Plans include a traditional preferred provider organization plan (COVA Care), two consumer-driven health plans with low premiums and high deductibles (COVA HealthAware and COVA HDHP), and one regional health management organization (Kaiser Permanente). Ninety percent of state employees enroll in a health insurance plan, with 82 percent enrolled in the COVA Care plan, and the remaining eight percent enrolled in one of the other three plans. The state pays for most of the monthly premium for all plans. Employee out-of-pocket costs, such as deductibles, copays, and coinsurance for specific services, vary by plan.

Employees are enrolled in one of five retirement plans. Most employees are enrolled in one of Virginia's defined benefit, pension-style plans. All state employees earn Social Security credits during employment. Except for employees in positions that qualify for one of the state's hazardous duty retirement plans, the state's defined benefit retirement plans are closed to new employees. Instead, new non-hazardous duty employees are enrolled in the hybrid retirement plan, which has a smaller defined benefit component, coupled with a defined contribution component. The hybrid plan was created by the General Assembly in order to manage rising state costs for retirement benefits. For state police officers, the state provides the State Police Officers Retirement System (SPORS), and for employees in other hazardous duty job roles, the state provides the Virginia Law Officers Retirement System (VaLORS). These plans typically have a higher retirement benefit and an earlier retirement age than the defined benefit plans for other state employees (Table 1-3).

TABLE 1-3
Virginia provides five different retirement plans

	State employees enrolled [a]	Unreduced retirement age	Employee contribution	Defined benefit multiplier	Defined contribution match (max) [b]
Plan 1	42,127	50 with 30 years of service	5%	1.7%	$20/month
Plan 2	17,396	Years of service plus age = 90	5%	1.65%	$20/month
Hybrid	17,754	Years of service plus age = 90	4% to DB; 1-5% to DC	1.0%	3.5%
SPORS	1,848	50 with 25 years of service	5%	1.85%	$20/month
VaLORS	8,650	50 with 25 years of service	5%	2.0%	$20/month

SOURCE: JLARC analysis of Virginia Retirement System data and documents, September 2017.
NOTE: Percentages in table represent percent of employee salaries. VaLORS members have either a 1.7% retirement multiplier with a hazardous duty supplement or a 2% retirement multiplier with no hazardous duty supplement, depending on when they were employed. All SPORS members with at least 20 years of service are eligible for the hazardous duty supplement in addition to their pension benefit.
[a] Includes all beneficiaries and retirees, including active and deferred members.
[b] The cash match is not a core component of Plan 1, Plan 2, SPORS, or VaLORS, but is available as a supplement.

The state offers all eligible employees several types of paid leave, including holidays. The types of leave vary, depending on when an employee joined the state workforce, and amount of leave depends on years of service with the state (Table 1-4). Employees accrue annual leave each pay period and can roll over unused annual leave up to a specified limit. Unused sick leave, community service leave, and family/personal leave under the Virginia Sickness and Disability Program (VSDP) do not roll over from one year to the next. Employees who are not in the VSDP can roll over unused sick leave each year. In addition to the types of leave discussed above, there are several other paid leave categories available to employees, dependent on certain criteria. Examples of these additional paid leave categories include civil and work related, educational, and military leave. Employees may also be granted leave by agency management, including compensatory, recognition, and sign-on leave when employees first accept a job.

TABLE 1-4
State employees receive at least five different types of paid leave

	Legacy leave system	VSDP
Annual leave – lowest	12 days limited carryover	12 days limited carryover
Annual leave – highest	27 days limited carryover	27 days limited carryover
Sick leave	15 days unlimited carryover	8-10 days
Family/personal leave	N/A	4-5 days
Community service leave	2 days	2 days
Holidays	12 days	12 days

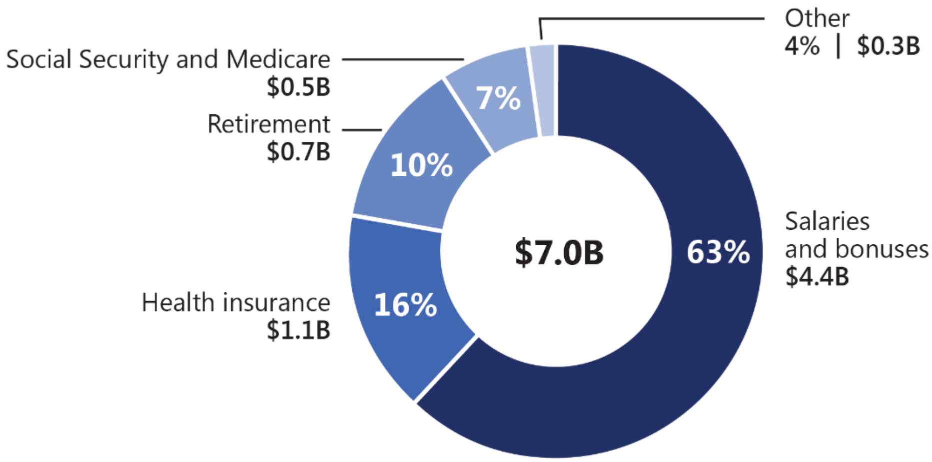
SOURCE: JLARC analysis of DHRM paid leave policies.
NOTE: The legacy leave system applies to staff who were employed by the state before 1/1/1999. VSDP applies to staff who were employed after 1/1/1999 and those employed before 1/1/1999 who voluntarily enrolled in the 1999 enrollment period or did not later opt out during the 2002 enrollment. Virginia provides additional holiday leave around Christmas, New Years, and Independence Day in some years.

State spending on compensation is primarily for salaries, health insurance, and retirement

In FY17, the cost to the state of total compensation for all state employees was approximately $7 billion, with 90 percent of expenditures for cash (including salaries and bonuses), health insurance, and retirement. The remaining 10 percent of spending was on leave and other benefits, including life insurance and contributions to Social Security and Medicare (Figure 1-3). For 46 percent of employees, compensation is paid from the general fund, with 54 percent of positions paid from non-general funds. Employees contribute to the cost of their benefits by paying a portion of health insurance premiums and contributing toward the cost of their retirement plans.

Although the size of the state workforce has been stable over the past 10 years, spending on compensation has increased by eight percent during that same time, adjusted for inflation. This is mostly due to health insurance and retirement spending, which have increased 31 percent and 13 percent respectively (Table 1-5). Increased spending on health insurance is due to the increasing costs of providing these benefits, not an expansion of benefits. The key driver of growth in retirement spending is the General Assembly's commitment to ensure the state has sufficient resources to pay for future retirement benefits. Spending on compensation has, however, decreased as a proportion of the state's operating budget in the past 10 years, from 18 percent to 13 percent.

FIGURE 1-3
Virginia spent $7 billion on employee compensation in FY17



SOURCE: JLARC analysis of expenditure data from Commonwealth DataPoint, October 2017.
NOTE: Excludes compensation for faculty, appointed officials, and wage employees. Excludes costs to employees, such as health insurance premiums and retirement plan contributions. Excludes benefit payments.
[a] Figures related to leave do not represent actual cash outlays, since agencies pay employees their full salary during leave (except when employees are on leave without pay). [b] Includes contributions by state to pre-fund future benefit payouts. Excludes actual benefit payments to retirees.

TABLE 1-5
Increase in compensation expenditures is driven by health insurance and retirement

	Cost ($ million)		10-year change ($ million)		
	FY08	**FY17**	**Overall $**	**Overall %**	**Average annual %**
Cash compensation	$4,221	$4,413	$192	4.5	0.5
Health insurance	869	1,138	269	31.0	3.1
Retirement [a]	648	730	82	12.7	1.3
Other [b]	725	705	−20	−2.8	−0.3
Total	**$6,463**	**$6,985**	**$522**	**8.1%**	**0.8%**

SOURCE: JLARC analysis of expenditure data from Commonwealth DataPoint, October 2017.
NOTE: Adjusted for inflation. Excludes compensation for faculty, appointed officials, and wage employees. Excludes costs to employees, such as health insurance premiums and retirement plan contributions. Excludes benefit payments.
[a] Includes contributions by state to pre-fund future benefit payouts. Excludes actual benefit payments to retirees. Retirement expenditures represent actual spending and do not include the full actuarially determined contribution rate in the years when it was not funded. [b] Includes expenditures related to leave, life insurance, disability, retiree health, Social Security and Medicare. Figures related to leave do not represent actual cash outlays, since agencies pay employees their full salary during leave (except when employees are on leave without pay).

The governor, General Assembly, and agency leaders are responsible for effective compensation

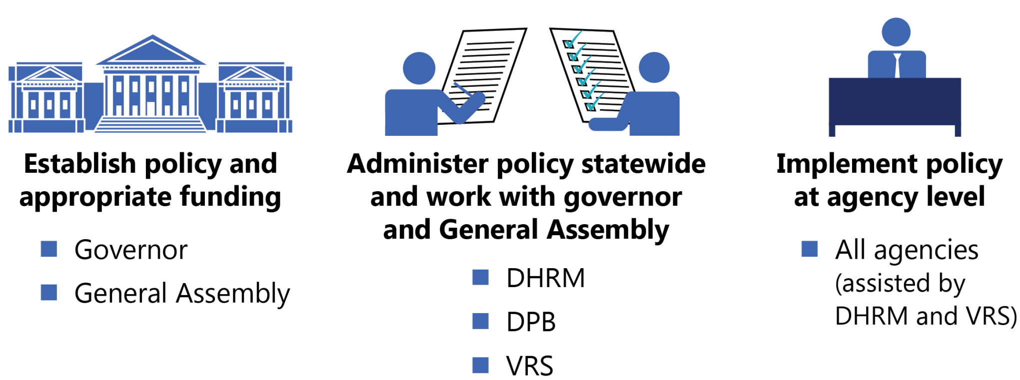
Multiple decision-makers are responsible for ensuring the effective use of compensation to meet the state's workforce needs. Virginia's goal is to provide compensation that is sufficient to

- attract qualified employees;
- retain qualified employees;
- reward sustained high performance; and
- support supervisors in accomplishment of agency objectives.

Through statute, the General Assembly established the goal of compensating state employees at rates comparable to rates of compensation for employees in the private sector (§ 2.2-1202 of the Code of Virginia).

State policies for changing employees' compensation are established by the governor and the General Assembly and implemented by agencies. The governor and the General Assembly establish compensation policy for all elements of compensation and, through the budget, designate funding for compensation—including salaries, health insurance premiums, and retirement contribution rates. The Department of Human Resource Management (DHRM), the Department of Planning and Budget (DPB) and the Virginia Retirement System (VRS) work with the governor and General Assembly in making these decisions through policy analysis and actuarial analysis. All state agencies are ultimately responsible for implementing state compensation policies and personnel decisions, with assistance from DHRM and VRS (Figure 1-4).

FIGURE 1-4
Governor, General Assembly, and agencies are responsible for effective employee compensation



SOURCE: JLARC analysis of Code of Virginia, Appropriation Act, and interviews with state agency staff.

Salaries, the largest component of compensation, can be changed by the governor or General Assembly through the budget process or by agencies using their existing discretionary funds. The governor proposes across-the-board and targeted salary changes through the budget process. Requests for targeted salary changes are typically initiated by agencies as a decision package (sidebar). Decision packages require approval by the appropriate cabinet secretary before being submitted to the Department of Planning and Budget and considered by the governor for inclusion in the executive budget. The executive budget, and any compensation changes it includes, is then considered and modified by the General Assembly. Without additional appropriations through the state budget, agencies are still able to adjust cash compensation for specific employees within their existing budgets. These adjustments include recruitment and retention bonuses, salary increases for employees who gain new skills or take on new responsibilities, and salary increases to match an employee's job offer from another organization.

Agencies submit **decision packages** to the Department of Planning and Budget to request modifications to their budget. For decision packages related to salary increases, agencies are asked to identify how total compensation compares to other relevant employers for similar positions and the impact on the agency's ability to provide services and recruit, retain, and motivate employees.

2 State Employee Compensation Compared to Other Employers

SUMMARY The value of total compensation for Virginia's state employees is, on average, comparable to what other organizations provide. State employee benefits are the most competitive element of state employee compensation, while salaries are the least competitive. State employee salaries are competitive overall but are well below market for some jobs. Salaries need to be managed over time to maintain Virginia's comparable compensation package. There are changes that could be made to employee health insurance benefits that could allow the state to shift more investments towards salaries and continue to provide total compensation that is comparable to what other employers offer; however, changes to benefits could diminish what is perceived to be the state's competitive advantage.

Compensation is a key reason employees choose to work for the state, along with other factors such as public service mission, work-life balance, and job stability. If state compensation is not comparable to compensation provided by other organizations, qualified employees may choose to work elsewhere. Therefore, competitive compensation is essential to agencies' ability to recruit and retain an effective workforce to implement state programs, protect public health and safety, and manage public funds.

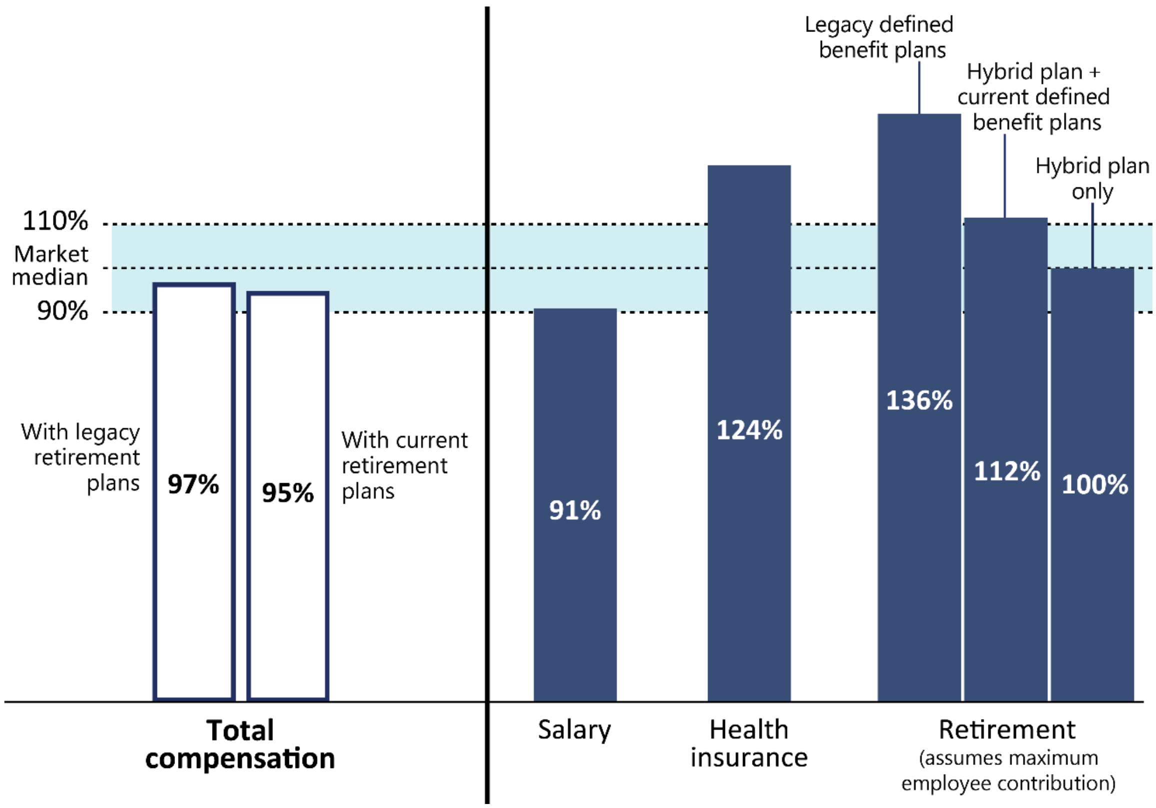
For this study, JLARC hired a consulting firm, Mercer, to conduct a comparison of Virginia's total compensation to that of other employers seeking to recruit employees for similar jobs. Mercer compared the value of Virginia's cash compensation to other employers in Virginia, and compared the value of health insurance, retirement, and leave benefits to 20 other employers in Virginia and seven other state governments. This type of analysis enables state agencies to better understand how organizations they compete with are compensating their employees. It also helps the General Assembly understand the effectiveness of its investments in state employee compensation and where additional investments might need to be targeted. (See Appendix B for information on Mercer's methodology.)

Mercer compared compensation for 67 job roles across all seven occupational families that account for half of Virginia's classified workforce.

Overall, Virginia's total compensation is comparable to the compensation that other employers provide

The value of the salaries and benefits for current state employees is, on average, nearly equivalent in value to what is provided by other public and private sector employers in the state. This was also the case 10 years ago, when a 2008 JLARC study found that the value of Virginia's salaries and benefits was, on average, 96 percent of the value of what other employers provided. The state's non-cash benefits, such as health insurance and the legacy retirement plans that most current employees are enrolled in (employees hired prior to January 1, 2014), are much more competitive than its salaries. For most current employees, Virginia's health insurance benefits (124 percent of market median) and retirement benefits (136 percent of market median) are more valuable than the benefits provided by other employers, while salaries (91 percent) lag behind other employers on average (Figure 2-1).

FIGURE 2-1
Virginia's combination of cash compensation and benefits is comparable to market



SOURCE: Mercer comparison: Virginia total compensation to total compensation provided by other public and private employers in Virginia, 2017.
NOTE: Salary comparison uses average salaries for Virginia employees compared to median salaries of employees in other organizations, which is Mercer's standard approach. Using the median salary for Virginia reduces the competitiveness of salaries by 1.8 percent. Value of hybrid retirement plan assumes that all employees maximize voluntary contributions. Data is not available on the actual voluntary contributions made by employees in other organizations and the match actually provided by other employers, so the comparison is based on the maximum potential value. Salary and health insurance figures include employees in all types of retirement plans, as retirement benefits do not affect these elements of compensation.

The value of Virginia's total compensation compared to other employers remains about the same as it was 10 years ago mostly because health insurance and retirement benefits (for most current employees who are in the state's defined benefit plans) remain substantially above the market. Cash compensation (salaries and bonuses) remains below what other employers pay.

The value of what Virginia offers to newly hired and *prospective* employees is still generally comparable to what other employers provide but slightly less so. This is because most employees hired on or after January 1, 2014 are enrolled in a new hybrid retirement plan, which is less valuable than the legacy defined benefit retirement plans in which most *current* employees are enrolled.

The competitiveness of state compensation varies widely across job roles. For the majority of job roles in this analysis, total compensation is competitive; however, for about a fourth of analyzed job roles, compensation is not competitive. There is no statutory or policy guidance about what Virginia considers "comparable" compensation, but JLARC staff considered between 90 percent and 110 percent of the market median to be a competitive range. Employees in about two-thirds of the job roles, which includes more than 22,000 employees (72 percent) in Mercer's analysis, have total compensation that is within this competitive range. The job roles were selected to represent a cross-section of the state workforce and are a strong indicator of how competitive Virginia's compensation is across job roles. (See Appendix C for the results of Mercer's analysis for each job role.)

Three of the largest job roles in the classified workforce—Security Officer III, Transportation Operator II, and Direct Service Associate II—all fall within this competitive range. Security officers are responsible for offender security at correctional facilities operated by the Departments of Corrections and Juvenile Justice. Transportation operators perform road construction and maintenance for the Department of Transportation, and direct service associates are primarily psychiatric technicians at Department of Behavioral Health and Developmental Services mental health hospitals.

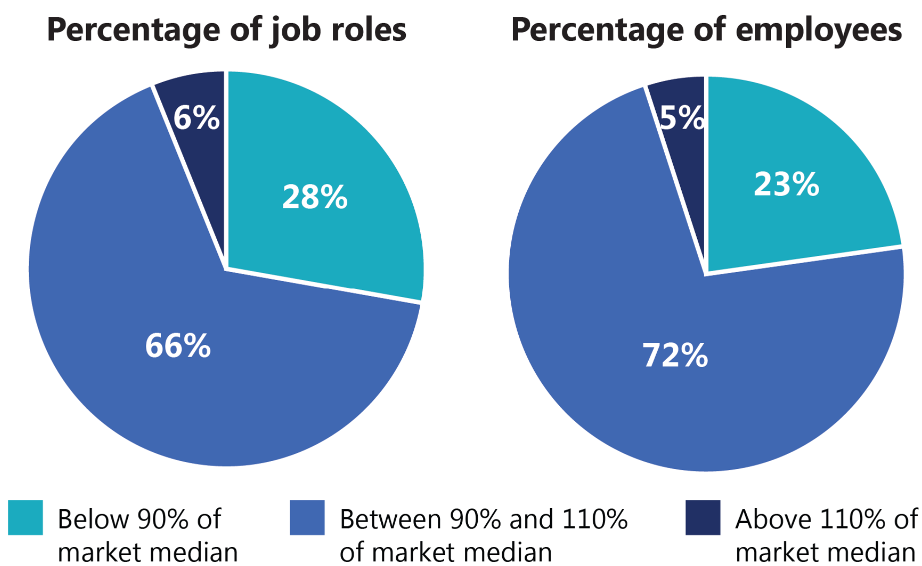
About one fourth of the job roles and employees used in the comparison had total compensation that was not competitive with other employers (Figure 2-2). The largest job role in the classified workforce—Administrative and Office Specialist III, which provides a wide variety of support and administrative functions across nearly all agencies—falls below the competitive range. Program Administration Manager III is also below the range, and these staff are responsible for overseeing the implementation of complex or multiple public programs. Three health and safety inspector jobs—Health Care Compliance Specialist II, Agricultural Specialist IV, and Compliance and Safety Officer III—were identified by agencies as being difficult to recruit and retain, and all three lack competitive total compensation.

Cash compensation includes base salary and bonuses. Salaries are the primary form of cash compensation because in most cases, the state does not use bonuses as a consistent part of compensation. Total cash compensation, including bonuses, is 90% of the market median.

Total compensation includes salary, bonuses, and benefits.

Market refers to a subset of the employment market identified by JLARC and Mercer for the purpose of this study. The subset includes public and private employers that likely compete with the state for qualified employees. (See Appendix B, research methods.)

FIGURE 2-2
Total compensation is within 10 percent of the market median for two-thirds of job roles



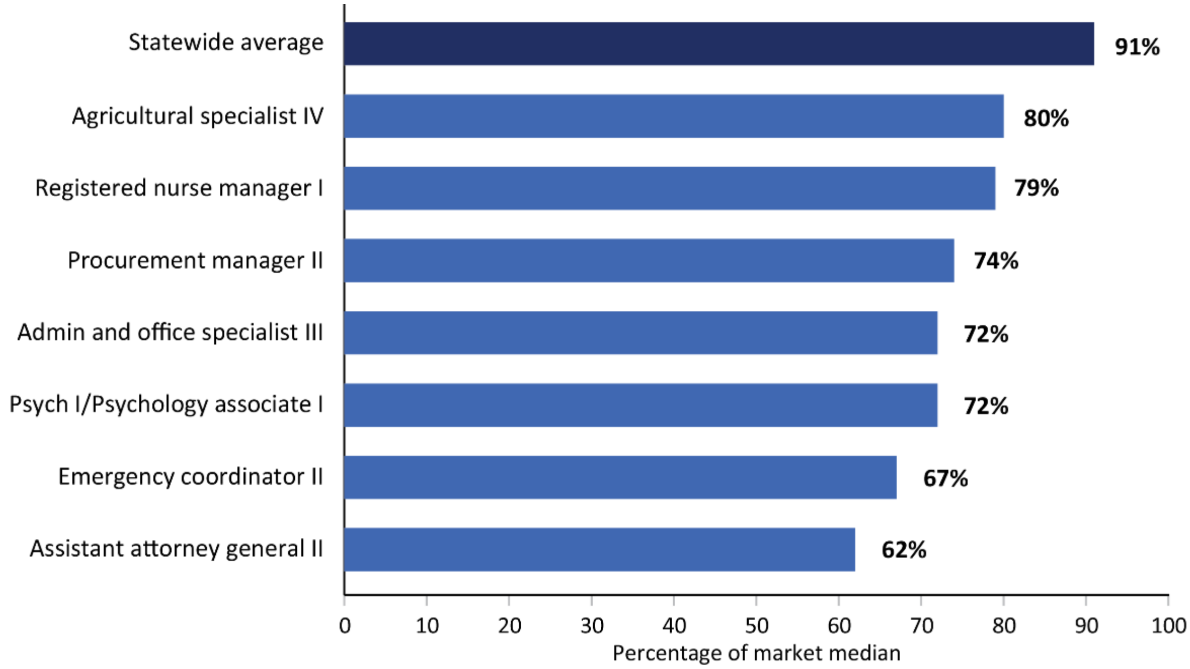
SOURCE: Mercer comparison of Virginia employee total compensation to total compensation provided by other public and private employers in Virginia, 2017.
NOTE: Figures include only the 67 job roles analyzed by Mercer.

Salaries for some jobs are below market

Overall, state employee salaries are competitive with what other employers pay, but are at the bottom of what is considered a competitive range. Salaries are the most visible component of compensation for employees and represent about 80 percent of the value of total compensation. Salaries are substantially behind the market for some jobs, and above for others, ranging from 62 percent to 112 percent of the market median. Salaries for seven job roles are less than 80 percent of what comparable employers pay, and this difference can be substantial. For example, the average salary for Agricultural Specialist IV is $42,972, nearly $11,000 less than the median salary paid by other employers.

The job roles that lag behind the market median by at least 20 percent include some critical state government functions (Figure 2-3 and Table 2-1). Procurement managers' salaries are just 74 percent of what other employers pay; employees in this job role, across a variety of agencies, oversee more than $6 billion in state contracts each year. Registered Nurse Managers earn 79 percent of market compensation; employees in this job role oversee patient care at health departments and mental health facilities across the state.

FIGURE 2-3
For some job roles, salaries lag 20 percent or more behind what other employers pay



SOURCE: Mercer comparison of Virginia employee total compensation to what is provided by other public and private employers, 2017.
NOTE: See Appendix C for the results of all job roles analyzed by Mercer.

TABLE 2-1
Job roles with salaries that are significantly behind market perform key functions at many different agencies (FY17)

Job role	Responsibility	Number of employees [a]	Agencies
Agricultural specialist IV	Farm and food inspections	63	VDACS
Registered nurse manager I	Supervising direct patient care	203	DBHDS, VCU, DOC
Procurement manager II	Contract development and administration	78	Numerous agencies
Administrative and office specialist III	Multiple administrative and support functions	6,395	Numerous agencies
Psychologist I	Conduct psychological assessment and treatment	85	DOC, DBHDS
Emergency coordinator II	Disaster preparedness	131	VDEM
Assistant attorney general II	Represent state in legal matters and advise agencies	34	OAG

SOURCE: Mercer comparison of Virginia employee total compensation to what is provided by other public and private employers and JLARC analysis of DHRM job classification documents and workforce data, FY17.
NOTE: The list of agencies impacted may not include all agencies where these job roles are found.
[a] Mercer did not include all employees in their comparison, but instead used those that performed the most similar functions, to enable a more precise match to employees of other organizations.

JLARC's survey of state employees received responses from over 4,500 classified employees across 259 job roles and 89 state agencies, facilities, and field offices.

The survey addressed topics including turnover intention, satisfaction with different elements of compensation, job satisfaction, and why employees came to work for the state. A total of 9,799 employees were surveyed (49.6% response rate).

Managing employee salaries is the state's primary mechanism for maintaining the competitiveness of its total compensation. This is important for attracting and keeping a qualified workforce. Salary is the only component of compensation that varies across job roles, because most employees generally receive the same benefits. Salary is the most effective mechanism that Virginia can use to recruit and retain employees because it tends to be valued more highly by employees than benefits are. When asked on a survey to select the most important element of compensation, more than twice as many employees indicated cash compensation than the second most common choice, health insurance. Dissatisfaction with salary was the most common reason cited by employees who indicated they may leave their current job in the coming year.

Comparisons to the market are an important tool to determine where to invest in salaries, but market comparisons alone are not sufficient to determine if the state should increase salaries for a specific job role. An effective compensation strategy should also discern how critical seemingly undercompensated job roles are to the state and how difficult it is for the state to recruit and retain qualified employees for those roles. Some job roles that are paid comparably to other employers may need a salary increase. For other job roles, compensation may lag behind the market and still be acceptable.

Value of the state's benefits generally exceeds what other public and private employers provide

Virginia employees choose from four different health plans:

COVA Care is a traditional preferred provider organization plan.

COVA HDHP is a high-deductible plan where the employee pays zero premium and assumes a greater portion of actual medical costs.

COVA HealthAware is a similar high-deductible plan but includes state funding for a Health Reimbursement Account.

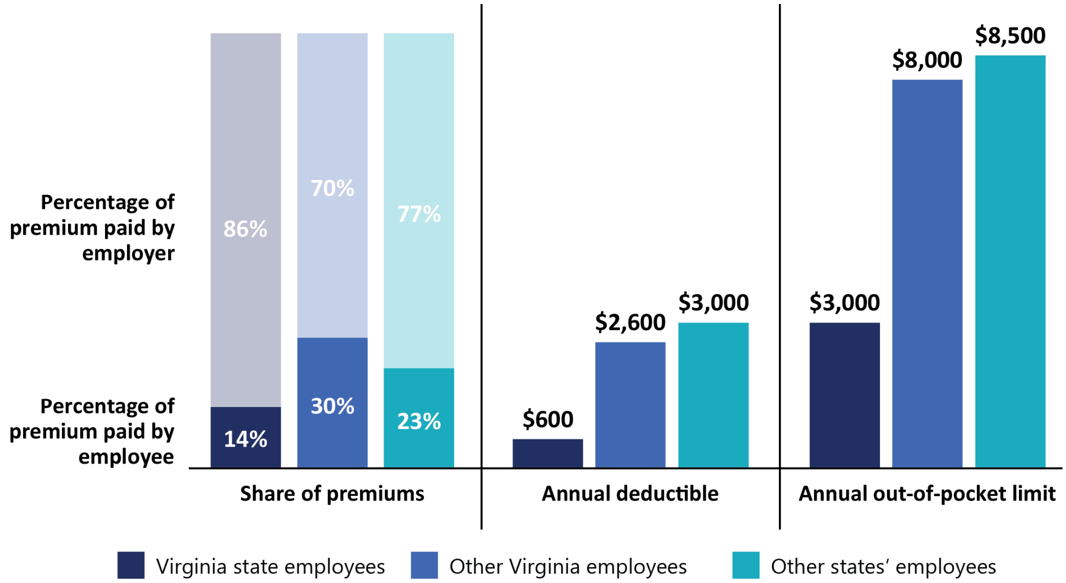
Kaiser Permanente is a regional health management organization plan for employees in northern Virginia.

Virginia provides a benefits package to all full-time state employees that includes the common components provided by most employers. The main components of this package are health insurance, retirement, and paid leave benefits. Most employees also receive group life insurance and short- and long-term disability coverage. State employee benefits are comparable to or better than what other employers offer, and employees tend to be willing to accept salaries that are relatively low because the value of benefits is relatively high. The value of retirement plans is different across employees however, so those in the legacy defined benefit plans have stronger benefits than those in the hybrid retirement plan, which impacts their total compensation.

Value of health insurance benefits is relatively high because the state pays a higher proportion of cost of benefits

Virginia's health insurance benefits are about 25 percent more valuable than what is offered by other employers. The choice of plans, and the services covered by those plans, are comparable to what is offered by other employers, but the state pays a higher percentage of the costs of these benefits than most employers do. Employee premiums and out-of-pocket costs are relatively lower for state employees (Figure 2-4). Using the most common plan as a comparison (COVA Care, used by 90 percent of employees enrolled), state employees pay less of the total premium than other employees. Employee deductibles and out-of-pocket expense limits are also significantly lower for state employees than those in other organizations.

FIGURE 2-4
Virginia state employees pay less for health insurance than employees of other public and private organizations



SOURCE: Mercer comparison of Virginia's health insurance benefits to those provided by other public and private employers, 2017.
NOTE: Data represents the median percentage of premium, annual deductible, and annual out-of-pocket limit for in-network services under PPO health insurance plans provided by other employers. Analysis includes 20 public and private employers in Virginia and seven surrounding states. Analysis is for family coverage only and does not include Premium Rewards. Comparing single and employee plus one coverage yields similar results.

Fewer Virginia employees choose consumer-driven health plans such as COVA high-deductible health plan (HDHP) and COVA HealthAware. This choice is likely driven by employee comfort with the traditional PPO plan and the low cost of the more generous coverage available in that plan. Less than six percent of Virginia employees are enrolled in consumer-driven health plans while on average 15 percent of public sector employees and 30 percent of employees at large, private sector organizations enroll in consumer-driven plans. These plans, which incentivize lower health care spending, have very low monthly premiums but require greater out-of-pocket spending by enrollees. Under COVA HDHP and HealthAware, employees have a deductible that is five to six times higher than under COVA Care, and then pay 20 percent of the cost of most services, instead of a fixed copay, after they reach the deductible.

Increasing employee cost-sharing or incentivizing more employees to choose consumer-driven health plans would bring Virginia's health insurance plans more in line with what other employers provide but could negatively impact recruitment and retention. Over time, Virginia's health insurance will become the only part of the state's total compensation that remains more generous than what other employers provide, because more of the state workforce will be enrolled in the hybrid retirement plan. Health insurance is an important recruitment tool, as many employees indicated that

Preferred provider organization (PPO) plans use a group of doctors, hospitals, and other providers who agree to provide services under the plan.

Consumer-driven plans tend to have lower monthly premiums but members have higher out-of-pocket costs with the goal of incentivizing more cost-effective health care choices because members pay more of the actual cost of services. Providers typically must be in-network to be covered.

Hybrid plan members contribute 4% of salary toward their defined benefit component. Members are required to contribute 1% of salary to their defined contribution component and may voluntarily contribute up to an additional 4%. This results in employees contributing a total of between 5% and 9% of salary toward their retirement benefits.

Comparisons assume employees maximize their retirement contributions. Data is not available on actual retirement contributions at other employers, so the maximum is used to enable an appropriate comparison.

Virginia implemented **auto-escalation** starting in January 2017. Hybrid plan members will automatically increase their voluntary contributions by 0.5% of their salary every three years until they reach the maximum of 4%. It will take 24 years for an employee to reach the maximum voluntary contribution through auto-escalation.

Virginia's benefits package was one of the reasons that they initially chose to work for the state. Health insurance is also a key retention tool; current employees view health insurance as the most important benefit that Virginia provides. An increase in the amount that employees pay for their current health insurance benefits, without a corresponding increase in salary, would likely be perceived by employees as a salary reduction, and would also decrease the competitiveness of total compensation. Moreover, the changes made to retirement benefit plans for most new employees have reduced the value of the benefit to the point that health insurance is now the only state benefit that is highly competitive from a recruitment standpoint. (See Appendix D for potential changes to Virginia's health insurance plans.)

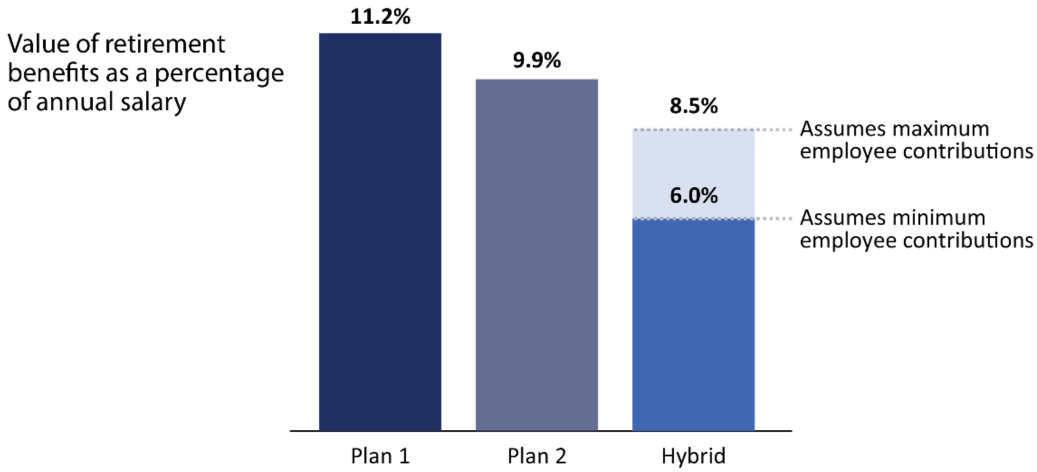
Hybrid retirement plan has a lower value than legacy plans, but is comparable in value to market

Virginia's legacy defined benefit retirement plans that are now mostly closed to new enrollees are more valuable than what other employers typically provide, but the value of the hybrid plan is comparable in value to the retirement plans offered by other employers. Most current employees participate in the legacy defined benefit plans, which provide a value that is more than 35 percent higher than what is typically offered by other employers. Most new employees are required to enroll in the hybrid plan, which is in line with the market median (Figure 2-5). However, this value assumes that employees make the maximum voluntary contribution to the savings portion of the plan (sidebar), but only 16 percent of employees were maximizing their contribution as of September 2017.

The lower value of the hybrid retirement plan is largely due to employees paying more for their benefits. Employees in the defined benefit plans contribute five percent of their salary towards their retirement plans, while hybrid plan members need to contribute nine percent of their salary to receive a projected retirement benefit that is comparable to the benefit provided under Plan 1. VRS analysis indicates that contributing seven percent of salary would provide a benefit similar to that provided under Plan 2.

More than 80 percent of hybrid plan members were not maximizing their voluntary contributions as of June, 2017, further reducing the value of their retirement benefits and their potential income replacement in retirement. Virginia legislation required the implementation of auto-escalation for hybrid plan members in 2017, but prior to this only 15 percent of hybrid plan members were making any voluntary contribution. The auto-escalation policy has increased that percentage, but about 70 percent of those making voluntary contributions are only making the minimum contribution of 0.5 percent.

FIGURE 2-5
Hybrid retirement plan is less valuable than legacy defined benefit plans



SOURCE: Mercer comparison of Virginia's retirement benefits to those provided by other public and private employers, 2017.
NOTE: Figures assume an employee retires at age 65 with 30 years of service. Value of hybrid retirement plan falls to 6.0% of salary when employees contribute the minimum required amount to the defined contribution portion.

The value of retirement benefits (net of employee contributions) is converted to a percentage of annual salary by actuarially assessing the monetary value of the plan at retirement and then determining the percentage of pay that would have to be invested to accumulate the same monetary value at retirement.

The design of the hybrid retirement plan is also different from the defined benefit plans, and these changes impact employees but are not directly captured when comparing the monetary value. These differences include that

- the hybrid plan includes a defined contribution component, which places the investment and longevity risk on the employee, rather than the state; and
- most employees do not maximize the voluntary contributions for the hybrid plan, significantly reducing the value of the plan.

Shifting the investment risk to the employee means that if employees' defined contribution accounts experience lower than projected investment returns, their ability to retire with sufficient income is put at risk. Longevity risk means that if employees live longer, they may exhaust their retirement savings while they still need it. Under the defined benefit plan, the state assumes these risks and would need to increase annual contributions if investment returns are lower than projected, and continue to provide a benefit to employees, regardless of how long they live.

Employees in job roles that are designated as hazardous duty are eligible for increased retirement benefits through the State Police Officers' Retirement System (SPORS) and the Virginia Law Officers' Retirement System (VaLORS). Both of these plans provide a level of income replacement in retirement that is generally comparable to hazardous duty retirement plans in the seven other states used for the comparison. Virginia's hazardous duty employees pay less for these benefits (5 percent of salary) than the median contribution required in these other states (6.5 percent of salary).

The design of retirement plans offered by other employers varies, with public sector employers more likely to include a defined benefit component as part of the primary retirement plan for new employees. Five of the six public employers in Virginia that were included in Mercer's analysis provide a hybrid-style plan that includes both defined benefit and defined contribution components, similar to Virginia's. The majority of private sector employers offer a defined contribution plan. However, five of the seven other states provide a defined benefit plan (Table 2-2).

TABLE 2-2
Public sector employers are more likely to include a defined benefit component in their primary retirement plan

	Public employers in Virginia	Private employers in Virginia	Other state governments
Primary defined benefit plan	1 of 6	1 of 14	5 of 7
Primary defined contribution plan	0 of 6	10 of 14	1 of 7
Primary hybrid-style plan	5 of 6	3 of 14	2 of 7

SOURCE: Mercer analysis of retirement plan design in 20 other employers in Virginia and seven other states: Maryland, North Carolina, South Carolina, Georgia, Kentucky, Tennessee, and West Virginia, 2017. South Carolina is included in count of states with a defined benefit plan and of states with a defined contribution plan, because employees can choose which plan they participate in. More employees choose the defined benefit plan.

State employees are somewhat satisfied with their retirement plans but do not view retirement benefits as one of the most important aspects of compensation. Employee satisfaction is similar across all three primary retirement plans, indicating that employees are not as concerned with the relative value of their specific plan.

Two types of changes to the state's retirement plans have been contemplated; these changes will have little impact on the competitiveness of total compensation and will increase state costs. There have been recent proposals to add an optional defined contribution retirement plan and to direct more employee contributions toward the defined contribution portion of the hybrid retirement plan. Adding an optional defined contribution plan would not change the monetary value of Virginia's retirement benefits compared to other employers, but would increase administrative complexity and the cost to the state, while reducing the key retention incentive that the current defined benefit portion of the retirement plans provide. Moving employee contributions more towards the defined contribution portion of the hybrid plan would improve the value of retirement benefits compared to other employers, but it would also require additional employer contributions, increasing state costs.

Value of leave and other flexible benefits is comparable to market

Virginia provides paid leave that is in line with other employers. Virginia's amount of annual leave is comparable to the market for employers that use a traditional vacation leave category. Virginia provides fewer sick days than most other employers, but more personal days (Table 2-3). Employees covered under VSDP also receive up to 120 days of paid disability leave for an eligible injury or illness (must be employed for at least one year to be eligible).

TABLE 2-3
Virginia's leave policies are comparable to what other employers provide

	Number of days of leave per year		
Type of leave	Virginia	Public and private employers in Virginia (median)	Other state governments (median)
Annual leave (lowest amount)	12	11	14
Annual leave (highest amount)	27	25	24
Sick leave	8-10	12	15
Family/personal leave	4-5	Very few provide	Very few provide
Community service leave	2	Very few provide	Very few provide
Holidays	12	11	12

SOURCE: Mercer comparison of Virginia's leave benefits to those provided by other public and private employers, 2017.
NOTE: Data represents the median of the number of days of leave provided by other employers. Analysis includes 20 public and private employers in Virginia and seven surrounding states. Virginia provides additional holiday leave around Christmas, New Years, and Independence Day in some years.

Virginia's leave policies are generally less flexible than other employers. Virginia provides five primary categories of leave and limits the use of some types of leave to specific purposes, such as sick leave for personal illness and community service leave. Some employers use a consolidated category of paid time off that employees can use for various purposes, including vacation time and sick leave. Virginia's sick leave policy is more restrictive than most other states, as it limits the use of sick leave to only an employee illness or medical appointment. Most states permit employees to use at least some of their sick leave for the care of an immediate family member or for parental leave after the birth or adoption of a child. These other states also tend to permit sick leave to accrue over an employee's career, significantly increasing the amount of sick leave available for these purposes. These policies are similar to Virginia's legacy sick leave program prior to the implementation of the Virginia Sickness and Disability Program (VSDP). Virginia employees in the VSDP program can use one third of their sick leave for care of a family member, and they receive four to five days of family/personal leave that can be used for these purposes. Most other employers in Virginia provide a short-term disability program similar to Virginia's while less than half of the other states included provide a similar program.

DHRM developed a proposal for a Paid Time Off system in 2011. The proposal was the result of three years of collaboration between DHRM and relevant stakeholder groups.

Employees in general are very satisfied with their leave benefits, but leave benefits are not a key element of compensation for recruitment and retention. More than 80 percent of employees surveyed are satisfied with their leave, but only three percent listed it as the most important benefit.

Virginia could alter its leave policies to allow greater flexibility in how employees use their leave benefits. Virginia could consolidate its current leave categories into a single category of paid time off for employees in the VSDP program. Employees would then have more flexibility to use their leave to meet their personal needs, rather than being restricted to the current uses for sick leave and community service leave. Virginia could also allow employees to receive a cash payment in exchange for fewer days of leave each year. This would allow employees to convert one type of compensation (leave) into another (cash) if it is better for their personal situation. (See Appendix E on the implementation of leave flexibilities.)

Analysis of parental leave policies in other states, as directed by SB 1412 (2017) is provided in Appendix F.

Virginia could also provide paid parental leave in addition to its current leave program. Employees in VSDP can use annual and family/personal leave after the birth or adoption of a child, but they cannot use sick leave that accrues over the course of their career for this purpose. This is in contrast to most other states that allow employees to use accrued sick leave that carries over each year for care of a family member, including a new child. Recent legislation (SB 1412 of 2017) provides for paid leave for adoptive parents and biological fathers. The legislation delayed implementation of the new leave category until 2018 and directed JLARC to include the issue in this study. JLARC's analysis found that while other states generally provide more leave (through accrued sick leave) that can be used for care of a new child than Virginia does, providing parental leave to biological fathers but not biological mothers may be in violation of Equal Employment Opportunity Commission guidance. Virginia should seek a legal opinion before reenacting SB 1412 in its current form. (See Appendix F on parental leave policies in other states and the cost of providing parental leave in Virginia.)

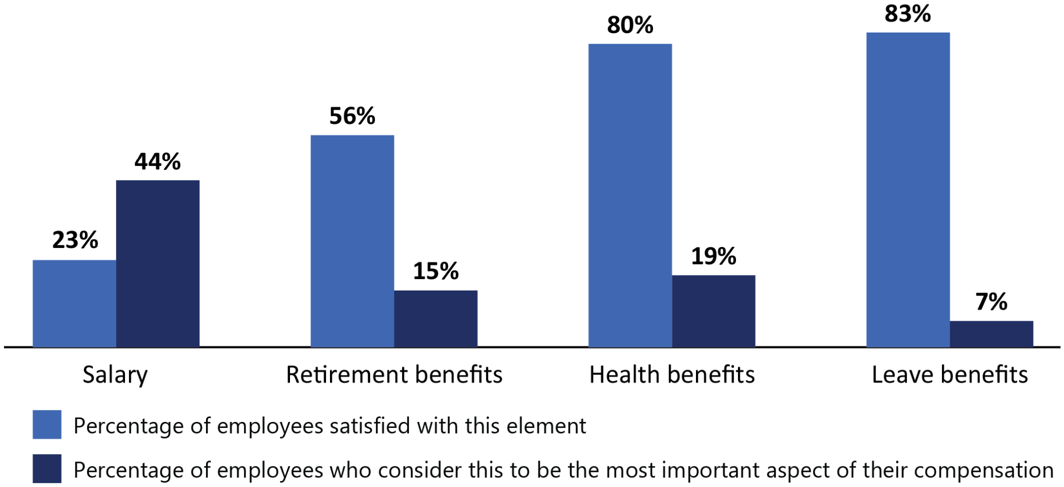
Several factors should be carefully considered before making compensation changes

The value of Virginia's compensation is currently comparable to what is provided by other employers, but it remains slightly less than the market median, and reductions in the competiveness of salaries or benefits would hurt Virginia's ability to maintain competitive total compensation. Maintaining competitive compensation that enables agencies to recruit and retain an effective workforce requires strategic management of each element of compensation. Changes to salaries, health insurance, retirement, or leave benefits would impact the value of total compensation, and if changes are made, corresponding changes to other elements could be necessary to maintain the competitiveness of total compensation. Decisions on compensation changes should be informed by considerations of

- how Virginia's compensation compares to other employers;
- the potential impact of changes on value of state employee compensation;
- the potential impacts of changes on the cost to the state and employees; and
- which aspects of employment matter most to employees.

Salary is the most important element of compensation for state employees, but less than one fourth of employees indicate they are satisfied with their salary (Figure 2-6). Strategically managing employee salaries is therefore important to maintaining a qualified workforce.

FIGURE 2-6
Employees are mostly satisfied with benefits but place higher value on salary



SOURCE: JLARC survey of state employees, 2017.

Despite these findings, increasing salaries by shifting state investments from the current benefits package to cash compensation could diminish what is perceived to be the state's key competitive advantage. Employees are largely satisfied with their benefits, and benefits continue to be the primary reason why employees first came to the state and why they stay in the state workforce. Additionally, when asked about their general beliefs about the positive aspects of working for the state, employees most commonly responded that the state provides good benefits. Maintaining this competitive advantage is important for agencies' ability to recruit and retain staff.

3 Role of Compensation in State Agency Workforce Challenges

SUMMARY Recruitment and retention of qualified employees is challenging for some state jobs, and while there are several reasons for these challenges, employee salary is a key factor. Low starting salaries hinder agencies' ability to recruit qualified candidates, and a lack of consistent salary growth contributes to retention problems. Workforce challenges have negative effects on agency operations and put state finances, public health, and public safety at risk. Increased capacity for data management, additional data, and more information on recruitment and retention are necessary in order to address problems in these areas. Non-compensation factors also affect agencies' abilities to recruit and retain qualified employees, and agencies could better leverage these factors to address workforce challenges to some extent.

State agencies need to recruit and retain a qualified workforce to effectively carry out their missions and implement their programs. However, some job roles (sidebar) and agencies are experiencing significant challenges maintaining sufficient qualified staff, resulting in risks to the state's finances, public health, and public safety. Recruitment and retention challenges can compound each other, exacerbating operational issues at some agencies. Compensation, specifically salary, is a primary factor in recruitment and retention challenges and is the aspect of compensation over which state and agency leaders have the most direct control. It is important for decision-makers to understand the state's difficulties with recruitment and retention, and the role compensation plays in them, so that compensation investments can be directed where they are most needed.

A **job role** is a classification developed by DHRM for different occupations in the classified state workforce. Much of the analysis in this chapter refers to job roles, but job roles can also be grouped into broader categories like health care and information technology.

Compensation is a key factor in recruitment and retention challenges

Employees consider a combination of compensation and other factors, such as job stability and career advancement, when deciding to work for the state and when considering whether to leave their state jobs. Many agencies are impacted by an inability to recruit and retain staff for key positions when they are not able to offer a sufficient combination of these factors. Salary increases are the most direct mechanism available to agencies to manage workforce challenges.

> *"Compensation is the primary reason for issues related to recruiting [and] hiring the best qualified candidate."*
>
> **– HR director Commerce and trade agency**

Salary has a significant influence on agencies' ability to recruit and retain qualified employees

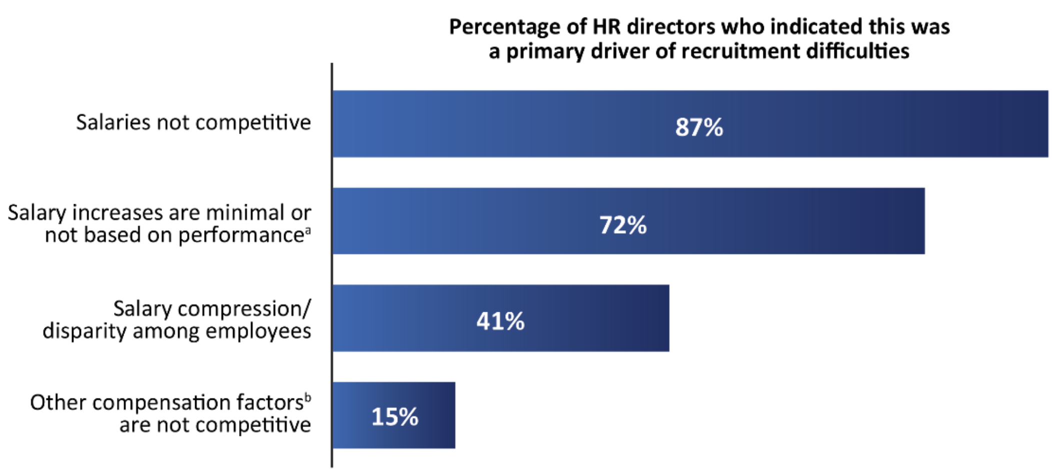
Paying employees an appropriate salary as part of a competitive total compensation package is essential for recruiting and retaining a qualified workforce. State employees do not always expect to be paid salaries comparable to what other employers pay. However, in some job roles, state salaries have fallen well behind market and below employee expectations, so even employees who accepted a lower salary could become dissatisfied and more likely to leave their jobs. To prevent turnover, salaries need to be managed over time. Meeting prospective employees' salary expectations and enabling agencies to attract and hire qualified candidates also requires starting salaries to be managed over time.

The **JLARC survey of state agency human resource directors and agency heads** received responses from 96 agencies, facilities, and field offices. Survey topics included workforce challenges and causes, impact of workforce challenges on the agency, pay practices, and the effectiveness of elements of compensation for recruitment, retention, and employee motivation.

Competitive starting salaries are key to recruitment of qualified candidates

Salary is a primary factor impacting agencies' recruiting difficulties. Seventy-eight percent of agency human resources directors responding to a JLARC survey indicated that they have trouble recruiting staff. These agencies are not only having challenges with filling open positions, but also with attracting qualified applicants. Two-thirds of agencies with recruitment difficulties said they could not recruit even minimally qualified candidates, and nearly all (97 percent) indicated that difficulty recruiting extremely qualified candidates is a problem. For example, Department of Taxation staff reported difficulty hiring tax examiners, observing that top candidates often decline offers of employment because starting salaries are too low. When asked for specific reasons for compensation-related recruitment difficulties, agencies most frequently identified problems related to salaries (Figure 3-1).

FIGURE 3-1
Agency leadership report that salary is the primary compensation factor impacting agency recruitment difficulties



SOURCE: JLARC survey of agency leadership, 2017.
NOTE: Percentages do not sum to 100; respondents had the option to select up to three factors. [a] Degree to which HR directors believe prospective employees have concerns about salary increases. [b] Includes retirement, leave, and health benefits; flexible benefits such as life insurance; part-time or flexible work arrangements; telecommuting.

Salary is particularly important to younger employees, who are a primary target of recruitment efforts. The median age of newly hired employees is 33, compared to 49 for all state workers. Several agencies indicated that they have more difficulty recruiting younger employees, who place a higher value on salary than benefits. As employees age, the importance placed on salary decreases steadily. According to the survey, 56 percent of employees under the age of 30 consider their salary to be the most important aspect of their job, compared to 39 percent of employees over 30. The extent to which employees consider salary the most important aspect of their job declines steadily as they get older and their focus on retirement increases.

When agencies cannot offer competitive starting salaries, they sometimes hire less-qualified candidates, extend the hiring period significantly, or restart the hiring process completely. One agency director noted, "We move [qualified applicants] through the interview only to have them decline when they see the salary limitations."

Salary increases at regular intervals may prevent and reduce employee turnover

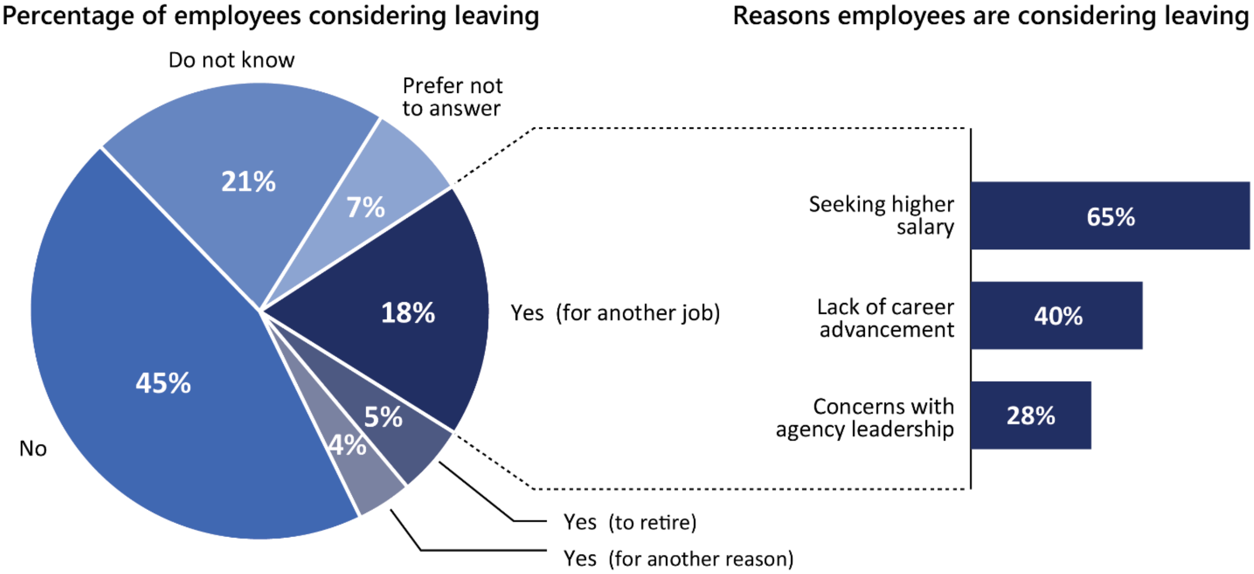
A lack of consistent salary increases has a significant impact on agencies' retention difficulties. Over three-fourths of state agencies have difficulty retaining employees in certain job roles, and of those agencies, 62 percent reported difficulty keeping their most qualified employees because of salaries. Nearly all agencies experiencing challenges said that compensation, particularly salary, was a cause of their difficulties. Agencies cited their inability to give raises as an issue for retaining employees.

Among employees who reported that they are considering leaving the state within the next 12 months to take another job, two-thirds indicated that an opportunity for a higher salary was a reason (Figure 3-2). Several agencies, including Department of Labor and Industry, Virginia Department of Agriculture and Consumer Services (VDACS), and Department of Taxation, said that they invest substantial time and money in training employees, only to have them leave the state workforce or go to another state agency with their improved qualifications.

The **JLARC survey of state employees** received responses from over 4,500 classified employees across 259 job roles and 89 state agencies, facilities, and field offices.

Survey topics included turnover intention, satisfaction with different elements of compensation, job satisfaction, and why employees came to work for the state. A total of 9,799 employees were surveyed (49.6% response rate).

FIGURE 3-2
Salary is the primary reason state employees expressed an intention to leave their job



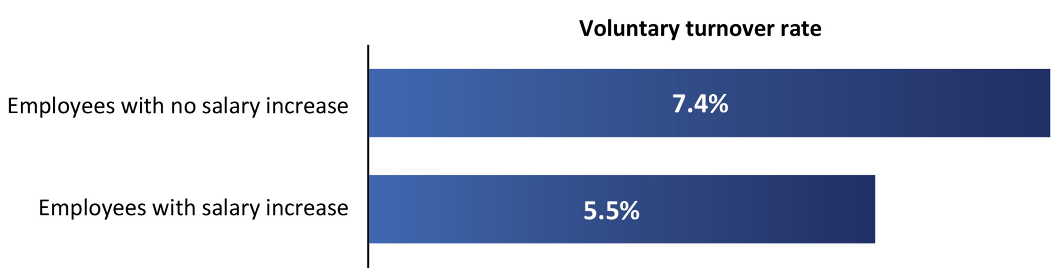
SOURCE: JLARC survey of state employees, 2017.
NOTE: Percentages of reasons given by employees do not sum to 100 because respondents were given the option to select up to three factors.

Turnover intention, a measure of whether employees are considering leaving their jobs, is typically calculated through surveys or interviews.

Actual turnover, when employees actually leave their jobs, is calculated using administrative data.

Providing employees with a pay increase, regardless of the size of the increase, may help reduce the state's voluntary turnover rate. JLARC statistical analysis showed that voluntary turnover was 7.4 percent among employees who did not receive a pay increase in the previous year, and 5.5 percent among those who did (Figure 3-3). In FY17, this difference in voluntary turnover would have amounted to approximately 1,100 full-time classified employees remaining in their jobs with the state. The finding holds true for high turnover positions, where voluntary turnover was 15.0 percent for employees who did not receive a pay increase, but only 10.6 percent for those who did. These differences in turnover rates were statistically significant. (See Appendix G for full results of JLARC's statistical analysis.)

FIGURE 3-3
Salary increases may reduce the state's voluntary turnover rate



SOURCE: JLARC analysis of DHRM employee and personnel transaction data, FY13–FY16.

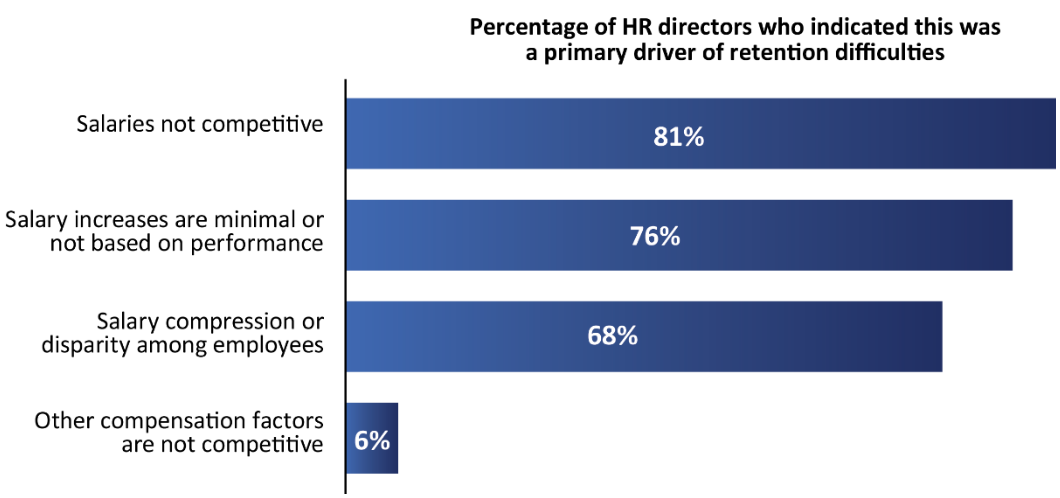
The amount of a salary increase, compared to whether or not there was an increase, had a weaker relationship to voluntary turnover. JLARC's statistical analysis indicated that the difference in voluntary turnover rates between employees who received a 10 percent raise and those who received no raise was only .03 percent, suggesting that the amount of any pay raise an employee receives is less important than regularly receiving a raise.

Employees also report that salary increases at regular intervals are important in their decision to continue their employment with the state, and the amount of the increase is less important than the increase itself. One employee said that "a regular two to three percent… raise annually would be a good incentive to retain employees over a longer period of time." Many employees echoed this comment in surveys and interviews, and discussed small "cost of living" increases as beneficial. Pay raises of any size make many employees feel as if the state is committed to investing in them, which they say entices them to stay in their jobs.

Without regular pay increases over time, salaries become less competitive and salary compression occurs

When pay raises are not provided at regular intervals and employee salaries remain the same, some employees leave state employment for higher-paying jobs. The top factor contributing to agency retention difficulties, as identified by human resources directors, was that salaries are not competitive, followed closely by salary compression and a lack of salary increases (Figure 3-4). Other public and private sector employers have historically provided regular salary increases, so a lack of regular pay increases for Virginia employees can reduce salary competitiveness.

FIGURE 3-4
Salary is the primary compensation factor impacting agency retention difficulties



SOURCE: JLARC survey of agency leadership, 2017.
NOTE: Percentages do not add up to 100 because respondents were given the option to select up to three factors. "Other compensation factors" include retirement, leave, and health benefits, as well as other flexible benefits such as life insurance, part-time or flexible work arrangements, and telecommuting.

> *I love working for [the state], but the main reason I would leave would probably be because there is no consistency in pay increases.*
>
> **– State employee**

Lack of consistent salary increases can lead to salary compression, which occurs when a new employee is hired at a salary that is very close to or above that of an employee in the same position with more experience, education, or job responsibilities. To compete with other employers, some agencies hire new employees at salaries that are nearly the same as those of more senior employees whose salaries have become static due to a lack of consistent salary increases. Agencies report that compression has a significant negative effect on employee morale and satisfaction and may lead to increased turnover.

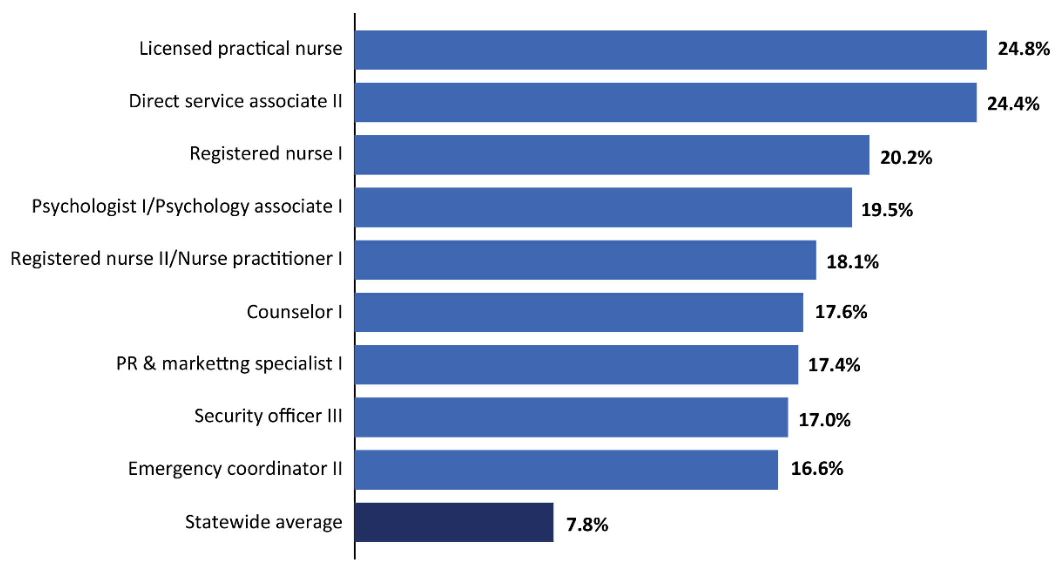
As salaries fall behind what other employers pay and salary compression occurs, employees' satisfaction with their salaries decreases. Dissatisfaction with salary is the primary reason that employees report looking for new jobs. Turnover intention rates were three times higher among those employees who were dissatisfied with their salaries than among those who were satisfied.

In 2017, the General Assembly and governor approved **a two percent salary increase** for employees in 13 classified job roles experiencing high turnover rates. In addition, state police officers received a salary increase of $6,793. Employees in these jobs were eligible to receive these targeted increases in addition to the three percent salary increase approved for all classified employees.

Some significant workforce challenges appear linked to salary

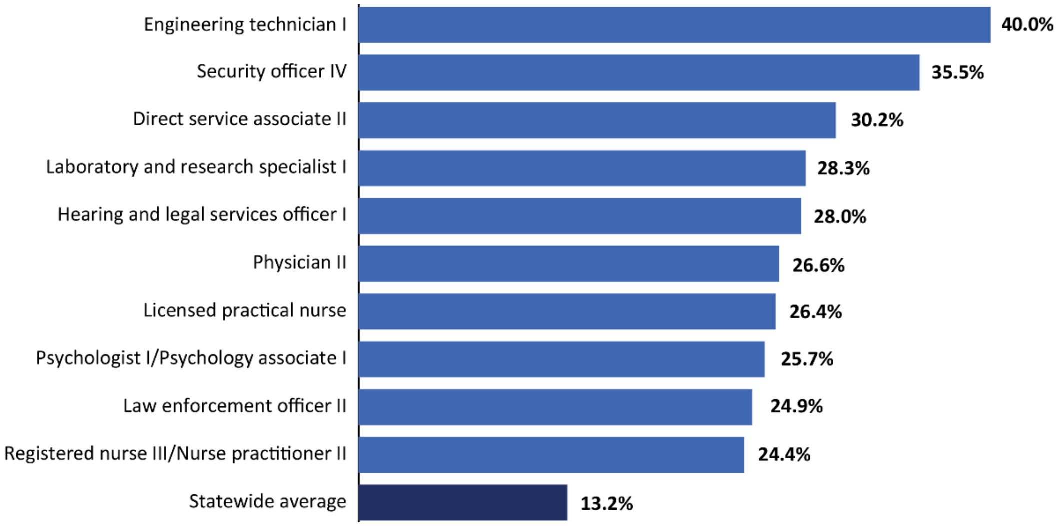
Identifying job roles with workforce challenges that are associated with salary issues is essential in order to use compensation to effectively manage the state's workforce. Although the voluntary turnover rate for the state in general followed the same trends as state and local governments nationwide, several job roles have voluntary turnover and vacancy rates significantly higher than the rate for all jobs in the classified state workforce. (See Chapter 1 on trends in turnover.) For example, in FY17, health care job roles made up six of the top 10 high voluntary turnover job roles (Figure 3-5) and had some of the highest vacancy rates in the state, making up five of the top 10 job roles for vacancy rate (Figure 3-6).

FIGURE 3-5
For some job roles, voluntary turnover is significantly higher than statewide rate



SOURCE: JLARC analysis of DHRM employee transaction data, FY15–FY17. Rates are three-year averages.
NOTE: See Appendixes C and H for turnover rates, vacancy rates, and comparison of total compensation by job role.

FIGURE 3-6
Certain job roles have vacancy rates significantly higher than the statewide rate



SOURCE: JLARC analysis of DHRM employee data, FY15–FY17. Rates are three-year averages.
NOTE: See Appendixes C and H to compare turnover and vacancy rates by job role to Mercer's total compensation and salary results.

Mercer compared compensation for 67 job roles that account for half of Virginia's classified workforce.

Three of the eight job roles with high turnover or vacancy rates that were also included in the compensation comparison were found to have salaries below the competitive salary range. (See Appendix C for Mercer's compensation comparisons.) Salary is likely a contributing factor to the challenges in these job roles. However, a link between salary and workforce challenges may not always be apparent; there may be other factors that affect why someone decides to work for or stay with the state. Even when salaries are within a competitive range, they may be insufficient to attract and keep employees because of other factors like a difficult work environment, poor work-life balance, or a shortage of qualified staff in the labor market. In these cases, compensation could be used to address these challenges by paying salaries that exceed what other employers pay to attract employees to similar jobs.

Agencies are experiencing the greatest challenges recruiting and retaining employees for job roles in health care, health and safety inspection, corrections, and information technology (IT). These are not the only job roles that pose challenges for agencies, but they were the most consistently reported by agency leadership. Health care, health and safety inspector, and correctional officer positions are clustered at several agencies, but IT positions are spread throughout the state workforce and are found at almost all major agencies (Table 3-1).

For some of these job roles, agencies can address recruitment and retention problems by increasing salaries, but for other job roles, agencies have difficulty with recruitment and retention of employees even when salaries are in line with the market.

TABLE 3-1
Some job roles with workforce challenges have uncompetitive salaries

Occupational group	Example job role	Number of employees [a]	Agencies affected	Turnover rate	Vacancy rate	Job role salary relative to benchmark
Health care	Psychologist/ psychology associate I	85	Aging & Rehab Services Behavioral Health Juvenile Justice Corrections Veterans' Services Health	19.5%	25.7%	−28%
Health & safety inspectors	Compliance & safety officer III	244	Labor and Industry Health Professions Occupational Regulation Agriculture & Consumer Services Fire Programs	5.5%	17.8%	−19%
Correctional officers	Security officer III	5,814	Corrections Juvenile Justice	17.0%	16.3%	0% (on par)
Information technology	Information technology specialist III	1,067	Nearly all major agencies	4.4%	11.9%	−1%
Statewide	n/a	62,551	n/a	7.8%	13.2%	−10%

SOURCE: JLARC analysis of DHRM employee and personnel transaction data, FY15–FY17 (three-year average).
NOTE: The list of agencies impacted is a selection and may not include all agencies where these job roles are found. Turnover and vacancy rates are three year averages, FY15–FY17.
[a] Mercer did not include all employees in their comparison but instead used those that performed the most similar functions, to enable a more precise match to employees of other organizations.

Health care job roles include physicians, registered nurses, licensed practical nurses, psychologists, counselors, occupational therapists, pharmacists, physician assistants, nurse practitioners, dentists, and direct care staff in health care settings.

Agencies are experiencing staffing shortages due to an inability to recruit and retain employees in health care job roles, such as doctors, nurses, psychologists, psychiatric technicians, and counselors. Many agencies employ health care staff who are responsible for one-on-one contact with patients, providing medical and behavioral health care. Six of the 10 job roles with the highest voluntary turnover from FY15 to FY17 were in the health care field, and several more health care job roles had voluntary turnover rates that were at least 50 percent higher than the statewide rate. Five of the top 10 job roles with the highest vacancy rates were in the health care field. In terms of starting salary, three of eight benchmarked health care job roles fell below the competitive range for similar positions in the wider market. In interviews, agency leadership at several agencies indicated that health care vacancies are caused in part by the low starting salaries and that turnover could be reduced by raising pay for existing employees.

Health and safety inspector positions are difficult to recruit and retain, according to leadership at various agencies. The inspector roles are essential for carrying out several of the state's regulatory responsibilities—workplace safety inspections, occupational regulation compliance reviews, food and agriculture inspections, and fire safety inspections. While the voluntary turnover rate for these positions is relatively low (5.5 percent), the vacancy rate is higher than average (17.8 percent). Median salaries for both benchmarked positions in this category are significantly below the competitive range for similar positions with other employers. According to leadership at agencies that employ people in these jobs, low starting salaries are an impediment to hiring, and the inability to increase salaries contributes to retention problems.

Recruiting and retaining correctional officers, especially at the Department of Corrections, poses challenges. Correctional officers are essential to the functioning and safety of the state's 38 adult correctional facilities and one juvenile correctional center. The vacancy rate for correctional officers is above the state average (16.3 percent), and voluntary turnover is among the highest in the state workforce (17.0 percent). Voluntary turnover and vacancy rates also vary widely by facility. Salaries for these jobs in the state workforce are within the competitive range for similar positions with other employers, but correctional officer jobs are inherently difficult, and the current salary levels may not be sufficient to attract and retain employees. Leadership of the Department of Corrections reported that higher starting salaries and salary increases at regular intervals could help with recruitment and retention issues. However, investments in salaries should be tracked to determine their effect on workforce challenges, as some of the challenges in this job role are due to non-compensation factors and may not be effectively addressed with higher salaries.

IT positions were most frequently identified as challenging for recruitment and retention by agencies in surveys and interviews. IT staff provide critical services to build and protect state technology and data infrastructure, an especially important function given the sensitive nature of much of the data the state collects (e.g., health and tax data). Voluntary turnover (4.4 percent) and vacancy rates (11.9 percent) for IT positions are below the overall statewide rates, but a wide variety of agencies still cited them as challenging. Salaries for IT positions in the state workforce are generally close to the competitive range for similar positions in the wider workforce. It is not clear that challenges recruiting and retaining IT staff are linked to salary, so compensation investments to address these challenges should be tracked to assess their effectiveness.

> "*We've made offers to first, second, and third candidates, and each declined or presented a competitive offer we couldn't meet.*"
>
> **– Agency HR director about IT staff**

Workforce challenges can negatively impact agencies and create risks for the state

Agencies have reported specific operational impacts and risks related to recruitment and retention challenges. Over half of agencies reported, when surveyed, that their operations are affected by recruitment and retention problems. This commonly means increased workload for existing staff and an inability for the agency to function beyond minimum requirements. Operational issues are made worse when workloads increase to the point where employees experience burnout, further reducing morale and productivity. These operational issues ultimately impact the quality of services an agency can provide to the public and other stakeholders.

Recruitment and retention problems frequently compound each other. The inability to recruit employees may adversely affect working conditions for current employees, who leave, causing more vacancies that make difficult working conditions worse. One agency director reported in a survey response that recruitment challenges "place additional burdens on the remaining workforce, which increases the likelihood that they will seek employment elsewhere." This is particularly apparent at state facilities that operate around-the-clock, such as mental health hospitals and correctional centers. In interviews, staff at a state mental health facility and a state correctional facility reported that insufficient staffing for some job roles makes difficult jobs even more difficult, leading to more voluntary turnover. A number of state agencies, including Virginia State Police, Department of Behavioral Health and Developmental Services (DBHDS), and Department of Labor and Industry, reported that because of their problems with recruitment and retention, they are understaffed, and as a result, overtime is frequent and employee burnout is a serious concern.

Agencies identified financial and economic risks to the state related to their recruitment and retention issues.

The **Virginia Department of Transportation** has difficulty hiring engineers because starting salaries are low relative to the private sector, and a limited transportation workforce creates a highly competitive hiring market. As a result, it often contracts with private companies for road maintenance. Some contractors are not familiar with Virginia's road engineering standards, which can lead to errors, whereas permanent employees in these positions have the benefit of training and experience in Virginia's standards. When state standards are not applied, roads can degrade at faster rates, which results in increased road maintenance costs.

The **Department of Taxation** reported difficulty hiring tax examiners due to low starting salaries. Vacancies in tax examiner positions may result in uncollected tax revenue.

Virginia Department of Agriculture and Consumer Services (VDACS) indicated that understaffing of food inspectors can result in lower profits for farmers and other producers, which can affect Virginia's economy (case study). The agency has difficulty hiring for these inspector positions because the starting salaries are low. Agency leaders expressed a reluctance to raise starting salaries because this would cause salary compression.

CASE STUDY
Virginia Department of Agriculture and Consumer Services (VDACS)

Background
VDACS is a mid-sized agency with regulatory and marketing duties related to agriculture. One area of responsibility is the inspection of facilities and sites that produce food, such as manufacturing facilities and poultry and dairy farms, and of grocery stores. VDACS is also responsible for grading of some fruits and vegetables to be sold by retailers.

Problem
Over half of voluntary turnover at VDACS is found in inspector positions, and the vacancy rate for these positions is around 16.7 percent (compared to 11.5 percent statewide for similar positions). While there are over 200 inspectors at the agency, the number of establishments requiring inspection grows consistently each year. Each VDACS inspector is responsible for the regular inspection of 547 establishments at any given time, which is significantly higher than the workload recommended by the Food and Drug Administration (280 per inspector). VDACS reports it is less able to complete inspections of grocery stores, food production and packaging facilities, farms, and produce in a timely manner.

Economic risk: Businesses unable to open or expand
In August 2017, the Food Program at VDACS assisted 158 food establishments in opening for business. VDACS cannot fully meet the growing demand for food inspection services for Virginia businesses, and delays in inspection impact the ability of businesses to open new food establishments.

Economic risk: Reduced prices and produce unable to be sold
Farmers are able to sell better graded produce for higher prices. Produce may deteriorate as it waits for inspection or grading. When inspections are delayed due to vacant inspector positions, farmers may be paid less for their produce or unable to sell it at all.

Financial impact: Training costs
VDACS reports spending $54,527 to fully train an inspector, money which is lost through high voluntary turnover. Seven agricultural inspectors left the state workforce in FY17, and the cost of replacing them with new hires who require full training is about $380,000.

Public health and safety are also put at risk by recruitment and retention challenges.

At the **Department of Labor and Industry**, there are significant recruitment and retention issues for workplace health and safety inspector job roles. These positions, which are core to agency functioning, require extensive training. There were 42 workplace fatalities in Virginia in 2016, compared to 31 in both 2014 and 2015. In this environment, an adequate number of fully trained workplace health and safety inspectors is necessary to help mitigate the risk of workplace fatalities. Agency leadership attributed retention issues primarily to the lack of funding for salary growth, and said the agency has difficulty recruiting even minimally qualified candidates because of low starting salaries.

The **Virginia Department of Health** has difficulty hiring and keeping middle management-level staff in its health districts. Agency leadership attributes these recruitment and retention issues to salaries—starting salaries are too low to attract qualified candidates, and it is difficult to promote from within because funding is not available for salary increases. As a result, the Department of Health has diminished capacity to develop and implement strategic initiatives for emerging and serious public health issues like the rise of opioid abuse, which has been characterized as a crisis by public health officials.

The **Department of Corrections** information systems operate around-the-clock and are used across the world for offender tracking, but agency leadership said that there are some IT positions for which they have stopped recruiting because they cannot find a suitable candidate with the starting salary they can offer. According to leadership at Department of Corrections, most of their IT positions support these systems. The agency ensures around-the-clock functioning by hiring contractors, but at a more expensive rate than permanent employees. The potential to lose track of an offender if the system is not functioning can pose a public safety risk.

Department of Behavioral Health and Developmental Services (DBHDS) experiences recruitment and retention issues in a number of job roles. A transition to electronic health records at all facilities would benefit patients, reduce costs, and improve recruitment and retention, but DBHDS cannot hire and keep enough qualified IT staff to make the transition because IT salaries are not competitive. The DBHDS mental health facilities experience serious understaffing due to voluntary turnover and the ensuing vacancies in health care positions that are made worse by low salaries. These factors can compromise patient care and pose a number of risks to the state (case study).

CASE STUDY
Department of Behavioral Health and Developmental Services (DBHDS)

Background
DBHDS, Virginia's third-largest agency, provides care and programming for Virginians with mental health or substance-use disorders and developmental disabilities. One element of these responsibilities is operating in-patient mental health facilities, such as Central State Hospital in Petersburg and Western State Hospital in Staunton. These facilities are staffed by employees in a wide variety of job roles, but health care professionals constitute 62 percent of DBHDS's workforce and perform core functions in its mental health facilities.

Problem
State mental health facilities have difficulty with recruitment and retention of qualified health care professionals, and facilities are significantly understaffed in core positions. High turnover and ensuing vacancies in these positions compromise facilities' ability to function beyond minimum requirements.

Public health risk: Patient care
Staff at Central State Hospital reported that understaffing has resulted in conditions that can compromise patient care. Patients sometimes do not receive medication on time, and front-line staff are less able to monitor patients for behavioral crises. Patient aggression has increased, which puts both patients and staff at risk.

Financial risk: Inconsistency with U.S. Department of Justice (DOJ) settlements in other states
DOJ has sanctioned other states for inadequate staffing that compromises patient care. In response, DBHDS has established policies requiring at least two licensed staff on mental health wards. When staffing levels are critically low, facilities can quickly fall out of compliance with standards, putting the state at risk for a DOJ investigation or lawsuit.

Public safety risk: Employee safety at mental health facilities
Employees at some facilities are at a significant risk for on-the-job injury. DBHDS had one of the highest rates of workplace injuries of any state agency in Virginia in FY17, and staff at Central State Hospital report that they are concerned for their safety. Administrators reported that up to 80 percent of workplace injuries are due to patient aggression. The problem is compounded when facilities are understaffed, because front-line staff are less able to monitor patients for behavioral issues or crises.

Several non-compensation factors affect recruitment and retention

Employees and agencies identified several non-compensation factors that impact recruitment and retention. The state has direct control over compensation, salaries in particular, and some control over certain non-compensation factors, including career advancement and work-life balance. However, the state has little to no control over several factors that are inherent to certain jobs, such as physical work environments and whether a job fits with employee interests. Because of this, non-compensation strategies should also be considered by agencies and the General Assembly when determining how to effectively address workforce challenges. When agencies do not have funding available for raises, they can address certain recruitment and retention challenges by enhancing non-compensation aspects of state employment. For example, an agency might offer a more flexible work schedule or make efforts to improve a difficult work environment.

The state has little control over some factors that matter to employees, such as job stability and work environment

> *"I love the work I'm doing, but the lack of flexibility in my schedule, the unreasonable expectations, and the lack of work-life balance have contributed to my being in a place to actively look for other opportunities."*
>
> **– State employee**

There are certain non-compensation factors that the state can have very little effect on but that are also important to recruitment and retention. These include job fit, work environment, and general labor market trends. Many employees indicated that the reason they came to work for the state, and continue to do so, was because the job was the best fit for their skills and interests. Work environment is another factor that the state has little control over, as some work environments, such as correctional facilities, are inherently stressful and may always generate more turnover than other environments. This factor is almost entirely outside the control of the state and is largely dependent upon employees' personal preferences.

Many agencies indicated that some of their recruitment and retention difficulties were the result of a labor shortage or an overly competitive labor market, and there is little the state can do to affect the market. For example, nurses have become increasingly difficult to recruit, due to a shortage of nurses in the general labor market. Leadership at Virginia Department of Transportation reported a general decline in interest in transportation jobs that negatively affects the recruitment of new employees. In a tight labor market, employees may have more opportunities for better or higher-paying jobs, and so the state may have to provide more competitive compensation to attract and retain these employees.

Efforts to improve some non-compensation factors could address recruitment and retention challenges

There are other non-compensation factors that the state can have a much more direct effect on. These include work-life balance, opportunities for career advancement, and the visibility of state job openings.

Poor work-life balance can lead to recruitment and retention challenges

Issues of work-life balance can have either positive or negative effects on an agency's recruitment and retention efforts. For instance, doctors at one DBHDS mental health facility said that the good work-life balance, when compared to private practice, was a significant attraction to join the state workforce. However, other employees in the workforce frequently cited poor work-life balance as a concern, and agencies recognize that it can lead to burnout and higher voluntary turnover. Many employees in various job roles expressed concern about poor work-life balance.

State code provides for alternate and flexible work schedules, as well as telecommuting, and sets a goal for 20 percent of authorized employees at agencies to take advantage of these opportunities. While some agencies must operate around-the-clock and require staff to be physically present for their job, there are many agencies that could improve the work-life balance of their employees. This could include offering a flexible work schedule, a compressed work week, or opportunities to telecommute. According to the survey of state employees, less than one-third of employees already participate in these scheduling flexibilities, and most of the remaining employees indicate they would benefit from doing so.

Lack of career advancement exacerbates problems with employee retention

Career advancement is important to employees, and for many, state employment does not offer enough opportunities for advancement. This was the second-most common reason why employees considered leaving their jobs, and agencies and employees agreed that a lack of a clear path to career advancement has exacerbated retention problems. A career advancement program, or "career ladder," can be an important tool for agencies to provide pay increases based on increased skills or responsibilities.

Several agencies that have created internal career ladders indicated that such career advancement programs improved their ability to retain key employees. The Department of Forensic Science and the Department of Environmental Quality are two examples of agencies that have successfully developed competency-based career ladders for certain job roles that promote professional development and provide salary increases to staff when they reach specific professional benchmarks.

Developing additional career ladders for some job roles could improve retention but requires careful planning by agencies to identify the competencies and skills that employees must gain to progress. The Department of Human Resource Management (DHRM) could assist agencies with identifying job roles that would benefit from career ladders and advise them on the key elements that need to be in place for career ladders to be successfully implemented. In interviews, most agencies indicated that lack of funding is the main obstacle to developing a career ladder program. Career ladder programs require consistent funding for salary increases and training. The capacity to fund a career ladder program likely varies across agencies.

> *"Employees feel that the salary is low and that there are not growth opportunities within the agency."*
>
> **– HR director**
> **Education agency**

RECOMMENDATION 1

The Department of Human Resource Management (DHRM) should (i) identify where career ladder programs already exist across state agencies and (ii) identify which job roles could most benefit from new or improved career ladder programs. DHRM should use this information to work directly with agencies to develop new or more effective career ladder programs.

Lack of public awareness of state job opportunities makes recruitment difficult

A lack of visibility of state jobs, and limitations of the state's recruitment management system, can negatively affect recruitment. Many job-seekers interviewed at a job fair indicated that they were unaware of state job openings, and most did not know where to look for them. Career services staff for allied health careers at one state university indicated that students are generally unaware of job openings with state agencies. Recruiters from other employers are routinely on campus meeting with staff and students, but most state agencies do not conduct similar outreach. Agencies may be able to improve recruitment by more proactively advertising job openings and by developing contacts with universities.

Improved statewide data is necessary to effectively measure and address workforce challenges

Data to identify and understand workforce challenges is not consistently available, and some existing metrics are of limited utility. Virginia cannot effectively address recruitment and retention problems without the data necessary to understand them.

Utility of voluntary turnover rate as a measure of retention problems will improve with planned exit survey

Voluntary turnover rate is a precise measure of retention but must be supplemented with information directly from agencies, including reasons why employees are leaving. Even a single instance of turnover could cause problems for an agency that lacks the capacity to recruit and train a new employee. Conversely, high turnover may not cause problems for those agencies that are able to quickly hire qualified replacements.

DHRM is currently in the final stages of implementing an exit survey for all state employees at the direction of the General Assembly's Commission on Employee Retirement Security and Pension Reform. The survey includes questions to identify demographic and job role information, why employees choose to leave their jobs, and, if they are taking other jobs, where they are going. This information will help decision-makers understand retention problems by identifying the root causes, which could be uncompetitive salary, issues with a supervisor, or poor work-life balance.

Statewide data is not sufficient to effectively measure and address recruitment challenges

The data that is currently available to identify and understand recruitment challenges is not comprehensive and is therefore of limited use. Vacancy rates can be used to understand recruitment challenges. However, there can be many reasons for vacancies that have nothing to do with an agency's ability to recruit qualified candidates. For instance, an agency may not have funding for a particular position or may choose to hold it vacant until the end of a fiscal year to reduce spending. Moreover, a low vacancy rate does not necessarily indicate that an agency is able to hire the best possible candidates. IT positions provide a good example—they have a low vacancy rate, but agencies reported difficulty hiring candidates with the necessary IT skills.

Two other metrics would provide better insight into recruitment challenges: length of time to fill a position and number of job offers declined. Longer times to fill positions may indicate that a pool of applicants is small or unsuitable or that recruitment efforts are not effectively targeting desirable candidates. Data on time to fill a position is not consistent and may not be accurate; not all agencies enter this information immediately, so the metric is imprecise. For instance, if an agency fills a position but does not update the accompanying record until months later, the time to fill that position will appear longer than it actually was. Some agencies effectively track time to fill a position through the recruitment management system or in other ways internally, but capacity to track this metric at all agencies or statewide is limited.

Information about declined job offers is essential for understanding recruitment challenges, but this information is not comprehensively collected or tracked through the state's recruitment management system. DHRM encourages all agencies to data-enter information on declined job offers, but the process is complex and not manageable for all agencies.

For an agency, a significant number of declined job offers would clearly signal a recruitment problem, but the solution would depend on understanding *why* offers are declined. Some agencies track this information internally, but the state's recruitment management system does not currently allow agencies to report the reason a job offer is declined. A data field could be added to the system to capture this information.

Better information on recruitment would give agencies and decision-makers insight into how to address recruitment challenges. More capacity for data management at agencies and DHRM will be necessary to enable the consistent and accurate tracking of this information. DHRM should identify the necessary system changes and train agency staff to implement them.

RECOMMENDATION 2

The Department of Human Resource Management (DHRM) should configure the state's electronic recruitment management system to allow agencies to capture consistent and accurate data on (i) the time it has taken agencies to fill positions and (ii) the number of, and reasons for, declined job offers. DHRM should regularly communicate with agency human resource staff and managers to provide feedback and assistance to agencies to ensure they provide complete and accurate information for these categories of data.

4 Strategies for Improving State Investments in Employee Salaries

SUMMARY The state has not typically spent funds on state employee salaries as strategically as possible to address workforce challenges. All employees are usually provided the same salary increase when funding is appropriated. Providing employees with different salary increase amounts could be a more effective way to prevent and reduce the recruitment and retention challenges that are exhibited by some job roles, even though there could be years in which some employees receive a salary increase and others do not. Providing employees with salary increases at regular intervals is important for reducing turnover, and waiting to provide salary increases until workforce challenges develop can be costly. Ideally, even employees in job roles without workforce challenges should receive some salary increase at regular intervals to prevent new workforce challenges. A methodology should be developed for objectively determining how salaries should be increased for employees in job roles that exhibit significant workforce challenges. This methodology would also determine how salaries for employees in job roles that are not experiencing workforce challenges should change, as well as how funds should be distributed to the affected agencies. Salary increases should receive a higher priority in the state budget development process to improve the likelihood that funds will be appropriated for salary increases as needed and at regular intervals.

Many factors affect the stability and quality of the state workforce, but the most prominent aspect of employment that can be influenced through statewide policy is the salaries that employees are paid and the frequency and amount of salary increases. Investments in employee salaries are both costly and important, given the size of the state workforce and the numerous policies, programs, and functions for which state employees are responsible. Although state employees value salary above other forms of compensation, they are currently least satisfied with salary. Moreover, in years when salary increases are not provided, employees are more likely to leave the state workforce.

The state workforce does not have widespread recruitment and retention challenges, and on average, total compensation is competitive with compensation offered by other employers. However, for some specific job roles with significant workforce challenges, salaries are not competitive. The state's workforce challenges vary by job role, and the state could more strategically invest in employee salaries by prioritizing salary increases for job roles with the greatest workforce challenges. This would allow funding to be invested as effectively as possible, which is important given that the state has many competing budget priorities, and there are no dedicated revenue sources for salaries.

Providing uniform salary increases for all employees does not use funding most effectively

Central salary increases are not provided to poor performers, who account for less than one percent of employees each year. In FY16, just 133 employees were rated at the "below contributor" performance level.

Historically, the state has provided the same percentage increase to all employees. The effectiveness of this approach is limited, because funding is not directed to areas of the workforce where salary increases are most needed. In effect, job roles with significant workforce challenges and those without these challenges receive the same amount. A strategic approach would likely be more effective—rather than spend $45 million to provide a one percent increase for all classified employees, the state could spend the same amount to target salary increases to the smaller subset of employees in job roles that are experiencing recruitment and retention challenges.

Virginia's use of uniform raises is similar to the approach used by many other states, but it is not in line with best practices in the private sector, and some states are beginning to shift toward a more strategic approach that allocates greater percentage increases for some employees than for others. In interviews, executive branch staff indicated that they do not usually consider increasing the salaries of some employees and not others, but on a few occasions, the General Assembly has appropriated funding for special increases, usually in an effort to address urgent workforce challenges (sidebar).

Recent targeted investments made in addition to across-the-board raises

FY18: Additional two percent increase for employees in high-turnover job roles.

FY16: Additional two percent increase for employees in high-turnover job roles; $65 increase per year per qualifying employee to alleviate compression with a higher increase for sworn officers of the Virginia State Police.

State could provide higher salary increases for jobs with the greatest workforce challenges

A more cost-effective way to fund salary increases would be to prioritize increases for employees in job roles that are experiencing recruitment and retention challenges. This could mean that in some years, some employees receive no salary increase.

Key decision-makers require specific and accessible information to distinguish between job roles that should be prioritized for salary increases and those that should not. Under statute, DHRM is required to submit annual reports on employment levels and turnover, as well as a comparison of the salaries for some state job roles to similar jobs in the private sector (§ 2.2-1202). However, the statute does not require sufficient information, and it does not require synthesis of the information in a way that would enable the prioritization of salary increases. The following data should be used to inform decisions regarding centrally appropriated salary increases:

1. which job roles and agencies are experiencing the most significant challenges with recruitment and retention;
2. the extent of challenges with recruitment and retention in these job roles and the likelihood that these challenges can be addressed by increasing salaries;
3. how the salaries of employees in each job role compare to salaries paid by other employers for similar positions; and
4. which job roles have the greatest impact on agency operations when there are challenges with recruitment and retention.

The first type of information would be used to develop an initial priority list of job roles that could be targeted for salary increases. The second would be used to determine whether particular workforce challenges can likely be addressed through salary increases. The third would provide a frame of reference for calculating the amount of the salary increase that could be provided to alleviate the recruitment or retention difficulties being experienced in each job role. The fourth would help decision-makers distinguish between those job roles that are mission-critical for agencies and therefore should be prioritized even if sufficient funding is not available to address all job roles with workforce challenges. This information would support objective, data-driven decisions by policymakers about how best to target salary increases.

Prioritizing salary increases for job roles with the greatest workforce challenges would be a significant change from how increases are typically allocated. The General Assembly could initiate this change by signaling to the governor, through language in the Appropriation Act, that this type of prioritization is a legislative priority.

State should develop methodology for prioritizing salary increases for jobs with the greatest workforce challenges

Routinely using a data-driven methodology to prioritize some job roles over others for salary increases would provide objective and reliable information on which to base difficult decisions about providing salary increases to some employees and not to others. The Department of Human Resource Management (DHRM), Department of Planning and Budget (DPB), the House Appropriations and Senate Finance committees, and human resources staff from several state agencies, could collaborate to develop a methodology to aid in decisions about salary increases. The methodology would provide a mechanism to identify the job roles to be prioritized for salary increases and calculate the percentage increases to be funded. The methodology would be *developed one time* by this workgroup, but it would be *used on a recurring basis* each biennium by DHRM to determine the amount of new funding that should be appropriated in the budget for salary increases and which job roles should be prioritized (Recommendation 5). Each year some agencies may not receive any new appropriations for salary increases, depending on the job roles that they have. (See Appendix I for a methodology that would achieve the objectives described above.)

RECOMMENDATION 3

The General Assembly may wish to consider including language in the Appropriation Act requiring the Department of Human Resource Management to convene a workgroup of state agency leaders to develop a methodology for determining the base amount of funding that should be appropriated for state employee salary increases each year. The methodology should take into account (i) recruitment and retention trends for each state job role, (ii) the value of each job role's median salary and total compensation as compared to the market, (iii) the extent to which workforce challenges can be addressed by salary increases, and (iv) the impact on state agency operations of workforce challenges in each job role.

To apply this methodology, decision-makers would need data that is not currently collected. Some of this data would be collected through Recommendation 2 in Chapter 3 of this report. Data would be needed on the value of salaries and benefits provided by other employers, to help guide decisions on the amount of salary increases. While DHRM has access to external salary data, it does not have access to the data necessary to compare the value of Virginia's benefits to other employers. Such data, which is necessary for a complete understanding of how state compensation compares to other employers, would be needed periodically to measure changes in total compensation.

RECOMMENDATION 4

The General Assembly may wish to consider appropriating funds for the Department of Human Resource Management to contract with a third party consultant to periodically update calculations of how the value of Virginia's total compensation compares to the value of other employers' total compensation, including salaries, bonuses, and fringe benefits.

One-time salary increases for employees in job roles currently receiving uncompetitive salaries would not be cost-effective

According to analysis by Mercer, there are 19 job roles (28 percent of benchmarked roles) for which average salary is below the competitive range. (See Appendix C for Mercer's analysis.) These job roles include approximately 7,200 state employees (23 percent of benchmarked employees). The governor and General Assembly could consider increasing salaries for all such job roles to bring their total compensation within 90 percent of the median salaries paid by other employers for these jobs, which would cost $97.8 million. This would not be a cost-effective use of state funds because some increases would go to employees in job roles that are not exhibiting recruitment and retention challenges. To provide a better basis for strategic compensation investment decisions, the state needs a methodology to identify workforce challenges and the compensation needed to address those challenges. (See Recommendation 3.)

Providing salary increases intermittently limits the effectiveness of investments

Because salary increases for all employees are expensive, it makes sense to prioritize increases for those job roles in which the greatest workforce challenges exist. However, providing salary increases more regularly for *all* employees should also be part of the state's compensation strategy. Increasing salaries at more regular intervals would help the state prevent new workforce challenges and maintain its current competitive compensation. Increases at regular intervals may be less expensive for the state than allowing salaries to decline and then "catching up" when workforce challenges make salary increases urgent.

Providing salary increases for all employees at regular intervals could better manage workforce challenges

Minimal salary increases at regular intervals could be effective to keep recruitment and retention challenges from worsening and to prevent new ones. Regular increases would help agencies minimize or avoid recruitment challenges by allowing agencies to keep starting salaries comparable to those paid by other employers. Regular increases would help agencies minimize or avoid retention challenges, because employees are statistically less likely to leave the state workforce after receiving a salary increase, regardless of the amount. (See Chapter 3 and Appendix G on voluntary turnover.) It may be less expensive to prevent workforce challenges through smaller, regular salary increases, than to address workforce challenges after they occur.

Central salary increases are determined by the governor and General Assembly during the annual budget process.

Agency salary increases are determined by agency leaders using discretionary funds that have already been appropriated to the agency. Agencies set aside vacancy savings or savings from their operating budget for this purpose.

Providing smaller salary increases at regular intervals could prevent the need for large investments in any given year

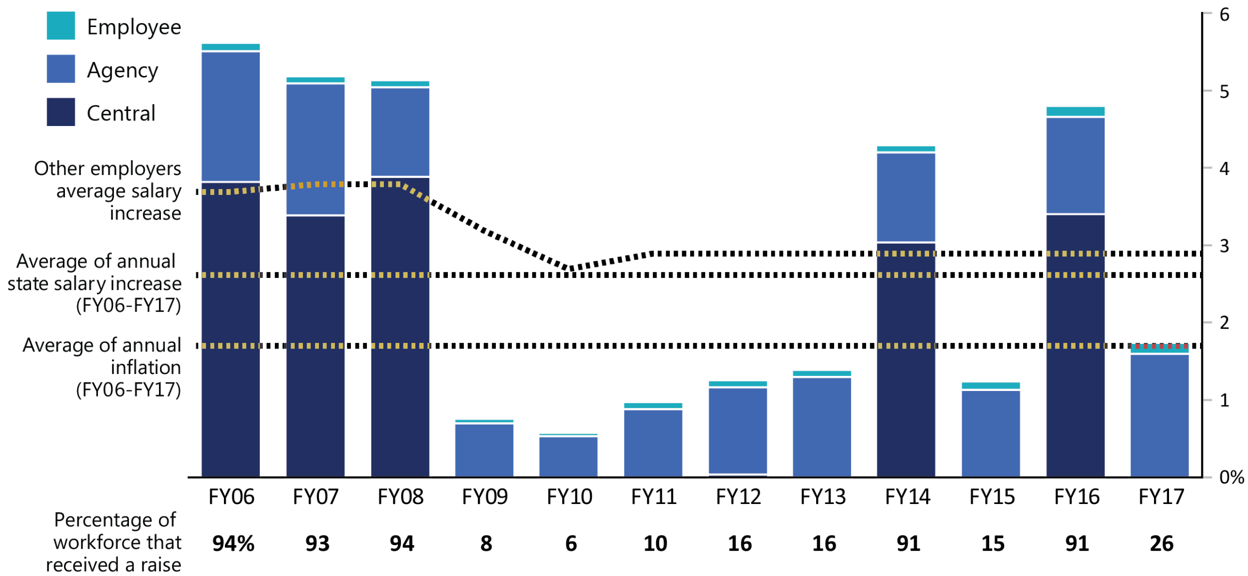
The state's approach of providing statewide salary increases in some years and not others has kept state salaries largely commensurate with the salaries that other employers pay and allowed state employee salaries to keep pace with inflation (Figure 4-1). Moreover, salary increases have been provided to at least some employees in each of the past 12 fiscal years. In most years these increases came from agencies' discretionary funds (sidebar) and were provided to a minority of employees.

In years when the state funded statewide salary increases, it spent significantly more than it would have if funding had been provided at regular intervals. This ad hoc approach has been used to make up for years when salary increases were not provided. Between FY06 and FY17 the state spent \$544 million in centrally appropriated funding for salary increases, which were paid in just five of those years, averaging \$109 million each time.

If the General Assembly had distributed the same \$544 million annually rather than ad hoc, the appropriation amounts would have been about \$45 million each year. This would have been about half of the approximately \$109 million that was provided in the years when central salary increases occurred. Smaller appropriations for salary increases could be more easily accommodated in the state budget from year to year and could allow the state to avoid such large ad hoc expenditures. Smaller salary increases at more regular intervals could also help address the state's recruitment and retention problems.

For these reasons, in addition to prioritizing salary increases for employees in job roles that exhibit the most significant workforce challenges, the state should adopt a strategy to ensure that all or most employees receive at least some salary increase at regular intervals. This could be based on the average salary increase planned by other employers, and would help ensure that state salaries grow, on average, at rates similar to the market. For example, if other employers are expected to increase salaries by an average of two percent, then the state would aim to increase salaries by about the same percentage.

FIGURE 4-1
Central investments in employee salaries are not made at regular intervals



SOURCE: JLARC staff analysis of DHRM compensation data. Market data provided by Mercer consultants, 2017.
NOTE: Salary growth reflects average across all employees, including those who did not receive a raise that year. "Central," "agency," and "employee" components reflect how salary increases were initiated, by the governor or General Assembly, agencies, or employees (e.g., transfers to different agencies). State provided a 5% central salary increase in FY11, but because that increase was offset by a mandatory five percent contribution to retirement, JLARC set the central amount to zero for that year. In years with central salary increases, almost every employee received a raise, but percentages shown here are lower because the calculation included employees who started working for the state after the increase was given. Lines depicting average state salary increase and average inflation increase reflect cumulative growth, as both salaries and inflation varied year to year. (See Appendix B for more about this analysis.)

Budget process does not compel decision-makers to critically evaluate state employee salaries

The irregularity of central salary increases is due in part to the budget process, which does not obligate decision-makers to consider whether additional investments in state employee salaries are warranted. Employee compensation currently competes with every other discretionary item in the state budget and therefore is more prone to being excluded based on other priorities. Revenue estimates fluctuate from year to year depending on economic conditions, and projected expenditures are affected by ongoing financial obligations and the addition of new programs. Even when employee compensation makes it into the final budget, central salary increases are usually contingent on sufficient revenue at the end of the fiscal year, which means that salary increases could be canceled. Without a means to prioritize employee salaries in the budget process, it is more likely that salaries will not be consistently funded, potentially creating or exacerbating workforce challenges.

According to Mercer, many private employers and some local governments set funding aside early in their budgeting process for employees' salaries, before determining how else to spend discretionary revenue. This reflects an understanding that an investment in the workforce is a direct investment in these entities' programs and services. Decisions in Virginia about whether to fund a central salary increase are currently made toward the end of the budget process, after fixed costs have been accounted for and revenue forecasts are more certain. Without a mechanism in the budget process to encourage early prioritization of salaries, investments would continue to be made only when enough funding remains after appropriations for other priorities.

Investing in salary increases to address workforce challenges would require specific and actionable information early in the budget process. Currently, the governor and legislature receive information in ad hoc ways at different stages of the budget process. For example, DHRM is required by the Code of Virginia to report to the General Assembly in September the total number of state employees and the number of employees who voluntarily left the state workforce at each agency (§ 2.2-1201 A.15). However, this report does not require a broad look at recruitment and retention challenges or synthesize the data in a way that enables decision-makers to prioritize job roles for salary increases.

Agencies are restricted in their requests for appropriations. DPB issues a memo to agencies at the beginning of the budget process that instructs agencies to prioritize requests pertaining to emergencies and safety concerns.

DHRM is also required to formally present a report to the governor and legislature on salary differences between the public and private sectors (§ 2.2-1202), but this report is presented at the end of the executive budget process, when the governor's largest funding proposal decisions have already been made. Ideally, agencies would submit their salary needs earlier in the budget process through decision packages, but this happens infrequently (sidebar), so decisions are made without complete information. Moreover, some agencies and advocacy groups approach the governor's office or General Assembly directly with their salary requests, and the more persuasive agencies or advocacy groups are more likely to succeed in obtaining salary increases for their employees, even if those agencies do not have the most pressing salary needs (case study).

CASE STUDY
Comprehensive salary information could result in different investment decisions

The Virginia State Police and the Department of Corrections both perform vital public safety functions. In FY18, state police officers received salary increases, but security officers who work in state prisons did not, despite having a turnover rate more than twice as high as that of police officers. Without complete and comprehensive information on the recruitment and retention challenges of the two agencies, the competitiveness of their compensation, and the extent to which these challenges are driven by, or could be addressed with, compensation, it is difficult for decision-makers to effectively address problems while maintaining the state's priorities.

DHRM and DPB developed salary investment recommendations in FY13. The General Assembly established a work group comprising staff of both agencies and other stakeholders, and this workgroup made recommendations for targeted salary increases to high-turnover job roles. These job roles received appropriations during the 2015 legislative session.

Prioritizing employee compensation is the responsibility of the governor. In order to improve the prioritization of employee salaries in the budget development process, the General Assembly could require that information on the need for and amount of salary increases be provided to the governor before the budget process begins. This would ensure that—early in the budget process—the governor is aware of the status of employees' compensation, whether salary increases are needed, and the amount of funds that need to be appropriated for increases. DHRM could develop a proposal for how salaries should be modified to address workforce challenges. Instead of its current report, DHRM should provide a report to the governor and General Assembly, through the Secretary of Administration, that summarizes and interprets information on state workforce trends in a way that gives decision-makers a clear understanding of the workforce challenges being experienced by agencies, how those challenges could be addressed through salary increases, and what the salary increases should be. The newly-designed DHRM report should identify job roles that should receive salary increases to address workforce challenges and propose the amount by which salaries should be adjusted for other job roles. Before finalizing the report, DHRM should work with DPB to obtain cost estimates for the proposed salary increases.

The newly-designed DHRM report could further improve upon the current report by including more relevant and comprehensive information on state workforce trends. This information should include vacancy rates and turnover rates for each state job role, how these rates vary by state agency, a description of the broad functions performed in each job role and their importance to state agency operations, comprehensive and up-to-date comparisons of each job role's salary with the salaries paid by other employers, and the number of employees in each job role and the number of agencies that employ people in those job roles. Ideally, this information would be part of the methodology developed in Recommendation 3, and this methodology would form the basis for the report to the governor.

RECOMMENDATION 5

The General Assembly may wish to consider amending § 2.2-1201 of the Code of Virginia to require the Department of Human Resource Management to provide a report that specifies (i) the job roles that should receive higher salary increases based on their recruitment and retention challenges; (ii) the amount by which other job roles' salaries should be increased, if at all; and (iii) cost estimates for funding the proposed increases. The report should also include supporting information on recruitment and retention trends, the functions performed by each job role, the number of employees and distribution of job roles across state agencies, and how the salaries for each job role compare to salaries paid by other employers. The report should be submitted through the Secretary of Administration to the governor and the House Appropriations and Senate Finance committees, by the last day in August in the first year of every biennial budget. This Code change would require technical amendments to eliminate the reports currently required under §§ 2.2-1201 A.15 and 2.2-1202.

The newly-designed DHRM report should include updated information on salary increases and recruitment and retention problems. Analysis and comparison should be done, for the job roles that receive salary increases and for those that do not, to assess the effectiveness of salary increases in addressing workforce problems over time. From year to year, the analysis should build on previous assessments. The report should clearly identify which job roles received salary increases, the amount of the increases, and any deviations from the most recent DHRM report's salary proposals. This follow-up analysis would help decision-makers assess the impact of the investments, and it would help DHRM improve its methodology.

RECOMMENDATION 6

The General Assembly may wish to consider including language in the Appropriation Act requiring the Department of Human Resource Management to conduct analysis on the effect of salary increases from the previous two biennial budgets on recruitment and retention of state employees. Analysis should focus on job roles with previously-identified recruitment and retention challenges and the effect of salary increases, or lack thereof, on recruitment and retention. This information should be included in a biennial report to the governor and the House Appropriations and Senate Finance committees at the end of August in the first year of every biennial budget.

The most effective approach to ensure adequate funding of state employee salaries is for the governor to prioritize salary increases in the base budget. However, the state could supplement the funding of employee salaries by establishing dedicated funding sources. The state could consider one or more of the following dedicated funding strategies (Table 4-1):

- When revenues are higher than expected, set aside a portion of the unexpected funds for future salary increases.
- When there are unspent general funds from the previous fiscal year, set aside a portion of these funds for future salary increases.
- When there are savings from changes to state employee benefits, like health insurance and retirement, set aside a portion of these funds for future salary increases.

TABLE 4-1
State could consider setting aside funds from certain sources for needed salary increases

Strategy	Description	Size of fund	Statutory changes required
Earmark funds when revenues are higher than forecasted	A percentage of revenues could be set aside for future salary increases after mandatory deposits have been made.	\$47-80 million[a]	Code of Virginia or Appropriation Act
Utilize a portion of general fund carry-over	The governor could be required to set aside a portion of general fund carry-over for future salary increases.	\$83-95 million[b]	Appropriation Act § 4-1.05
Set aside savings from changes to benefits	The state could use future savings from changes to employee health and retirement benefits to fund salary increases.	\$8-11 million[c]	Appropriation Act § 1-133

SOURCE: DPB, DHRM, and Department of Administration documents.
[a] The estimated size of the fund represents the maximum dollars available and is based on the average amount of funds above the original revenue forecast that were available for appropriation in recent fiscal years, excluding years when there was no additional funding. [b] The estimated size of the fund represents an average of the total general funds available for reinvestment in FY14, FY15, and FY16. [c] Includes JLARC estimate of potential savings from changes to health insurance plans only. See Appendix D for additional detail. Savings from retirement plan changes are not projected to be available until FY46.

Another long-term strategy that could yield substantial funding would be to redirect funding that is currently needed to pay down the unfunded liability in the state retirement plans to salaries once the unfunded liability is paid off. This is not scheduled to occur until 2046, but the state spent more than \$350 million in FY17 (8.94 percent of salary) to pay the required contribution toward the unfunded liability.

The amount of funding available through each of these strategies varies, and funding may not be available every year. Still, dedicated funding could be sufficient to at least increase salaries for job roles with significant workforce challenges. If implemented, dedicated funding strategies would require trade-offs in investments. For each strategy, any available funding normally would revert to the general fund. If that funding were instead directed to employee compensation, then it would not be available for other priorities. Budget priorities are different each year, and it is not possible to predict which state functions or programs would lose funding. These trade-offs would need to be weighed in advance. In addition to these trade-offs, some of these strategies are one-time funding sources, so using them for salary increases would require finding new revenue in subsequent years. One-time funding could be used for employee bonuses, which are one-time costs, but bonuses are not as effective at reducing and preventing workforce challenges.

Agencies lack authority and support to invest more strategically in state employee salaries

Unlike some states, Virginia gives agencies flexibility to adjust salaries through pay policies, as long as agencies can pay for increases from their existing budgets. Agencies that use these policies have improved the consistency with which their employees receive salary increases; approximately 43 percent of total salary growth over the past 12 years is due to agencies' use of discretionary funds that had already been appropriated. However, agencies vary in how much they can afford to adjust salaries and in how strategically they make changes to salaries. DHRM could play a larger role in facilitating strategic salary decisions at the agency level.

Agencies cannot increase salaries by different percentages when funds are appropriated centrally

Agency leaders know their compensation needs best, but agencies lack the authority to distribute central salary increases in ways that would allow them to address workforce challenges. When a central salary increase is appropriated, agencies must allocate the funds exactly as the budget prescribes, which usually means providing the same percentage increase to every employee. When agencies are unable to effectively align employee salaries based on factors like work experience and performance, salary compression occurs and employee morale can decline. Giving agencies the authority to allocate salary increases to employees at different levels within each job role would ensure that agencies can adjust salaries based on relevant factors. With such authority, an agency could decide to compensate two employees in the same job role differently, based on factors such as work experience and performance. Agencies would need to maintain the average percentage salary increase that the General Assembly determines for each job role.

If agencies are granted the authority to increase salaries by different percentages, then certain policies would be needed to promote consistency across agencies. At a minimum, DHRM would need to require that all agencies consider the following factors when aligning salaries: job responsibilities, work experience, and performance. It might also be beneficial for the General Assembly to set limits, through the Appropriation Act, on how much an agency can increase each employee's salary. Such limits would ensure that agencies make salary increase decisions within the same parameters and would help set expectations for employees.

General fund versus non-general fund agencies

There is a perception that agencies that primarily receive general funds are less able to afford salary increases using discretionary dollars than agencies that primarily receive non-general funds. Although there is some anecdotal evidence to support this, JLARC did not find a strong correlation between ability to give raises and funding source. There are likely multiple factors that explain agencies' abilities to increase salaries, such as how strategically they manage their workforce.

RECOMMENDATION 7

The General Assembly may wish to consider including language in the Appropriation Act granting agencies the option to increase individual employee salaries by different percentages, within the total amount appropriated for salary increases for each job role. The Appropriation Act should require the Department of Human Resource Management to specify, through policy, the factors that agencies should consider when determining salary increases for individual employees. These factors should include experience, job responsibilities, and performance.

Agencies lack the authority to target pay increases to high-performing employees

Virginia was the first state to implement **performance-based pay** but no longer has a true system in place. Agencies still conduct annual performance evaluations, but staff at multiple agencies indicated they are not as objective as they could be, and managers sometimes inflate performance ratings to reward employees in the absence of salary increases.

Agencies would like the flexibility to use performance-based pay to retain and motivate employees. In a survey of state agencies, two-thirds of agencies indicated that they would like the option to pay employees based on performance alone, which is currently prohibited by state policy. Performance-based pay is designed to help employers retain their best employees, and agencies view it as critical to motivation. In interviews, human resources directors suggested that equal pay regardless of performance is unfair and can reduce employee morale, especially for high-performing employees.

According to state policy, performance cannot be the only reason for a salary increase or bonus; performance is only one of many factors that must be considered. This limitation applies to most executive branch agencies, even those that have discretionary funds available for performance-based pay. There are a few exceptions: some non-executive-branch agencies have been given the authority to reward employees with higher salaries based solely on performance, and higher education institutions can reward some non-classified staff with performance-based pay.

Although many agencies would like the flexibility to distribute funds based on performance, implementing a performance-based pay system is difficult. Performance-based pay should therefore be scaled gradually instead of imposing a one-size-fits-all solution. Performance-based pay is used by most private organizations today, and increasingly by public organizations, but both sectors struggle with implementation. Virginia's current performance management structure has been in place since FY01, but performance-based pay has never been funded, so it is difficult to predict how well it would work in practice. Research suggests performance-based pay can have small, positive impacts, but that performance-based pay systems often fail without substantial efforts to provide funding, ensure objective and consistent evaluations, train supervisors, and communicate the process to employees. State agencies acknowledge these potential obstacles and even anticipate grievances from employees, but a majority still want the option to implement performance-based pay in order to retain and motivate high performers.

Agencies that are well positioned, both financially and operationally, to implement a performance-based pay system, should be authorized to develop and implement a model within guidelines that are established by DHRM. If any of these models are successful, they could be adopted by other agencies or scaled to similar job roles.

RECOMMENDATION 8
The General Assembly may wish to consider including language in the Appropriation Act (i) directing the Department of Human Resource Management (DHRM) to establish guidelines for performance-based pay models and (ii) allowing agencies to implement performance-based pay models within the guidelines established by DHRM.

Agencies could more strategically invest in salaries with additional training and support from DHRM

Virginia policy allows agencies the discretion to adjust employees' salaries with funds that have already been appropriated, but some agencies are more strategic than others in their use of pay practices (sidebar). Agencies vary in their use of pay practices not only because of differences in the availability of funding, but also because of differences in how strategically they manage salaries. For example, strategic agencies tend to make decisions about salary changes using data and set funds aside at the beginning of the fiscal year for anticipated compensation needs. Conversely, less strategic agencies tend to use fewer pay practices and rely more on across-the-board increases. Agencies that are less solutions-oriented in their approach to human resources are likely to be less effective in addressing workforce challenges.

Pay practices are tools that agencies use to adjust salaries or provide bonuses to employees throughout the fiscal year to address workforce challenges. There are multiple options for making pay changes including promotions, position transfers, and even disciplinary actions.

In-band adjustments are one type of pay practice frequently used by agencies to adjust salaries to reflect changes in job responsibilities or the attainment of new knowledge or skills. This pay practice can also be used to retain key employees and address salary compression.

Agencies generally feel they have the flexibility they need within existing policy to adjust pay (with the exception of performance-based pay), but additional training and support could help some agencies more strategically utilize pay practices to address workforce challenges. Moreover, if agencies are given the authority to distribute central salary increases differently among employees, then increased training and support for agency human resources staff will become even more essential. Enhanced training and support should be provided by DHRM to agencies in the following areas:

- technical skills for maximizing pay practices and utilizing salary data;
- soft skills for managing staffing issues and handling complaints that may arise from differentiating salary increases across job roles and employees; and
- strategic skills for identifying and addressing workforce challenges and aligning salaries on the basis of individual factors.

Training should be mandatory for each agency's human resources manager.

DHRM currently employs five full-time human resources management consultants to work one-on-one with agencies and provide training when agencies request it. However, these five individuals are assigned to the state's approximately 150 agencies, and therefore, according to DHRM, they do not have the capacity to take on additional responsibilities. Furthermore, DHRM's official training department was eliminated in 2009 due to budget reductions. DHRM indicated it would require three full-time staff to begin performing these training functions again. To ensure that all agencies can benefit from training and support, the state would need to invest resources in DHRM for additional staff.

RECOMMENDATION 9

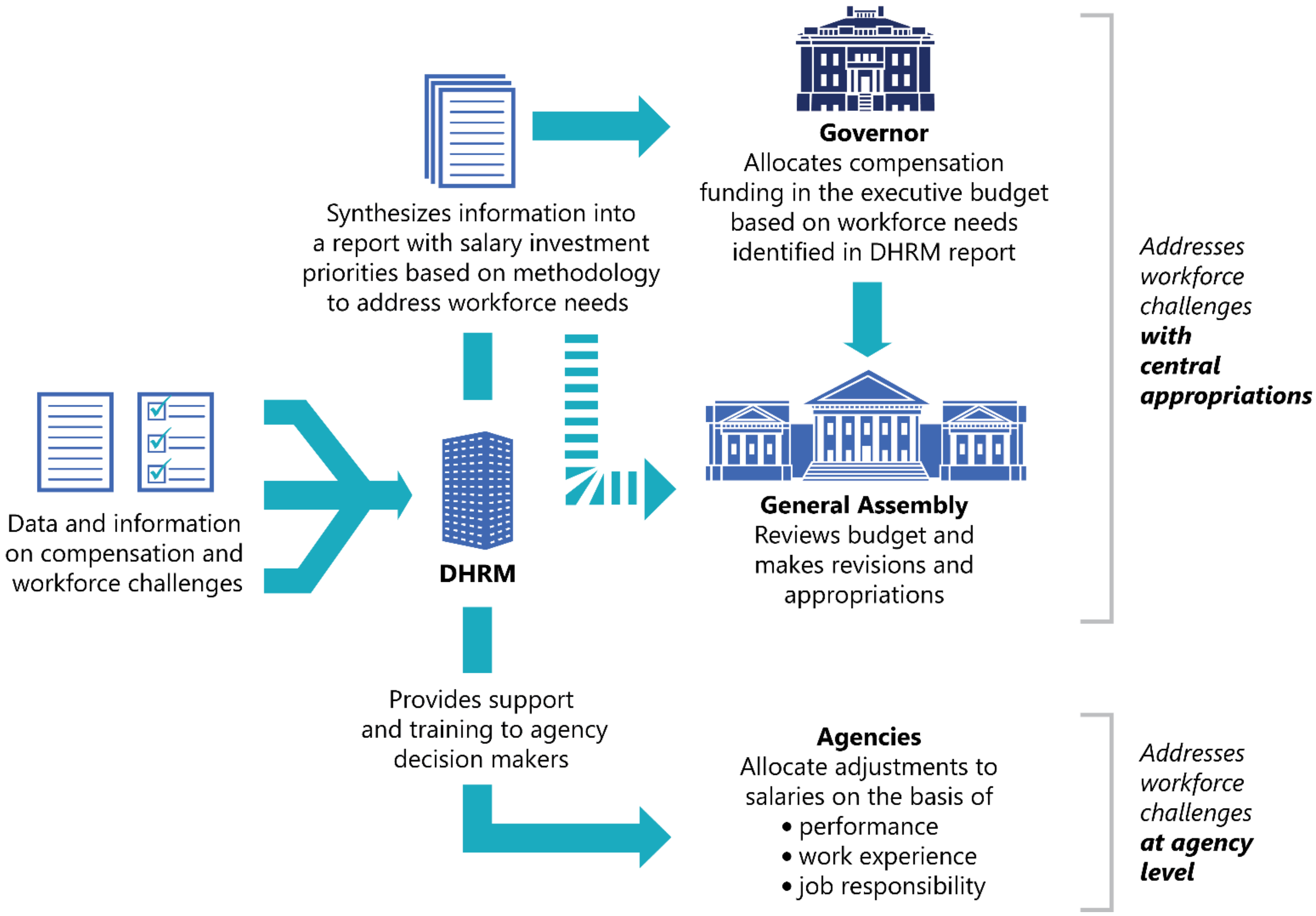
The Department of Human Resource Management should develop and offer training and support for all state agency human resources staff on how to (i) maximize the use of pay practices and salary data; (ii) manage staffing issues and handle employee complaints; (iii) identify and address workforce challenges; and (iv) align salaries based on individual factors. This training should be mandatory for each agency's human resources manager.

Decisions about salaries should be strategic, well informed, and made at regular intervals

To maximize its investments, the state should aim to (1) provide salary increases that address current workforce challenges and (2) provide other state employees a small salary increase at regular intervals to prevent future workforce challenges (Figure 4-2).

Salary increases should vary by job role, and it would be ideal to provide at least some salary increase to all employees; however, addressing workforce challenges through investments in salary should not be dependent on sufficient funding to provide a salary increase to all employees. At a minimum, funding should be appropriated each year to address the state's most pressing workforce needs, even though some employees may not receive an increase.

FIGURE 4-2
Solutions for strategic investments in employee compensation would be most effective if implemented together



Appendix A: Study mandate

A Resolution of the Joint Legislative Audit and Review Commission directing staff to study total compensation to employees of the Commonwealth.

Authorized by the Commission on January 13, 2017

WHEREAS, the Commonwealth has funded statewide base pay increases only three times since 2007; and

WHEREAS, the three percent performance increase scheduled for 2016 was canceled due to revenue shortfall; and

WHEREAS, state salaries are lower than salaries for comparable positions in the private sector by an average of 21.20 percent; and

WHEREAS, state employee wages have been lower than all other sectors since 2003; and

WHEREAS, in 2015 the Commonwealth ranked 32nd among all states in pay to state employees; and

WHEREAS, the workforce of the Commonwealth has experienced turnover rates of 11.1 percent, 13.15 percent, and 14.1 percent in fiscal years 2014, 2015, and 2016, respectively; and

WHEREAS, employees of the Commonwealth receive a variety of forms of noncash compensation, including retirement contributions, health insurance premiums, group life insurance, disability benefits, and paid leave; and

WHEREAS, noncash compensation for employees of the Commonwealth has constituted, as a percentage of total compensation, 48.4 percent, 44.5 percent, and 44.0 percent for fiscal years 2014, 2015, and 2016, respectively; and

WHEREAS, the Joint Legislative Audit and Review Commission (JLARC) reviewed state employee salaries and benefits in 2008 and 2011, but issues related to total compensation, such as the adoption of the hybrid retirement plan, have continued to evolve; now, therefore be it

RESOLVED by the Joint Legislative Audit and Review Commission that staff be directed to study total compensation to employees of the Commonwealth. In conducting its study, staff shall determine the total value of all forms of compensation provided to state employees, including cash compensation and the value of health care, retirement, leave, and other flexible benefits. Staff shall also (i) compare the total compensation provided by state agencies with the compensation provided by other large employers that seek to recruit and retain employees with the same skills and competencies; (ii) research how best to recruit, retain, motivate, and facilitate the work/life balance of state employees; (iii) identify cost-effective approaches that could be used to ensure that state agencies are able to employ an effective workforce; and (iv) research any other issues and make recommendations as appropriate.

The staff shall hire consultants or experts it considers necessary for the completion of the study. The costs of consultants or experts for analysis shall be paid for from additional general fund appropriations to the Commission for that purpose.

Technical assistance shall be provided to JLARC by the Department of Human Resource Management. All agencies of the Commonwealth shall provide assistance to JLARC for this study, upon request.

The Joint Legislative Audit and Review Commission shall complete its meetings by November 15, 2017, and the chairman shall submit to the chairman of the Commission on Employee Retirement Security and Pension Reform an executive summary of its findings and recommendations no later than November 30, 2017. The executive summary and report shall be submitted as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports and shall be posted on the General Assembly's website.

Appendix B: Research activities and methods

JLARC staff conducted the following primary research activities as part of its study of employee compensation:

- structured interviews and focus groups with state decision-makers, central agencies, agency leadership, employees, stakeholders, national experts, and other states;
- surveys of agency directors and human resources directors and of a sample of full-time classified state employees;
- quantitative analysis of workforce data from the Department of Human Resources Management (DHRM) and the Bureau of Labor Statistics (BLS); and
- review of documents and research literature.

JLARC also contracted with a compensation and benefits consultant, Mercer, to conduct a comparison of Virginia's compensation to other employers and to identify market trends and best practices.

Structured interviews and focus groups

JLARC staff conducted over 70 structured interviews and focus groups with the governor's policy staff, agency leadership and employees, stakeholder groups, national experts on state employee compensation, and other states. JLARC interviewed more than 30 different agencies to understand a variety of research topics. Additional details on each type of interview are provided below.

Structured interviews with state decision-makers and central agencies

JLARC staff interviewed staff in the governor's policy office, the Secretary of Finance and Deputy Secretaries of Finance, the Senate Finance Committee and House Appropriations Committee staff, Department of Planning and Budget (DPB) leadership and staff, and DHRM leadership and staff, in order to understand the state's approach to compensation and how decisions are made about how and when to invest in compensation. Interviews focused on how compensation is addressed in the budget process and whether the governor and General Assembly have the information they need to make informed decisions about compensation. JLARC staff also sought ideas for how the state can prioritize and fund compensation in the budget process and the advantages and disadvantages of performance-based compensation strategies.

Structured interviews and focus groups of agency leadership

JLARC staff held focus groups with human resources and finance directors at several agencies to gather information about agency processes for budget development, the impact of compensation on their workforce and the agencies' missions, and any strategies agencies have used to improve employee recruitment, retention, and motivation.

JLARC conducted interviews with the leadership of nine agencies and two state mental health and correctional facilities to understand agencies' workforce challenges and how they impact agency operations. These interviews focused on identifying the agencies' workforce challenges and understanding how those workforce challenges impact agency operations and performance. JLARC staff also heard agencies' perspectives on the role compensation plays in their workforce challenges and how the total compensation structure might be changed to help with recruitment, retention, and motivation of employees.

Agency leadership were asked about the specific effects that challenges in recruitment and retention have on their agency's ability to implement programs and complete its mission. Agencies were asked about risks and costs to the state that they attribute to their recruitment and retention issues. Leadership at Central State Hospital within the Department of Behavioral Health and Developmental Services (DBHDS) and Greensville Correctional Center within the Department of Corrections (DOC) were also interviewed to gather the same information as it pertained specifically to the challenges and functioning of these facilities.

JLARC staff interviewed 15 agencies about their use of state compensation policies and pay practices. These interviews were designed to gather information about whether agencies have adequate flexibility within existing policy to address compensation needs and whether there are other policies that could be beneficial, including performance-based pay. Additionally, agencies were asked if there were any barriers to effectively using pay practices to address their compensation needs, and whether they had recently requested additional appropriations through the budget process for compensation. These interviews were also intended to gain a better understanding of how agencies make decisions to increase salaries or provide bonuses and generally whether agencies have been effective in using pay practices to address workforce challenges.

Focus groups with agency staff

JLARC staff conducted focus groups with employees at three agencies (Virginia Department of Agriculture and Consumer Services, Central State Hospital, and Greensville Correctional Center) to get their perspectives on compensation and how their jobs and morale are affected by recruitment and retention issues. These focus groups consisted of five to 10 employees each. At Central State Hospital and Greensville Correctional Center, multiple focus groups were conducted with employees with similar job functions at the facility, ranging from health care and direct care staff to correctional officers and food service staff. At VDACS, employees from several divisions attended the focus group, including food and plant inspectors and weights and measures inspectors. Employees were asked about their compensation priorities, including how compensation could be changed to better reflect their priorities, what brought them to work for the state, and why they remain in the state workforce (Table B-1).

TABLE B-1
Thirty agencies and decision-makers were interviewed about compensation of state employees

	HR/Finance perspective on compensation	Budget process	Impact of workforce challenges	Employee perspectives on compensation	Agency use of pay practices
Department for Aging and Rehabilitative Services					✓
Department of Behavioral Health and Developmental Services			✓		✓
Central State Hospital			✓	✓	
Department of Corrections	✓		✓		
Greensville Correctional Center			✓	✓	
Department of Education					✓
Department of Environmental Quality	✓				
Department of Forensic Science	✓				
Department of Game and Inland Fisheries					✓
Department of General Services					✓
Department of Housing and Community Development	✓				✓
Department of Juvenile Justice			✓		✓
Department of Labor and Industry			✓		✓
Department of Mines, Minerals, and Energy					✓
Department of Taxation			✓		
George Mason University	✓				
Longwood University					✓
Office of the Attorney General	✓		✓		
Office of the Executive Secretary of the Supreme Court			✓		
Virginia Department of Health	✓		✓		✓
Virginia Department of Transportation	✓		✓		✓
Virginia Information Technologies Agency	✓				✓
Virginia Retirement System					
Virginia State Police			✓		✓
Virginia Department of Agriculture and Consumer Services			✓	✓	✓
Worker's Compensation Commission	✓				
Governor's Office		✓			
Office of the Secretary of Finance		✓			
Department of Human Resource Management		✓			
Department of Planning and Budget		✓			

SOURCE: JLARC interviews with state agencies, 2017.

Structured interviews with stakeholder groups, other states and national experts

JLARC staff interviewed state government HR staff in other states, national experts on employee compensation, stakeholder groups, and career counselors and job seekers. The following national experts and other organizations were interviewed to identify trends and best practices that could be adopted in Virginia:

- California
- Colorado
- Georgia
- Louisiana
- Pennsylvania
- Tennessee
- Henrico County, Virginia
- National Association of State Budget Officers
- National Association of State Personnel Executives
- Partnership for Public Service
- Association of Clerks of the District Courts of Virginia
- Virginia Governmental Employees Association
- Virginia State Police Association

JLARC staff interviewed counselors from Virginia Commonwealth University, as well as prospective employees at a career fair hosted by the Virginia Employment Commission in Charlottesville, to understand what prospective employees think about state employment and compensation.

Surveys

JLARC staff conducted surveys of two groups for this study: (1) state employees (a sample) and (2) state agency directors and human resources directors.

Survey of state employees

The survey of state employees was administered electronically to a randomly-selected sample of full-time, salaried employees. Employees were asked about the following topics:

- why they initially came to work for the state, and why they continue to do so;
- whether they were considering leaving their job, the reasons for that decision, and where they were considering looking for another job;
- satisfaction with each element of compensation (including salary, health, retirement, and leave), as well as how they value each element relative to the others; and
- satisfaction with their job overall, as well as with specific aspects of their job including work-life balance, work environment, and the relationship with their supervisor.

The response rate for this survey was 49.6 percent, or 4,860 of the 9,799 employees included in JLARC's random sample. JLARC drew its sample from employee data for 88,297 employees through the state's human resource management system. After excluding agency directors, faculty employees, and employees on leave, 64,425 employees remained. Of those, approximately 15 percent were randomly selected for the survey. The sample was stratified to ensure adequate representation across all occupational families and controlled to include employees from all agencies.

This same survey was also administered to a random sample of employees of the Executive Secretary of the Supreme Court, but because they operate under a different compensation system than other state employees, their responses were not included in the overall survey analysis. The response rate for that survey was 65.4 percent, or 210 of the 321 employees included in the random sample.

Survey of state agency leadership and human resources staff

The survey of state agency directors and human resources directors was administered electronically to a total of 115 agencies and facilities. JLARC excluded agencies that did not employ at least 20 classified employees. Agency staff were asked about the following topics:

- causes of agency workforce challenges, including compensation and non-compensation factors, and how such challenges vary across job roles and geographic regions;
- impact of recruitment and retention challenges on agency operations and agency workforce;
- effectiveness of available pay practices for increasing employee salaries, and availability of funding for such practices;
- advantages and disadvantages of a pay-for-performance policy; and
- effectiveness of each element of compensation in the recruitment, retention, and motivation of employees, as well as how each element could be made more attractive to employees.

The response rate for this survey was 83 percent overall, with the response rate ranging from 92 percent of parent agencies to 68 percent of facilities (Table B-2).

TABLE B-2
Response rates for agency leadership survey

	Responses	Total	Response rate
Parent agencies	68	74	92%
Facilities	28	41	68
Total	**96**	**115**	**83%**

SOURCE: JLARC survey, 2017.
NOTE: The parent agencies whose facilities were surveyed include the Department of Corrections, the Department of Behavioral Health and Developmental Services, and the Department of Veterans Services. The Virginia Community College System was not selected for this survey due to a concurrent JLARC study of VCCS that relied on surveys of the VCCS central office and its 23 colleges.

Quantitative analysis

JLARC staff conducted extensive quantitative analysis to help identify and understand recruitment, retention, and possible future workforce challenges in the classified state workforce. In addition, a logistic regression analysis was conducted to ascertain the influence of several factors on voluntary turnover. JLARC primarily used data from DHRM's employee demographic and personnel transactions databases for these analyses. Data from the state's recruitment management data system, which includes information for nearly all state job postings, and from the Bureau of Labor Statistics (BLS) Job Openings and Labor Turnover Survey (JOLTS) was also used.

Analysis of workforce challenges

JLARC staff calculated a number of workforce metrics to help identify areas with possible workforce challenges (Table B-3). JLARC calculated these metrics for FY13–FY17. In addition, voluntary turnover (known as "quits") data from BLS was utilized to obtain the nationwide turnover rate for state and local governments, as a benchmark for Virginia's voluntary turnover rate.

TABLE B-3
Workforce metrics were calculated to analyze recruitment and retention challenges

Metric	Definition
Voluntary turnover	Total number of employees who left state service for reasons other than retirement, long-term disability, dismissal, or death divided by total number of employees at the end of the fiscal year.
Vacancy rate	Total vacant positions divided by the total number of authorized positions in the workforce
Likely to retire	Employees who are eligible to retire and who are at least age 65
Less than 5 years of service	Employees who have worked for the state for less than five years
Time to fill	Number of days from posting date of a position to the date the position filled

Analysis of turnover drivers

A total of 11 logistic regression analyses were conducted to identify factors associated with voluntary turnover in the classified workforce. (See Appendix G for full logistic regression results.) JLARC staff used data from the classified workforce between FY13 and FY16 for this analysis.

In order to test the hypothesized regression model, 10 regressions were conducted on the 10 highest turnover positions with at least 200 employees in FY16. The results were similar enough that JLARC then pooled data for all four fiscal years in the final analysis so that the results could be generalized to the entire population.

A number of variables were used in the analysis (Table B-4). Demographic variables (age, gender, race) were pulled directly from DHRM's employee and transaction data. An employee was identified as receiving a pay raise by using several personnel transaction codes provided by DHRM and verified by ensuring there was an increase between starting and ending salary for that transaction. JLARC staff examined the effects of independent variables in one year on turnover in the following year (e.g., the effect of receiving a pay increase in FY15 on turnover in FY16).

TABLE B-4
Nine primary variables and two groups of dummy variables were used in regression analyses

Variable	Definition
Age	Age in years at the end of the fiscal year
Gender	Male or female
Percent salary change	Total salary at the end of the fiscal year minus total salary at the beginning of the fiscal year, divided by total salary at the beginning of the fiscal year
Race	Non-white or white
Salary increase	Yes/no variable indicating at least one salary increase during a fiscal year
Total bonus amount	Totaled amount of any bonuses received
Total bonuses	Number of bonuses received
Ending salary	Total salary at the end of the fiscal year
Years of service [a]	Date at end of fiscal year minus employee start date
Dummy variables for fiscal year	Dichotomous variable indicating whether an observation was from a particular fiscal year (FY14-FY16)
Dummy variables for job roles [b]	Dichotomous variable indicating whether an observation was from a particular job role (one for each job role)

[a] A quadratic term for years of service was included because the distribution was parabolic. [b] These dummy variables were included in the statewide regression model, but not the 10 test models.

Results from the 10 regressions were then compared for consistency to determine whether a regression analysis on the entire full-time classified state workforce for FY13-FY16 would produce valid results. This analysis confirmed that a statewide regression model was appropriate. The final results reported in Chapter 3 come from the analysis of the entire full-time classified workforce.

Marginal effects of each of the control variables were calculated in order to understand the magnitude of the influence of each variable on turnover. Chapter 3 results on the difference in turnover rate related to pay increases came from this analysis.

Employee salary increases over time

JLARC staff conducted an analysis of DHRM's compensation data from FY06 to FY17 to determine the average salary growth per employee over time. The analysis helped JLARC identify (1) how salaries have grown each year compared to other employers; (2) the percentage of the workforce that receives a salary increase each year; (3) the percentage of salary increases that come from central appropriations, agency actions, and employee actions; and (4) the extent to which the number of salary increases per employee varies by state agency.

Salary growth was limited to positive salary changes only, and therefore excluded disciplinary pay practices and downward role changes. Table B-5 highlights the pay practices that were considered for positive salary growth. Each pay practice corresponds with the type of salary change that it represents:

- Central—salary increases decided by the governor and/or General Assembly;
- Agency—agency-initiated salary increases, such as promotions; and

- Employee—employee-initiated salary increases, such as competitive voluntary transfers. A competitive voluntary transfer occurs when a state employee takes a new job with another state agency for a higher salary.

TABLE B-5
Pay practices used to identify salary increases

Pay practice	Type of salary change
Across-the-board raise	Central
Targeted increase decided by the governor and/or General Assembly	Central
Reassignment	Agency
Non-competitive voluntary transfer	Agency
Promotion	Agency
Role change (lateral or upward)	Agency
In-band adjustment for the purpose of • Change of duties • Internal alignment • New KSAs (knowledge, skills, and abilities) • Retention	Agency
Temporary pay	Agency
Competitive voluntary transfer (same agency)	Agency
Competitive voluntary transfer (new agency)	Employee
Competitive salary offer	Employee

NOTE: JLARC staff utilized DHRM's HR policies regarding pay practices to make decisions about how to classify each type of salary change. DHRM may prefer different ways of classifying changes. For example, DHRM considers promotions to be employee-initiated changes because employees must compete for the position.

JLARC attributed some salary changes to employee actions because when employees change jobs or seek out competitive salary offers, the subsequent change in pay is more attributable to the employee's decision than to any agency decision. Competitive voluntary transfers were unique in that JLARC staff considered the pay practice to be an agency-initiated change when the employee transferred to a new agency (a form of internal turnover) but an employee-initiated change when the employee transferred within the same agency. New hire and rehire pay practices were not included in this analysis because those changes in salary are more indicative of how much employees are paid compared to their previous jobs and not how much the state can afford to pay.

JLARC staff encountered a few data limitations in conducting the analysis. Pay practices that awarded temporary salary increases were not included in calculations because there was no dollar amount recorded in the data. There also were some salary changes that did not fall into the above categories (central, agency, and other), but there were so few that JLARC staff opted to remove them from the analysis. When data from the two data sources were inconsistent, such as some employees showing positive salary growth in one DHRM data set but lacking transactions records in the other data set for this growth, the observations were assigned a zero salary growth. It is not clear why these employees did not appear in both data sets.

Review of state documents and research literature

JLARC staff reviewed information from several written sources for this report. The Code of Virginia and pay practices and performance management policies from DHRM were examined for this study in order to understand the legal and policy framework for compensation in Virginia. JLARC staff consulted reports and policies from other states about benefit structures, salary changes, and performance-based pay. Peer-reviewed literature about performance-based pay, public service motivation, employee satisfaction, the impact of benefit structures, and factors affecting employee turnover were examined to identify best practices and understand the potential impacts of changes to Virginia's compensation.

Oversight of consultant work product

JLARC contracted with a national compensation and benefits consultant, Mercer, to compare the value of Virginia's compensation to that provided by other employers and to identify market trends and best practices in employee compensation. JLARC staff developed the scope of work, consulted with Mercer on methodological decisions throughout their work, and reviewed Mercer's draft and final results.

Comparison of Virginia's compensation to other employers

Mercer compared the value of compensation for Virginia employees to that of other employers in Virginia and seven other states. Salaries were compared to other employers in Virginia using salary survey data, and benefits were compared to 20 other public and private employers in Virginia, as well as seven other states (Table B-6). This comparison was done for 67 job roles (66 classified job roles and one job role at the Office of the Attorney General). Only employees in each job role whose duties were similar enough to enable a precise comparison were used in the analysis. The 67 job roles were selected to be representative of the entire state workforce. Mercer compared the value of each of the main elements of compensation: salary, bonuses, health insurance, retirement, leave, disability, and life insurance benefits for each of the job roles. Mercer then calculated a total compensation value for each job role, and an average for all 67 job roles.

Mercer calculated the value of compensation for Virginia employees using data from DHRM and the Virginia Retirement System (VRS). Mercer used multiple salary surveys to calculate the cash compensation for other employers in Virginia. This comparison was done at the job role level, by identifying jobs in the salary surveys that were at least an 80 percent match for the duties and responsibilities of the job role in Virginia. Mercer used detailed benefits data from 20 employers in Virginia and seven other states to compare the value of Virginia's benefits (Table B-7). (See Appendix C for additional detail on methodology and full results of the analysis.)

TABLE B-6
Virginia's benefits were compared to other employers in Virginia and other states

Comparison group	Other public employers	Other private employers
Primary peer group (public and private employers in Virginia)	Chesterfield County City of Norfolk City of Virginia Beach Fairfax County Hanover County U.S. Office of Personnel Management (federal agencies)	Aetna, Inc. Booz Allen Hamilton Carilion Clinic CarMax Auto Superstores, Inc. Dollar General Corporation Dominion Resources Home Depot, Inc. Norfolk Southern Corporation Northrop Grumman Corporation Science Applications International Corporation Sentara Healthcare University of Richmond Valley Health System Volkswagen Group of America
Supplemental peer group (other states)	Georgia Kentucky Maryland North Carolina South Carolina Tennessee West Virginia	

TABLE B-7
Methods used to calculate the value of each element of employee compensation

Element of compensation	Method for calculating a monetary value
Salary	Base salary as of September 1, 2017
Bonuses	Total amount of bonuses in a one-year period
Health insurance	Cost of purchasing the health insurance plan in the private marketplace; used the most common health plan for each employer
Retirement	Convert all retirement plans to an annual equivalent level percentage of pay by calculating the amount required to be saved over an employee's career to replicate the employer-paid benefits provided under the retirement plan
Life and disability insurance	Value of employer-paid premiums

Identification of trends and best practices

Mercer identified trends and best practices used by other employers that could help Virginia improve recruitment and retention of qualified employees. Mercer relied on existing surveys of compensation strategies and policies, experience with other clients, and the research literature to identify trends and best practices in the areas of compensation strategy, health insurance benefits, retirement benefits, and leave benefits.

Appendix C: Virginia total compensation compared to other employers

JLARC contracted with a compensation and benefits consultant, Mercer, to conduct a comparison of the value of Virginia's total compensation to other employers seeking to recruit staff for similar occupations. JLARC and Mercer worked together to select 67 job roles that represented a cross-section of Virginia's classified workforce. Each job role was matched to similar roles in available survey data to compare the value of Virginia salaries. Virginia's benefits were compared to those provided by 20 other public and private organizations in Virginia.

Table C-1 includes the results of Mercer's comparison for each of the 67 job roles, as well as the three-year average (FY15–FY17) turnover and vacancy rates for each role. JLARC staff considered total compensation for a job role to be competitive if it is within plus or minus 10 percent of the market median. (For additional detail on Mercer's results and methodology, see the JLARC website: jlarc.virginia.gov/statecomp/appendix/appendixC.pdf).

TABLE C-1
Comparison of Virginia's total compensation to other employers

Job role	Number of employees included in comparison	Average value of Virginia total compensation	Percent above or below market median total compensation	Turnover rate	Vacancy rate
Job roles above competitive range (4)					
Information technology manager I	86	$122,345	12.9%	2.8%	10.5%
Computer operations technician II	63	69,594	12.8	10.5	15.0
General administration manager I	258	86,167	12.6	2.8	9.7
Probation officer I	1,197	58,526	10.4	3.7	11.7
Job roles within competitive range (44)					
Financial services specialist II	201	$79,560	9.6%	3.0%	12.7%
Laboratory and research specialist II	243	60,972	7.5	6.6	18.5
Security officer III	5,521	47,991	7.4	17.0	15.1
Education coordinator I	135	86,631	7.2	8.9	12.9
Forensic science specialist III/ forensic scientist II	124	88,573	7.2	7.6	12.5
Housekeeping/apparel worker I	1,425	34,473	7.1	8.7	11.9
Scientist II	163	75,607	6.9	4.6	11.0
Trades manager I	144	82,745	6.3	3.4	7.2
Architect/engineer I	538	91,026	6.3	3.7	9.8
Program administration specialist I	716	60,242	5.0	19.5	23.4
RN II/nurse practitioner I/ physician assistant	530	79,919	4.3%	7.2%	11.7%

Job role	Number of employees included in comparison	Average value of Virginia total compensation	Percent above or below market median total compensation	Turnover rate	Vacancy rate
Counselor II	525	$65,054	4.0%	24.4%	27.1%
Education administrator III	58	113,945	3.0	7.7	16.7
Food service technician I	278	32,913	2.5	11.0	19.9
Financial services manager I	130	91,652	2.4	3.2	10.2
Food service technician II	118	37,990	2.2	7.4	9.7
Law enforcement officer II	915	66,536	2.1	7.7	27.2
Information technology specialist III	478	108,772	1.6	4.4	12.6
Financial services specialist I	631	63,491	0.6	3.8	9.4
Law enforcement manager I	189	86,038	−2.9	1.6	4.8
Licensed practical nurse	509	54,294	−2.9	24.8	25.6
General administration supervisor I/coordinator I	562	63,187	−3.2	4.4	7.9
Psychologist II/psychology associate II	134	85,627	−3.3	12.0	15.9
Law enforcement officer I	269	57,494	−4.0	13.0	12.5
Human resource manager I	68	86,425	−4.5	7.0	9.7
Engineering technician III	411	64,689	−5.0	1.9	5.4
Environmental specialist II	643	78,584	−5.0	3.0	11.9
Media specialist III	65	64,562	−5.4	5.5	10.0
Direct service associate II	1,619	37,189	−5.4	5.0	16.4
Human resource analyst I	228	62,704	−5.6	6.5	8.5
Auditor II	51	82,145	−5.8	5.5	17.4
Natural resource specialist II	105	49,930	−6.1	6.9	16.2
Store and warehouse specialist III	105	48,294	−6.1	3.5	7.0
Transport operations manager I	343	60,555	−6.2	1.3	3.1
Utility plant specialist II	147	51,430	−6.4	6.0	11.9
Equipment service repair technician I	249	56,541	−7.6	4.1	4.8
Transportation operator II	2,252	49,740	−7.8	4.2	4.5
Procurement officer II	103	78,835	−8.7	2.7	9.5
Policy planning specialist II	186	83,238	−8.9	4.3	12.4
Education support specialist II	571	49,255	−8.9	4.3	11.2
Procurement officer I	163	63,022	−8.9	4.5	14.8
Information technology specialist II	544	83,102	−9.6	4.9	11.0
PR and marketing specialist III	287	61,459	−9.7	7.5	7.8
Environmental manager II	90	$108,681	−9.8%	1.6%	8.3%

Job role	Number of employees included in comparison	Average value of Virginia total compensation	Percent above or below market median total compensation	Turnover rate	Vacancy rate
		Job roles below competitive range (19)			
Architect/engineering manager II	258	$129,638	−10.9%	2.5%	5.5%
Security manager I	414	61,363	−11.3	2.1	11.5
Library specialist II	196	58,631	−11.9	6.0	12.3
Housekeeping/apparel manager I	93	46,645	−12.4	4.5	10.6
Trades technician III	461	51,645	−13.1	4.3	9.0
Electronic technician II	98	67,393	−14.1	0.0	0.0
Retail manager II	192	59,803	−14.2	9.5	15.1
Physician II	62	243,273	−14.2	11.5	25.2
Retail specialist II	325	44,652	−14.9	3.3	2.4
Compliance/safety officer III	163	61,998	−15.4	5.6	9.9
Agricultural specialist IV	58	54,780	−16.5	8.1	11.6
Health care compliance specialist II	200	76,639	−17.0	2.9	8.0
Registered nurse manager I	201	87,058	−17.1	18.1	22.5
Program administration manager III	334	112,658	−19.7	8.4	16.2
Administrative and office specialist III	3,917	50,983	−22.9	5.1	10.6
Procurement manager II	73	88,720	−23.4	4.3	9.6
Psychologist I/psychology associate I	78	61,454	−25.5	12.6	19.6
Statewide totals	**31,559**	**$59,278**	**−4.9%**	**7.8%**	**13.2%**

SOURCE: Mercer comparison of Virginia employee total compensation to total compensation provided by other public and private employers in Virginia, and JLARC analysis of DHRM workforce data, FY15–FY17 (three-year averages).
NOTE: Total compensation comparison is equal to cash compensation plus the monetary value of benefits and uses the retirement plan available to new employees. Mercer did not include all employees in their comparison, but instead used those that performed the most similar functions, to enable a more precise match to employees of other organizations.

Appendix D: Options to change employee health insurance

The state has several options to change state employee health insurance plans to make them more comparable with what is provided by other employers and reduce state spending. The first set of options would do so by shifting more costs to employees. The second set of options would incentivize employees to enroll in health insurance plans that are less costly to the state.

These options should be considered in the context of the state's current total compensation (Chapter 2). The state's total compensation is comparable, on average, to what other employers provide because its relatively generous health insurance and retirement benefits offset salaries that are slightly less that what other employers provide. Increasing the amount that employees pay for health insurance would reduce the value of the health insurance plans, and therefore total compensation, unless an increase in salaries is also provided. Health insurance is also a valuable recruitment and retention tool for agencies, so increasing the cost of benefits for employees without a corresponding investment in salaries could adversely impact agencies' ability to employ a qualified workforce.

Options to increase employee cost sharing

Virginia could bring its health insurance benefits more in line with what other employers provide by increasing the amount that employees pay for their health insurance benefits. The health insurance plans and services covered are comparable to those provided by other employers, but the state's benefits are more valuable because employees pay less for their benefits than employees of other organizations. Increasing employee cost-sharing could be done by increasing the share of monthly premiums or increasing annual deductibles and out-of-pocket limits. Each of these options would impact employees enrolled in Virginia's health insurance plans and state spending to varying degrees (Table D-1).

TABLE D-1
Impact of options to increase employee cost sharing of health insurance benefits

Option	Annual state savings	Financial impact to employees	Number of employees impacted
Increase employee share of monthly premiums	$11.2M per 1% shift in premium split	Increases premiums by $6/mo for employee only $12/mo for employee +1 $18/mo for family	76,290 in total: 29,990 in employee only 19,976 in employee +1 26,324 in family
Increase annual deductibles	$7.8M	Increases out-of-pocket deductibles by a maximum of $400 per year	Unknown
Increase annual out-of-pocket limits	$10.4M	Increases out-of-pocket expenses by $484 for each enrollee who would have hit the prior limit	21,424

SOURCE: JLARC analysis of FY17 health insurance premiums and enrollment data.
NOTE: Figures do not include premium rewards.

Reducing the employer share of monthly premiums

Virginia could reduce the share of monthly premiums that agencies pay for employees enrolled in COVA Care, the state's primary preferred provider organization plan (PPO). Agencies currently pay between 85 percent and 88 percent of the monthly premium for COVA Care, depending on the level of coverage (employee only, employee plus one, or family plan). Other organizations in Virginia and other states pay a smaller percentage of the premium for similar PPO plans (Table D-2).

TABLE D-2
Virginia agencies pay a higher share of monthly premiums than other organizations in Virginia and other states

Level of coverage	Virginia (COVA Care)	Public employers in Virginia	Private employers in Virginia	Other state governments
Employee only	88%	84%	76%	88%
Employee plus 1	85	72	72	78
Family	86	73	70	77

SOURCE: Mercer comparison of Virginia's health insurance benefits to those provided by other public and private employers, 2017.
NOTE: Data represents the median of the health plans provided by other employers. Analysis includes 20 public and private employers in Virginia and seven surrounding states.

Increasing the percentage of monthly premiums paid by employees by one percent would have reduced agency spending by $11.2 million in FY17. This cost would be shifted to the 76,000 employees enrolled in the COVA Care plan. Premiums for these employees would increase by between $6 and $18 per month ($72 - $216 per year), depending on their level of coverage (Table D-2). For an employee earning $44,000 per year (median state salary is $44,413), this equals between 0.2 and 0.5 percent of their salary.

Employee premiums have risen consistently over time, even though employees pay a smaller share of monthly premiums than employees of other organizations. Employee premiums have increased by an average of about seven percent annually over the past 12 years as the cost of health care continues to rise. Employee salaries have not increased at this pace, so employee take-home pay has declined over time. Increasing the percentage of the premium that employees pay would further drive up these increases in premiums.

Increasing annual deductibles

Virginia could increase the annual deductibles for enrollees in COVA Care. The current deductible is $300 for an individual and $600 for all family members included in the plan. Other organizations in Virginia and other states have larger deductibles for health insurance plans similar to COVA Care (Table D-3). Employees pay the full cost of the service until they meet their annual deductible. Raising the deductible would increase the amount that employees pay for health care services and decrease the amount paid by the employer.

TABLE D-3
Virginia's annual deductibles are lower than those for comparable health insurance plans offered by other employers

	Virginia (COVA Care)	Public employers in Virginia	Private employers in Virginia	Other state governments
One person	$300	$425	$1,400	$1,275
Two or more people	$600	$850	$2,800	$3,000

SOURCE: Mercer comparison of Virginia's health insurance benefits to those provided by other public and private employers, 2017.
NOTE: Data represents the median of the in-network deductibles for health plans provided by other employers. Analysis includes 20 public and private employers in Virginia and seven surrounding states.

Increasing the annual deductible to $500 for an individual and $1,000 for all members of a plan would have reduced spending by $7.8 million in FY17. Employees who previously reached the $300 or $600 deductible would incur a maximum of $400 in additional out-of-pocket spending for deductibles over the course of a year.

Increasing annual out-of-pocket limits

Virginia could increase the annual limit on out-of-pocket expenses for enrollees in COVA Care. The current out-of-pocket limit is $1,500 for an individual and $3,000 in total across all family members included in the plan. Other organizations in Virginia and other states have larger out-of-pocket limits for health insurance plans similar to COVA Care (Table D-4). An out-of-pocket limit places an annual cap on the amount an employee spends for health care services, including deductibles, copays, and coinsurance. Raising the annual out-of-pocket limit would increase the amount that employees pay for the health care services and decrease the amount paid by the employer.

TABLE D-4
Virginia's annual out-of-pocket limits are lower than those for comparable health insurance plans offered by other employers

	Virginia (COVA Care)	Public employers in Virginia	Private employers in Virginia	Other state governments
One person	$1,500	$4,500	$4,000	$3,750
Two or more people	$3,000	$8,000	$8,000	$8,500

SOURCE: Mercer comparison of Virginia's health insurance benefits to those provided by other public and private employers, 2017.
NOTE: Data represents the median of in-network deductibles for health plans provided by other employers. Analysis includes 20 public and private employers in Virginia and seven surrounding states.

Virginia's out-of-pocket limits have not changed to account for requirements included in the Patient Protection and Affordable Care Act (PPACA). Beginning in 2016, to comply with PPACA requirements, Virginia's health insurance plans started counting the out-of-pocket costs for all essential health benefits toward annual limits. Essential health benefits include the services typically covered in a comprehensive health insurance plan, such as physician visits, hospital services, and prescription drugs. Prior to 2016, COVA Care only included out-of-pocket costs for medical services, such as physician and hospital services, when calculating annual totals, and not other essential benefits such as prescription drugs. Including prescription drug out-of-pocket costs without a corresponding increase in the annual out-of-pocket limit increases the amount that Virginia pays for services. This is because the state pays 100 percent of the cost of services once employees reach the annual limit, and more employees reached the limit, and reached it more quickly, when prescription drugs were included in the calculation.

Increasing the annual out-of-pocket limit to $2,500 for an individual and $5,000 for all members of a plan would account for the policy change to include all essential health benefits in the calculation of annual limits. This would have reduced total spending by $10.4 million in FY16. There were more than 21,000 employees who reached the annual out-of-pocket limit in FY16 and would have incurred additional out-of-pocket costs if the deductible was raised to account for the policy change. The average increase in out-of-pocket costs for these employees is $484 per year.

Options to incentivize employees to choose different health insurance plans

Virginia could reduce spending on health insurance benefits without altering the value and competitiveness of current benefits by providing incentives for employees to choose lower-cost options. This could be done by incentivizing employees to choose Virginia's COVA high-deductible health plan (HDHP) or to enroll in another health insurance plan that meets PPACA requirements instead of one offered by Virginia. These options would not impact the value of Virginia's total compensation package but could potentially reduce the state's costs through more cost-effective use of health care services, or by having more employees waive their state health insurance coverage in favor of another plan.

Providing an incentive for employees to enroll in the COVA HDHP

Virginia could provide a financial incentive for employees to enroll in the consumer-driven health plans offered, specifically COVA high-deductible health plan (HDHP). Employees pay zero monthly premium for COVA HDHP, but there are higher out-of-pocket costs. The goal of this plan design is to reduce overall health care spending by encouraging employees to consume more cost-effective services. This is accomplished by shifting employee spending to the cost of actual services rather than the monthly premium.

A much smaller percentage of Virginia employees are enrolled in COVA HDHP than similar consumer-driven health plans offered by other employers. Only one percent of state employees are enrolled in COVA HDHP, while about 10 percent of public sector employees and 26 percent of private sector employees in Virginia are enrolled in similar plans. It is important to note that some other employers only offer high-deductible plans. DHRM indicated that a primary reason that more state employees do not enroll in COVA HDHP is because the monthly premiums and lower out-of-pocket costs make spending more predictable.

Providing funding for employees' health savings accounts (HSA) as part of COVA HDHP could encourage more employees to enroll in the plan. Employees who enroll in COVA HDHP can save their own money in an HSA on a pre-tax basis, which can be used for qualifying health care expenditures, such as copays, coinsurance, and deductibles. Providing state funding each year towards an employee's HSA would help offset the out-of-pocket costs under COVA HDHP, and could range between $500 for an individual and $1,000 for a family. It is not clear what level of incentive would be sufficient to entice employees to switch plans.

This incentive could reduce spending on health care if it results in employees using less costly services, such as more generic prescription drugs rather than name brands, or using fewer unnecessary services. This incentive could also increase premiums for employees remaining in the COVA Care plan, because it is likely that healthier employees would enroll in COVA HDHP. This results in adverse selection by leaving employees with higher health insurance costs in the COVA Care plan. Premiums for the COVA Care plan would increase because the higher costs for that population would be spread across fewer enrollees. The state would bear a significant portion of these increased premiums because agencies pay approximately 86 percent of the monthly COVA Care premium. More detailed cost modeling is necessary to determine if this strategy would result in cost savings.

Providing an incentive for employees to enroll in alternate health insurance

Virginia could provide a financial incentive for employees to waive state health insurance coverage and instead enroll in another qualifying health insurance plan, which is typically through a family member. This would be a taxable, cash payment to the employee each month instead of paying the agencies' share of health insurance premiums. One other state, California, provides this type of cash incentive for employees to enroll in a different, qualifying health insurance plan.

For example, the state could provide a cash payment of $150 per month to employees who enroll in another qualifying health insurance plan. This would save the state money if enough employees took advantage of the incentive. All employees who currently waive their health insurance benefits, and are enrolled in a qualifying health insurance plan, would be eligible for the incentive. This would not save any money because agencies are not currently paying for health insurance for these employees. Agencies would save an average of about $900 per month for each additional employee who takes advantage of the incentive, assuming they were enrolled in a COVA Care plan. (The average cost of monthly premiums that agencies pay for each employee enrolled in COVA Care is about $1,050.) These costs would no longer be incurred, and instead agencies would pay the $150 incentive. To break even with a $150 incentive, about 1,500 additional employees would need to enroll in a different qualifying health insurance plan, and the state would begin to realize cost savings as additional employees took advantage of the option (Table D-5). Raising the amount of the incentive would increase the number of employees that would have to elect the option to realize savings. This option could result in adverse selection, where healthier employees are more likely to leave the state plan, which tends to have lower out-of-pocket costs than other plans. If this occurs, premiums could increase for the remaining employees in the plan because the high cost of those with higher health care needs would be spread across fewer people.

TABLE D-5
Providing a cash incentive for employees to enroll in alternative health insurance could save money if enough employees elect this option

Steps in cost analysis	Calculations
A. Monthly incentive	$150
B. Employees currently waiving health insurance	10,187
C. Cost of incentive for employees currently waiving insurance (A x B)	$1,528,050
D. Average cost to agencies of monthly premiums (COVA Care)	$1,052
E. Average savings for employees electing the incentive (D–A)	$902
F. Number of employees required to break even (C/E)	1,452

SOURCE: JLARC analysis of FY16 health insurance enrollment and premium data.

Appendix E: Options to change employee leave benefits

The state has two options to modify leave benefits to better align with those provided by other employers. The first option would be to transition from the current leave system to a paid-time-off (PTO) system, which would consolidate the many categories of leave currently available to employees into a single, all-purpose category. The second option would allow employees to sell back a portion of their unused leave each year, as opposed to having to wait until separation or retirement to do so. DHRM explored both of these options as part of an effort to simplify the state's leave system between 2008 and 2011. An advisory workgroup convened by DHRM, which included human resources staff, finance staff, and employees from 11 state agencies, developed and proposed a PTO system with an option to sell back leave, but the recommendation did not result in further action.

Although the state provides paid leave that is in line with other employers who offer a traditional leave system, Virginia's policies are generally less flexible than other employers. It is important to note that state employees are very satisfied with their current leave benefits, and they consider leave less important than salary, health insurance, and retirement benefits. Still, these options provide the state with the opportunity to further improve the attractiveness of leave benefits, which could in turn improve the state's ability to recruit and retain a qualified workforce. A leave cash-in option would provide employees an option to increase their take-home pay, which may in turn help address employees' concerns with salary, the element of compensation that matters most to nearly half the workforce.

Virginia could convert its current leave system into a single paid-time-off system

A PTO system provides employees with one all-purpose leave category, as opposed to separate categories such as vacation, sick leave, community service, and personal leave. PTO systems typically provide employees with a slightly smaller amount of total available days than a traditional leave system, but with much greater flexibility in terms of how to use those days. Other employers are increasingly implementing PTO systems; usage is highest among private employers. The amount of companies offering PTO programs to employees increased from 37 percent in 2007 to 63 percent in 2015, according to Mercer's Survey on Absence and Disability Management.

Because PTO leave has fewer restrictions, most employers typically reduce the total number of available days (Table E-1). Certain categories of leave would remain unchanged, including civil and work related leave, emergency and disaster leave, military leave, and leave to donate bone marrow or organs, because these types of leave are granted to employees on an "as-needed" basis.

TABLE E-1
PTO system would offer more flexibility, but fewer overall days of paid leave

Years of service	Annual	Family and personal	Community service	Sick leave	Total available	Estimated days of PTO
Less than 5	12	4	2	8	26	**22**
5 to 9	15	4	2	9	30	**26**
10 to 14	18	5	2	10	35	**30**
15 to 19	21	5	2	10	38	**33**
20 to 24	24	5	2	10	41	**35**
25 or more	27	5	2	10	44	**38**

SOURCE: JLARC analysis of Mercer's Assessment of Total Compensation Strategies, August 2017.
NOTE: Figures related to sick leave refer to the Virginia Sickness and Disability Program, and do not apply to those employees who opted to remain in the state's traditional sick leave program. Does not include the state's 12 paid holidays.

There are both advantages and disadvantages to taking a PTO approach to leave, affecting both employees and employers. Advantages of a PTO system include a decrease in administrative complexity and an increase in employee flexibility. Fifty-nine percent of human resources managers surveyed by JLARC indicated that combining leave into a single all-purpose category would make leave benefits more attractive to employees. Disadvantages of a PTO system include a decrease in the overall number of leave days available to employees, a possible increase in financial liability for the state and an initial administrative burden of transitioning employees to a new leave system (Table E-2).

TABLE E-2
PTO system would increase employee flexibility and reduce administrative complexity but could potentially increase leave payouts at retirement or separation

	Considerations
Impact on employees	Provides additional flexibility for employees to use leave as best fits their needs, but reduces the total number of days of leave available.
Impact on state spending	Could result in higher liabilities and leave payout rates upon retirement or separation, if employees are able to accrue higher maximum amounts. Such policies should be carefully defined.
Impact on administrative complexity	Reduces administrative complexity and burden by reducing the number of leave categories to be monitored.
Legal barriers or risks	None identified.
Impact on state competitiveness	Improves flexibility of benefits and better aligns with the market. (Note that only 3% of employees identified leave as the most important part of their job, and 83% of employees are satisfied with their leave benefits.)
Potential unintended consequences	Employees may elect to come into work when they are sick in order to avoid using PTO if they decide they could save it for other types of leave. Could also be negatively perceived by less healthy employees. [a]

SOURCE: JLARC analysis of Mercer's Assessment of Total Compensation Strategies, August 2017.
[a] One potential solution to these issues would be to adopt a partial PTO system that combines all categories of leave except for sick leave, which would accrue separately.

Virginia could implement a leave cash-in policy

A leave "cash-in" policy allows employees to exchange a portion of their unused leave balance for additional cash compensation. Provisions for these types of policies vary by employer, including when and how often leave can be cashed in, as well as the rate at which employees are reimbursed for their leave. Virginia currently allows employees to receive the full cash value of any unused annual leave at retirement or separation, up to a cap of 42 days.

If the state were to implement a leave cash-in policy, it could consider using the following provisions:

- Allow employees to cash in up to 3 days of unused annual/PTO leave at the beginning of each year as part of an open enrollment process (leave type is dependent on whether the state was to also adopt a PTO leave policy, as discussed in Option 1 above);
- Maintain the current maximum number of eligible days that can be cashed in at 42 over the course of an entire career (including annual cash-in and payment upon separation);
- Allow employees, upon retirement or separation, to be paid for a maximum of 42 days, minus any days of leave sold throughout their career; and
- Require employees to maintain a minimum of 5 days of annual/PTO leave.

If the state decides to implement such a policy, it should work with the Department of Human Resource Management (DHRM) in crafting the policy and preparing for its implementation. Additional items for the state and DHRM to consider are whether to allow employees to receive payment as a lump sum versus an annuitized payment, how the policy would affect the employee leave donation policy, and how the state's payroll and time allocation systems would need to change in order to accommodate this new policy.

There are both advantages and disadvantages to offering a leave cash-in policy, affecting both employees and employers. Advantages of a leave cash-in policy include increased flexibility for employees in modifying their total compensation to best fit their needs and a stabilization of expenditures related to leave payouts by agencies. Additionally, 56 percent of human resources managers surveyed by JLARC indicated that allowing employees to cash-in a portion of unused annual leave each year would make leave benefits more attractive to employees. Disadvantages of a leave cash-in policy include an increase in administrative complexity, an initial increase in spending upon roll-out of the program, and a potential for employees to run out of leave early in the year (Table E-3).

TABLE E-3
Leave cash-in policy would increase employee flexibility and potentially stabilize state costs associated with leave payouts, but could increase administrative complexity

	Considerations
Impact on employees	Creates flexibility for employees and allows employees to convert a benefit they place a low value on (leave) for one they place a high value on (salary).
Impact on state spending	Creates higher level of spending initially, but could reduce amount of leave accruals set aside for future leave payouts at retirement or separation, resulting in a more stable cash outlay over time.
Impact on administrative complexity	Would require state to amend policies, establish an enrollment period, and revise tracking and payroll systems to reflect additional form of pay.
Legal barriers or risks	No barriers or compliance risks identified. Leave payouts would have to be considered as taxable income, and taxed immediately. (Vast majority of employers apply tax as payouts occur).
Impact on state competitiveness	Increased flexibility would enhance the overall employee value proposition for the state and could improve recruitment/retention efforts of agencies.
Potential unintended consequences	Process for adjusting number of eligible leave days and correctly reflecting in employee pay creates potential for errors. Could result in employees running out of leave prior to the year's end if they don't accurately anticipate their use of leave.

SOURCE: JLARC analysis of Mercer's Assessment of Total Compensation Strategies, August 2017.

Appendix F: Analysis of paid parental leave in other states (SB 1412, 2017)

The General Assembly passed SB 1412 in the 2017 legislative session, which provides up to six weeks of paid leave to biological fathers and adoptive parents for the purposes of caring for a child. SB 1412 included an enactment clause delaying its implementation until July 1, 2018, and directing JLARC to conduct an analysis of parental leave benefits for state employees in other states and the cost of providing parental leave benefits to employees of the Commonwealth.

Virginia currently provides paid leave to biological mothers through the state's disability program for the purpose of physical recovery

Virginia provides biological mothers paid, short-term disability leave through the Virginia Sickness and Disability Program (VSDP) (§ 51.1-1110) when the mother is physically unable to work as a result of the pregnancy either prior to or following childbirth. The typical length of this income replacement is 6 weeks, and the percentage of income replacement is dependent upon when an employee began working for the state and their total months of state service (Table F-1). Short-term disability is defined by the VSDP manual as "an illness, injury or other condition, such as surgery, pregnancy, complications from pregnancy or a catastrophic or major chronic condition, that prevents you from performing the full duties of your job." This leave is specifically intended for the physical recovery of the mother, and not for the purposes of caring for a child.

TABLE F-1
Income replacement rates for biological mothers offered by VSDP

	Months of state service	Work days of 100% replacement	Work days of 80% replacement
Employed before July 1, 2009	Less than 60	5	20
	60 or more	25	0
Employed on or after July 1, 2009	Less than 60	0	25
	60 or more	25	0

SOURCE: Code of Virginia § 51.1-1110.
NOTE: Employees must have at least 12 months of state service before they are eligible for disability benefits. Income replacement will not begin until after seven consecutive calendar days from the first day of an employee's disability. During this period, employees may use sick leave, family and personal leave or other eligible leave to cover their absence from work.

While the state does not currently offer any leave specifically intended for the care of a child, eligible employees can use a combination of paid and unpaid leave for this purpose. Eligibility requirements include having at least 12 months of state service in the past seven years and having worked at least 1,250 hours in the previous 12-month period. Employees, including biological mothers following the end of their short-term disability leave, can use annual, family/personal, and a portion of sick leave to care for a child (Table F-2). Additionally, all employees are eligible to take *unpaid* leave through the Family Medical Leave Act (FMLA) for the purposes of caring for a child, during which time they remain in job-protected status for up to 12 weeks (inclusive of any paid leave taken).

TABLE F-2
Classified state employees in VSDP can use several types of paid leave for care of a new child

Leave type	Purpose	Days per year	Max accrual	Carry-over?
Annual	For vacation or other personal purposes	12 to 27	24 to 54	Yes
Family/personal	For any purpose (family, illness, attend a funeral, or other personal needs, etc.)	4 to 5	N/A	No
Sick	For personal illness [a]	2 to 3	N/A	No

SOURCE: Code of Virginia and DHRM policy manual.
NOTE: Figures apply to full-time, classified employees. Available leave and accrual rates vary depending on months of service. Other types of leave that may also be used for bonding include compensatory, overtime, bonus, sign-on, and recognition leave. See DHRM policies for additional details regarding each type of leave.
[a] Employees may use up to 33 percent of their sick leave for absences for family illness or disability that are covered by FMLA.

Employees typically have an average of between 11 and 20 days of paid leave to use for care of a child, if they combine all of their available annual, family/personal, and sick leave. Most new mothers are between 25 and 35 years of age, according to data from the Centers for Disease Control and Prevention (CDC). The average annual leave balance of current employees in this age range was between 5 and 12 days in FY17 (Table F-3). Including family/personal and available sick leave increases the total days to between 11 and 20 days.

TABLE F-3
Average amount of leave available to employees for care of a child by age range

Age group	Average balance of annual leave (days) [a]	Available family/ personal days	Available sick days for care of a child	Total days available for care of a child
Under 25	5	4–5	2–3	11–13
25–30	9	4–5	2–3	15–17
31–35	12	4–5	2–3	18–20
36–40	14	4–5	2–3	20–22
Over 40	23	4–5	2–3	29–31

SOURCE: JLARC analysis of DHRM data and leave policies.
NOTE: Annual leave balances represent a snapshot of employee leave data as of July 15th, 2017.
[a] Rounded to nearest day

Most states do not have a separate parental leave program, but allow employees greater flexibility to use sick leave to care for a new child

Many states allow employees to carry over their sick leave each year and to use such sick leave to care for a new child. All states that JLARC reviewed allow biological mothers to use sick leave for this purpose, while all but two permit biological fathers, and 75 percent permit both adoptive mothers and fathers to use sick leave for care of a new child (Table F-4). Most Virginia employees do not carry over sick leave, and are limited in their use of most of their sick leave to personal illnesses. Allowing employees to carry over sick leave and use it for care of a new child provides employees with a greater amount of leave over time, and acts as a de facto parental leave program. In addition to these other states, many companies and localities that the state competes with for its workforce also provide employees with the ability to use their sick leave to care for a child.

TABLE F-4
Compared to Virginia, flexible sick leave policies in other states provide employees with greater amounts of paid leave that can be used to care for a new child

	Maternity	Paternity	Adoption
# of states	28 of 28 states	26 of 28 states	21 of 28 states
Median # of days	60 days	40 days	35 days
Average # of days available for care of a child (Virginia)	11–31 days	11–31 days	11–31 days

SOURCE: JLARC analysis of NCASG survey data and DHRM data.
NOTE: Includes information on 28 states that responded to NCASG's 2016 Benefits Survey. At least some of the other states listed do not have a short-term disability program similar to Virginia's, so the additional, accrued sick leave would need to be used by employees for extended, medically-necessary absences.

A few states offer employees paid leave specifically designated for the purpose of caring for a child. Five states offer paid parental leave to employees, either through an expansion of the Family and Medical Leave Act or the state's disability program, and nearly all of these states guarantee this leave to both public and private employees. The amount of paid leave provided by these leave policies ranges from 30 to 60 days, as compared to the 11 to 31 days available to Virginia employees. (Table F-5).

TABLE F-5
States that provide paid parental or bonding leave through FMLA

	Max length (days)	Income replacement rate	Max weekly benefit	Waiting period
California	30 days	55%	$553	7 days
New Jersey	30 days	66	505	7 days
Rhode Island	20 days	60	519	7 days
New York	40 days	50	653	None
Washington	60 days	50–90 [a]	1000	None

SOURCE: JLARC analysis of other states' administrative code and leave benefit policies.
[a] Washington's income replacement rate is dependent on how an employee's salary compares to the statewide average, and the weekly benefit cannot exceed 50 percent of the statewide average weekly wage.

SB 1412 does not cover all biological or adoptive parents

SB 1412 would provide a new category of paid leave to biological fathers and some adoptive parents but excludes biological mothers. While this legislation would provide biological fathers and adoptive parents paid leave equivalent with the leave provided to biological mothers under VSDP, the leave provided through VSDP is explicitly intended for medically-necessary absences due to pregnancy, delivery, and recovery, while the leave offered by SB 1412 is intended for bonding with or caring for a child. This is therefore a new category of leave that would be available to some employees, but not others, for the purposes of bonding with or caring for a child.

Virginia should seek a legal opinion on whether SB 1412 would be in violation of Equal Employment Opportunity Commission (EEOC) criteria. EEOC guidelines state that employers are required to provide the same amount of parental leave to men and woman. More specifically, EEOC guidelines regarding the treatment of workers with caregiving responsibilities state:

> While employers are permitted by Title VII [of the Civil Rights Act of 1964] to provide women with leave specifically for the period that they are incapacitated because of pregnancy, childbirth, and related medical conditions, **employers may not treat either sex more favorably with respect to other kinds of leave, such as leave for childcare purposes**. To avoid a potential Title VII violation, employers should carefully distinguish between pregnancy-related leave and other forms of leave.

Extending this logic to SB 1412, if the state offers 6 weeks of paid leave to biological fathers and adoptive parents to care for an infant, and does not extend such leave to biological mothers separately from the leave they receive under VSDP, the state could be at risk of violating Title VII. Staff with the EEOC's Office of Legal Counsel agreed that the state should seek further legal guidance before moving forward with SB1412.

SB 1412 also limits parental leave benefits for adoptive parents to children under the age of one. This limitation creates an inequity between parents who adopt children under the age of one and those who adopt an older child. FMLA standards require that leave for the purposes of caring for an adopted child must be taken within one year of the adoption, regardless of the age of the adopted child.

Modifying SB 1412 to include eligibility for biological mothers and removing the one-year age restriction for adopted children would address both equity concerns discussed above, and better align Virginia with both FMLA and EEOC standards.

Additional costs for parental leave would primarily be incurred from employees who would have otherwise taken leave without pay

Providing paid parental leave under SB 1412 would not result in additional spending for employees who use this leave instead of other forms of paid leave, or who would have otherwise not taken time off from work. Agencies pay the full salary for employees who use annual, family/personal, or sick leave to care for a new child. To the extent employees use parental leave under SB 1412 instead of other paid leave, agencies will save money because parental leave does not provide full income replacement in all cases. Some employees may take parental leave instead of simply not taking time off from work, and in these circumstances agencies will also save money because they would otherwise be paying the employee's full salary.

When employees take additional time away from work under SB 1412 agencies will experience a loss in productivity. But because the parental leave does not accrue or carry over, there is little additional cash outlay or liability for the state. Some agencies may incur increased costs due to spending on overtime or contract workers during employees' absences, but sufficient data is not available to quantify these costs. The fiscal impact statement for SB 1412 provides an estimate of the lost productivity, but JLARC did not conduct an independent estimate because there will be no cash outlay or accrued liability.

Agencies would see a cost increase when employees use parental leave instead of taking leave without pay to care for a new child. Based on a JLARC estimate, SB 1412 would have cost the state between $214,650 and $357,750 in FY17, if it were expanded to include biological mothers (Table F-6). This is based on estimating the number of employees who took leave without pay to care for a new child, and assuming that all of these employees would instead elect to take paid parental leave under SB

1412. This estimate was calculated by analyzing available data on unpaid FMLA claims in Virginia in FY17, salary data for these employees, and estimates provided by the Department of Labor on the usage of FMLA leave, which state that 19 percent of FMLA leave is taken for reasons related to a new child. If SB 1412 is reenacted as currently written, to include only biological fathers and adoptive parents, the fiscal impact would be lower.

TABLE F-6
Calculation estimated increase in state spending as result of SB 1412

Step 1: Estimate number of state employees to take leave to care for a new child

	558	Number of employees who took unpaid FMLA leave in FY17
X	19%	Percent of FMLA claims taken for reasons related to a new child[a]
	106	Estimated number of employees who may have taken leave for reasons related to a new child

Step 2: Estimate total cost of paid leave provided by SB 1412

	106	Number of employees who may have taken leave for reasons related to a new child
	$135	Median daily salary for employees who took unpaid leave in FY17
X	25	Maximum amount of days available of paid leave under SB 1412
	$214,650	Total amount of unpaid salary for employees with less than 5 years of service (60%)
	$357,750	Total amount of unpaid salary for employees with less than 5 years of service (100%)

SOURCE: JLARC analysis of DHRM data on employee leave usage, income replacement rate provided by SB 1412, and Department of Labor's 2012 Family and Medical Leave Act Employee and Worksite Surveys.
[a] Including pregnancy, birth, adoption or foster care.

It is important to note that while this estimate represents an increase in spending, it is still less than budgeted salary spending. Because agency budgets assume paying 100 percent of each employee's salary for the entire year, paying part of that salary for parental leave results in cost savings. However, agencies will not save as much money as they would if these employees took leave without pay instead of the paid parental leave.

Appendix G: Turnover driver analysis

JLARC conducted a binary logistic regression analysis to evaluate the factors that are associated with employee turnover. The regression model included all full-time classified employees for the four-year period from FY13–FY16 (236,277 observations). The dependent variable was whether or not the employee voluntarily left the state workforce during the fiscal year. The model included several independent variables including employee demographics, years of service, and multiple compensation factors (Table G-1).

TABLE G-1
Variables included in JLARC's turnover driver logistic regression model

Variable	Definition
Voluntary turnover (dependent variable)	Whether an employee left the state workforce for reasons other than retirement, dismissal, long-term leave, or death
Age	Age in years at the end of the fiscal year
Gender	Male or female
Percent salary change	Total salary at the end of the fiscal year minus total salary at the beginning of the fiscal year, divided by total salary at the beginning of the fiscal year
Race	Non-white or white
Salary Increase	Yes/no variable indicating at least one salary increase during a fiscal year
Total bonus amount	Totaled amount of any bonuses received
Total bonuses	Number of bonuses received
Ending salary	Total salary at the end of the fiscal year
Years of service*	Date at end of fiscal year minus employee start date
Dummy variables for fiscal year	Dichotomous variable indicating whether an observation was from a particular fiscal year (FY14–FY16)
Dummy variables for job roles+	Dichotomous variable indicating whether an observation was from a particular job role (one for each job role)

*A quadratic term for years of service was also included because the distribution was parabolic.
+These dummy variables were included in the statewide regression model, but not the 10 test models.

The analysis suggested that several variables may influence turnover, including receiving at least one pay increase, an employee's years of service, race, and the total number of bonuses an employee receives in a year. The results for key independent variables and statistics indicating how well the model fit the underlying data are shown in Table G-2, and fit statistics for the model are shown in Table G-3.

The key statistic for logistic regression is called an odds ratio, which is a measure of association between an independent and dependent variable—in this case, between the variables listed in Table G-

1 and voluntary turnover. In this context, an odds ratio less than one means that the odds of turnover may be reduced based on the dependent variable, and an odds ratio of greater than one indicates that the odds of turnover may be increased by a particular variable.

TABLE G-2
Binary logistic regression results for voluntary turnover (N=236,777)

					95% Confidence interval	
Variable	**Odds ratio**	**Standard error**	**z**	**P>|z|**	**UB**	**LB**
Pay increase	0.702	0.016	−15.170	0.000	0.735	0.671
Percent change in pay	0.995	0.001	−6.830	0.000	0.996	0.993
Years of service	0.796	0.003	−57.110	0.000	0.802	0.790
Ending salary	0.997	0.001	−2.500	0.013	0.999	0.994
Age	0.973	0.001	−32.020	0.000	0.974	0.971
Male	1.025	0.021	1.210	0.227	1.068	0.985
White	0.643	0.011	−24.800	0.000	0.666	0.621
Total number of bonuses	0.881	0.024	−4.730	0.000	0.928	0.835
Total bonus amount	0.998	0.026	−0.090	0.925	1.051	0.947
Years of service (quadratic term)	1.003	0.000	19.790	0.000	1.004	1.003

NOTE: Dummy variables for 292 job roles and for FY13–FY16 were excluded from the table for brevity.

TABLE G-3
Fit statistics for JLARC logistic regression model

Pseudo R^2	0.216
LR chi^2 (248)	27872.08
Prob > chi^2	0.000
N	236,277

The regression model did not include several factors that are associated with turnover due to data limitations. A review of literature around the drivers of turnover and turnover intention suggested using a number of variables that JLARC staff did not have access to or could not accurately measure. These variables include but are not limited to the effects of an employee's supervisor or agency leadership, teleworking, flexible schedules, workload, work environment, job satisfaction, public service motivation, performance evaluation results, and opportunities for advancement. The omission of these variables means that their influence could not be accounted for in the regression model.

Appendix H: Analysis of the state's workforce challenges

JLARC conducted extensive data analysis to identify the job roles and agencies experiencing the greatest workforce challenges. JLARC calculated four primary metrics to identify current challenges, or the risk of future challenges:

- vacancy rate (recruitment challenges),
- voluntary turnover rate (retention challenges),
- percent of employees with less than five years of state service (retention risk), and
- percent of employees likely to retire (retirement risk).

The results of this analysis by job role and agency are shown below (Tables H-1 and H-2).

TABLE H-1
Workforce challenges by job role (FY15–FY17 three-year average)

Job role	Number of classified employees	Vacancy rate	Turnover rate	Percent of employees less than 5 years of service	Percent of employees likely to retire
Administrative and office specialist II	2,069	13.3%	5.5%	30.9%	8.4%
Administrative and office specialist III	6,947	10.6	5.1	33.8	6.4
Agricultural specialist III	116	4.6	6.2	35.1	4.9
Agricultural specialist IV	71	11.6	8.1	42.2	6.7
Architect/engineer I	600	9.8	3.7	32.7	7.6
Architect/engineer II	230	11.7	3.6	35.6	4.4
Architect/engineering manager II	240	5.5	2.5	20.2	4.5
Auditor I	106	13.7	6.6	39.8	7.8
Auditor II	132	13.9	5.0	27.1	8.4
Compliance/safety officer III	251	17.4	5.5	29.2	7.3
Compliance/safety officer IV	126	15.7	6.1	16.7	11.2
Computer operations technician I	70	15.2	6.4	45.7	4.2
Computer operations technician II	106	9.9	5.6	31.6	2.2
Counselor I	89	15.6	17.6	54.1	3.0
Counselor II	874	15.0	10.5	39.4	5.0
Counselor manager	83	12.6	2.4	7.7	7.9
Direct service associate II	2,306	27.1	24.4	47.9	3.1
Direct service associate III	1,033	17.4	16.6	37.8	3.4
Education administrator I	53	16.9	6.2	42.7	3.8
Education administrator II	58	21.1	4.6	34.0	6.9
Education administrator III	60	16.4	5.0	19.5	18.8
Education coordinator I	153	16.7	7.7	43.6	5.9

Job role	Number of classified employees	Vacancy rate	Turnover rate	Percent of employees less than 5 years of service	Percent of employees likely to retire
Education support specialist I	74	7.2%	4.2%	65.7%	0.9%
Education support specialist II	876	12.9%	8.9%	51.3%	4.1%
Education support specialist III	735	15.3	8.9	53.1	3.3
Electronic technician II	203	11.2	4.3	29.2	5.7
Emergency coordinator I	122	8.4	14.6	52.2	4.0
Emergency coordinator II	130	18.7	16.6	45.0	2.8
Engineering technician II	83	10.7	4.9	40.0	5.4
Engineering technician III	656	5.4	1.9	15.4	6.6
Engineering technician IV	187	6.9	3.0	17.6	5.3
Environmental manager I	82	4.3	1.6	6.9	4.0
Environmental manager II	102	8.3	1.6	6.5	7.5
Environmental specialist I	525	9.3	5.5	26.7	5.0
Environmental specialist II	747	11.9	3.0	19.1	6.1
Equipment services repair manager I	52	3.1	0.0	5.8	3.8
Equipment services repair technician I	288	4.8	4.1	36.1	3.9
Equipment services repair technician II	192	5.8	2.8	25.5	4.4
Financial services manager I	273	10.2	3.2	17.1	5.2
Financial services manager II	137	9.7	2.4	11.9	3.5
Financial services specialist I	1,332	9.4	3.8	30.6	5.1
Financial services specialist II	400	12.7	3.0	27.6	3.6
Food service manager II	87	7.8	4.4	37.6	3.3
Food service manager III	51	5.6	6.2	24.7	7.9
Food service technician I	358	19.9	11.0	48.7	4.0
Food service technician II	168	9.7	7.4	40.2	2.3
Food service technician III	252	11.7	10.8	45.4	4.9
Forensic science specialist III/forensic scientist II	116	12.5	7.6	39.8	1.8
General administrative manager I	266	9.7	2.8	14.3	6.3
General administrative manager II	203	7.6	1.9	9.3	11.0
General administrative manager III	141	9.0	2.8	16.1	10.4
General administrative supervisor/coordinator I	1,074	7.9	4.4	29.9	5.9
General administrative supervisor/coordinator II	167	11.2	5.6	21.9	4.5
Health care compliance specialist II	226	8.0	2.9	27.4	5.9
Health care technologist II	62	12.5	9.8	45.2	1.6
Hearing and legal services officer I	116	25.0	5.2	19.9	8.6
Hearing and legal services officer II	80	19.5	5.8	46.0	7.1

Job role	Number of classified employees	Vacancy rate	Turnover rate	Percent of employees less than 5 years of service	Percent of employees likely to retire
Housekeeping and/or apparel manager I	106	10.6%	4.5%	26.2%	4.7%
Housekeeping and/or apparel worker I	1,530	11.9%	8.7%	42.1%	5.7%
Housekeeping and/or apparel worker II	212	8.3	6.3	28.3	9.8
Human resource analyst I	278	8.5	6.5	38.9	3.4
Human resource analyst II	205	11.6	3.6	21.8	5.1
Human resource manager I	72	9.7	7.0	23.7	6.1
Human resource manager II	68	14.0	4.4	19.8	8.0
Information technology manager I	117	10.5	2.8	14.1	6.0
Information technology manager II	78	10.6	4.2	11.5	1.7
Information technology specialist I	505	10.5	4.7	45.5	2.7
Information technology specialist II	1,402	11.0	4.9	31.9	4.0
Information technology specialist III	1,039	12.6	4.4	26.6	5.1
Information technology specialist IV	86	14.9	2.2	21.6	6.6
Laboratory and research specialist I	277	26.6	15.0	62.3	1.3
Laboratory and research specialist II	372	18.5	6.6	43.8	4.3
Laboratory and research technician	62	17.2	10.8	51.7	4.3
Land acquisition and property management agent III	54	8.5	4.3	34.8	9.3
Law enforcement manager I	253	4.8	1.6	3.8	1.1
Law enforcement manager II	211	4.4	0.5	1.4	4.9
Law enforcement officer I	285	12.5	13.0	60.1	0.3
Law enforcement officer II	1,207	27.2	7.7	49.0	0.6
Law enforcement officer III	964	8.0	2.3	6.2	1.5
Library specialist I	212	7.1	4.2	28.6	10.9
Library specialist II	223	12.3	6.0	27.2	6.9
Licensed practical nurse	526	25.6	24.8	46.5	2.1
Media specialist II	124	12.4	8.2	52.6	3.1
Media specialist III	220	10.0	5.5	44.0	5.8
Minerals specialist I	102	10.3	1.7	22.3	9.9
Natural resource manager II	81	5.5	1.2	5.4	3.3
Natural resource specialist II	188	16.2	6.9	37.8	5.3
Natural resource specialist III	116	4.7	5.9	28.7	2.0
Physician II	111	25.2	11.5	40.7	15.0
Policy planning specialist I	205	14.2	5.2	25.6	7.5
Policy planning specialist II	353	12.4	4.3	28.0	6.0
Policy planning specialist III	65	11.3	1.0	21.7	5.8

Job role	Number of classified employees	Vacancy rate	Turnover rate	Percent of employees less than 5 years of service	Percent of employees likely to retire
Probation officer assistant	96	8.6	8.2	45.1	9.4
Probation officer I	1,197	7.8%	7.5%	32.8%	2.9%
Probation officer II	159	5.0%	1.3%	1.8%	3.0%
Procurement manager II	73	11.7	3.7	14.5	6.8
Procurement officer I	179	9.6	4.3	22.9	5.2
Procurement officer II	110	14.8	4.5	23.8	5.2
Program administration manager I	62	13.0	6.0	45.4	8.6
Program administration manager II	291	8.8	3.2	17.5	7.5
Program administration manager III	344	9.5	2.7	15.4	12.0
Program administration specialist I	1,854	16.2	8.4	36.4	5.4
Program administration specialist II	1,491	10.8	4.8	31.0	5.9
Program administration specialist III	159	10.1	3.3	17.3	9.3
Psychologist I/psychology associate I	79	23.4	19.5	60.4	4.3
Psychologist II/psychology associate II	130	19.6	12.6	40.9	7.5
Public relations and marketing specialist II	90	17.9	17.4	74.0	0.0
Public relations and marketing specialist III	345	15.9	12.0	62.0	1.1
Public relations and marketing specialist IV	151	13.5	5.8	45.8	5.4
Registered nurse I	537	19.7	20.2	50.5	5.5
Registered nurse II/nurse practitioner I/physician's assistant	646	22.5	18.1	36.1	6.9
Registered nurse III/nurse practitioner II	60	21.1	12.8	33.2	13.4
Registered nurse manager I	250	15.1	9.5	19.8	7.3
Registered nurse manager II	55	9.8	4.2	15.4	10.8
Retail manager I	142	11.2	6.1	36.8	2.6
Retail manager II	182	2.4	3.3	18.6	4.6
Retail specialist II	303	11.7	7.2	59.7	4.1
Scientist I	146	10.7	8.2	45.5	5.0
Scientist II	234	11.0	4.6	23.4	3.2
Security manager I	415	11.5	2.1	2.9	1.1
Security manager II	312	10.6	1.5	1.6	1.6
Security officer III	5,996	15.1	17.0	46.9	1.1
Security officer IV	777	28.1	8.5	20.4	1.0
Store and warehouse specialist II	125	5.8	4.9	40.0	2.7
Store and warehouse specialist III	169	7.0	3.5	22.5	9.7
Therapist II	51	20.0	13.8	34.3	2.0
Therapist III	66	16.8	7.0	25.6	3.4

Job role	Number of classified employees	Vacancy rate	Turnover rate	Percent of employees less than 5 years of service	Percent of employees likely to retire
Therapy assistant/therapist I	96	15.0	14.4	36.8	1.7
Trades manager I	147	7.2%	3.4%	15.0%	6.8%
Trades technician I	202	14.3%	13.9%	43.6%	5.6%
Trades technician II	118	15.7	10.2	54.7	1.5
Trades technician III	1,271	9.0	4.3	29.0	6.8
Trades technician IV	759	7.4	3.3	21.2	6.1
Trainer and Instructor I	173	10.9	7.7	44.0	7.8
Trainer and Instructor II	504	18.0	7.9	34.2	6.4
Trainer and Instructor III	186	10.1	5.0	31.1	6.1
Transportation operations manager I	337	3.1	1.3	8.6	3.0
Transportation operations manager II	225	1.6	0.6	4.6	3.2
Transportation operations manager III	61	3.2	1.6	7.2	2.2
Transportation operator II	2,434	4.5	4.2	36.7	3.9
Transportation operator III	208	9.1	3.2	20.1	4.3
Utility plant specialist II	173	11.9	6.0	29.3	10.0
Statewide totals	**64,977**	**13.2%**	**7.8%**	**4.8%**	**33.8%**

SOURCE: JLARC analysis of DHRM workforce data, FY15–FY17 (three-year averages).
NOTE: Only job roles with a three-year average of at least 50 classified employees were included.

TABLE H-2
Workforce challenges by agency (FY15–FY17 three-year average)

Agency	Number of classified employees	Vacancy rate	Turnover rate	Percent of employees less than 5 years of service	Percent of employees likely to retire
Christopher Newport University	437	10.2%	9.4%	49.5%	2.7%
College of William and Mary	944	14.0	7.7	41.2	5.7
Department Alcoholic Beverage Control	1,060	10.0	5.4	38.0	3.9
Department Conservation and Recreation	397	10.4	3.7	26.0	6.1
Department for Aging and Rehabilitative Services	1,168	10.0	6.1	29.1	7.6
Department for the Blind and Vision Impaired	146	11.7	3.7	30.7	12.8
Department of Accounts	138	8.8	4.1	37.6	3.2
Department of Agriculture and Consumer Services	436	16.4	4.9	28.9	7.3
Department of Aviation	32	2.0	4.1	26.8	2.1
Department of Behavioral Health and Developmental Services	6,738	23.1	17.2	39.4	4.5

Agency	Number of classified employees	Vacancy rate	Turnover rate	Percent of employees less than 5 years of service	Percent of employees likely to retire
Department of Corrections	10,968	13.4	11.6	35.3	2.6
Department of Criminal Justice Services	97	9.1%	5.8%	25.7%	4.5%
Department of Education	401	14.7	8.0	30.0	9.3
Department of Emergency Management	114	22.7	10.2	34.1	4.6
Department of Environmental Quality	778	12.7	2.8	18.5	7.1
Department of Fire Programs	63	7.6	4.9	24.6	10.0
Department of Forensic Science	270	10.4	6.0	30.7	3.0
Department of Forestry	227	6.2	4.1	18.4	3.4
Department of Game and Inland Fisheries	420	11.2	3.8	22.6	5.3
Department of General Services	598	13.6	4.7	28.9	6.8
Department of Health	3,258	12.0	7.4	31.1	6.5
Department of Health Professions	199	7.4	4.0	27.2	4.7
Department of Historic Resources	38	10.7	4.4	37.7	8.8
Department of Housing and Community Development	88	11.3	5.4	38.7	4.5
Department of Human Resource Management	98	8.9	1.0	23.5	5.1
Department of Juvenile Justice	1,617	23.9	10.9	31.0	5.0
Department of Labor and Industry	143	19.3	3.7	26.6	7.2
Department of Medical Assistance Services	391	14.6	3.8	30.8	4.6
Department of Military Affairs	281	8.5	11.6	37.2	9.9
Department of Mines, Minerals, and Energy	192	10.9	2.3	21.4	11.8
Department of Motor Vehicles	1,852	8.9	5.0	28.1	4.9
Department of Planning and Budget	44	12.0	2.3	16.0	2.3
Department of Professional and Occupational Regulation	166	16.8	4.4	23.5	3.4
Department of Rail and Public Transportation	46	16.8	8.2	46.8	3.1
Department of Small Business/Supplier Diversity	31	30.9	12.8	41.5	13.8
Department of Social Services	1,599	8.8	4.0	28.3	8.0
Department of State Police	2,679	17.6	4.8	26.9	2.7
Department of Taxation	806	10.9	3.2	25.5	8.1
Department of the Treasury	105	7.6	5.4	26.2	7.0
Department of Transportation	7,249	5.2	3.0	25.7	5.0
Department of Veterans Services	635	8.4	15.8	52.6	3.4

Agency	Number of classified employees	Vacancy rate	Turnover rate	Percent of employees less than 5 years of service	Percent of employees likely to retire
George Mason University	1,731	14.5	11.7	47.4	4.0
James Madison University	1,332	5.0%	5.6%	36.3%	4.3%
Jamestown-Yorktown Foundation	114	10.1%	5.9%	24.0%	9.2%
Longwood University	310	9.2	6.6	34.4	6.2
Marine Resources Commission	143	11.0	7.2	28.5	6.3
Norfolk State University	473	18.0	10.3	31.9	6.0
Office of the State Inspector General	34	12.2	4.9	31.5	13.0
Old Dominion University	1,030	9.3	8.0	38.1	5.0
Radford University	511	9.9	9.9	43.6	4.0
Richard Bland College	37	28.6	6.2	17.0	5.3
Southern Virginia Higher Education	33	13.2	5.0	53.7	0.0
State Council of Higher Education	32	12.0	2.1	31.3	1.0
The Library of Virginia	114	16.1	1.2	14.9	9.9
The Science Museum of Virginia	58	11.2	7.6	29.8	5.7
University of Mary Washington	328	9.6	7.8	39.1	4.0
University of Virginia	1,184	0.0	0.0	0.0	9.7
Virginia Commonwealth University	2,677	19.9	9.0	42.0	3.7
Virginia Community College System	3,495	14.3	6.8	41.5	5.9
Virginia Employment Commission	702	20.3	3.9	21.5	12.0
Virginia Information Technologies	229	16.5	1.7	14.7	7.1
Virginia Military Institute	281	11.6	7.2	37.3	6.1
Virginia Museum of Fine Arts	129	8.5	8.0	42.9	6.2
Virginia Museum of Natural History	34	4.6	7.9	31.8	7.9
Virginia Polytechnic Institute and State University	2,593	0.0	0.0	40.3	2.8
Virginia State University	329	19.2	5.9	23.7	8.3
Statewide totals	**64,977**	**13.2%**	**7.8%**	**4.8%**	**33.8%**

SOURCE: JLARC analysis of DHRM workforce data, FY15–FY17 (three-year averages).
NOTE: Only agencies with a three-year average of at least 30 classified employees were included.

Appendix I: Potential methodology for strategic investments in salaries

JLARC recommends that the state develop a methodology for informing decisions about how to prioritize salary increases for job roles with the greatest workforce challenges (Chapter 4, Recommendation 4). There are many methodologies that the state could develop, and compensation experts at DHRM and other state agencies are best positioned to develop the methodology that is most feasible and effective for Virginia. JLARC developed the following methodology for consideration. The goal of any methodology should not be to simply bring every employee's salary in line with the market median salary. Instead, the state should aim to pay employees at rates adequate to help address workforce challenges, even if rates are below or above the market median salary.

JLARC's potential methodology for differentiating salary increases by job role

The methodology proposed in this appendix requires actions at both the central and agency levels. Determining salary increases for each *job role* would occur at the central level, with the governor and General Assembly determining the percentage increase, if any, that each job role receives. Agencies would then have the ability to differentiate pay further *at the employee level* to account for individual differences, such as work experience and performance. To effectively implement this methodology, central decision-makers need access to more detailed information about salaries and workforce challenges (Chapter 4, Recommendations 5 and 6), and agencies need the authority to differentiate pay by employee (Chapter 4, Recommendations 7 and 9).

JLARC's proposed methodology would require several actions to be taken as part of the budget development and execution process each year. These steps are described below.

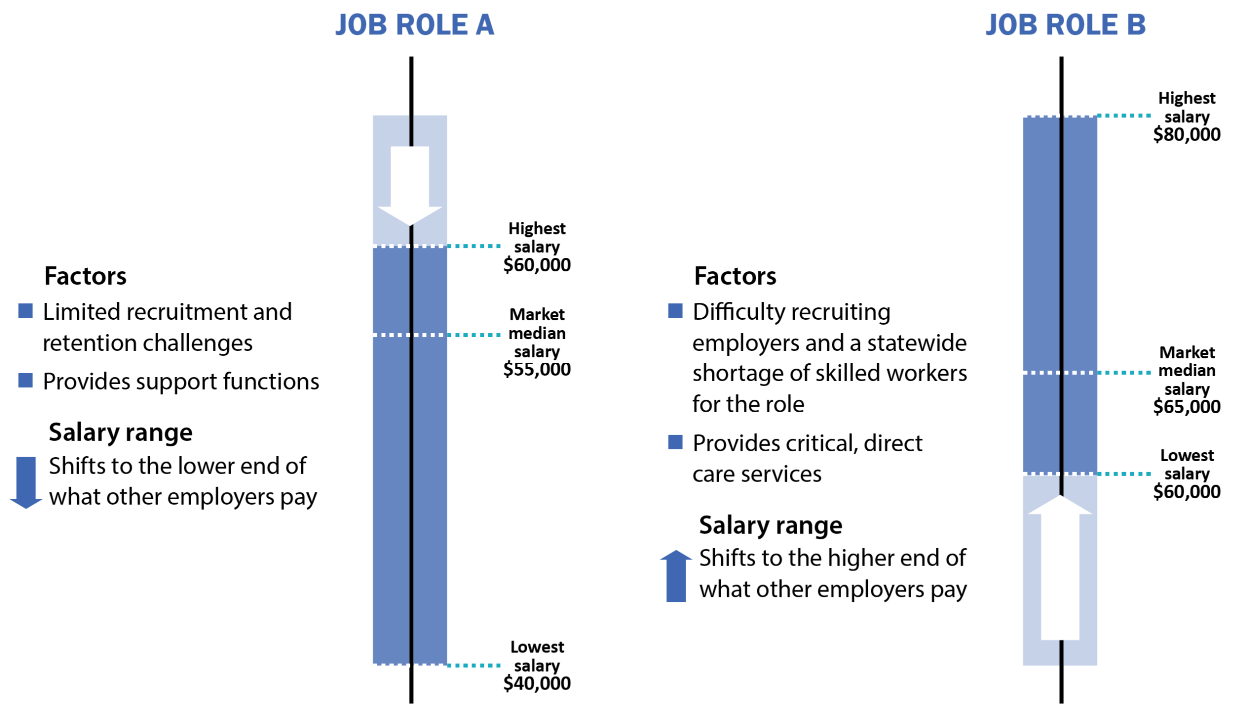
Step 1: DHRM and DPB set target salary ranges for each job role

DHRM, with the assistance of DPB, could establish a target salary range for each job role based on workforce challenges so that decision-makers have a way to determine when salary increases are needed. Target salary ranges would allow decision-makers to determine when pay is appropriate, too low, or too high for each job role. When the average salary for employees in a particular job role is within the target salary range, then the state has met its goal. However, when the average salary is below this range, then pay is inadequate to effectively address or prevent workforce challenges. Alternately, when salary is above this range, then the state is paying more than is necessary to address workforce challenges.

The initial salary range for each job role could be determined based on salaries offered by employers that the state competes with, but ranges would need to be shifted to account for workforce challenges, which vary by job role. The state might also want to consider other factors, such as how critical each job role is, when deciding how to set target salary ranges.

Figure I-1 provides an example of how target salary ranges could vary by job role. In the first scenario, "job role A" does not have major workforce challenges and performs support functions, so the salary range is shifted down in relation to the median salary provided by other employers. However, in the second scenario, "job role B" experiences significant recruitment issues and performs mission-critical functions; this justifies shifting the salary range up in relation to the median of what other employers pay, to ensure that there are enough qualified staff to perform these functions.

FIGURE I-1
Target salary ranges could be established for each job role and shifted as needed to account for workforce challenges

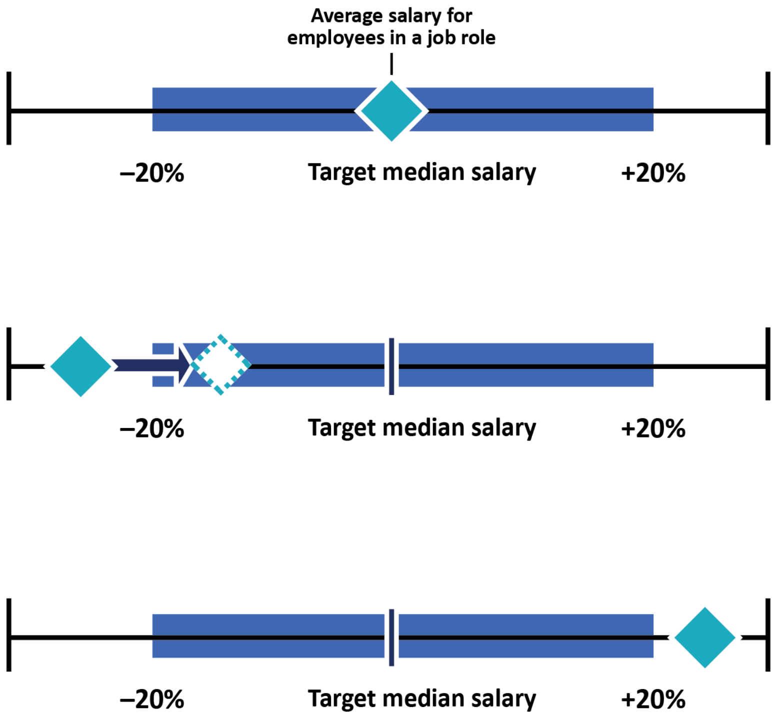


NOTE: Scenario is hypothetical and for illustration only. Market median is used because average salary data is not reported by other employers.

Step 2: Compare the average salary for each job role to the target salary range

DHRM would calculate the average salary for employees in each job role on an annual basis to determine where it falls in relation to the established target salary range (Figure I-2). (Using the average salary for these calculations, instead of the median, is necessary to calculate the funding necessary to provide a certain percentage salary increase to all employees in a job role.) There are three possible outcomes: the average salary is either above, below, or within the target salary range.

FIGURE I-2
DHRM compares the average salary for each job role with the target salary range



Within target salary range
Salaries are appropriate to address or prevent workforce challenges.
Not a priority for salary increases.

Below target salary range
Salaries are too low to help effectively address workforce challenges. Increase salaries so that the average salary is within the target range.
These jobs are a priority for salary increases.

Above target salary range
Salaries exceed the level necessary to address or prevent workforce challenges.
Not a priority for salary increases.

NOTE: Scenario is hypothetical and for illustration only.

Step 3: Decide the percentage increase that each job role should receive

DHRM and DPB would need to calculate the funding necessary to bring or maintain the average salary for each job role within its target range. Below is a proposed method that DHRM and DPB could use to calculate these percentages.

- **Job roles <u>below</u> target salary range:** Calculate the amount necessary to bring the average salary for each job role to the bottom of the target range. The total funding necessary would be the difference between the bottom of the target range and the average salary, multiplied by the number of employees. This calculation should also account for how much other employers intend to increase salaries because this will raise the bottom of the target range.
- **Job roles <u>within</u> the target salary range:** Calculate the amount necessary to avoid having the average salary fall below the target range. The total funding necessary would be the average percentage salary increase provided by other employers, multiplied by total salaries in these job roles.
- **Job roles <u>above</u> the target competitive range:** Calculate an increase that will keep salaries growing, but salaries do not necessarily have to fully keep pace with other employers. For example, the total funding necessary could be equal to half of what other employers are providing, multiplied by the total salaries in these job roles.

Step 4: Secretary of Administration provides a report with proposed salary increases to the governor, and the governor responds in conjunction with the executive budget

The Secretary of Administration submits a report with investment priorities to the governor and chairmen of the House Appropriations and Senate Finance Committees. These priorities would be structured to accomplish different policy goals. The highest priority would be to address the most pressing workforce challenges by bringing the job roles with salaries below the target salary range up to at least the bottom of that range. The next highest priority would be to provide some level of increase to other job roles, to avoid having those jobs fall below their target salary range. These priorities can both be accomplished in any given year if sufficient funding is available. However, even when sufficient funding is not available, some level of investment should be provided to address the state's most pressing workforce needs.

Highest priority

> **Goal:** Address *only* the most pressing workforce challenges.
>
> **Approach:** Invest enough funding to bring the average salary for all job roles at least to the bottom of the target salary range. This approach focuses investments on the most pressing issues, but it would not help *prevent* workforce challenges because it would not provide some amount of increase to other job roles as well.

Next highest priority

> **Goal:** Prevent future workforce challenges by providing some amount of salary increase to employees in job roles that are not experiencing workforce challenges.
>
> **Approach:** Invest in job roles that are not experiencing workforce challenges to mitigate the risk of future issues. The increases provided would still be differentiated by job role depending on whether the job role is within the established target salary range, or above it.

The governor would decide which priorities to include in the executive budget based on the administration's policy goals and the amount of funding available that year.

Step 5: The General Assembly appropriates a total amount of funding for salary increases for each job role.

The General Assembly would make amendments to the salary investments proposed in the executive budget during the legislative session each year. Once the budget is passed by the legislature and signed by the governor, DPB would allocate the funds that each agency should receive based on the percentage increase determined for each job role and the number of employees in each job role at that agency. For example, agencies would receive a larger percentage increase for employees in the highest priority job roles with the greatest workforce challenges. If funding is also provided for other job roles, agencies would receive funding for the percentage increase that was appropriated for those job roles, depending on the final budget. If funding is appropriated only for the highest priority job roles, some agencies may not receive any new appropriations for salary increases (Table I-1).

TABLE I-1
Calculate total appropriations for an agency based on number of employees in each job role

	Category	Number of employees	Average salary increase in final budget	Average salary	Total funding agency receives
Nurse	Within range	10	2%	$64,000	$12,800
Probation officer	Below range	30	5	43,000	64,500
Admin/Office specialist	Above range	15	1	54,000	8,100

NOTE: Scenario is hypothetical and for illustration only.

Step 6: Agencies distribute the total funding they have received based on individual factors.

Agencies receive the total appropriation amount determined in Step 5 from the General Assembly. If agencies are provided the authority to differentiate pay for individual employees (see Chapter 4, Recommendation 9), then they do not have to give the same percentage salary increase to every employee. For employees in job roles that receive larger salary increases based on their workforce challenges, agencies would have the flexibility to distribute funds based on employee-specific factors, such as work experience, job responsibilities, and performance, as long as the total amount of salary increases provided for employees in that job roles does not exceed the funding appropriated in the budget.

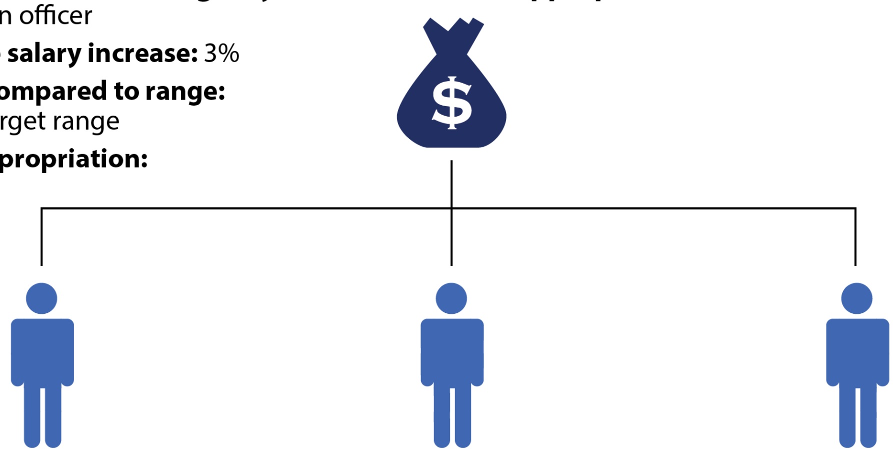
For job roles that receive smaller salary increases to keep pace with other employers and prevent future workforce challenges, agencies would be provided with the same flexibility. Agency leadership could distribute salary increases based on the same employee-specific factors, as long as the total amount of salary increases for employees in that job role does not exceed the funding appropriated in the budget. Figure I-3 illustrates how an agency could distribute funds among employees within the same job role.

To ensure consistency, DHRM could require agencies to consider the following individual factors when aligning salaries: job responsibilities, work experience, and performance. DHRM also could set upper and lower limits for salary increases to ensure that all employees receive some amount of a raise and that the aggregate increase does not exceed the amount of appropriated funds. In the example above, the lower limit is one percent and the upper limit is five percent, but the agency can decide how much to distribute to each employee within those parameters.

FIGURE I-3
Agency provides different salary increases to employees based on individual factors

Job role:
Probation officer
Average salary increase: 3%
Salary compared to range:
Below target range
Total appropriation:
$64,500

Agency distributes funds appropriated



Employee A: 1%
1 year of work experience

Employee B: 3%
5 years of work experience

Employee C: 5%
10 years of work experience

NOTE: Scenario is hypothetical and for illustration only. In reality, multiple factors would be considered by agencies to increase salaries by different percentages across their employees.

Appendix J: 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 the Secretary of Administration, the Secretary of Finance, the Department of Human Resource Management, the Department of Planning and Budget, and the Virginia Retirement System.

Appropriate corrections resulting from technical and substantive comments are incorporated in this version of the report. This appendix includes response letters from the following:

- Department of Human Resource Management
- Virginia Retirement System

COMMONWEALTH of VIRGINIA

Department of Human Resource Management

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November 3, 2017

Mr. Hal E. Greer, Director
Joint Legislative Audit and Review Commission
919 East Main Street
Suite 2101
Richmond, Virginia 23219

Dear Mr. Greer:

Thank you for the opportunity to review the exposure draft of the 2017 Joint Legislative Audit and Review Commission (JLARC) *Total Compensation for State Employees* report. A critical component to building and sustaining a productive public workforce is an effective total compensation strategy that maximizes the value proposition of the Commonwealth. We fully endorsed the recommendation of the Commission on Employee Retirement Security & Pension Reform (the Commission) that JLARC conduct this study, and we are very impressed with the talent that you assigned to this project. Our November 1st discussion regarding the exposure draft recommendations was productive, and we appreciate this opportunity to emphasize various areas of the report.

Because of the July 2017 funding of the recommendations of the Commission that i) DHRM establish a Workforce Planning and Succession Planning Program, ii) develop a statewide Exit Survey, and iii) restore the subscription to Occupationally Based Compensation Data Services, we have already implemented strategic and tactical measures that advance many of the recommendations in the JLARC report. We appreciate your acknowledgement that additional, supplemental resources are essential to fulfilling the recommendations.

As stated in the JLARC report, the Governor, General Assembly, and agency leaders are responsible for an effective compensation program for state employees. The best way to reinforce the shared accountability for employee compensation and talent management is through appropriated salary adjustments and agency utilization of flexible pay practices. A stable funding mechanism combined with executive and legislative commitment to making employee compensation a budget priority are the crucial missing components of the total compensation strategy of the Commonwealth. For these reasons, we support the recommendation to convene a workgroup of agency human resource directors and state finance leaders to develop a methodology for determining the base amount of funding that should be appropriated for state employee salary increases each year. We further encourage the workgroup to consider effective solutions to issues that emerge during the fiscal year that require funding.

To maintain a competitive edge in the market, providing paid time off (PTO) is a definite win-win for both the employee and the employer. The Commonwealth has an extremely complex legislated leave program. DHRM has long supported simplifying the leave program to make it easier to use, understand and administer. We welcome an opportunity to transition to a PTO program.

We agree that paid parental leave is an attractive recruitment tool, especially for younger workers. It is important to maintain a distinction between access to disability benefits for birth mothers and paid parental leave for bonding. DHRM also concurs that SB1412, as amended, does not provide bonding benefits to birth mothers that are comparable to those of birth fathers or adoptive parents. We can identify no clear business rationale for applying the same disability plan eligibility rules to a parental leave plan.

Finally, the report states that increased spending on health insurance is due to the increasing costs of providing these benefits, and not an expansion of benefits. In recent years when no employee salary increases were awarded, the Commonwealth often paid the entire premium increase in order to mitigate the impact on employees, which increased the Employer portion of the health insurance premium. Changes in the health benefits program could impact employee total compensation.

Thank you again for the opportunity to comment on the JLARC report. We support the JLARC recommendations and look forward to their consideration by the Commission.

Sincerely,

Sara R. Wilson

Sara Redding Wilson

cc: The Honorable Nancy Rodrigues
Secretary of Administration

Virginia Retirement System

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Richmond, VA 23218-2500
Toll-free: 1-888-VARETIR (827-3847)
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Fax: 804-786-1541

Patricia S. Bishop
Director

November 3, 2017

Mr. Hal E. Greer
Director
Joint Legislative Audit and Review Commission
919 East Main Street, Suite 2101
Richmond, Virginia 23219

Hal

Dear Mr. Greer:

Thank you for the opportunity to review the exposure draft of the JLARC report, Total Compensation for State Employees. My staff and I appreciate the considerable amount of time and research that has gone into producing this report, and we believe that stakeholders will find it informative and thoughtfully drafted. This is a dynamic time for the Commonwealth and having this report will be of great assistance to members of the General Assembly as they consider a range of compensation options.

As you know, since 2010, the Commonwealth has engaged in a series of comprehensive pension reform initiatives related to plan design changes and funding. The implemented plan design changes have served to lower the cost of future benefits and introduced risk sharing with employees, thereby reducing potential future unfunded liabilities. Another key component of pension reform has been codifying funding discipline and ensuring that the Board certified rates are fully funded. This commitment has been clearly demonstrated by developing and executing an accelerated payback of deferred contributions from the 2010-2012 biennium and fully funding the actuarially required contribution rates ahead of the statutory schedule. These actions improve the health of and avoid adding future costs to the plans.

With this context in mind, we would like to take this opportunity to reemphasize the point that all Hybrid Retirement Plan members do not contribute the maximum 4% voluntary contribution. An employee in the Hybrid Retirement Plan who contributes the maximum 4% voluntary contribution, for a total contribution of 9% of creditable compensation, can achieve a retirement benefit that is similar or equal to that of a Plan 1 or 2 retiree with similar pay and years of service. Our statistics, as noted in the report, show that the majority of hybrid plan members do not contribute the maximum voluntary amount of 4%, although the percentage of hybrid plan employees who are contributing the maximum voluntary contribution has continually increased and is now above 20%.

In addition, the statutorily required auto-escalation feature has proven successful in increasing the voluntary contributions for members and has a low opt-out rate. However, 0.5% auto-escalation every three years means that it would still take over 20 years for an employee to reach the maximum voluntary contribution through auto-escalation alone. Therefore, a comparison that assumes that 100% of hybrid plan members are contributing the maximum voluntary contribution amount of 4% does not provide a comprehensive estimate of actual retirement benefits for these members compared to the benefits provided by other employers included in the analysis. In addition, in light of the Commonwealth's significant pension reform efforts, it is important to further clarify that some of the comparisons reflect Plan 1 and Plan 2 combined with enhanced hazardous duty benefits. As these plans are not open to new members and the enhanced hazardous duty provisions are specific to a limited population of employees, the value of the retirement benefit when compared with those provided by other employers may be somewhat overstated, particularly when the other employer plans being compared include only those provisions for new entrants.

Another area of the report focuses on savings related to the more cost-efficient design of the Hybrid Retirement Plan. While it is true that over time the Hybrid Retirement Plan design will result in a lower-cost benefit, employer contributions also include payments toward the amortization of the legacy unfunded liability. Therefore, basing potential savings on the normal cost of the hybrid plan alone does not account for the reality that the full savings represented by the Hybrid Retirement Plan will not be fully realized until it becomes the dominant plan and the legacy unfunded is fully paid off. As significant efforts have been committed to successfully implementing pension reforms and funding efforts have been closely scrutinized by the bond-rating agencies, proposals suggesting the deployment of practices where unrealized savings are captured would be a retreat from the proven and ongoing progress made through substantial pension reforms.

Thank you again for the opportunity to comment on the exposure draft. We are available to provide additional information to JLARC, members of the General Assembly and the Administration as the recommendations set out in the report are considered.

Sincerely,

Patricia S. Bishop
Director

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