

EVALUATION OF POLICIES TO IMPROVE STATE PERSONNEL RECRUITMENT AND RETENTION



DEPARTMENT OF LEGISLATIVE SERVICES 2023

Evaluation of Policies to Improve State Personnel Recruitment and Retention

**Department of Legislative Services
Office of Policy Analysis
Annapolis, Maryland**

January 2023

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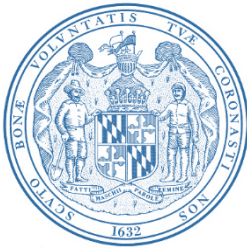
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DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF POLICY ANALYSIS
MARYLAND GENERAL ASSEMBLY

Victoria L. Gruber
Executive Director

Ryan Bishop
Director

January 9, 2022

The Honorable Bill Ferguson, President of the Senate
The Honorable Adrienne A. Jones, Speaker of the House of Delegates
Members of the General Assembly

Dear President Ferguson, Speaker Jones, and Members of the General Assembly:

To address the extraordinarily high position vacancy rates in State government, the Department of Legislative Services has prepared an *Evaluation of Policies to Improve State Personnel Recruitment and Retention*. The report reviews vacancy trends over the past decade; evaluates salary, fringe benefit, and workplace issues; and makes several policy recommendations to reduce vacancy rates.

The report has seven chapters. Chapter 1 reviews vacancy trends since fiscal 2008. Chapter 2 examines labor force trends, characteristics of the State workforce, and data on employee separations from State service. State personnel management policies and procedures are reviewed in Chapter 3. Chapter 4 includes data on State salaries, a comparison of the pay of State positions with high vacancy levels compared to the pay offered for similar positions in other organizations, the effectiveness of the Annual Salary Review process, and longevity pay. In Chapter 5, fringe benefits such as child care services and telework policies are analyzed. Potential changes to the workplace, including management training, job sharing, succession planning, and apprenticeships, are examined in Chapter 6. Recommendations made in the previous chapters are summarized in Chapter 7.

This report was prepared by Richard L. Duncan, Jason A. Kramer, Heather N. MacDonagh, and Michael C. Rubenstein, under the direction of Patrick S. Frank. Elizabeth A. Bateman, Emily R. Haskel, and David A. Smulski also contributed to the report. Katylee M. Cannon and Brett A. Ogden provided administrative support.

Sincerely,

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Chapter 1. State Agency Vacancy Rates Are Exceptionally High

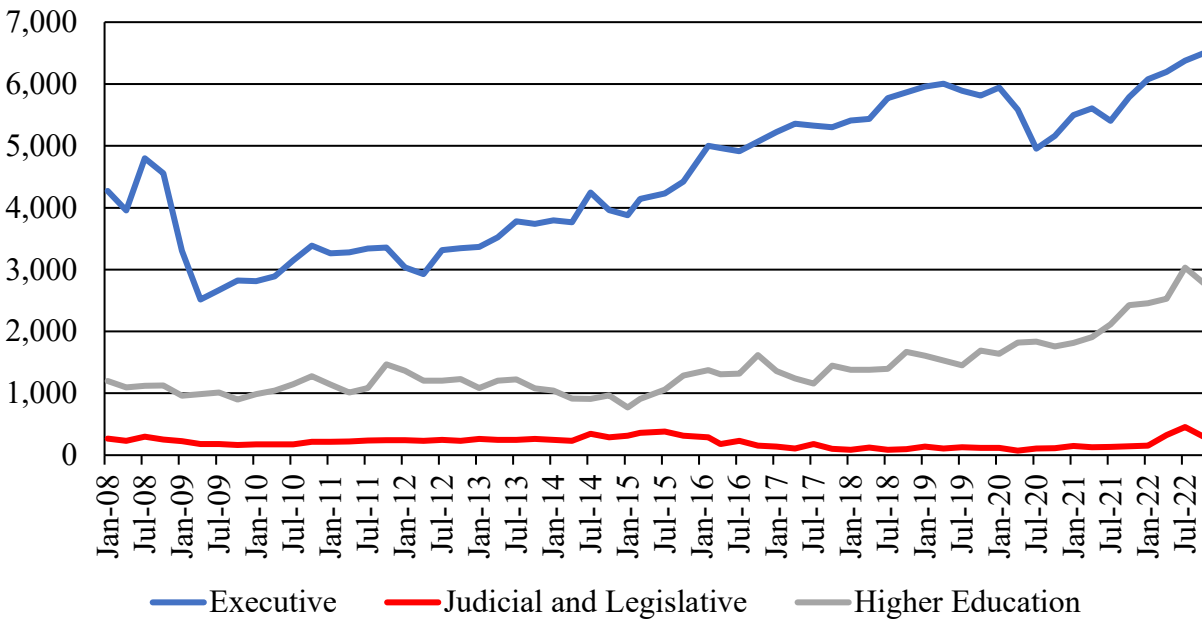
In recent years, the State has struggled to fill authorized positions. The State budget process recognizes that all positions will not be filled at all times, so agency budgets are reduced by a turnover rate that reflects anticipated vacancies. While agencies' vacancies occasionally exceed 10% of authorized positions, such a high level of vacancies was uncommon in prior years. Recently, this rate has become the norm. High vacancy rates have adversely affected agency performance.

Vacancy Rates Increased during the Pandemic and Are Still Exceptionally High

Since 2009, the number of vacancies in the Executive Branch of State government has been on a steady upward climb with only small interruptions, some of which were due to the abolition of hundreds of vacant positions. This trend coincides with a slow reduction in the authorized size of the State workforce and a nationwide shock to the labor force from the COVID-19 pandemic and its subsequent recovery. The vacancy issue plagues many areas of State government, and its effects can be seen in many ways, from increased turnover and overtime to high caseloads, and to delays in the implementation of projects and legislative reforms.

The Executive Branch (excluding higher education) has nearly 6,500 vacant positions as of October 2022, continuing a trend of increased vacancies in State government employment dating back to 2009. When higher education and the Legislative and Judicial branches are included, there are more than 9,500 vacant State positions, as shown in **Exhibit 1.1**.

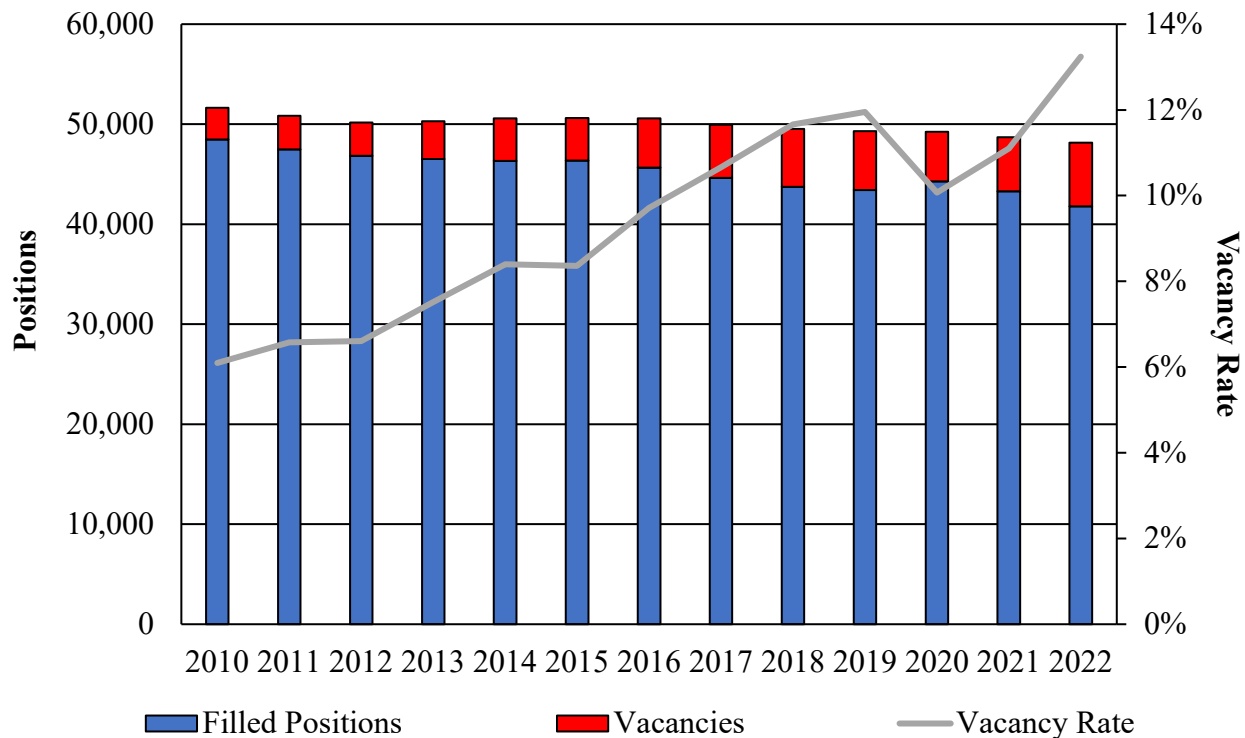
Exhibit 1.1
Vacant Positions
Calendar 2008-2022



Source: Department of Legislative Services

The increase in vacancies comes during a period of reductions in the authorized size of the Executive Branch workforce, with total authorized positions most notably falling from 51,633 in 2020 to 48,152 in 2022, a reduction of nearly 3,500 positions. The combination of a decreased size of the authorized workforce and the increase in the number of vacant positions has led to the vacancy rate increasing from 6% in 2010 to over 13% currently, as shown in **Exhibit 1.2**. The number of filled positions has dropped dramatically since fiscal 2010, when there were 48,810 employees in the Executive Branch (excluding higher education) to perform the duties and responsibilities of State government. As of October 2022, there were 41,815 filled positions, a 14.3% reduction in the State workforce.

Exhibit 1.2
Executive Branch Vacancy Rate
Calendar 2010-2022



Source: Department of Legislative Services

Prior to 2019, double-digit vacancy rates were not widespread and were seen primarily in the Department of Public Safety and Correctional Services (DPSCS), the Maryland Department of Labor, and the Department of Information Technology. However, as **Exhibit 1.3** shows, as of October 2022, all but two State agencies (the Department of Housing and Community Development and the Department of Commerce) have vacancy rates above 10%. The average vacancy rate among the six largest agencies is 14.1%.

Exhibit 1.3
Executive Branch Vacancy Rates by Department
January 2016 to October 2022

<u>Department/Service Area</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2022 (Oct.)</u>
Largest Six State Agencies								
Public Safety and Correctional Services	9.9%	12.1%	18.2%	19.3%	18.2%	16.5%	14.1%	16.2%
Human Services	7.5%	8.3%	7.8%	11.9%	9.9%	10.5%	12.9%	15.8%
Health	6.9%	10.1%	9.5%	8.3%	11.9%	12.0%	14.7%	14.0%
Police and Fire Marshal	11.5%	9.5%	12.7%	11.7%	8.5%	10.4%	13.1%	11.6%
Juvenile Services	11.7%	10.6%	10.2%	10.5%	9.0%	6.9%	12.7%	16.5%
Transportation	5.8%	7.5%	7.0%	6.6%	6.2%	7.9%	10.0%	10.6%
<i>Average</i>	<i>8.9%</i>	<i>9.7%</i>	<i>10.9%</i>	<i>11.4%</i>	<i>10.6%</i>	<i>10.7%</i>	<i>12.9%</i>	<i>14.1%</i>
Other Executive Agencies								
Legal (Excluding Judiciary)	7.5%	8.1%	9.1%	9.3%	8.0%	9.8%	12.2%	10.2%
Executive and Administrative Control	7.9%	10.5%	10.2%	10.5%	11.4%	12.9%	11.4%	11.3%
Financial and Revenue Administration	10.6%	8.6%	8.0%	10.6%	10.1%	11.5%	12.4%	10.8%
Budget and Management and DoIT	9.8%	8.7%	11.1%	14.9%	15.7%	11.0%	12.4%	11.0%
Retirement	12.6%	8.6%	5.7%	9.5%	14.8%	14.4%	12.2%	13.4%
General Services	8.8%	9.5%	12.9%	11.1%	10.8%	8.3%	10.4%	12.7%
Natural Resources	5.1%	7.4%	9.7%	8.7%	10.4%	8.6%	12.9%	10.4%
Agriculture	11.7%	8.5%	8.8%	12.8%	10.2%	12.0%	15.4%	14.8%
Labor	3.8%	13.3%	15.4%	15.5%	13.5%	14.2%	9.5%	11.9%
MSDE and Other Education	3.5%	8.7%	9.0%	8.3%	11.2%	11.1%	15.4%	17.4%
Housing and Community Development	6.2%	7.4%	8.1%	4.5%	7.6%	8.8%	6.0%	9.6%
Commerce	10.2%	6.2%	5.2%	8.5%	13.8%	8.0%	11.2%	6.9%
Environment	7.7%	9.3%	7.5%	10.8%	13.4%	13.5%	9.6%	10.2%
<i>Average</i>	<i>8.1%</i>	<i>8.8%</i>	<i>9.3%</i>	<i>10.4%</i>	<i>11.6%</i>	<i>11.1%</i>	<i>11.6%</i>	<i>11.6%</i>

DoIT: Department of Information Technology
MSDE: Maryland State Department of Education

Note: Rates are for January of each year with the exception of the October 2022 column.

Source: Department of Legislative Services

While the vacancy issue is widespread across State government, the top 10 classification series represent 1,453 vacancies, or about 22% of vacant positions, as shown in **Exhibit 1.4**. Some of the positions are within one department, like correctional officers in DPSCS and family investment specialists in Department of Human Services, while others span most areas of State government, such as administrators, program managers, and office secretaries. This concentration of vacancies may provide opportunities for targeted efforts, a policy that is discussed later in this report.

Exhibit 1.4
Vacant Positions by Classification Series
August 2022

<u>Classification Series</u>	<u>Vacancies</u>
Correctional Officer	248
Administrator	244
Family Investment Specialist	209
Correctional Officer Lieutenant	135
Administrative Officer	125
Social Worker Family Services	124
Program Manager	116
Office Secretary	96
Parole and Probation Agent	79
Administrative Specialist	78

Source: Department of Legislative Services

Reduced Workforce Adversely Affects State Agency Performance

The high number of vacancies in State government impacts State agencies in a variety of ways, discussed below.

Increased Use of Overtime

High vacancies can lead to high overtime costs to fully staff 24/7 shifts. Including time off, it takes almost five full-time positions to staff one 24/7 position. Chronic staff shortages at State facilities, such as the Clifton T. Perkins Hospital Center and the Spring Grove Hospital Center, have resulted in large increases in overtime spending, from approximately \$27 million in fiscal 2019 to more than \$35 million in the fiscal 2023 working appropriation. Overtime costs at DPSCS, primarily due to correctional officer vacancies, are nearly \$150 million annually.

High Caseloads

Staff shortages at certain agencies require existing employees to take on a higher workload. At the Office of the Chief Medical Examiner, a 17% decline in medical examiners in fiscal 2021 led to a caseload ratio of 390 autopsies per year, far above the national standard of 325 per year. The Office of the Attorney General has noted that the high vacancy rate there has resulted in high caseloads for existing employees, leading to higher turnover.

Failure to Perform Required Duties

The lack of employees can result in the failure of State agencies to perform required duties. At the Office of Health Care Quality, an 18% vacancy rate had led to difficulties in meeting mandates for surveys and inspections of developmental disability units and assisted living units. At the State Department of Assessments and Taxation, high vacancy levels harmed the agency's ability to conduct assessments, leading to a backlog of cases that also impacted the Property Tax Assessment Appeals Board, which delayed hearings due to a lack of available assessors to attend hearings.

Difficult Implementation of Legislative Reform

The Maryland General Assembly has passed significant public safety and education reforms in recent years. A lack of staffing at agencies responsible for the implementation of these reforms could hinder their progress. At DPSCS, 30% of administrative positions are vacant, which may delay criminal justice reform. And a 20% vacancy rate at the Maryland State Department of Education could similarly slow the implementation of the Blueprint for Maryland's Future.

Chapter 2. Workforce Characteristics

This chapter examines the U.S. labor force's characteristics and trends, characteristics of the State workforce, and separations from State employment.

U.S. Labor Force Trends

The U.S. labor force has grown modestly in recent decades and is expected to continue along that path over the next decade. Since 1995, the labor force has increased by an average of 0.8% annually. In September 2022, the U.S. Bureau of Labor Statistics (BLS) estimates that the labor force will increase at an annual average rate of 0.5% through calendar 2030. Much of the growth in the workforce is older workers staying in the workforce longer. The labor force participation rate for men aged 25 to 54 has continued to decline, while the rate for women has stabilized at about three-quarters of the population participating in the labor force. In 2021, the workforce was considerably more educated than in 1995, as the number of workers with college degrees increased from 32 million to 61 million. Occupations with the highest growth were in professional, management, and other related occupations, which added 29 million jobs and absorbed higher numbers of college-educated workers. Details about these key trends follow.

- ***The Labor Force Is Getting Older:*** From 1995 to 2021, the share of the labor force that is 55 and older almost doubled (increasing from 11.9% in 1995 to 23.4% in 2021). Over the same period, the share of the labor force between 25 and 54 years old declined from 71.9% to 63.8%. **Exhibit 2.1** shows that the number of workers aged over 55 increased more than the labor force's annual growth rate, while workers aged under 55 increased at a rate that was less than the average growth rate.

Exhibit 2.1
Share of U.S. Labor Force by Age
Calendar 1995 and 2021
(in Millions)

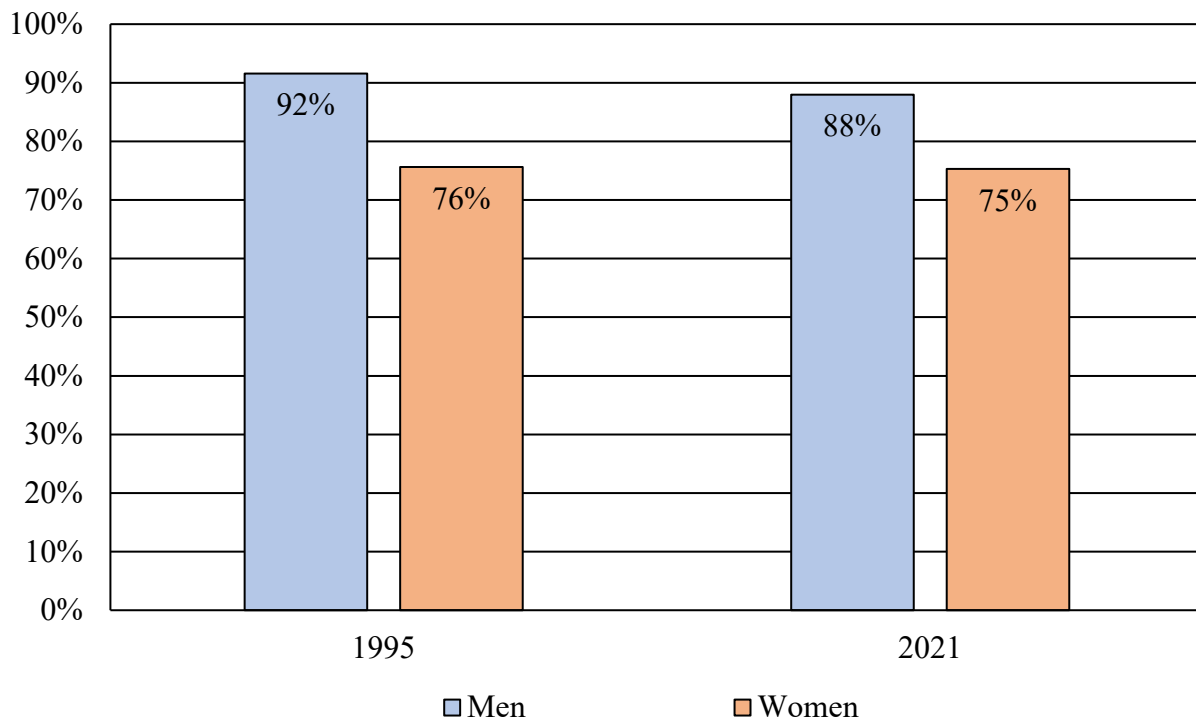
	<u>1995</u>	<u>2021</u>	<u>Increase</u>	<u>Total % Change</u>	<u>Annual % Change</u>
Total Labor Force	132.3	161.2	28.9	21.8%	0.8%
Under 25 Years	21.5	20.7	-0.8	-3.6%	-0.2%
25 to 54 Years	95.2	102.9	7.7	8.1%	0.3%
55 to 64 Years	11.9	27.0	15.2	128.1%	3.5%
65 Years and Over	3.8	10.6	6.8	177.6%	4.3%

Note: The number of workers over the age of 24 peaked in 2019 and declined modestly in 2021. Annual percent changes in 2021 are within 0.1% of 2019 percent changes for all categories.

Source: Bureau of Labor Statistics, Current Population Survey

- Labor Force Participation Rates for Men Continue to Decline While Rates for Women Have Stabilized:*** Exhibit 2.2 shows data for people that are 25 to 54 years old, which is almost two-thirds of the labor force. This segment minimizes the effects of age, since people that are older and younger are less likely to be in the labor force. The decline in men's labor force participation over this period continues a long-term trend; in calendar 1967, the labor force participation rate for men was 97%. In the decades prior to calendar 1995, the number of women participating in the labor force increased steadily, from 47% in 1967 to 74% in 1991. Self-reported data from the BLS Current Population Survey suggests that the most common reason for women not to be in the labor force is caregiving requirements, and for men, the most common reason is illness or disability.

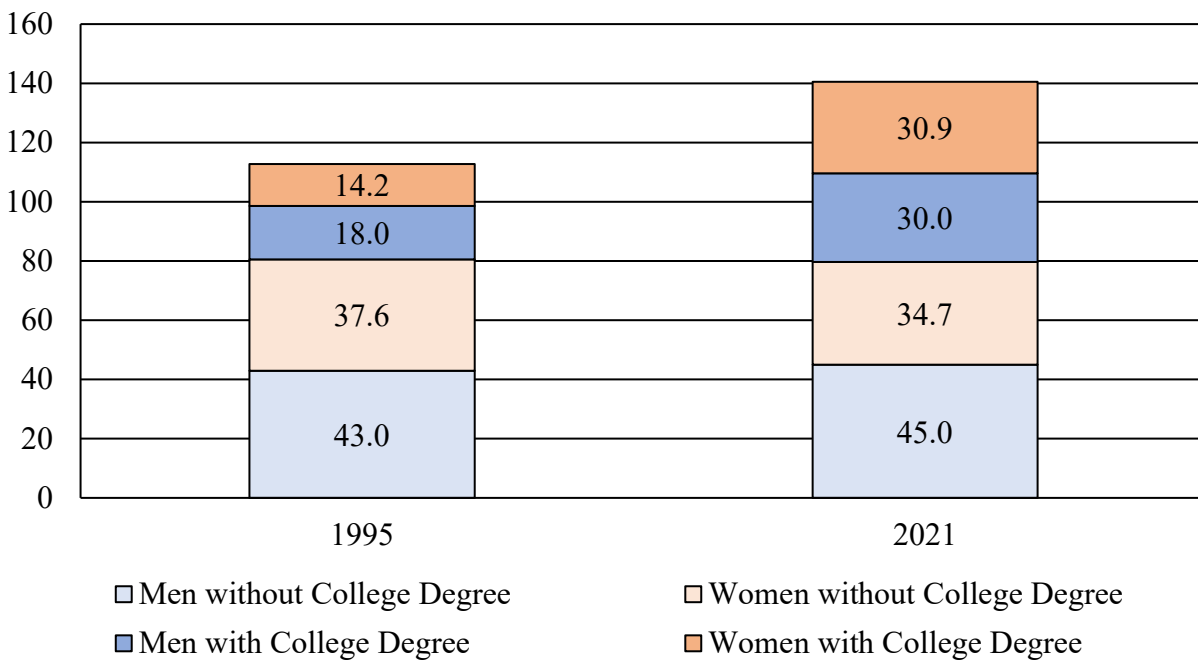
Exhibit 2.2
Labor Force Participation Rates for Workers Ages 25 to 54
Calendar 1995 and 2021



Source: Bureau of Labor Statistics, Current Population Survey

- ***A Larger Share of the Labor Force Has Four-year College or Advanced Degrees:*** The number of workers in the labor force without college degrees was essentially unchanged from calendar 1995 to 2021. The increase in labor force participation is entirely among college-educated workers. **Exhibit 2.3** shows that by 2021, the number of women with college degrees exceeded the number of men with college degrees. For women, the changes from 1995 to 2021 are not the share of women working but rather higher educational attainment of working women. Exhibit 2.1 shows a decline in the number of workers under 25 in the labor force. This may reflect larger shares of the population choosing to opt out of the labor force to earn a college degree. BLS also reports that there are 9.5 million women and 6.2 million men with college degrees who are not in the labor force.

Exhibit 2.3
U.S. Labor Force by Education
Calendar 1995 and 2021
(in Millions)

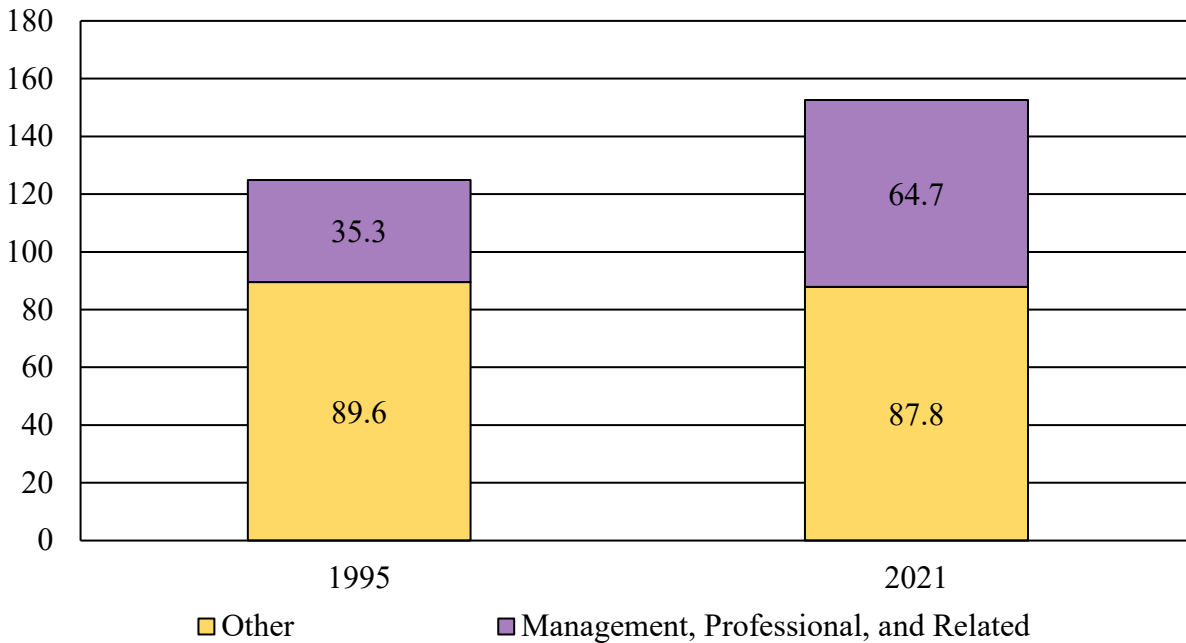


Note: The data is for workers that are 25 years or older.

Source: Bureau of Labor Statistics, Current Population Survey

- Job Growth Has Been in Professional, Management, and Related Occupations:*** This is a broad category that includes occupations like management, finance, legal, information technology, engineering, life sciences, health care, and educational instruction. The most recent update to the BLS Standard Occupational Classification System was made in 2018. While this updated and modernized some classifications, it does not appear to have had material changes to definitions for professional, management and related occupations. As shown in **Exhibit 2.4**, BLS reports that there were 29 million more workers employed in these occupations in 2021 than 1995, suggesting that the competition for educated workers is robust. It seems that employers have taken advantage of this more educated labor force and hired many of those workers into occupations that require more education. This suggests that the market for college-educated workers is competitive and it will continue to be a challenge for State agencies to hire these workers.

Exhibit 2.4
Changes in Workers Employed in
Management, Professional, and Other Occupations
Fiscal 1995 and 2021
(in Millions)



Note: The data includes all employed workers.

Source: Bureau of Labor Statistics, Current Population Survey, Standard Occupational Classification System

Observations about the U.S. Labor Force

High vacancy rates in State agencies has led agencies to examine personnel policies to implement actions that address these vacancies. As policies are evaluated, the State considers labor force trends to adopt policies that align more with workers' needs. Based on these trends, the State should consider the following when reviewing personnel policies:

- BLS estimates that the labor force will increase at a modest 0.5% annually through calendar 2030, which suggests that there will continue to be demand for employees.

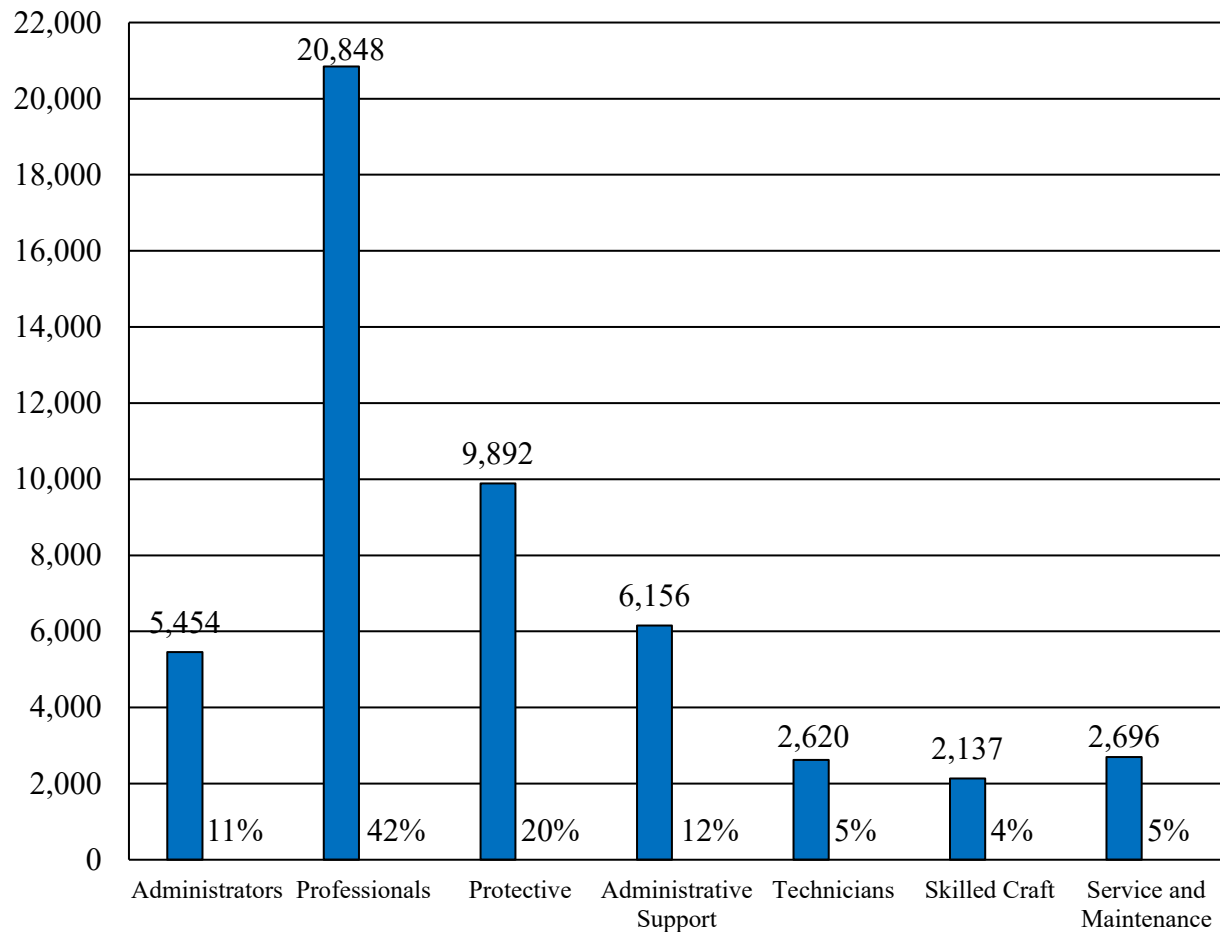
- While there are 29 million more workers with college degrees, the number of professional, management, and related occupations also increased by 29 million. There is much more demand in the economy for skilled workers than there was 25 years ago.
- Older workers have become a larger share of the labor force. The State should consider policies to attract and retain these older workers.
- Since there are high numbers of two-income families, flexible working hours and availability of child care may improve employee recruitment and retention.
- BLS data suggests that caregiving needs are the most common reason for women not participating in the labor force. Policies that address these needs could improve recruiting and retaining women.
- College-educated women outside the labor force are 14.4% of the female population above age 25. This presents an opportunity to expand recruitment.

State Workforce Characteristics

This section examines the State workforce to determine what kinds of jobs the State has as well as the State employees' ages and resignation patterns.

The State relies on skilled and educated workers for most of its workforce. **Exhibit 2.5** shows that two of every five workers are in professional positions, the most common type of State employment. Other State jobs, such as administrators, skilled craft workers, and technicians (which includes positions like computer programmers, drafters, and radio operators), are less common but also require training and education.

Exhibit 2.5
Executive Branch Employees by Job Category
Fiscal 2021

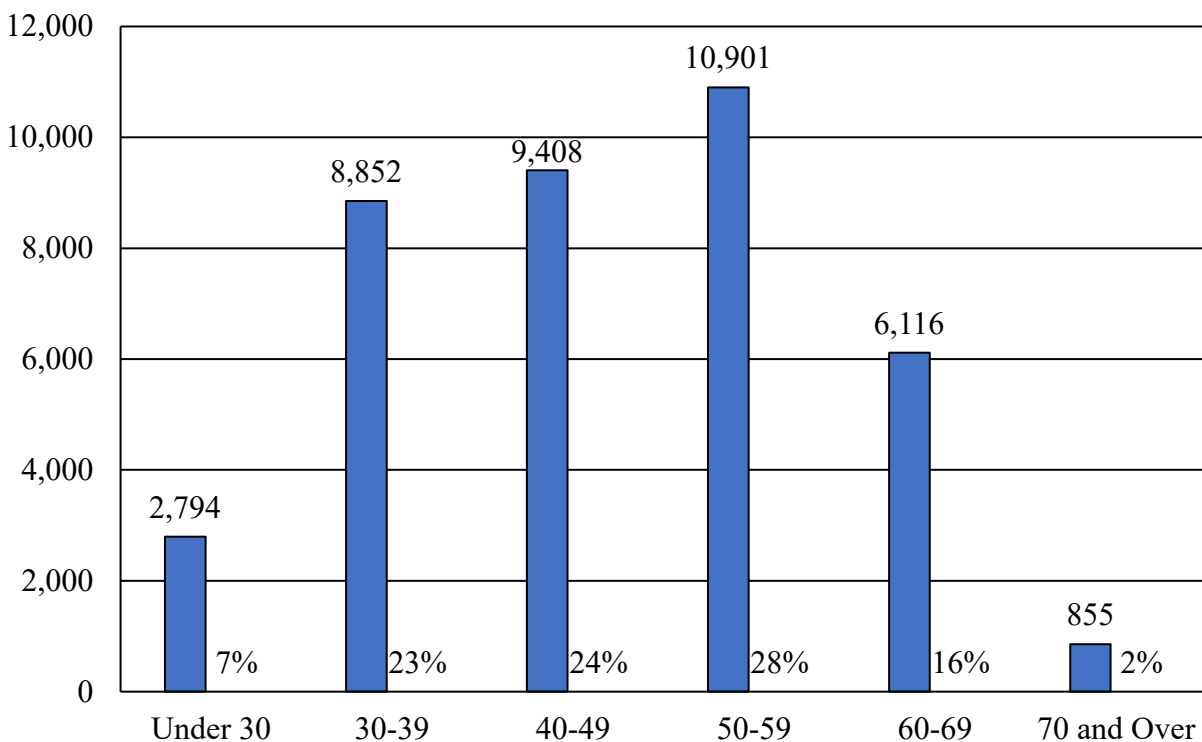


Note: The data includes State Personnel Management System and independent agencies, excluding the Maryland Department of Transportation, State universities, the Maryland Automobile Insurance Fund, and the Maryland Environmental Services. Contractual positions are not included.

Source: Department of Budget and Management, *Annual Statewide Equal Employment Opportunity Report – Fiscal Year 2021*

The State workforce tends to be older, as 52% of employees are in their forties and fifties. **Exhibit 2.6** shows that 18% of employees are sixty and over, while only 7% of employees are under thirty.

Exhibit 2.6
Executive Branch Employees by Age
Fiscal 2021

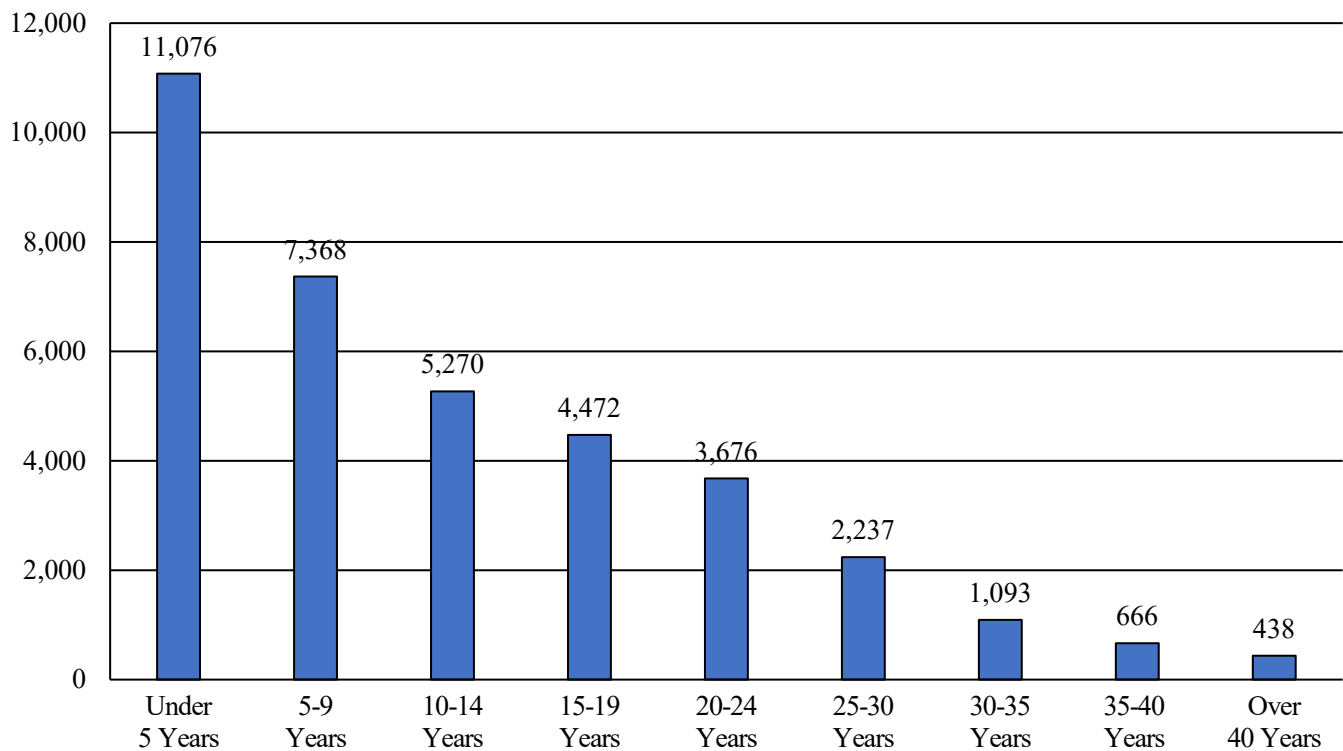


Note: The data includes State Personnel Management System and independent agencies, excluding the Maryland Department of Transportation, State universities, the Maryland Automobile Insurance Fund, and the Maryland Environmental Services. Contractual positions are not included.

Source: Department of Budget and Management, *Annual Statewide Equal Employment Opportunity Report – Fiscal Year 2021*

One effect of high turnover rates is that most employees have not been with the State for a long period. **Exhibit 2.7** shows that 51% of employees have less than 10 years of service with the State. Approximately 6% of employees have been with the State for more than 30 years. As of July 2022, the average length of service was just over 12 years.

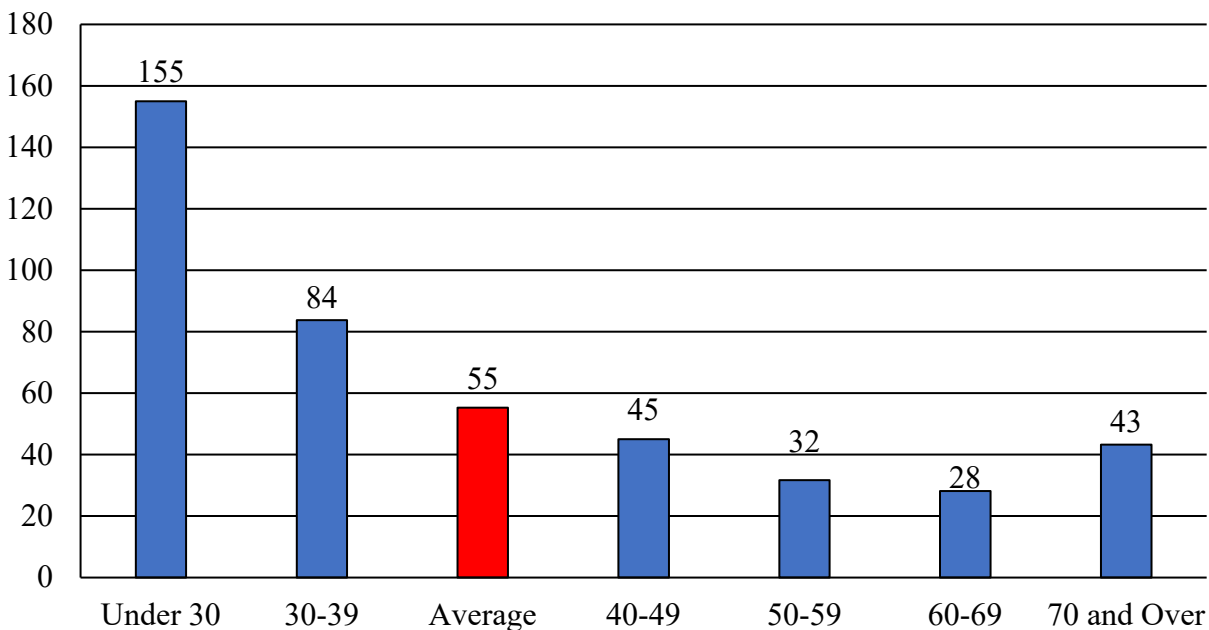
Exhibit 2.7
Executive Branch Employees' Cumulative Years of State Service
July 2022



Source: Department of Budget and Management

Exhibit 2.8 shows that younger employees resign at a higher rate than older employees, as 155 per 1,000 employees under 30 resigned in fiscal 2021. The data does not include retirements, for which data is included in the following exhibit.

Exhibit 2.8
Executive Branch Resignations Per 1,000 Employees
Fiscal 2021

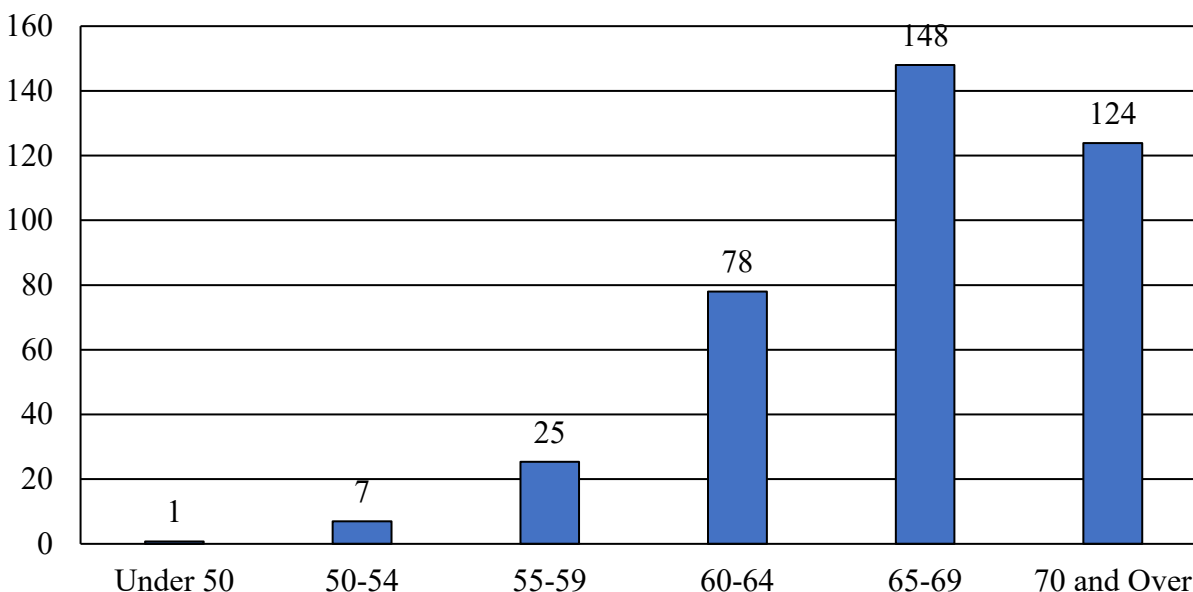


Note: The data includes State Personnel Management System and independent agencies, excluding the Maryland Department of Transportation, State universities, the Maryland Automobile Insurance Fund, and the Maryland Environmental Services. Contractual positions are not included.

Source: Department of Budget and Management, *Annual Statewide Equal Employment Opportunity Report – Fiscal Year 2021*

Many older workers have been with the State long enough to be eligible for retirement and leave State service with full retirement benefits. **Exhibit 2.9** shows that the most common age in which employees retire is between 65 and 69 years, as 148 per 1,000 employees of that age group retired in fiscal 2021. While the retirement and resignation data are not exactly comparable, since the retirement data is for all State employees and the resignation data is for State Personnel Management System (SPMS) employees, the retirement data shows that substantial numbers of older workers are also leaving State service. The employees least likely to leave State service are in their forties and early fifties.

Exhibit 2.9
Statewide Retirements Per 1,000 Active Members
Fiscal 2021



Note: Excludes three members who retired with disability benefits or who left service before retiring and have a deferred benefit, since these would be included as resignations.

Source: Gabriel, Roeder, Smith & Company, *Maryland State Retirement and Pension System Actuarial Valuation Report as of June 30, 2021*

Observations about the State Workforce

Observations about this data include:

- Most State positions are skilled, so the State is competing with other employers for skilled workers. As such, reviewing State policies should consider the demands of skilled workers and what other employers offer these workers.
- The State workforce is older, as over three-quarters of the workforce is between 30 and 59. This age group also has lower resignation and retirement rates than other groups.
- The State has difficulty keeping newly hired employees. Over half of employees have been working for the State less than 10 years. Resignation rates for employees are highest among employees under 30, more than any other age group. The State should consider what

policies can be implemented to attract and retain these newer employees. Anecdotally, while salary is important for these employees as many of them work for the State to get experience and then leave for a higher-paying job, work/life issues may also affect a worker's decision to leave State service.

- It is common for employees to continue working after they are eligible for retirement. Over 2,000 employees have more than 30 years of service and are eligible for retirement.¹ This suggests that policies that make work more attractive for older workers to keep them on the job longer could retain more State employees.

Analysis of Employees Leaving State Service

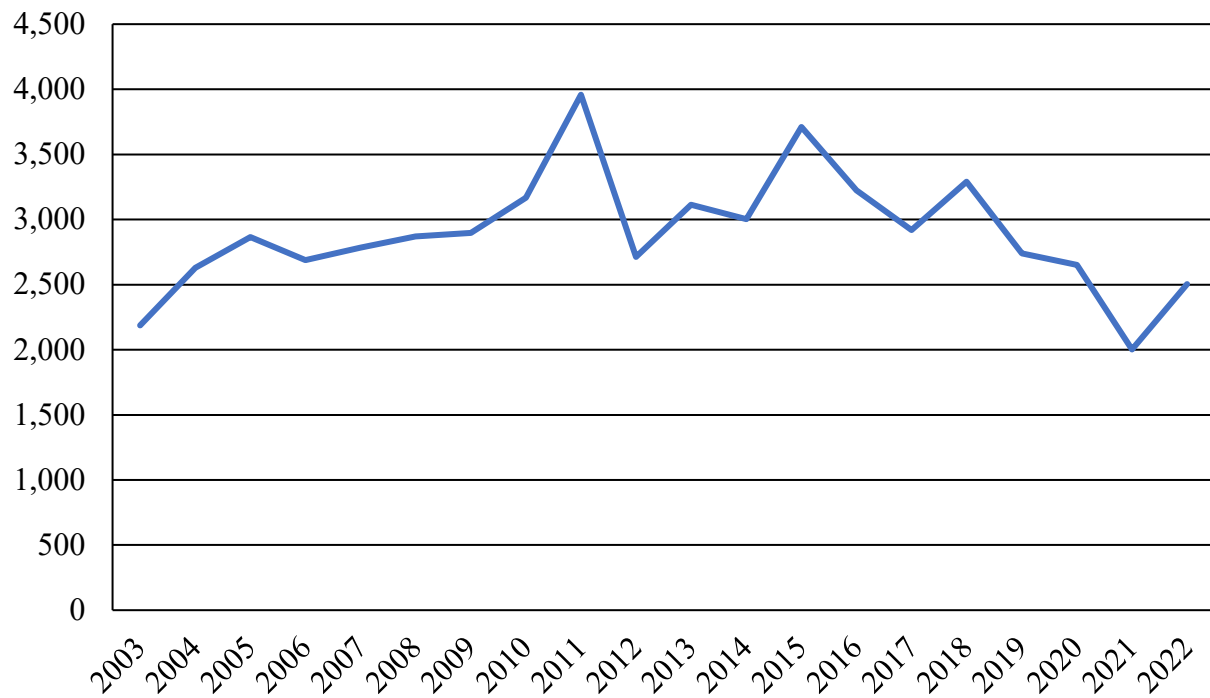
To get a sense of who is resigning from State service, the Department of Legislative Services (DLS) examined data showing how many employees have been leaving State service in recent years. Specifically, DLS examined how many employees were retiring and resigning.

High Vacancy Rates Are Not Attributable to Increased Employee Retirements

Exhibit 2.10 shows that the number of employees retiring has been less since the beginning of the COVID-19 pandemic than prior to the pandemic. Retirements peaked in 2011 in response to pension reform legislation that created incentives for employees to retire. Retirements were also higher from fiscal 2015 to 2018, as a “Silver Tsunami” gently moved through State government. Initially, total retirements declined during the pandemic, but retirements did increase in fiscal 2022. This could be attributable to employees that delayed their retirement from fiscal 2021 to 2022, or it could be the beginning of a trend.

¹ Chapter 397 of 2011 modified retirement eligibility for employees hired after June 30, 2011, by adopting the “rule of 90.” This rule changes retirement eligibility so that an employee must either reach the age of 65 or have the sum of their years of employment and their age equal at least 90. This delays retirement eligibility for some employees beyond 30 years. Presumably, these employees have not worked long enough to be eligible for retirement.

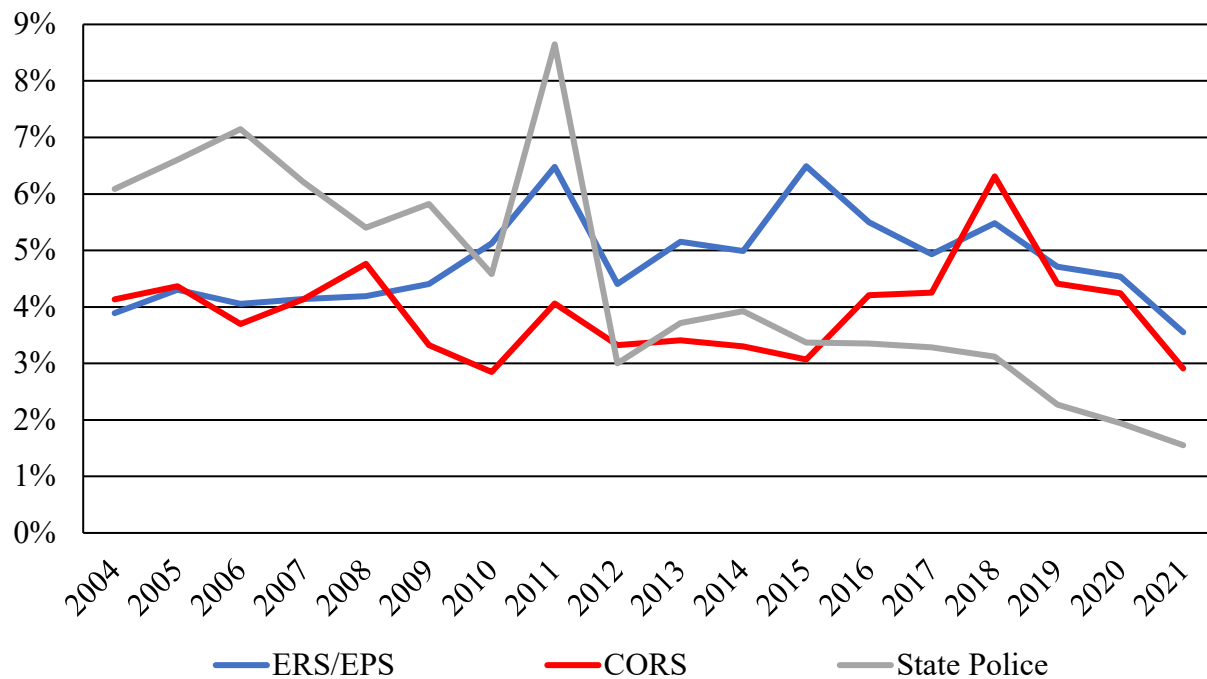
Exhibit 2.10
Total Retirements from All Plans
Fiscal 2003-2022



Source: State Retirement and Pension System

Exhibit 2.11 shows that retirement rates declined for employees', correctional officer, and State police plans from fiscal 2018 to 2021. Recent retirement trends appear to be consistent across plans.

Exhibit 2.11
Retirement Rates by Pension Plan
Fiscal 2004-2022



ERS/EPS: Employee Retirement System/Employee Pension System

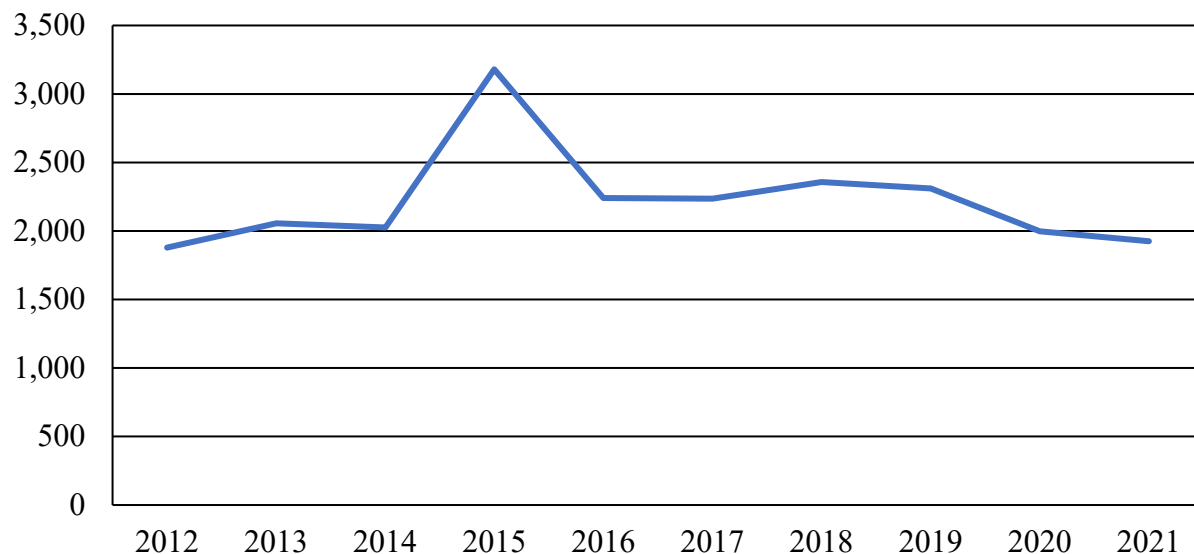
CORS: Correctional Officer Retirement System

Source: State Retirement and Pension System; Department of Legislative Services

Resignations from State Service Have Remained Steady

DLS also examined how nonretirement resignations from State government have changed in recent years. **Exhibit 2.12** shows that SPMS resignations have been steady since fiscal 2016 and even declined during the first two years of the pandemic. This data shows the number of employees resigning from State service in good standing. Examples of separations excluded from this data are employees that were deceased, failed to report for duty, were laid off, took a leave of absence, or were terminated after or during probation.

Exhibit 2.12
Personnel Resignations from the State Personnel Management System
Fiscal 2012-2021



Source: Department of Budget and Management, Annual Personnel Reports

Conclusions

Since retirements and resignations have been consistent in recent years, the data suggests that recruitment is a major factor contributing to the exceptionally high vacancy rates realized since fiscal 2020. In the short term, improving recruitment will be key to reducing vacancy rates. However, retention may well become more of a problem over the longer term. The data show that the workforce is aging, and this trend is expected to continue. People are working longer, and they are willing to leave their employer if they are not satisfied with their jobs. This suggests that State agencies will also need to do more to retain employees.

Chapter 3. State Personnel System

The State workforce is comprised of several independent personnel systems. The State Personnel Management System (SPMS) is the primary system for Executive Branch agencies; it is administered by the Department of Budget and Management (DBM) and is the focus of this report. The Judicial and Legislative branches, higher education, and the Maryland Department of Transportation all have independent personnel systems; the systems share varying degrees of resources and policies with the SPMS. DBM sets policies for the system, develops classifications, sets salaries, and provides training, among other responsibilities. Employees may be considered professional service, skilled service, executive service, management service, or special appointments, among other types of positions.

The basic salary schedule consists of 22 grades, each with 22 steps, and is the pay plan for the majority of employees. Salary increases are provided either in the form of a cost-of-living adjustment, which adjusts every slot of the salary scale by a certain percentage, or step increases (also known as increments), which moves an employee one step higher in their grade's salary schedule. Depending on the starting step, a one-step increase can be worth between a 1.8% to 3% raise, with larger raises given to employees on lower steps. State employees are also provided with paid leave in the form of 13 State holidays, annual leave in the amount of 10 to 25 days per year depending on tenure, 6 personal days, and up to 15 sick days per year. Other types of paid and unpaid leave are also available. There is also a State Employee and Retiree Health and Welfare Benefits system for all Executive, Judicial, and Legislative branch agencies that offers health, dental, and prescription drug insurance benefits. State employees are also eligible to participate in the State Retirement and Pension System, which provides retirement allowances and other benefits.

Recruitment and Hiring Policy

In general, the State hiring process for skilled service or professional service is outlined in Sections 7-202 through 7-209 of the State Personnel and Pensions Article. Agencies must complete and submit to DBM a selection plan, which shall include a position description and requirements one week prior to posting the job. The appointing agency must post a job announcement for at least two weeks that includes the position description and requirements, as well as information about how to apply and any examinations that would be required. The authority then determines which candidates meet the minimum qualifications for the position. Credits are applied to candidates for time in State service, for veteran status, for living in a county with an unemployment rate 1.5 times the State average, for being a State resident, and for being an individual with a disability. Based on appropriate standards, candidates are categorized as best qualified, better qualified, qualified, or unqualified, as well as several other categories for employees being reinstated or transferred. Depending on the amount of candidates in each category, a certain number of candidates are interviewed beginning with the best qualified category. An agency may make a selection from any candidate interviewed.

Recent Actions Taken by DBM

While compensation plays the largest role in recruiting and retaining members of the State workforce, the sometimes slow and bureaucratic hiring process can lead to potential recruits choosing other jobs before the State can hire them – or in some cases, even interview them. The impact of these delays is anecdotal, but DBM has made several significant changes to the hiring process in SPMS agencies in recognition of the impact the slow pace of hiring can have. This section is a summary of some of the more significant changes made in the past year.

Hiring Freeze Lifted

In April 2020, Governor Lawrence J. Hogan, Jr. instituted a hiring freeze for most positions in response to the impacts of the COVID-19 pandemic. As the economy recovered, the freeze was lifted in October 2021 to allow State agencies to restart the hiring of employees.

Deprioritized Advanced Degree Requirements

While the vast majority of State jobs do not require an advanced degree, many job postings for State positions had emphasized the preference for candidates to have such a degree; however, DBM found that despite the fact that substitutions of relevant experience or other education were allowed, the emphasis on the advanced degree dissuaded potential candidates from applying for the job.

DBM evaluated all of its job specifications for classes where the preference for an advanced degree was prioritized in job postings and determined that it could deprioritize the degree preference from the job postings for a significant number of positions. In all, the department deprioritized or removed the advanced degree preference from nearly 400 classifications comprising more than 7,400 authorized positions in the SPMS. The change, which went into effect in February 2022, affected nearly 1,100 of 5,500 SPMS vacancies in August, including several classifications that have large numbers of vacant positions (discussed in Chapter 4), such as administrator, family investment specialists, administrative officer, and administrative specialist.

Streamlined Hiring for High Vacancy Classes

In March 2022, to speed up the recruitment and hiring process for difficult to fill positions, DBM began allowing agencies to hire on a streamlined basis for any classification that has a vacancy rate higher than the State average (which is currently approximately 13% in Executive Branch agencies). While the merit protections remain in effect, the hiring process for these positions resembles the process for at-will positions, and some of the requirements in Sections 7-202 through 7-209 are eased.

Ability to Hire at Higher Salaries

As of August 2022, DBM does not require approval before an agency can offer new hires a starting salary up to step 17 of the position's grade, which is the third quartile of the salary scale. Previously, the department required approval for salaries above step 11, the midpoint of the salary scale. This is done in response to the low salaries offered by the State. The concern with this approach is that it creates retention issues, as employees have little room for salary growth. These issues are discussed in more detail in Chapter 4.

In January 2022, the department also implemented pay equity provisions so that agencies may increase the salary of current employees in the same class and unit working under the same supervisor of an employee hired at advanced steps due to labor market conditions. DBM has also notified agencies that it is not a requirement that a position be offered to the candidate willing to accept the lowest salary. This appears to be in response to salary compression, which is also discussed in Chapter 4. In many cases, employees still have limited room for salary growth since they were hired near the top of the pay scale.

Reference Checks Not Required

Beginning in September 2022, DBM no longer requires that agencies verify a candidate's education and experience unless a certain degree is required by law or a certification is required. Agencies are still allowed to verify if desired. The department found that the benefits of verification were low, and removing the need for the checks speeds up the hiring process.

Legislation Suggested by DBM

Some portions of the State hiring process are statutorily required, meaning legislative changes would be required to implement any streamlining in certain areas. DBM has informed the Department of Legislative Services (DLS) of several legislative changes that it would support, and DLS would also recommend legislation allowing implementation of the following changes:

- ***One-week Notice and Two-week Posting:*** State law requires that the hiring agency send a copy of an open position's selection plan and job announcement one week before the job announcement is posted (State Personnel and Pensions Section 7-204 (c)(1)). Statute also requires that the job posting stay open for two weeks (Section 7-204 (c)(2) and (3)). The combination of these two requirements means that there are at least three weeks between the decision to hire for a position and the selection of candidates, and often a month or more before the interview and hiring process can begin. Removing these requirements could address the concern that the State loses out on many candidates to employers that are able to make faster hiring decisions. **DLS recommends legislation to remove these requirements or make them waivable by the Secretary of Budget and Management.**

- ***More Flexibility for Managers Regarding Who Is Interviewed:*** Current law in most situations requires candidates to be placed into categories of best qualified, better qualified, and qualified, and further requires that candidates be interviewed in that order. Due to scoring preferences given to State employees and veterans, those candidates are often in the best qualified category. This can lead to a lengthy interview process, encourage the poaching of State employees from other State agencies, and restrict entry into State service for recent graduates, non-State employees, and candidates with shorter work histories. The preference given to State employees is not related to the type of job being sought, meaning that State service not related to the open position can carry more weight than the experience of a candidate not in State service that directly relates to the job being sought. **DLS recommends adopting legislation to provide more flexibility to managers in choosing which candidates to interview.**

Chapter 4. State Salaries

The most common concern raised in discussions of high vacancy rates is that State salaries tend to be lower than salaries for similar positions in the federal government or local jurisdictions. Since there has not been a comprehensive salary study published since February 2008, there is no recent comprehensive report or set of data that can confirm this. However, there is ample anecdotal evidence to support the assertion that State employees are underpaid to conclude that additional pay is needed to reduce vacancy rates. This chapter examines State employees' salaries and policies to reduce vacancy rates.

Surveys suggest that salary is a key issue for employees and that many positions are difficult to hire. A 2021 survey by Mission Square Research Institute found that, when asked to describe realistic actions their employer could take that would be most impactful in making their workplace a better place to work, respondents most frequently recommended the issuing of bonuses or raises, followed by allowing remote work and flexible hours. A 2022 survey by Mission Square Research Institute of state and local governments reports when asked what state and local governments could do to retain more employees, respondents most commonly endorsed improving salaries (62%), offering or increasing bonuses (50%), and showing more appreciation and recognition of employees and the work they do (38%). The study also found that "Eighty-one percent of state and local governments are hiring new employees but face workforce challenges that are impacting total employment." Job openings for nurses, engineers, police, and information technology workers routinely outnumber the number of qualified applicants who apply for those positions.

State Salaries Tend to Be Lower Than Federal and Local Government Salaries

CPS Human Resource Services' *State of Maryland Salary and Benefits Comparative Study* published in 2008 is the most recent comprehensive survey of State, local, and federal government salaries. The report's comparison of State salaries estimated that:

- overall State minimum and maximum salaries for positions were 5% less than minimum local salaries and 3% less than maximum local salaries;
- standard rate salaries¹ were 7% less than minimum local salaries and 5% less than maximum local salaries;
- overall State salaries were 17% less than minimum federal mid-Atlantic region salaries and 15% less than maximum local salaries; and

¹ In 2008, the standard rate pay plan covered most positions. The State Personnel Management System has separate pay plans for executives, physicians, firefighters, and sworn police officers.

- standard rate salaries were 21% less than minimum federal mid-Atlantic region salaries and 17% less than maximum local salaries.

From fiscal 2009 through 2018, State employee salary increases were modest. Compounded general salary increases totaled 9.3%, which did not keep up with inflation, as estimated by the federal Bureau of Labor Statistics (BLS). BLS' calculation of inflation from June 2008, the month before the beginning of fiscal 2009, to June 2018, the last month of fiscal 2018, is 15.2%. Over this period, State employees' salaries may have fallen further behind, as these data suggest that State salaries probably did not keep up with salaries in local jurisdictions or the federal government. **Exhibit 4.1** shows that:

- in five fiscal years, employees received neither a general salary increase or increments;
- in one year, employees received a general salary increase but no increments;
- in one year, employees received increments but no general salary increase; and
- in three years, employees received both a general salary increase and increments.

Exhibit 4.1
Permanent Salary Actions
Fiscal 2009-2018

<u>Year</u>	<u>General Salary Increase</u>	<u>Increments Given</u>
2009	2%	On Time
2010	None	None
2011	None	None
2012	None	None
2013	2%	None
2014	3%	April 1, 2014
2015	2%	On Time
2016	None	None
2017	None	On Time
2018	None	None

Note: There were temporary salary actions taken in the period as well. Employees were furloughed in fiscal 2009, 2010, and 2011. In fiscal 2012, employees received a \$750 one-time bonus.

Source: Department of Budget and Management

Other concerns have been raised about salaries. These include:

- ***Sampling of Department of General Services' Positions Shows State among Lowest Paid:*** The Department of Legislative Services (DLS) compared the eight most common positions at the Department of General Services (DGS) to similar local government positions in Baltimore City, Cecil, Montgomery, and Washington counties. The months selected were August 2017, January 2020, and January 2022. DLS found that in all but two cases, State positions were the lowest paid. Procurement officer II, which had received salary increases as part of procurement reform, rated fourth in 2017 and third in 2020 and 2022. Police officer II rated fourth in 2022. These positions also received higher raises in recent years than most employees. The conclusion from this sampling is that, unless positions received extraordinary salary increases, State salaries are expected to be the lowest salaries.
- ***Lack of Increments Has Compressed Salaries So That New Employees Are Commonly Paid More Than Employees Hired in Prior Years:*** In 2022, DLS surveyed recent hires at DGS and the Department of Information Technology (DoIT). In both agencies, DLS found that employees hired in 2021 were often at a higher step than employees hired in prior years. In DGS, the average step of employees hired in 2021 was step 10, which is higher than the average step for employees hired in fiscal 2018 and 2020, and equal to the average step of employees hired in fiscal 2019. This was even more pronounced in DoIT, where the average step of employees hired in fiscal 2021 was step 16. This is higher than the average step for positions hired from fiscal 2017 to 2020 and most pronounced in fiscal 2018; there, step 10 was the average step. Insofar as no increments were given from fiscal 2017 to 2020, lack of increments was a primary factor leading to salary compression.
- ***Most Positions Are Hired Above Base Pay, Leaving Little Room for Future Raises:*** As the data from DGS shows, recent hires are often hired at levels that are well above base pay. The median step is step 9, so many newly hired positions are also hired well above the median pay. With respect to DoIT, positions hired in fiscal 2016 are, on average, four steps away from top pay for the grade.

Recent Budgets Have Consistently Increased Employee Wages

Since fiscal 2019, the State has provided regular salary increases, along with increments in fiscal 2022 and 2023. Taken together, compounded general salary increases total 18.2%. This compares favorably to increases to federal government salaries, which totaled 12.3% if a 4.6% increase proposed for January 2023 is included, as well as salaries in Maryland's largest five jurisdictions, which total 10.7%.²

² Salaries compared include general salary increases but not merit or step increases. County salaries reflect an average of the range of increases in each county.

It is noteworthy that vacancy rates increased most during the period in which salary increases were most consistent. To some extent, the full effect of the increases has not worked its way into the hiring process since the highest general salary increase, which is 7.5%, was in fiscal 2023. But raises in the four years from fiscal 2019 to 2022 were more than raises in the prior decade from fiscal 2009 to 2018, which suggests that salary actions have not been enough to attract employees.

High-vacancy Positions' Salary Comparison

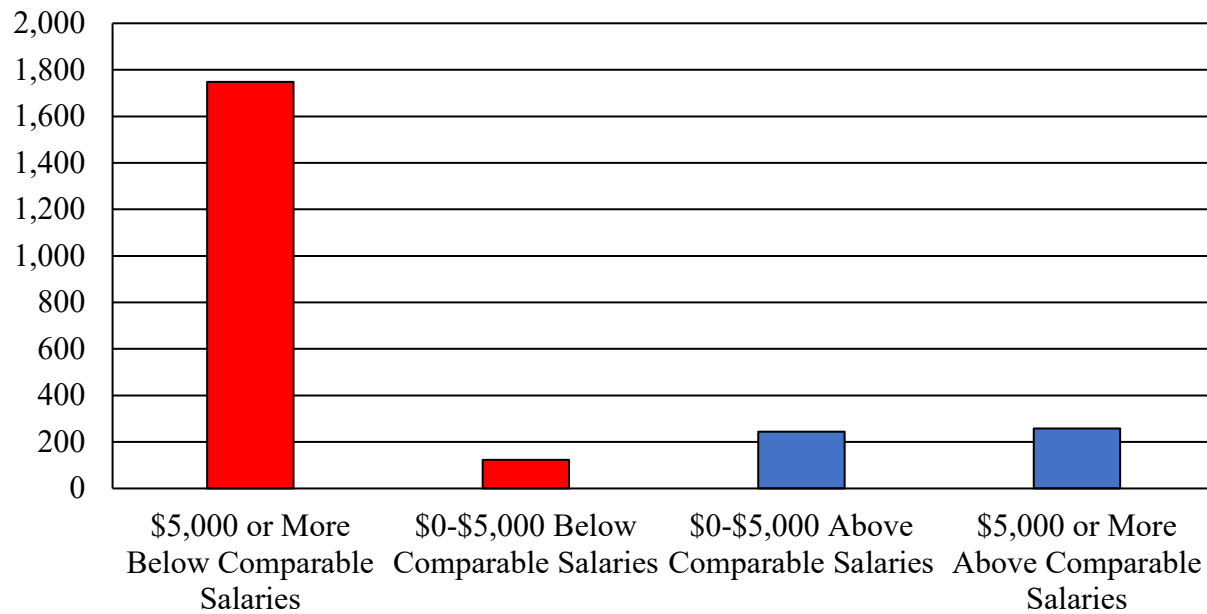
As discussed in the previous section, there is anecdotal evidence that State employees are paid below the market wage in most instances. A preliminary review of State salaries shows that it is likely that State employees are underpaid, but it is difficult to quantify the level of undercompensation relative to the labor market.

DLS does not have the resources to prepare a comprehensive salary survey, but DLS did a modest survey to get a sense of how State salaries compare to federal and local government salaries. DLS examined the 5,539.23 vacant full- and part-time State Personnel Management System (SPMS) positions in August 2022, categorized by job classification series. There are many jobs that fall within a series of classifications, such as admin officer I, admin officer II, and admin officer III. These series were categorized together.

The top 43 classification series accounted for approximately 2,800 vacancies, or slightly more than half of the vacant positions in August. The classification series with the most vacancies are correctional officer (248), administrator (243.5), family investment specialist (209), correctional officer lieutenant (135), administrative officer (125.3), social worker family services (124), and program manager (116). These seven series account for 1,200 vacancies, or 22% of vacant positions in August. While the vacancy rate for these classifications is not significantly different than the statewide average vacancy rate, it does indicate the potential for concentrating recruitment and retention efforts in certain areas.

Of the 43 series, DLS was able to find comparable job descriptions for 35 of the series on publicly available job listing sites, such as Indeed.com or job postings for neighboring states and Maryland cities or counties. In most cases, the midpoint of salary ranges found for positions with similar titles and job descriptions was higher than the average salary of the similar State classification series. **Exhibit 4.2** shows that there are 1,748 State positions out of those examined that appear to be paid much less than workers in similar jobs outside of State government. The classifications with the most employees likely paid below market wages are administrator, correctional officer lieutenant and sergeant, and program managers. There are only 258 positions where State salaries appear to be higher than for jobs in similar other workplaces. These positions include correctional officer dietician officer, assistant Attorney General, and social work supervisor family services. It should be noted that this analysis was done prior to the 4.5% general salary increase provided to State employees in November 2022, but the impact of that increase on this analysis is not currently known.

Exhibit 4.2
State Employee Salary Comparison
August 2022



Note: Trainee classifications and classifications where comparable jobs were not found are not included.

Source: Department of Legislative Services

DLS emphasizes that it is difficult to compare various employee job responsibilities due to the limited information available. While State positions may have descriptions that are superficially similar to non-State positions, a close examination of the positions is necessary to have confidence in comparing positions. There are also State positions, such as administrator, that have average salaries with vast discrepancies with non-State positions; these discrepancies are so large that the issue is likely a difference in position responsibility rather than undercompensation. Also as previously mentioned, State employee salary averages are being compared to the midpoint of a salary range; the average or median for non-State positions is not known. However, the combination of anecdotal evidence and this comparison of State salaries to non-State salaries indicates State employees in positions with large numbers of vacancies are undercompensated, so more study is clearly warranted.

DLS recommends that the State consider hiring a consultant to study and determine the differences between State and non-State salaries. This study could be used as a basis for targeted salary increases and could be combined with other recommendations, such as enhancing the annual salary review (ASR) process.

Impact of Annual Salary Review Awards on Vacancy Rates

The Department of Budget and Management (DBM) has an ASR process to evaluate State salaries. The process is used to align salaries to market conditions in certain positions. Recently, ASRs have been awarded to positions where agencies have difficulty recruiting and retaining staff.

Annual Salary Review Process

DBM advises that ASRs can be requested either by agencies or bargaining units during collective bargaining negotiations. DBM takes into consideration various data regarding salaries of similar positions in other governmental organizations when determining the appropriate funding level for ASRs in a budget. DBM notes that the ASR process is part of the budget process and therefore is up to the Governor's discretion and funding priorities, which are protected by executive privilege. If the ASR is approved, funds are added to DBM's Statewide program in the next year's budget. These funds are then transferred by budget amendment to State agencies. ASRs are not included in every budget; in fiscal years with large structural budget deficits, it is uncommon to fund ASRs.

Analysis of Recent Annual Salary Review Awards

To analyze the effect of ASRs on employment, DLS gathered data on every regular position in DBM's SPMS. The data was collected from fiscal 2013 to 2022.³ The data include:

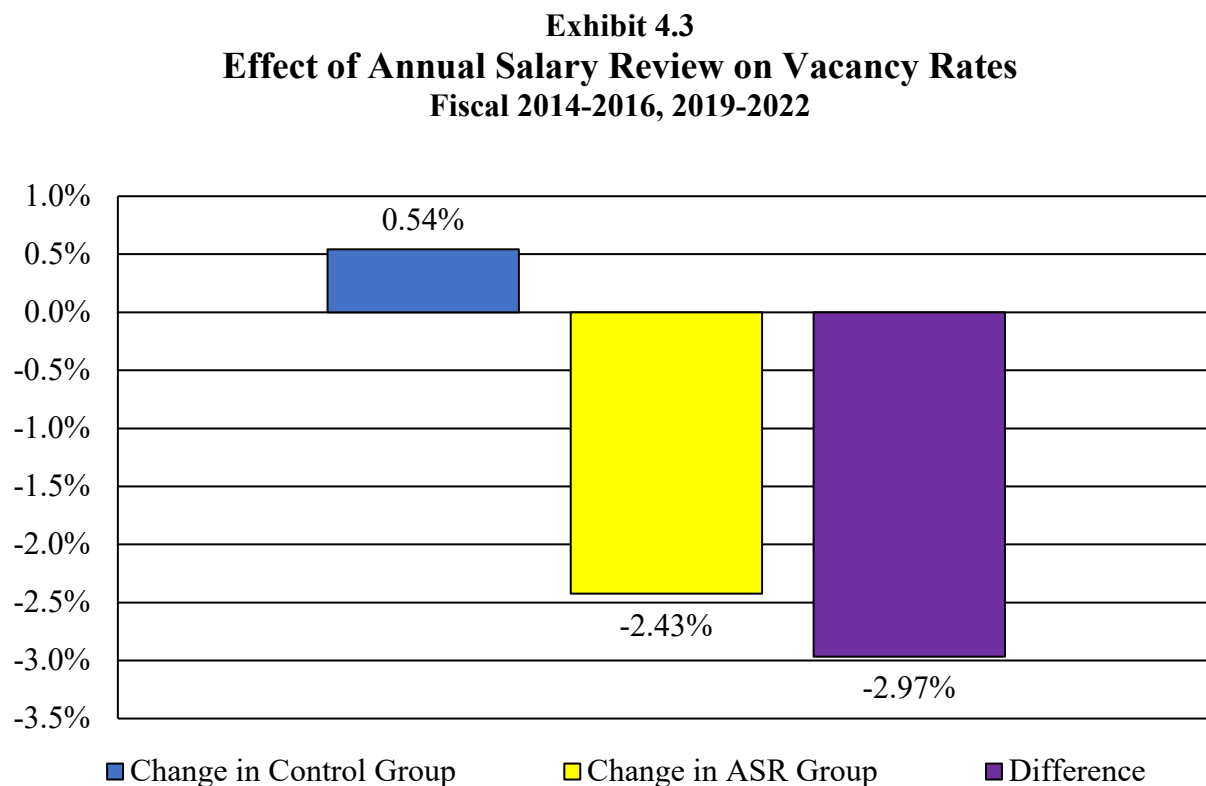
- a position's part-time or full-time status;
- a position's salary;
- if and when a position received an ASR; and
- if a specific position was vacant and what the position was.

DLS divided SPMS regular positions into two groups, those that did not receive an ASR as a control group and positions that received an ASR as the test group. To normalize the data, DLS calculated vacancy rates for all the positions. DLS then compared the change in vacancy rates of positions that did not receive an ASR to those that did. Since the study's objective is to estimate the effect that ASRs have on vacancy rates, DLS calculated the change in the vacancy rate of a position over five quarters from October, in the fiscal year before the ASR is received, to January, in the year that the ASR is received. For example, the analysis of fiscal 2015 ASRs compares the change in vacancy rates from October 2013 to January 2015. For each fiscal year,

³ This analysis was not done for fiscal 2013, 2017, and 2018. ASRs received in fiscal 2013 were for new positions and positions that had not been created in October 2011, so no October 2013 vacancy data was available, and a comparison of the change in vacancy rates was not possible. For fiscal 2017, personnel data received for these positions from DBM was sent while DBM was upgrading its personnel system and there was missing data, such as 1,742 positions without class codes, that make the analysis results unreliable for positions in fiscal 2017 and 2018.

the change in vacancy rates of the control group is then compared to the change in the vacancy rates of the ASR group.

Exhibit 4.3 shows that the vacancy rate of positions that did not receive an ASR increased by an average of 0.5% over the five quarters measured. By contrast, the vacancy rate for positions receiving ASRs decreased an average of 2.4% over the five quarters, which is 3 percentage points less than the control group.



ASR: annual salary review

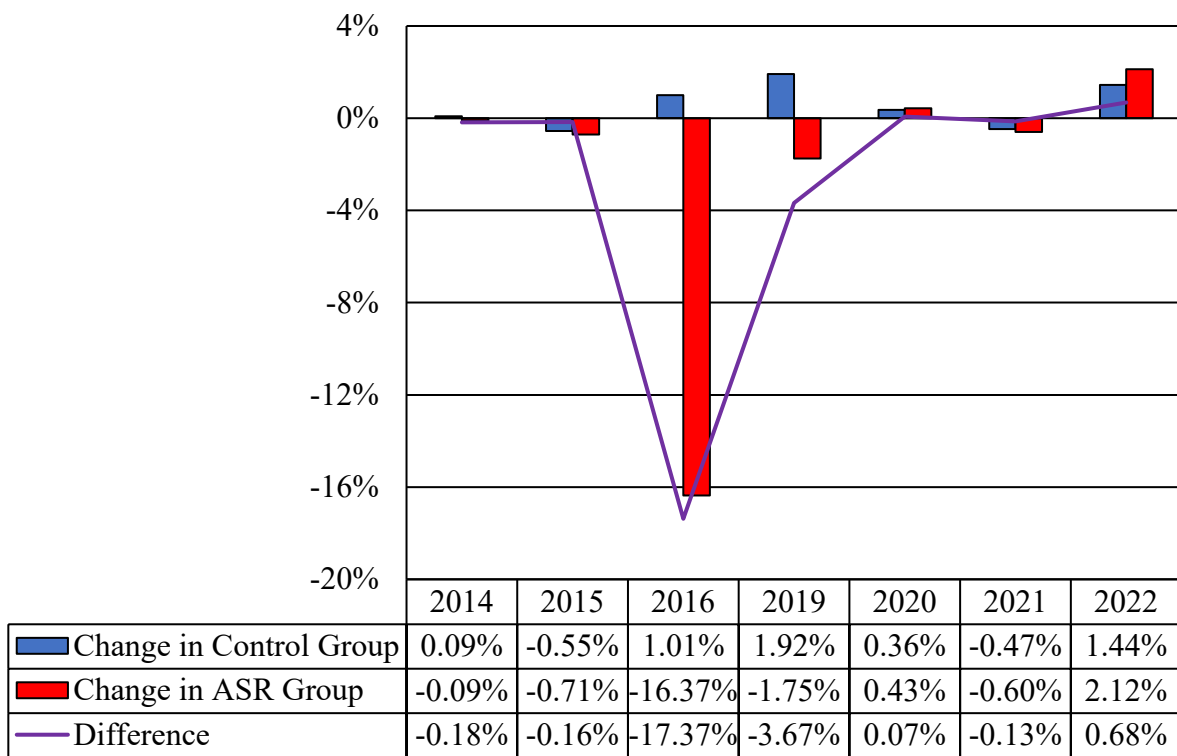
Note: Gaps in fiscal 2017 State Personnel Management System personnel data do not allow the Department of Legislative Services to analyze fiscal 2017 and 2018 ASRs, so those years are not included in this analysis.

Source: Department of Legislative Services, November 2022

Exhibit 4.4 shows that changes in vacancy rates for positions with ASRs outperformed the control group in five of seven years. Differences between the change in vacancy rates ranged from a 17.4 percentage point reduction in fiscal 2016 to a 0.7 percentage point increase in fiscal 2022. However, in five of the seven years, the five-quarter change in vacancy rates was less than 1 percentage point. While ASRs tended to reduce vacancies when compared to the control group,

this was not the case in fiscal 2020 and 2022. It is unclear why ASR positions in those years had changes in vacancy rates that were higher than the control group. The impact of the COVID-19 pandemic on salaries and the job market may have carried more weight in employment decisions in this period. DLS prepared a t-test of the control group and ASR group means. The results are in **Appendix 2**.

Exhibit 4.4
Comparison of ASR and Control Group Changes in Vacancy Rates
Fiscal 2014-2016, 2019-2022



ASR: annual salary review

Note: Gaps in fiscal 2017 State Personnel Management System personnel data do not allow the Department of Legislative Services to analyze fiscal 2017 and 2018 ASRs, so those years are not included in this analysis.

Source: Department of Legislative Services, November 2022

Recommendations

DLS recommends that DBM continue to use the ASR process. The data analysis clearly shows that the ASR program has been effective. Some positions with extraordinarily high vacancy rates have seen lower vacancy rates after receiving an ASR, even in years in which aggregate vacancy rates increased. Having a process to award salary increases to positions that are difficult to fill and keep filled is an efficient way to reduce vacancies in high-vacancy positions.

DLS also recommends that DBM enhance the ASR process. DLS recognizes that requiring more work from DBM may require additional resources. That said, having a more efficient ASR program may outweigh the costs associated with additional DBM resources. Specific areas to enhance include:

- ***Have DBM Be More Proactive:*** The current process requires that agencies request ASRs from DBM. There is ample data to determine which positions are most difficult to hire and which positions have the shortest tenures. DBM could analyze personnel data to see what positions are most difficult to keep and address problems sooner. In some years, ASRs have reduced vacancy rates by over 3% when compared to the control group. In other years, ASRs reduced vacancy rates by less than 0.5%. This variability may indicate that ASRs are not applied efficiently. A more proactive approach could lead to a more effective application of ASRs.
- ***Develop Standards to Rank Positions That Are in Most Need of an ASR:*** Funds may not be available each year to fund all positions that need ASRs, so ranking may yield the best results. DLS also observes that fiscal years in which there were only modest improvements in the vacancy rates for positions receiving ASRs may be attributable to ASRs not being awarded to the positions that most need them. While ASRs have been effective, they may not have been awarded as effectively as possible. More targeted ASRs may reduce vacancy rates further. Ranking ASR awards may make the program more efficient.
- ***Review Positions That Received ASRs to Determine the Effectiveness of Awarding an ASR:*** For ASRs awarded in fiscal 2020 and 2022, the vacancy rate for positions receiving ASRs increased at a higher rate after the ASR was awarded than for positions not receiving an ASR. The reasons for this counterintuitive result are unclear. Examining positions that did not perform as expected could yield data that informs how subsequent ASRs are structured.

Longevity Pay

Longevity raises or bonuses are when employers give a raise or bonus to recognize and reward the length of their employees' tenures. As employees progress and gain experience, employees should become more effective and efficient in their work. Longevity raises reflect and reward the effect of experience in the workforce. Longevity raises and bonuses help employers

signal to their employees that they value experience and loyalty. Some states, such as Texas, Oklahoma, and North Carolina, provide longevity pay plans or bonuses as a tool for state agencies to use in attracting and retaining qualified employees for state service.

Texas

Texas provides longevity pay to eligible state employees at a monthly rate of \$20 for every 24 months of lifetime service credit in addition to employees' base salary. The amount increases on the first of the month following the month the lifetime service accrual reaches a new multiple of 24 months. For example, an employee who has 10 years of service credit receives longevity pay of \$100 per month. The maximum amount an employee can be paid is \$420 per month for 504 months of lifetime service credit. Generally, part-time employees, temporary state employees, and independent contractors are not eligible for longevity pay.

Oklahoma

In Oklahoma, to receive longevity pay, a state employee must be continuously employed in the classified or unclassified service of the state for a minimum of two years in full- or part-time (for more than 1,000 hours per year) status. **Exhibit 4.5** shows the annual longevity payment based on years of service. Once an eligible state employee reaches 20 years of service, the employee receives an annual payment of \$2,000, plus an additional \$200 for each additional two years after the first 20 years of service.

Exhibit 4.5
Oklahoma Longevity Payment Table

<u>Years of Service</u>	<u>Annual Longevity Payment</u>
At Least 2 Years but Less Than 4 Years	\$250
At Least 4 Years but Less Than 6 Years	426
At Least 6 Years but Less Than 8 Years	626
At Least 8 Years but Less Than 10 Years	850
At Least 10 Years but Less Than 12 Years	1,062
At Least 12 Years but Less Than 14 Years	1,250
At Least 14 Years but Less Than 16 Years	1,500
At Least 16 Years but Less Than 18 Years	1,688
At Least 18 Years but Less Than 20 Years	1,900
At Least 20 Years	2,000

Note: For each additional two years of service after the first 20 years, an additional \$200 shall be added to the amount stated for 20 years of service.

Source: Oklahoma Office of Management and Enterprise Services

North Carolina

In North Carolina, an eligible employee who has at least 10 years of total state service receives a lump sum payment annually. Longevity payment amounts are computed by multiplying the employee's base pay rate by the appropriate percentage from the table shown in **Exhibit 4.6**. Full- and part-time (20 hours or more) permanent, probationary, and time-limited employees are eligible for longevity pay. Part-time (less than 20 hours) and temporary employees are not eligible for longevity pay.

Exhibit 4.6
North Carolina Longevity Pay Rate Table

<u>Years of Service</u>	<u>Longevity Pay Rate</u>
At Least 10 Years but Less Than 15 Years	1.50%
At Least 15 Years but Less Than 20 Years	2.25%
At Least 20 Years but Less Than 25 Years	3.25%
25 or More Years	4.50%

Source: North Carolina Human Resources Manual

Recommendation

DLS recommends that DBM consider offering longevity pay or bonuses for State employees. As employees progress and gain experience, employees should become more effective and efficient in their work. Longevity raises reflect and reward the effect of experience in the workforce. Longevity raises and bonuses help employers signal to their employees that they value experience and loyalty. Some states, such as North Carolina, Oklahoma, and Texas provide longevity pay plans or bonuses as a tool for state agencies to use in attracting and retaining qualified employees for state service.

Chapter 5. Employee Benefits

While increasing wages is necessary to reduce vacancy rates, there are nonsalary benefits that the State can offer to help recruit and retain employees. This chapter examines policies that can complement salary actions to reduce vacancy rates.

The State already offers employees an array of fringe benefits, which include (1) defined benefit pensions for which the State assumes market risks should the value of assets decline; (2) employee and retiree health insurance whereby the State typically funds between 80% to 85% of premiums; (3) prescription drug benefits; (4) dental insurance; (5) vision insurance; (6) mental health and substance abuse programs; (7) life insurance; (8) workers' compensation; and (9) limited, subsidized day care services. Most of these benefits are more generous than benefits commonly offered by private and nonprofit organizations.

State employees also receive more days of leave than employees in private organizations. The State offers (1) 13 paid holidays; (2) 10 to 25 days of annual leave depending on an employee's years of service; (3) 6 days of personal leave; (4) 15 days of sick leave; (5) advanced sick leave under certain circumstances; (6) employees' leave bank; (7) work-related accident leave; (8) parental leave; (9) military administrative leave; and (10) other types of leave.

Enhancing Child Care Benefits

Having adequate child care is a key concern for working parents. In Maryland, the demand for child care exceeds the availability of child care. This leads to lower productivity and labor force participation rates. Providing child care benefits is becoming more common. A survey by Care.com found that the number of employers offering child care benefits increased from 36% in 1999 to 56% in 2022. To improve the recruitment and retention of State employees, various kinds of child care benefits could be offered.

Availability of Child Care Is a Concern for Parents and a Problem for Employers

A substantial majority of the U.S. population in prime working years is in the labor force.¹ The U.S. Bureau of Labor Statistics (BLS) reports that in calendar 2021, 82% of the U.S. population between the ages of 25 and 54 was in the labor force. This included 88% of men and 75% of women. Finding adequate child care is a concern for working parents, who often spend a considerable amount of time and money ensuring that their children have adequate care while they are at work. As such, the nature and availability of child care can play a major role in parents'

¹ The U.S. Bureau of Labor Statistics considers ages 25 through 54 as prime working years. Much of the population under the age of 25 is in school and after the age of 54, it is more common for people to leave the labor force.

work, including the kinds of work parents can do and the amount of time parents can commit to work.

Parents' child care concerns can affect productivity. The Pew Research Center reports that among parents with children under 18 at home, 49% could not give 100% at work, 30% needed to reduce working hours, and 13% turned down important work assignments.

Results of a 2017 survey published by the Maryland Family Network estimates that 50% of Maryland working parents missed work, were late to work, or left work early in the previous three months because of child care issues. The survey also found that 15% of working parents experienced long-term disruptions in the previous year because of child care issues.

Many parents leave the workforce because of a lack of child care. This includes substantial numbers of skilled workers. Of the share that is not in the labor force, BLS reports that more than 14 million women and 9 million men have four-year college degrees. BLS also notes that the most common reason for women leaving the labor force is the need to care for others. The U.S. Chamber of Commerce also found that child care was a major reason for not participating in the workforce. A survey commissioned by the Chamber of Commerce found that as of February 2022, 58% of parents left the workforce because they were unable to find child care that meets their needs, and 26% of parents left because they cannot afford child care.

As these findings suggest, available child care in Maryland appears to be less than the demand. Although inadequate before and after-school care for school-aged children may limit a parent's ability to work full-time or specific hours and therefore contribute to the overall problem, the more acute concern relates to families with children aged 0 to 5. **Exhibit 5.1** shows that there is a gap between the number of licensed child care slots and the number of children, as there are two to four times as many children under 5 as slots. Insofar as more than four out of five members of the population in prime working years are in the workforce, this data suggests that the competition between workers to find child care for young children is stiff. This competition is made more intense by providers' common business practices to ensure adequate care and be compliant with regulations. Specifically, this gap may be larger since it is common for providers not to operate at full capacity. According to the Maryland Department of Health's Administration for Children and Families, most providers operate at 85% to 95% capacity. This is because enrolling 100% of capacity risks becoming noncompliant if a staff member leaves, resulting in child-staff ratios exceeding legal requirements.

Exhibit 5.1

Maryland's Under 5 Child Population and Licensed Child Care Slots

<u>Age Groups</u>	<u>Calendar 2019 Estimated Population</u>	<u>Fiscal 2020 Licensed Slots</u>	<u>Children Per Licensed Slot</u>
Infants and Toddlers (Ages 0 and 1)	140,376	34,393	4.1
Preschool (Ages 2, 3, and 4)	218,503	101,338	2.2

Source: Kids Count Data Center; Maryland State Department of Education

Child care shortages may have become more acute since the beginning of the COVID-19 pandemic. From 2016 to 2022, the number of child care providers declined 22%, according to data from the Maryland State Department of Education. The decline was most acute among family providers who provide over 50% of slots for infants and toddlers (children aged 0 or 1 years).

Child care shortages may be common because of the economics of child care. A 2021 report by the U.S. Department of Treasury notes that “unfavorable economic conditions lead to a chronic underinvestment.” Parents of young children tend to be younger than most workers and earn less income than they would later in life. This results in liquidity constraints and underinvestment. This is an example of market failure, as market forces lead to an under allocation of resources for a particular good or service. The report also suggests that the quality of child care also matters, as there are positive externalities associated with providing young children with high-quality child care that benefits society for years.

For the reasons described previously, offering child care benefits to State employees could improve both recruitment and retention of employees. By receiving child care benefits, workers in the workforce could be enticed to work for the State, and workers outside the labor force could return to the labor force to work for the State. More employers are addressing workforce needs by providing child care benefits. A survey by Care.com found that the number of employers offering child care benefits increased from 36% in 1999 to 56% in 2022.

Child Care Benefits Options

Child care benefits that the State could offer its employees include:

- ***Priority Agreements with Child Care Providers:*** As a one of the largest employers in the Maryland, the State could leverage its size and enter into agreements with child care providers so that State employees are prioritized when applying for child care. In a tight market for child care, this could be a valuable benefit;

- **Child Care Subsidies:** The State could reimburse all or some of employees' child care costs; and
- **Onsite Child Care:** There are multiple, potential onsite child care approaches. Child care facilities could be placed close to where employees work or areas in which a higher number of employees live. The child care market is mature so there may be contractors available that the State could use to provide child care. If the State has real estate available, the State could also explore repurposing that space and hiring a vendor to operate child care services. The State has entered into similar arrangements in Annapolis and Crownsville.

While finding before and after-school care appears to be a less acute concern for parents, insufficient care for school-aged children should also be considered as the State reviews these issues.

Recommendations

The Department of Legislative Services (DLS) recommends that the State examine the costs and benefits of offering child care benefits. This should include examining State employees' needs, various kinds of benefits, and costs associated with offering benefits. The objective is to determine if there are cost effective child care benefits that the State could offer that would make working for the State more attractive.

DLS also recommends that the State consider adopting policies to expand the pool of child care providers statewide. As the U.S. Department of Treasury reported, there tends to be underinvestment in child care. An option to consider is start-up grants for new child care providers.

Continue Offering Telework and Examine How to Improve Telework Options

Many employers have significantly expanded telework policies due to the pandemic. Prior to the pandemic, as described in detail by a March 2020 Pew Research Center article, telework and flexible workspace options were generally offered to managers, white-collar professionals, and highly-paid individuals. However, according to research and data presented by BLS in March 2022, the pandemic resulted in a significant expansion of telework policies and teleworking employees to ensure employees were better protected while necessary work could continue. At its peak, from April 2020 through December 2020, some researchers estimate that 50% of all paid work was being completed through telework, compared to just 5% before the pandemic. This section discusses telework issues and the State's program.

Benefits of and Concerns about Telework

As a result of this expansion, telework, and the flexibility afforded through telework policies, has become a common and important part of many workers' lives. Recent data suggest that workers have come to value telework. Thus, the maintaining of a robust telework policy has

become an important employee morale and retention tool. Most notably, there is evidence that many workers equate the opportunity to telework with pay raises. Moreover, there is evidence, both from the public and private sectors, that workers will seek more telework friendly jobs when faced with the prospect of losing the benefit. Among the most promising benefits of telework, with respect to employee recruitment and retention, is that a March 2022 BLS study found that offering telework for two or three days is equivalent to giving employees a raise. There are also environmental benefits to telework, which are discussed in **Appendix 3**.

The State has recently enhanced and expanded the telework program; however, it is unclear to what extent agencies have followed the new law by establishing telework policies to maximize the number of employees participating in a telework program. There are also concerns about how to maintain organizational culture when most of the staff are teleworking.

Employee Wellness and Work-life Balance

There are numerous beneficial effects to telework for an employee, including better work-life balance, increased job satisfaction, and stress reduction. Conversely, there are two major potential problems as well: the risk of social isolation; and the blurring of home/work boundaries.

The operative benefit for teleworking employees is the elimination of the commute and the resulting reclamation of the time that would otherwise be spent traveling to and from the workplace. The additional time helps an employee maintain a positive work-life balance to be both mentally and physically healthier. As noted previously, some employees in the State have some of the worst commutes in the nation. Therefore, such an employee who teleworks would have, on average, an additional hour per day to spend on any number of other activities, such as exercise, cooking, family time, and relaxing.

A 2018 survey by Mental Health America found that 77% of its respondents claim that flexible workplace options would allow them to be healthier. Additionally, in that same survey 71% of respondents said they would like to work from home to avoid commute-related stress. The increased workplace flexibility can more easily be accompanied by increased work-time flexibility, allowing employees to take time to make a healthier lunch, run errands, or pick up children during work hours and more easily make up the lost time. Another 2016 study, *The Effects of Telecommuting Intensity on Employee Health*, observed adult employees working at an insurance company in 2010 and 2011 and found that employees in that workplace who did not telework were at greater risk for obesity, alcohol abuse, physical inactivity, and tobacco use.

One major problem affecting employee wellness with regard to telework (especially during the pandemic) is social isolation. The Centers for Disease Control and Prevention (CDC) reports that loneliness and social isolation, particularly in older adults, are serious public health risks affecting a significant number of people in the United States. CDC found that social isolation and loneliness was associated with higher rates of depression, anxiety, and suicide. Even if telework does not directly cause it, an employee's existing social isolation or loneliness may be exacerbated if they lack social interactions in a workplace. Even so, video conferencing and virtual workplace

programs, such as Zoom and Microsoft Teams, are helping to address this issue by making social interaction and collaboration during telework easier and more accessible.

Another major problem that may affect employee wellness with regard to telework is the blurring of home/work boundaries, which can affect work-life balance. For example, an employee may purposefully or accidentally work extra hours or check emails at odd hours of the night. While an employer may see such an occurrence as a benefit, the inability to disconnect from work could affect employee morale and increase stress. In a separate workspace, an employee can more easily “leave work at work” when clocking out, logging off, and/or commuting home for the day.

Cost of Living and Other Financial Considerations for Employees

Historically, employees lived within commuting distance of their workplace to travel to and from work on a daily basis. Consequently, the population density of cities grew larger over time because that was where the jobs and workplaces were. As a result of demand and other factors, the cost of living in these urban areas tends to be more expensive than in some other suburban and rural areas. Jobs and careers that either require or allow telework make it possible for employees to live almost anywhere instead of being limited to the commuting distance from the workplace. For example, a programmer that teleworks 100% of the time for a Baltimore-based company could live in a location where the cost of living is less expensive, such as on the Eastern Shore, in Western Maryland, or even in a completely different state.

In addition, there are various other financial considerations for teleworkers. These sorts of costs and savings include, but are not limited to, commuting (which includes car wear and tear, gasoline, or public transportation fares), home energy use, improvements to the home office (such as purchasing an office chair, computer desk, or a standing desk), child care, Internet access, parking, and dry cleaning and other wardrobe expenses. The net effect on any given employee largely depends on the individual employer, telework policies, and the employee’s personal situation.

Offering Telework Is Like Giving Employees a Raise: With respect to employee recruitment and retention, a BLS study published in March 2022 found that 63% of employees rated the value of two to three days working from home as being equivalent to a pay raise of some sort. This suggests that employers not offering telework will need to pay employees more. As discussed in Chapter 4, State salaries tend to be lower, so not offering telework puts the State in a more severe disadvantage than it already is.

Workplace and Employer Effects

Many of the same telework benefits for employees also directly benefit employers in numerous ways, and there are financial incentives for an employer to encourage or require telework. Conversely, some employers had been reversing their telework policies prior to the pandemic for a variety of reasons.

Many employees view telework and the accompanying flexibility as a benefit, consequently improving employee morale and retention, since low-stress employees tend to be more productive and more content with their jobs. Employers also benefit from having a wider applicant pool for any given job. For example, a worker living in Ohio who wants to work in Maryland would not necessarily need to move into the State. Additionally, an employer may experience financial benefits from having a telework program. Fewer employees working in an office means less space must be rented or purchased to house all the employees. Even if the same amount of office space is needed, an employer may experience other types of cost savings (such as lower energy use) if all employees telework on the same day. This is consistent with the State's experience. For example, the Department of Human Services' new lease requires 30% less space than was used at their prior location.

However, teleworking may present challenges for an organizational culture to take hold. One survey by the Society of Human Resource Management from September 2021 found that 66.5% of chief executive officers believed maintaining culture was the biggest talent management challenge posed by remote work. A 2021 Harvard Business Review article notes that onboarding new employees and getting them adjusted to the workplace culture is a growing concern. Improving the frequency and quality of communication may help with overcoming these issues and improving collaboration.

As discussed more in the following section, some employers have begun to reduce employee telework benefits, citing a variety of reasons including a need to better manage large workforces, improve collaboration, or better oversee employees who are not productive.

Equity

Industry and Occupational Differences

Through recent research and surveys, BLS found that 33% of employers in the nation increased telework offered to employees because of the pandemic, with substantial variation by employer size and industry. Employers with 500 or more employees were twice as likely to have increased telework than smaller employers; and in the sectors of educational services, finance and insurance, information, and company management, more than 50% of employers increased telework. Conversely, for certain in-person industries (such as agriculture and accommodation and food services) less than 10% of employers increased telework.

Recently, many large, private companies (including Best Buy, Yahoo, IBM, Honeywell, and Bank of America) have begun to reverse course and require many of their professional employees to return to the office in some capacity. The reasons for this reversal are varied, but employers who reverse course often cite a need to manage large workforces better, improve collaboration, or better oversee employees who are not productive. The reduction of telework has introduced additional complexities into the lives of many employees, particularly those who began working when full or primarily telework was the norm and live a great distance from their actual

workplaces. While little data is yet available regarding the outcome from these decisions, many anecdotal accounts exist of employees quitting outright or refusing to return to the office.

Most notably, in late 2021, General Motors attempted to change its “work appropriately” telework policy, which was developed and implemented in response to the pandemic, to one that required at least three days in the office for each employee. Due to significant backlash and complaints from employees, management at the company instead decided that it would not change its existing telework policy prior to 2023.

Geographic Differences

Researchers at the Economic Innovation Group (EIG) have observed a substantial geographic difference in the rates of employees teleworking. Specifically, using data collected from the U.S. Census Bureau’s American Community Survey in 2021, EIG found that telework rates were highest along the coasts, especially in the northeast and west coast, and lowest in the south and midwest. Even so, many southern and midwestern major cities had telework rates that rivaled those found on the coasts, including Austin, Texas; Denver, Colorado; and Raleigh, North Carolina. This trend suggests that telework is more common in urban areas. Through its analysis, EIG found the geographic differences to primarily be correlated with:

- professional positions (especially occupations associated with computer programming and financial analysis) being more likely to telework;
- education levels, with more educated populations being more likely to telework;
- average commute times, as employees with significant commute times opted to work remotely when given the opportunity; and
- expensive housing markets, with more expensive regions having higher rates of telework.

Although not mentioned in the report, lack of access to broadband with sufficient bandwidth may also be a factor limiting telework in some areas.

Maryland’s Telework Program and Policies

The State’s telework program was originally established by Chapter 83 of 2013 and required the Secretary of Budget and Management to establish a telework program and adopt related policies and guidelines with a State goal of having at least 15% of eligible employees participating in a telework program. However, the State’s telework policy was significantly enhanced by Chapter 696 of 2021 to increase the number of both public- and private-sector employees teleworking in the State.

State and Local Employees

Under Chapter 696, the statutory telework requirements apply for all State and local employees, including those in the Legislative and Judicial branches of State government and those that work for higher education institutions. Broadly speaking, and with additional requirements applying under some circumstances, each State, local, and municipal agency:

- must establish a telework program and adopt a policy and telework guidelines to govern the program; and
- may designate the positions for which an employee would be eligible to telework.

Each State agency must, to the extent practicable, maximize the number of eligible employees participating in the telework program. Each local and municipal agency may, in its discretion, maximize the number of eligible employees participating in the telework program.

Private-sector Employees

Chapter 696 also establishes the Office of Telework Assistance and the Business Telework Assistance Grant Program in the Department of Commerce. The purpose of the office is to, among other things, establish best practices for telework policies and assist the business community in implementing telework policies for their employees. A grant awarded through the program may be used to purchase hardware, software, and other technical equipment or technical services necessary for a business to implement a telework policy.

Telework in the Federal Government and Virginia

Federal Government

The U.S. Office of Personnel Management (OPM) releases an annual report on the *Status of Telework in the Federal Government*, which summarizes the robust telework program of the federal government as required by the Telework Enhancement Act of 2010. In its most recent report, covering federal fiscal 2020, OPM reported that employee eligibility and participation in telework has increased, and the capacity to assess cost savings through telework has improved. In summary, agencies reported 45% of all federal employees and 90% of eligible employees teleworked in federal fiscal 2020, reflecting a 34% increase to both totals compared to federal fiscal 2019. Moreover, federal agencies have begun to report estimated cost savings from their various telework policies and programs, although for some agencies, identifying the savings has been more challenging. Most notably, 40% of agencies report savings related to employee transit/commuting and travel, 17% report savings related to employee absences, and 11% report savings related to rent/office space.

Additionally, OPM recently reported that many federal employees have been transitioning out of agencies that are enforcing strict office reentry policies by attempting to transfer to other, more telework friendly agencies, or by leaving federal employment altogether.

Virginia

In Virginia, a business that enters into a signed telework agreement with teleworking employees before January 1, 2022, can receive up to \$50,000 in tax credits for spending (at most) \$1,200 in telework-related expenses for each employee. However, Virginia has become less encouraging of teleworking for state employees. In May 2022, Virginia Governor Glenn A. Youngkin announced a new telework policy that executive branch state employees return to in-person office work five days a week beginning July 5, 2022, unless they received approval for a telework agreement. Under the policy, employees seeking one telework day per week or a temporary telework period of no more than two weeks need approval from their agency head. Two telework days a week require approval from the cabinet secretary, and more than two days per week require approval from the Governor's chief of staff.

In a survey by the Virginia Governmental Employees Association, 77% of respondents expressed dissatisfaction with the new telework policy, and 58% of survey respondents said they are thinking about either retirement or leaving state employment for the private sector as a result of the new telework policy. From May 1, 2022, through June 30, 2022, 1,066 people quit or retired from state government, although the administration has pointed out that more employees (1,690 employees) joined state government in that timeframe.

Before the pandemic began, about 25% of state jobs were eligible for telework and, of those, about 19% were being carried out under telework agreements, but the Virginia Department of Human Resource Management does not know how many employees had been working remotely since then.

Teleworking in Maryland State Government

Prior to the COVID-19 pandemic, less than 1 out of 50 State positions in Maryland was eligible for telework. Telework was expanded quickly at the onset of the pandemic so that about half of State positions were teleworking by late spring 2020. DoIT advised that all positions that could telework did telework at that time. **Exhibit 5.2** shows the number of positions teleworking has declined since the early days of the pandemic, as 64% of positions worked onsite full-time in July 2022.

Exhibit 5.2
State Personnel Management System
Teleworkers by Department or Service Area
July 2022

<u>Department or Service Area</u>	<u>Full-time Onsite</u>	<u>Hybrid</u>	<u>Full-time Telework</u>	<u>Workers</u>
Largest Agencies				
Public Safety and Correctional Services	84.6%	11.7%	3.7%	7,128
Health	70.7%	17.4%	11.9%	8,542
Human Services	35.1%	49.7%	15.2%	4,818
Police and Fire Marshal	90.7%	7.7%	1.6%	2,097
Juvenile Services	73.4%	19.6%	6.9%	1,668
Other Agencies				
Legal	45.5%	36.8%	17.6%	1,352
Executive and Administrative Control	48.9%	36.4%	14.7%	1,669
Financial and Revenue Administration	48.3%	41.5%	10.2%	1,841
Budget and Management and DoIT	20.3%	53.8%	25.8%	451
Retirement	48.8%	34.4%	16.8%	198
General Services	70.8%	24.3%	4.9%	596
Natural Resources	77.2%	12.1%	10.8%	1,805
Agriculture	68.2%	29.6%	2.1%	411
Labor	35.5%	36.3%	28.2%	1,289
MSDE and Other Education	81.2%	13.7%	5.1%	1,424
Housing and Community Development	30.7%	51.5%	17.8%	404
Commerce	22.7%	48.6%	28.8%	193
Environment	25.5%	54.3%	20.2%	809
All Agencies	64.0%	25.3%	10.7%	36,694

DoIT: Department of Information Technology
MSDE: Maryland State Department of Education

Note: Data includes regular positions, contractual full-time equivalent, and temporary employees. Departments or service areas with the five highest onsite rates are bolded.

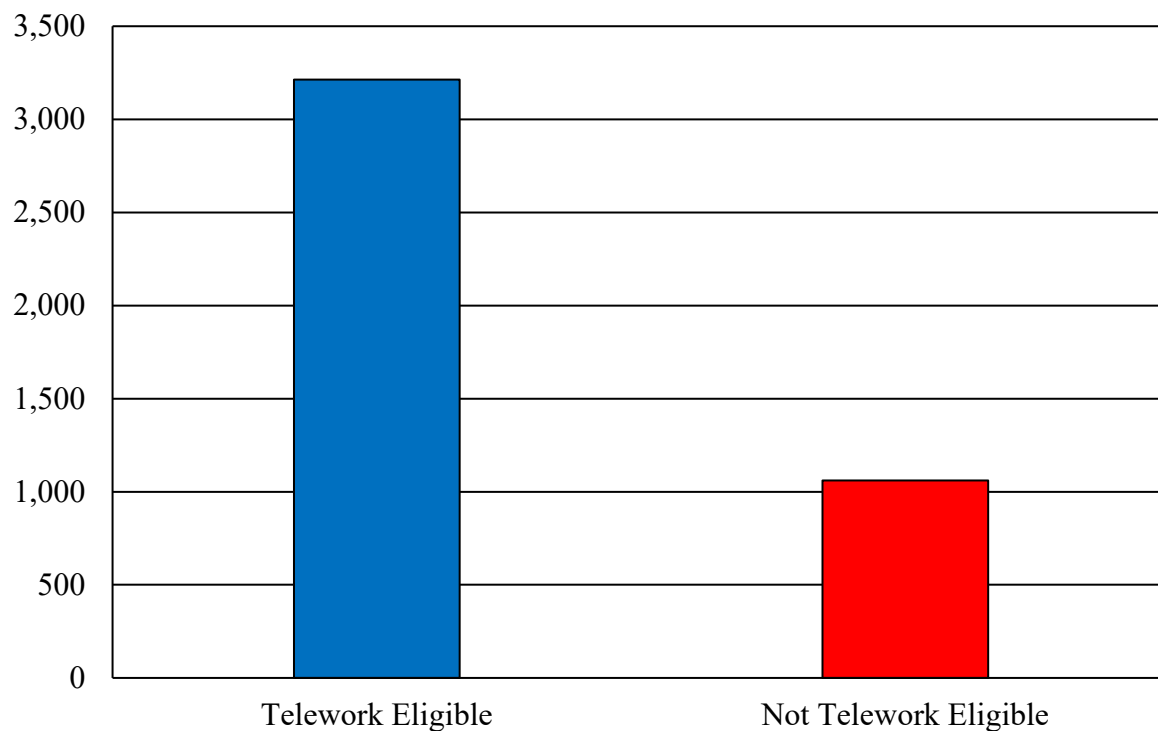
Source: Department of Budget and Management

The full-time, onsite positions vary tremendously among agencies; 91% of filled State police and fire marshal positions work onsite, while 20% of filled positions at DBM and DoIT work onsite. Much of this is due to the nature of the agencies' work. Agencies with large workforces in institutions, like the Department of Public Safety and Correctional Services, or in the field, like the Department of State Police, tend to have lower levels of telework. Agencies with higher numbers of office workers, like DBM and the Department of Commerce, have higher levels of telework.

A second potential reason the difference in teleworking is the discretion given to agencies in managing their workforce. SPMS is a decentralized system. DBM designates positions that are eligible for telework. However, agencies also have autonomy and can require a position that is eligible for telework to work onsite. It is quite possible that some agencies are reluctant to offer telework to certain job classifications and therefore have lower shares of employees teleworking. However, there is little information reported about telework, so it is unclear to what extent teleworking varies among the same positions across agencies.

Most of the high vacancy positions examined in Chapter 4 are deemed eligible for telework by DBM. **Exhibit 5.3** shows that three times as many vacant positions are eligible for telework than are ineligible for telework. As previously mentioned, some of the positions eligible for telework by DBM may not be offered telework by an agency, so this estimate may exaggerate the number of vacant positions that can telework.

Exhibit 5.3
Most Commonly Vacant Positions That Are
Eligible and Not Eligible for Telework
July 2022



Note: There are 4,274 vacant positions in the State Personnel Management System from the 39 job classifications with the highest vacancy rates. Eligible as defined by the Department of Budget and Management. Agencies can have their own restrictions that limit eligibility so that eligibility as determined by the agencies is less than as defined by the Department of Budget and Management.

Source: Department of Budget and Management

Recommendation

DLS recommends that the Department of Budget and Management (DBM) study how to improve telework programs and support agencies' telework programs. Data shows that employees value telework programs, so offering telework is an employee recruitment and retention tool. However, an often-cited concern about telework is that it can be difficult to maintain organizational culture if much of the staff are teleworking. There are also concerns about how to integrate new staff into teleworking organizations. Since the COVID-19 pandemic, organizations have rapidly expanded telework. For most organizations, telework policies are in their infancy, so

policies were implemented quickly. While policies may be well intentioned, quickly implementing telework may not be as effective as developing policies based on methods that have been tested over time and implemented after long and careful consideration. As such, there is probably room for improvement with respect to the State's telework policies and practices. Agencies' concerns about maintaining organizational culture and managing teleworking employees may reflect how difficult it is to manage teleworking employees. State agencies could benefit from guidance regarding how to successfully manage teleworking employees. DBM should examine how organizations successfully implement telework and provide guidance to State agencies regarding telework. DBM should coordinate with DoIT and Office of Telework Assistance to assist State agencies in implementing high quality telework programs.

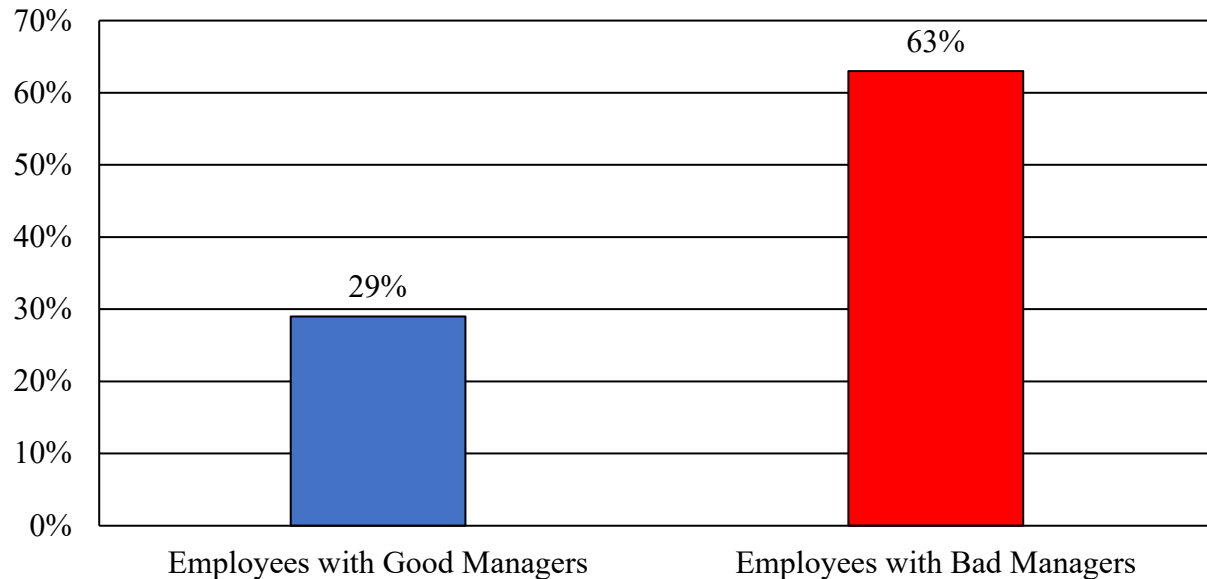
Chapter 6. Enhancing the Workplace

Previous chapters examined employees' salaries and fringe benefits. This chapter examines programs that enhance the workplace. This includes job training, succession planning, job sharing, and apprenticeships.

Expand Job Training for Supervisors and Managers

Effective organizations have effective management. The quality of an organization's management does not only affect how an organization operates but also influences employees' perceptions of an organization and their willingness to work for the organization. There is an adage that employees do not quit their job, employees quit their boss. A 2021 survey compared the attitudes of employees with good and bad managers. At the time, 63% of employees who believed that they had bad managers were thinking about leaving their job. **Exhibit 6.1** shows that 29% of employees who believed that they had good managers were considering leaving their job.

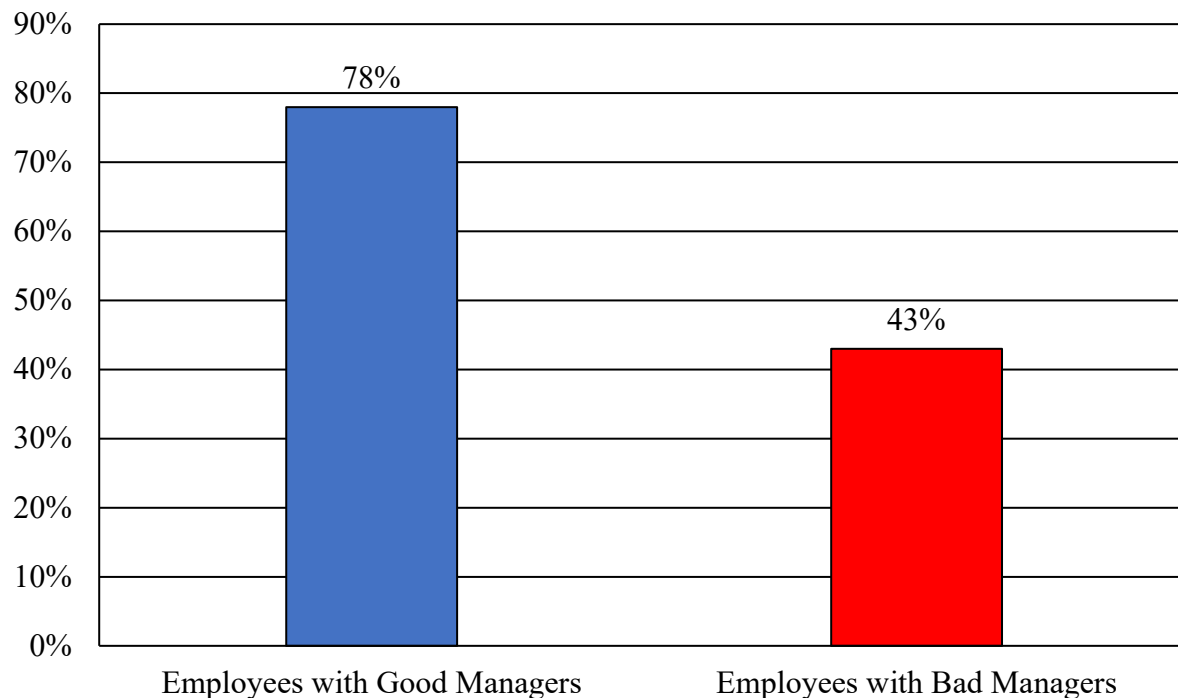
Exhibit 6.1
Share of Employees Thinking of Leaving Their Company



Source: *People Management Report*, predictiveindex.com, 2021

Managers' performance does not just affect employees' attitudes about their own job. Managers can also influence perceptions employees have about their employer. The same survey estimated that 78% of employees with good management skills believed that their company supports their efforts to adjust to change. **Exhibit 6.2** shows that only 43% of employees with poor managers had the same perception of their employer.

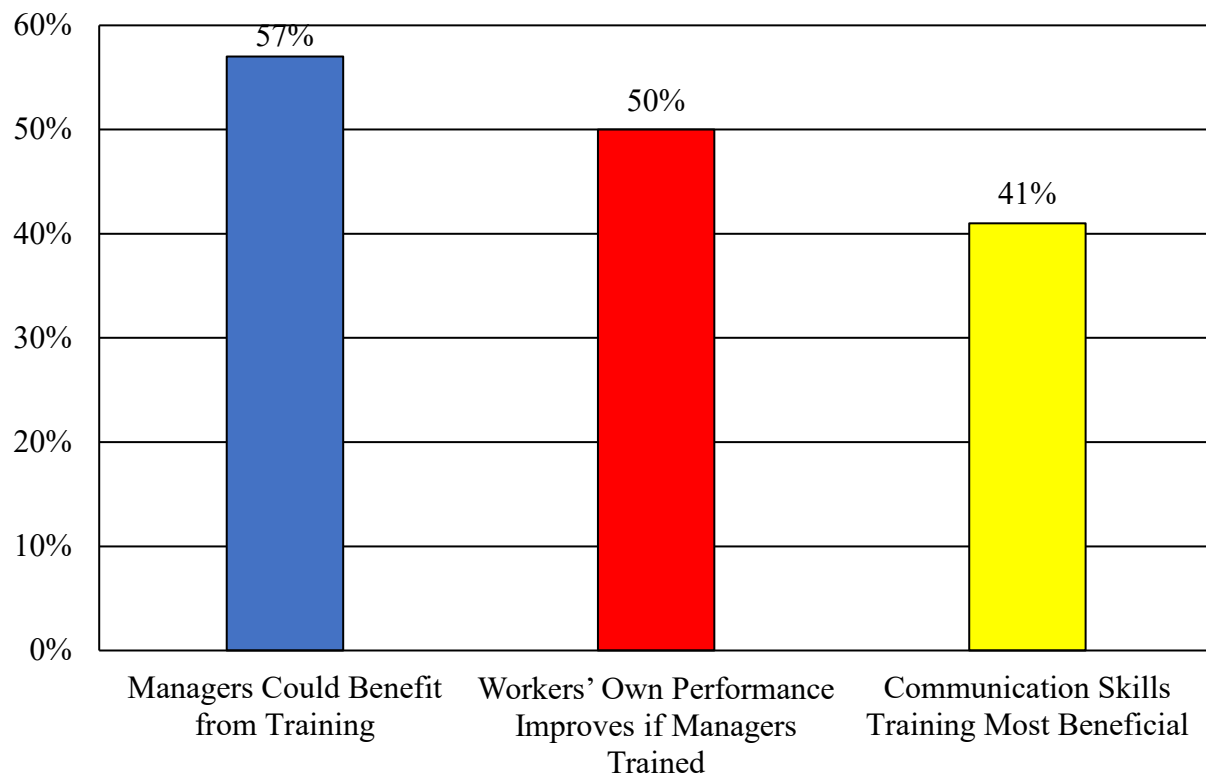
Exhibit 6.2
Share of Employees That Think Helps Employees Adjust to Changes



Source: *People Management Report*, predictiveindex.com, 2021

Employees are not just aware of the shortcomings of their managers but have ideas about how management can be improved. Data from a 2022 survey shows that 57% of employees think that managers could benefit from management training. **Exhibit 6.3** shows that 50% of employees also believe that this training could in turn improve their own performance.

Exhibit 6.3
Workers' Perceptions about Training Managers



Source: *Amerispeak Omnibus Survey*, National Opinion Research Center at the University of Chicago, 2022

The review of management training issues by the Department of Legislative Services (DLS) found that communication is the area of improvement that is most commonly mentioned in the literature. This survey found 41% of employees believe that the kind of management training that would be most beneficial is communication skills training.

Management Training Programs Are Common and Support a Broad Range of Skills

Training magazine prepares an annual survey of employers' training programs, which covers private industry, government, and nonprofits. In its 2022 report, *Training* estimated that over \$100 billion was spent in the 2021 to 2022 year. This includes spending on training staff, products supporting training staff, and outside services. The survey suggests that employers are expected to spend more on training in subsequent years. The most common type of product or

service that organizations intend to purchase next year is a learning management system, which is a software application or web-based technology used to plan, implement, and assess a specific learning process. Learning management systems are used to develop and improve training. Acquiring learning management systems suggests that the organizations are expecting to expand or enhance their training.

Training can be customized and offered through various media. Organizations provide instructor-led training, virtual training, self-paced lessons, and blended training that combines multiple approaches. Recent technological developments have made training easier to implement. The kinds of topics that management training can offer include:

- communication;
- conflict resolution;
- coaching and mentoring;
- teamwork and team building;
- performance management;
- change management;
- safety; and
- meeting management.

Well-designed training provides benefit to organizations by improving operations and employee retention. However, training programs are not always effective. Factors that can lead to improved training outcomes include:

- ***Organizational Strategy:*** Ideally, training is not an ad hoc exercise whereby an executive sees a random problem and orders resources to address the problem. Rather, effectively organized training examines the needs of the organization and applies training across the organization. These kinds of issues examine how the training addresses specific organizational needs; how to design the training to fit the needs; and how to provide the training, which includes decisions about what is outsourced and how the training is offered (such as virtual, instructor-led, or blended). The training should also be designed to have buy in from executives, managers, and employees.
- ***Metrics Measuring Effectiveness:*** The purpose of the training is to improve the organization's performance. Metrics can be used to measure how effectively the training is addressing the stated goals. Metrics can also identify deficiencies and adjust training to

improve it. So that metrics are embedded in the training process, metrics should be developed at the same time that the instruction is being developed.

- ***Economies of Scale:*** Developing effective management training programs require time and money, so it is inefficient for each agency to develop its own training program. Many of the skills taught in management training programs, such as communication, coaching and mentoring, and performance management apply to other State agencies. As such, the State could begin by developing a pilot program. The program could be tested and refined. When the program is ready, it could be adopted for other agencies. This could provide a better program at a lower cost.

Expanded and Improved Employee Training Programs Could Improve Retention

National surveys suggest that it is common for employees to be dissatisfied with their supervisors and managers to the point that they leave the organization because of poor management. It is unlikely that the State is immune from this trend. Data suggests that management training can improve how employees feel about an organization and reduce the desire to leave the organization. Additionally, many employees feel that management training that improves their managers' performance also improves their own performance at work. While some agencies do offer some management training, the State's efforts to date have been modest, so more needs to be done to improve employee retention.

Recommendations

DLS recommends that the Department of Budget and Management (DBM) expand and enhance management training programs for the Executive Branch. Specifically, DBM should:

- implement a supervisor and manager training program that can be used across Executive Branch agencies;
- develop pilot programs that can be accommodated to support specific agencies;
- collect performance data and develop these performance measures as the training is being developed, so that they are embedded in the training program; and
- survey employees to collect data about employees' perceptions about their supervisors and managers to inform the training programs. This should include specific skills that could be developed. Data should also be collected from exit interviews since this may also provide some indication of what skills may need to be enhanced to improve retention rates.

Examine Job-sharing Programs

Strategies to improve worker recruitment and retention should consider how to make the workplace more flexible for workers. Surveys show that employees value flexibility at their workplace. There are many workers that need flexible schedules to maintain a satisfactory work-life balance. Some of these workers leave the workforce if they cannot get flexible hours. These groups include (1) older workers, many of whom still want to work but no longer want a full-time job; (2) parents in the workforce with child care responsibilities; and (3) workers with aging parents that need additional caregiving. Taken together, these groups represent a substantial share of the workforce.

Ages with the higher rates of separation from State service are under 30 and over 60. DBM's data shows that in fiscal 2021, 155 per 1,000 employees under the age of 30 resigned. This is almost twice as high as employees in their 30s and three times higher than employees in their 40s. While there are many reasons that employees resign, surveys suggest that a common reason for employees, especially women, to leave work is because work interferes with caregiving responsibilities. Programs that reduce the amount of time an employee spends at work but still keeps employees on the job could reduce the number of separations.

In recent years, workers over 55 are the fastest growing segment of the labor force. The State's defined benefit contribution plan is an attractive benefit for many older workers. These older workers may want to earn retirement benefits but may not want to work full time. Programs that reduce the time at work could encourage older workers to enter State service or encourage older workers already working for the State to continue State service.

Job Sharing Can Improve Employee Recruitment and Retention by Making the Workplace More Flexible

Job sharing provides opportunities for part-time workers working in full-time positions. Job sharing is when two or more workers perform the same full-time position. Together, they share responsibility for the success of their assigned position. The responsibility for building a functional arrangement is on the workers, not the supervisor. Workers agree that if one leaves or is not meeting expectations, the other position reverts to full time until a replacement is found. Work effort (such as hours or share of the job), salary, and paid time off is split between the employees. The work does not have to be split evenly between the two workers. When the work is not evenly split, salaries and time off is prorated based on the split. Schedules may overlap, as needed. If job sharing is implemented, the State could have management take some responsibility for job sharing so that management also finds part-time employees that could be matched with employees that want a job-sharing arrangement.

Potential advantages to job sharing are that:

- successful job sharing provides more consistent work than two part-time workers since the arrangements are made by the workers to cover a full-time position;

- job-sharing partners may be able to fill in for each other during scheduled and unscheduled absences;
- successful job sharing allows workers to benefit from each partner's varied perspectives, strengths, and skills; and
- successful job sharing gives workers more time outside of work to address personal responsibilities, so that many workers are more focused on their work schedule.

There are some potential disadvantages to job sharing, such as:

- it may be difficult for an individual interested in job sharing to find a compatible job-sharing partner;
- when a partner is found, a partner could be unreliable;
- a higher degree of communication and more planning time is needed;
- possible reduced potential for advancement;
- potentially higher costs for fringe benefits, as they are paid to two employees; and
- new programs and ideas are potentially more difficult to implement.

There are strategies that can address some of the potential disadvantages. Prior to starting the arrangement, time should be spent to create job-sharing arrangements. This should include a detailed work plan. The arrangement should have regularly scheduled times to meet to foster communication. There can also be a probationary period in which workers can be acclimated to the arrangement.

There are also factors that mitigate some of the disadvantages. With respect to job sharing limiting advancement opportunities, older workers may be less interested in advancement, so concerns about advancement may not be relevant for many workers. While paying additional fringe benefit is a potential cost, this cost should be compared to the costs associated with leaving positions unfilled, training new employees, and other costs associated with high vacancies. Since communication is key to successful job-sharing arrangements, recently adopted technology that fosters improved employee communication is a key to success. Finally, advertising job sharing and targeting employees that have recently left could expand the pool of workers aware of job sharing and streamline finding job sharing partners.

Employees in job-sharing programs are eligible to earn retirement benefits. To qualify, the employee must work at least 500 hours in a year. This is 12.5 weeks for full-time work. Workers that are not yet eligible to retire can continue to earn retirement service credits while they are in a job-sharing program.

Recommendations

DLS recommends that DBM examine the costs and benefits of creating a statewide job-sharing program. This should include developing guidelines for agencies to implement job sharing, developing strategies for advertising job sharing, and assisting workers interested in finding a job-sharing partner. This could include creating a pilot program to test job sharing on a limited basis.

Enhance Succession Planning

As the national workforce moves through the phase of retirements by the baby boomer generation, recruiting and retaining talent to replace those who are retiring is central to the success of any employer. Succession planning, the process of identifying critical positions in the organization and creating a talent pipeline, can serve as a major tool in meeting this need.

The Society of Human Resource Management (SHRM) defines succession planning as a future-focused practice of identifying the knowledge, skills, and abilities to perform certain functions and then developing a plan to prepare multiple individuals to potentially perform those functions. It is viewed as a focused process for keeping talent in the pipeline. SHRM emphasizes that succession planning is a 12 month to 36 month process of *preparation*, not *pre-selection*. This distinction is important in the context of the public sector, which generally requires public notice of vacancies and competition for open positions. Notable advantages of succession planning include:

- adapting to demographic changes and talent scarcity;
- identifying skill gaps and training needs;
- retaining institutional knowledge;
- boosting morale and retention by investing in employees; and
- replacing unique or highly specialized competencies.

Although succession planning can be carried out in diverse work environments, some practices facilitate its success, including designing jobs with complementary or layered skill sets and maintaining an open organizational structure that reduces barriers to cross-functional learning. Failure to engage in succession planning can lead to the loss of mission critical knowledge and skills with no plan to replace them as well as significant disruptions to workplace processes as successors are sought and trained.

Succession planning is an ongoing process that may require dedicated staff to ensure continuity and accountability. Key steps to successful succession planning are to:

- ***Begin by Analyzing the Workforce:*** Workforce data and analysis can help identify potential future challenges and also facilitate buy-in for succession planning. For instance, workforce data analysis can highlight areas of the enterprise that may experience high rates of retirement in the next five years. It can also spotlight areas that experience frequent employee turnover. Possible variables include retirement eligibility, distribution of employees' years of service throughout the organization, turnover trends, average time stayed past retirement eligibility, and length of time to fill vacant positions.
- ***Focus on Positions, Not People:*** In a merit system such as state government, permanent succession cannot be decided until all qualified candidates are provided an equal opportunity to apply and be considered for a position. Thus, a best practice is to determine which positions are best positioned to succeed another position rather than which individuals may fill future vacancies.
- ***Identify Critical and Vulnerable Positions:*** Identifying positions that have no known successor is a crucial but insufficient step in succession planning. The next step is to identify which of those positions is critical to carrying out the organization's mission. These positions may extend beyond senior leadership roles to specific positions with particular technical expertise.
- ***Develop Detailed Job Descriptions:*** For positions identified as high risk, identify the knowledge, skills, abilities, and competencies needed to achieve success in that position. These then serve as the selection criteria for identifying positions that can fill in.
- ***Identify Positions That Can Make the Transition:*** Based on the job description, identify positions that can transition temporarily, should a vacancy arise. These positions may also be qualified to apply for the successor position, but they are not assured of a permanent appointment. This process should also include identifying gaps between the two positions as well as aligned duties and responsibilities.
- ***Create a Plan to Prepare Successors:*** A developmental growth plan can identify meaningful opportunities for growth, including learning opportunities, participating in functional areas in the incumbent's role, mentoring or coaching by the incumbent, filling in when the incumbent is away, and more.

Recommendations

Many agencies have key career employees that have decades of experience. These employees will leave State service one day. As such, agencies will need to replace the employees

with competent employees. **DLS recommends that DBM encourage and support agencies succession planning efforts.**

Expand Apprenticeships in State Government

During the 2022 session, the General Assembly provided \$25 million to expand apprenticeship programs in the State and directed the Maryland Department of Labor (MDL) to form several workgroups to study opportunities for apprenticeship programs for the public-sector workforce as well as for the development of degree apprenticeship programs. The President of the Senate has also created a workgroup on apprenticeships. Work on developing apprenticeship pathways for in demand occupations is expected to continue during the 2023 session.

Background

Apprenticeship is a voluntary, industry-sponsored system that prepares individuals for occupations typically requiring high-level skills and related technical knowledge. An apprentice receives supervised, structured, on-the-job training under the direction of a skilled journey person and related technical instruction in a specific occupation. Apprenticeships are available to individuals aged 16 and older that may last from 1 to 6 years, although most are 3 to 4 years, and involve a minimum of 144 hours of classroom instruction per year and at least 2,000 hours per year of on-the-job training.

A national apprenticeship and training program was established in federal law in 1937 with the purpose of promoting national standards of apprenticeship and to safeguard the welfare of apprentice workers. Along with 26 other states and the District of Columbia, Maryland has chosen to operate its own apprenticeship programs under the federal law. The Division of Workforce Development and Adult Learning (DWDAL) within MDL is responsible for the daily oversight of State apprenticeship programs. More specifically, DWDAL approves new apprenticeship programs as well as changes to current programs and ensures compliance with State and federal requirements. The Maryland Apprenticeship and Training Council serves in an advisory role for legislation and regulations, recommending changes to update apprenticeship law.

Public-sector Apprenticeship Workgroups

The 2022 *Joint Chairmen's Report* (JCR) directed MDL to establish three workgroups on public-sector apprenticeships at the State and local level, focusing on the health care, transportation, and public safety sectors. Each workgroup was tasked with identifying the extent of public-sector vacancies in each sector; reviewing related apprenticeship programs in other states or internationally; and identifying apprenticeship opportunities in jobs with the greatest barriers to recruitment and training, including opportunities for degree apprenticeship programs and high school apprenticeship programs.

Each of the three workgroups has met monthly throughout fall 2022, discussing the current landscape of apprenticeships in Maryland and barriers to expanding apprenticeships in each field as well as hearing about apprenticeship programs in other states. The workgroups will continue to meet through spring 2023, with a targeted focus on implementation of potential apprenticeship programs. Each workgroup is expected to submit an interim report to the budget committees by December 1, 2022, and a final report by June 30, 2023. Additionally, the JCR directed the University System of Maryland (USM) to convene a group of stakeholders to discuss the feasibility of creating degree apprenticeship programs, including developing two pilot programs by fiscal 2024. USM and MDL are expected to submit a report on these efforts by December 1, 2022.

Funding

The fiscal 2023 budget includes \$25 million in general funds to be expended over multiple years to support the expansion of apprenticeship programs. As of October 2022, MDL is deciding how the funds will be used and has identified priority areas and potential initiatives, including:

- ***Sustaining and Growing the Pool of Registered Apprenticeship Sponsors:*** assisting employers in establishing or expanding apprenticeship programs through reimbursement programs for related instruction, funding for onsite coordination staff, or other services for apprenticeship sponsors;
- ***Growing and Diversifying Apprentices:*** Improving recruitment and support for apprentices, including through marketing and outreach, integration with disability services, supporting programs in serving underrepresented groups, and expanding access to pre-apprenticeship and reentry programs that lead to apprenticeship; and
- ***Expanding Degree Apprenticeship and Public-sector Apprenticeship:*** Implementing recommendations and pilot programs identified by the workgroups established in accordance with the 2022 JCR language.

Funding for broader workforce development initiatives has also expanded significantly in recent years. The Governor and General Assembly allocated \$75 million in federal funds from the American Rescue Plan Act of 2021, across the fiscal 2022 and 2023 budgets, to local workforce boards for providing training, job search assistance, supportive services, and other workforce development initiatives to individuals and businesses impacted by the pandemic, including the expansion of apprenticeship and pre-apprenticeship programs. For example, Baltimore City plans to use a portion of this funding to support 100 apprenticeships in industries negatively impacted by the pandemic, and Montgomery County plans to invest in business incentives for hiring apprentices as well as funding pre-apprenticeship training.

Recommendation

DLS recommends that the State consider expanding apprenticeship programs. These programs offer individuals that might not yet have all the qualifications to be employed by the State the opportunity to build the required skills. This can be especially useful in the trades for agencies like the Department of General Services or with information technology positions. These are areas in which the State had high vacancy rates prior to the pandemic and whose vacancy rates have increased since the pandemic.

Chapter 7. Summary of Recommendations

This chapter summarizes the recommendations. They are grouped by chapter.

State Salaries

Report on State Salaries

The Department of Legislative Services (DLS) recommends that the State consider hiring a consultant to estimate the differences between State and non-State salaries. This study could be used as a basis for targeted salary increases and could be combined with other recommendations, such as enhancing the annual salary review (ASR) process.

Annual Salary Review

DLS recommends that the Department of Budget and Management (DBM) continue to use the ASR process. The data analysis clearly shows that the ASR program has been effective. Some positions with extraordinarily high vacancy rates have seen lower vacancy rates after receiving an ASR, even in years in which aggregate vacancy rates increased. Having a process to award salary increases to positions that are difficult to fill and keep filled is an efficient way to reduce vacancies in high-vacancy positions.

DLS also recommends that DBM enhance the ASR process. DLS recognizes that requiring more from DBM may necessitate additional resources, but any additional costs may be outweighed by having a more efficient ASR program. Specific areas to enhance include:

- ***Have DBM Be More Proactive:*** The current process requires that agencies request ASRs from DBM. There is ample data to determine which positions are most difficult to hire and which positions have the shortest tenures. DBM could analyze personnel data to see what positions are most difficult to keep and address problems sooner. In some years, ASRs have reduced vacancy rates by over 3 percentage points when compared to the control group. In other years, ASRs reduced vacancy rates by less than 0.5%. This variability may indicate that ASRs are not applied effectively. A more proactive approach could lead to a more effective application of ASRs.
- ***Develop Standards to Rank Positions That Are in Most Need of an ASR:*** Funds may not be available each year to fund all positions that need ASRs, so ranking may yield the best results. DLS also observes that fiscal years in which there were only modest improvements in the vacancy rates for positions receiving ASRs may be attributable to ASRs not being awarded to the positions that most need ASRs. More targeted ASRs may reduce vacancy rates further. Ranking ASR awards may make the program more efficient.

- ***Review Positions That Received ASRs to Determine How Effective Awarding an ASR Was:*** For ASRs awarded in fiscal 2020 and 2022, the vacancy rate for positions receiving ASRs increased at a higher rate after the ASR was awarded than positions not receiving an ASR. The reasons for this counterintuitive result are unclear. It may be that the position was so underfunded that the ASR was too little, too late, or there could be other factors that affect various positions' vacancy rates. Examining positions that did not perform as expected could yield data that informs how subsequent ASRs are structured.

Longevity Pay

DLS recommends that DBM consider offering longevity pay or bonuses for State employees. As employees progress and gain experience, employees should become more effective and efficient in their work. Longevity raises reflect and reward the effect of experience in the workforce. Longevity raises and bonuses help employers signal to their employees that they value experience and loyalty. Some states, such as North Carolina, Oklahoma, and Texas provide longevity pay plans or bonuses as a tool for state agencies to use in attracting and retaining qualified employees for state service.

Employee Benefits

Child Care Benefits

DLS recommends that the State examine the costs and benefits of offering child care benefits. This should include examining State employees' needs, various kinds of benefits, and costs associated with offering benefits. The objective is to determine if there are cost-effective child care benefits that the State could offer that would make working for the State more attractive.

DLS also recommends that the State consider adopting policies to expand the pool of child care providers statewide. As the U.S. Department of Treasury reported, there tends to be underinvestment in child care. An option to consider is start-up grants for new child care providers.

Telework

DLS recommends that DBM study how to improve telework programs and support agencies' telework programs. Data shows that employees value telework programs, so offering telework is an employee recruitment and retention tool. However, an often-cited concern about telework is that it can be difficult to maintain organizational culture if the majority of the staff are teleworking. There are also concerns about how to integrate new staff into teleworking organizations. Since the COVID-19 pandemic, organizations have significantly expanded telework. For most organizations, telework policies are in their infancy, so policies were implemented quickly. While policies may be well intentioned, this approach may not be as effective as developing policies based on methods that have been tested over time and implemented after long and careful consideration. As such, there is probably room for

improvement with respect to the State's telework policies and practices. DBM should examine how organizations successfully implement telework and provide guidance to State agencies regarding telework. DBM should coordinate with the Department of Information Technology and Office of Telework Assistance to assist State agencies in implementing high quality telework programs.

Enhancing the Workplace

Expand Job Training for Supervisors and Managers

DLS recommends that DBM expand and enhance the management training programs for the Executive Branch. Specifically, DBM should:

- implement a supervisor and manager training program that can be used across Executive Branch agencies;
- develop pilot programs that can be accommodated to support specific agencies;
- include collecting performance data and develop these performance measures as the training is being developed so that they are imbedded in the training program; and
- survey employees to collect data about employees' perceptions about their supervisors and managers to inform the training programs. This should include specific skills that could be developed. Data should also be collected from exit interviews, since this may also provide some indication of what skills may need to be enhanced to improve retention rates.

Examine Job-sharing Programs

DLS recommends that DBM examine the costs and benefits of creating a statewide job-sharing program. This should include developing guidelines for agencies to implement job sharing and developing strategies for facilitating successful job-sharing. This could include creating a pilot program to test job sharing on a limited basis.

Enhance Succession Planning

DLS recommends that DBM encourage and support agencies' succession planning efforts. Many agencies have key career employees that have decades of experience. These employees will leave State service one day. As such, agencies will need to replace the employees with competent employees.

Expand Apprenticeships in State Government

DLS recommends that the State consider expanding apprenticeship programs. These programs offer individuals that might not yet have all the qualifications to be employed by the State the opportunity to build the required skills. This can be especially useful in the trades, for agencies like the Department of General Services, or with information technology positions. These are areas in which the State had high vacancy rates prior to the pandemic and whose vacancy rates have increased since the pandemic.

State Personnel System

Legislation Suggested by DBM

DLS recommends legislation to remove certain job notice and posting requirements or make the requirements waivable by the Secretary of DBM. State law requires that the hiring agency send a copy of an open position's selection plan and job announcement to DBM one week before the job announcement is posted (State Personnel and Pensions §7-204 (c) (1)). Statute also requires that the job posting is open for two weeks (§7-204 (c) (2) and (3)). The combination of these two requirements means that there are at least three weeks between the decision to hire for a position and the selection of candidates, and often a month or more before the interview and hiring process can begin. Removing these requirements could address the concern that the State loses out on many candidates to employers that are able to make faster hiring decisions.

DLS recommends that managers be given more flexibility regarding who is interviewed. Current law in most situations requires candidates to be placed into categories of best qualified, better qualified, and qualified, and further requires that candidates be interviewed in that order. Due to scoring preferences given to State employees and veterans, those candidates are often in the best qualified category. This can lead to a lengthy interview process, encourage the poaching of State employees from other State agencies, and restrict entry into State service of recent graduates, non-State employees and candidates with shorter work histories. The preference given to State employees is not related to the type of job being sought, meaning that State service not related to the open position can carry more weight than a non-State candidate's experience that directly relates to the job being sought.

Appendix 1

Other State Experiences and Policies

Maryland is not unique in the challenges that it faces with recruiting and retaining state workers. The Bureau of Labor Statistics reports that public-sector employment has declined by 8.5% for local governments and 4.4% for state government since February 2020 (before the start of the Covid-19 pandemic). Though net employment losses have improved, they have still not fully recovered with net employment losses at 4.4% for local governments and 1.1% for state government through August 2022. Meanwhile, private-sector employment has fully recovered, with 885,000 more private-sector jobs in August 2022 than in February 2020. From December 2021 to February 2022, the state and local government job opening rate was the highest it has been in over 20 years, according to a 2022 report from Mission Square Research Institute.

Experiences and Steps Taken in Other Neighboring States

Other states have faced recruitment and retention issues of state employees similar to Maryland. As described in the following, Pennsylvania and West Virginia have examined the issue of recruitment and retention of state employees and have either taken steps or recommended steps to address the issue.

Pennsylvania

Pennsylvania has taken steps to shorten the hiring process for state employees. Additionally, Pennsylvania has established new benefits programs and policies to enhance state employee retention and improve workplace culture, such as providing six weeks of paid parental leave, raising the minimum wage to \$15 per hour, offering telework for certain positions, offering flexible spending accounts for health care and dependent care expenses, and expanding mental health benefits.

Pennsylvania has focused on recruiting young people to consider joining the state workforce, since 54% of Pennsylvanian state employees are 45 years old or older; and there are fears of a silver tsunami of retirees approaching. Recruiters participate in 400 to 500 in-person and virtual events around the state annually. Pennsylvania was named for the first time ever as one of the best employers in the nation for new graduates in 2021 by Forbes. Additionally, Governor Thomas W. Wolf included \$30 million in his 2023 budget proposal to establish two child care facilities located on or near state offices and provide a subsidy for employees for private child care.

West Virginia

West Virginia is challenged with employee retention issues, salary compression, and employees moving from agency to agency to improve their salary. In its fiscal 2021 annual report, the West Virginia Division of Personnel (DOP) expressed concerns on addressing these issues due

to compensation limitations, which have resulted in increased expenses related to grievances, new hires, training, and turnover. Pay grades have been compressed due to the absence of merit increases over the past decade, which is compounded by the increase in the minimum wage. The floor of the salary schedule has been raised to meet the minimum wage; yet, there is minimal movement occurring for current employees within the pay schedule. To mitigate the recruiting problem, agencies frequently request special hiring rates. DOP recommended the following options considered to provide better tools for recruiting and retaining employees:

- include more frequent updates to the salary schedule and compensation plan;
- offer flexible benefit options for workers seeking non-traditional benefits such as educational loan repayment;
- encourage promotion within, compensate strong performances, job progression, continuing education, and succession planning; and
- authorize DOP to update the entire DOP statute to create efficiencies in the hiring process and address pay stagnancy.

Appendix 2 Annual Salary Review Analysis Data

The Department of Legislative Services (DLS) prepared a t-test to estimate if the difference in vacancy rates is statistically significant. After reviewing the data that was collected to consider the best approach to evaluate the data, DLS concluded that the appropriate assumptions are that the two samples are independent, that the population means are unknown, and the estimates' variances are not necessarily equal. Since DLS is only concerned if annual salary reviews (ASR) reduce vacancy rates, a one-tailed t-test was used. For this test, the t-statistic is 1.239, and the p-value is 0.130. The sample size, with 14 values, is smaller than ideal. The t-test does not find that the results are statistically significant.

However, it is noteworthy that these are strong results for such a small sample. While the p-value of 0.13 is not less than the 0.05 required to be statistically significant, the p-value is not far from 0.05, which suggests a fair amount of confidence in ASRs effect on reducing vacancy rates. DLS also observes that the standard deviations for each of the two sample means was greater than its mean, so the changes in vacancy rates differ substantially between the various years. Not surprisingly, the high standard deviations make it less likely a t-test will be statistically significant and increase the p-values.

Summary Statistics for t-test

	Change in Vacancy Rates <u>No ASR</u>	Change in Vacancy Rates <u>With ASR</u>
Data Points	7	7
Mean	0.542	-2.425
Standard Deviation	0.946	6.623

t-test Results

	<u>Results</u>
Mean Difference	2.967
t-statistic	1.239
Degrees Freedom	6.274
p value or Significance (1-tailed)	0.130

Changes in Vacancy Rates That ASR Is Received
Fiscal 2014-2022

<u>Fiscal Year</u>	<u>Change in Positions Not Receiving ASR</u>	<u>Change in Positions Receiving ASR</u>	<u>Difference</u>
2014	0.090%	-0.090%	-0.180%
2015	-0.549%	-0.714%	-0.165%
2016	1.006%	-16.367%	-17.373%
2019	1.920%	-1.754%	-3.674%
2020	0.355%	0.428%	0.073%
2021	-0.469%	-0.602%	-0.133%
2022	1.440%	2.123%	0.683%

Note: Test is for independent samples, with equal variances not assumed, and mean of population not known. Gaps in fiscal 2017 personnel data do not allow the Department of Legislative Services to analyze fiscal 2017 and 2018 ASRs, so those years are not included in this analysis.

Appendix 3

Environmental Benefits of Telework

The expansion of telework reduces the need for as many employees to commute to and from work on a daily basis, reducing both congestion during peak commuting hours and the overall number of vehicle miles traveled (VMT) in the State. Eliminating commutes, easing congestion, and reducing VMT have potential beneficial effects on energy use, greenhouse gas emissions, and air quality and personal health. The U.S. Environmental Protection Agency estimates that in 2018, 28.2% of the nation's greenhouse gas emissions came from the transportation system (including cars, trucks, ships, trains, and planes), and 26.9% came from electricity production.

The effect of the world's transportation system on the environment was abundantly clear during the global lock-down measures put in place at the start of the COVID-19 pandemic. During the pandemic, many regions across the planet experienced meaningful and oftentimes visible reductions in air pollution and water pollution. For example, the air quality in Los Angeles, California, which experiences significant traffic congestion and related air pollution, improved drastically during the city's lockdown.

The effect of congestion and vehicle emissions on local air quality and personal health is illustrated well by the study "Traffic Congestion and Infant Health: Evidence from E-ZPass," which was published in *American Economic Journal: Applied Economics* in January 2011. In the study, researchers observed infant-health factors in high traffic areas both before and after the implementation of E-ZPass toll systems in those areas. The researchers made two key findings. First, the E-ZPass greatly reduced both traffic congestion and vehicle emissions in the surrounding area, and second, the corresponding air quality improvements reduced prematurity and low birth weight among mothers within two kilometers of the toll plazas by over 10%.

A 2020 meta-analysis published by *Environmental Research Letters* observed 39 separate studies on the impact telework has on energy use and related greenhouse gas emissions. Of those 39 studies, 26 found that telework policies result in a net decrease in energy use and greenhouse emissions, while only 5 of the studies found a net increase. The benefits resulted primarily from eliminating commutes, reducing congestion and related vehicle emissions, and reductions in office-based energy consumption. The meta-analysis emphasizes that it is difficult to fully comprehend the size impact due to the difficulty in measuring off-setting factors such as a worker's frequency of telework, at-home energy use when teleworking, and changes to travel patterns. The analysis concludes that the more rigorous of the studies produced more complicated and ambiguous results; studies that account for non-work travel and home energy use find smaller savings.

Reducing congestion and VMT could have a particularly pronounced impact on the air quality of the State since the Washington metropolitan area has one of the worst average commute times in the United States. Specifically, the U.S. Census Bureau estimates that the average commute time in the Washington metropolitan area at 35.6 minutes each way.

Bibliography

- Abrams, Zara. 2019. "The Future of Remote Work." *Monitor on Psychology* 50 (9): 54. <https://www.apa.org/monitor/2019/10/cover-remote-work>.
- Adams, Nath, Rachel Allen, and Emeka Ojukwu. 2019. "Workplace Redesign: Current Trends, Challenges, and Opportunities." CAHRS White Paper. Center for Advanced Human Resource Studies (CAHRS), Cornell University, May. <http://est05.esalestrack.com/eSalesTrack/Content/Content.ashx?file=89d39838-fd4a-4dcc-b3f2-cdb4fc61d66e.pdf>.
- Anne Arundel County Office of Personnel. n.d. "Class Specifications." Anne Arundel County, Maryland (website). Accessed October 2022. <https://www.aacounty.org/departments/personnel/employment-information/job-descriptions/>.
- BDO United States. 2020. "Teleworking Employees, COVID-19, and the Resulting SALT Effects." BDO. May 2020. <https://www.bdo.com/insights/tax/state-and-local-tax/teleworking-employees,-covid-19,-and-the-resulting>.
- Belzunegui-Eraso, Angel, and Amaya Erro-Garcés. 2020. "Teleworking in the Context of the COVID-19 Crisis." *Sustainability* 12 (9): 3662. <https://doi.org/10.3390/su12093662>.
- Bureau of Labor Statistics. n.d. "BLS Data Finder 1.1." BLS Beta Labs. Accessed November 9, 2022. <https://beta.bls.gov/dataQuery/find?st=0&r=20&q=ce&fq=survey:%5bce%5d&fq=cg:%5bIndustry%5d&more=0&fq=cc:%5bGovernment%5d>.
- Casale, Matt. 2020. "Working From Home During the Pandemic Has Environmental Benefits – But We Can Do Even Better." *The Revelator*, May 18, 2020. <https://therevelator.org/telework-environmental-benefits/>.
- Centers for Disease Control and Prevention. 2021. "Loneliness and Social Isolation Linked to Serious Health Conditions." Alzheimer's Disease and Healthy Aging. Last modified April 29, 2021. <https://www.cdc.gov/aging/publications/features/lonely-older-adults.html>.
- Conway, Matthew Wigginton. Deborah Salon, Denise Capasso da Silva, and Laura Mirtich. 2020. "How Will the COVID-19 Pandemic Affect the Future of Urban Life? Early Evidence from Highly-educated Respondents in the United States." *Urban Science* 4 (4): 50. <https://doi.org/10.3390/urbansci4040050>.
- Cruikshank, Ainslie. 2020. "COVID Pandemic-19 Shows Telecommuting Can Help Fight Climate Change." *Scientific American*, July 22, 2020. <https://www.scientificamerican.com/article/covid-19-pandemic-shows-telecommuting-can-help-fight-climate-change/>.

- Cunneen, William. n.d. "Management Training: Why It's Important and Popular Topics." Roundtable Learning (website). Accessed December 1, 2022. <https://roundtablelearning.com/management-training-why-its-important-and-popular-topics/>.
- Currie, Janet. 2011. "Traffic Congestion and Infant Health: Evidence from E-Z Pass." *American Economic Journal: Applied Economics* 3, no. 1 (January): 65-90. <https://doi.org/10.1257/app.3.1.65>.
- Curtis, Matt. 2020. "(re)Awakening to the Benefits and Climate Impacts of Telework during COVID-19." capstone project, UC San Diego, June 12, 2020. <https://escholarship.org/uc/item/7nf8k2q6>.
- Dalton, Michael, and Jeffrey A. Groen. 2022. "Telework During the COVID-19 Pandemic: Estimates Using the 2021 Business Response Survey." *Monthly Labor Review*, March 2020. <https://www.bls.gov/opub/mlr/2022/article/telework-during-the-covid-19-pandemic.htm#top>.
- Delaware Employment Link. n.d. "Class Specifications." State of Delaware (website). Accessed October 2022. <https://www.jobapscloud.com/DE/auditor/ClassSpecs.asp>.
- DeSilver, Drew. 2020. "Before the Coronavirus, Telework Was an Optional Benefit, Mostly for the Affluent Few." Pew Research Center (website), March 20, 2020. <https://pewrsr.ch/2Qwk1zt>.
- Environmental Protection Agency (EPA). 2022. "Sources of Greenhouse Gas Emissions." EPA. Last modified August 5, 2022. <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.
- Evans, Simon. 2020. "Analysis: Coronavirus Set to Cause Largest Ever Annual Fall in CO2 Emissions." *CarbonBrief*, September 4, 2020. <https://www.carbonbrief.org/analysis-coronavirus-set-to-cause-largest-ever-annual-fall-in-co2-emissions/>.
- Fiscal Management Division. 2021. "Non-salary Payments: Longevity Pay." Texas Comptroller of Public Accounts (website). Last modified January 15, 2021. https://fm.xcpa.texas.gov/fm/pubs/paypol/nonsalary_provisions/?section=longevity&page=longevity.
- Freifeld, Lori. 2022. "2022 Training Industry Report." *Training Magazine*, November 16, 2022. <https://trainingmag.com/2022-training-industry-report/>. Global Workplace Analytics. n.d. "Costs and Benefits." Accessed November 9, 2022. <https://globalworkplaceanalytics.com/resources/costs-benefits>.

- Global Workplace Analytics. n.d. “Work-at-Home After COVID-19 – Our Forecast.” Accessed November 9, 2022. <https://globalworkplaceanalytics.com/work-at-home-after-covid-19-our-forecast>.
- Guyot, Katherine and Isabel V. Sawhill. 2020. “Telecommuting Will Likely Continue Long After the Pandemic.” Brookings (blog). April 6, 2020. <https://www.brookings.edu/blog/up-front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic/>.
- Hanke, Rachel Mosher, Richele Benevent, Patricia Schulte, Christine Rinehart, K. Andrew Crighton, and Maureen Corcoran. 2016. “The Effects of Telecommuting Intensity on Employee Health.” *American Journal of Health Promotion* 30 (8): 604-612. <https://doi.org/10.4278/ajhp.141027-quan-544>.
- Heckman, Jory. 2022. “OPM Says Federal Employees ‘Agency-hopping’ to Telework-friendly Offices.” *Federal News Network*, July 21, 2022. <https://federalnewsnetwork.com/hiring-retention/2022/07/opm-says-federal-employees-agency-hopping-to-telework-friendly-offices/>.
- Hook, Andrew, Victor Court, Benjamin K. Sovacol, and Steve Sorrell. 2020. “A Systematic Review of the Energy and Climate Impacts of Teleworking.” *Environmental Research Letters* 15 (9): 093003. <https://doi.org/10.1088/1748-9326/ab8a84>.
- Indeed Editorial Team. 2022. “Guide to Managerial Training Programs: Definition, Benefits and Common Topics.” Indeed.com (website). August 17, 2022. <https://www.indeed.com/career-advice/career-development/managerial-training-programs>.
- Jobs at Virginia.gov. “Postings.” Commonwealth of Virginia (website). Accessed October 2022. <https://virginiajobs.peopleadmin.com/postings/search>.
- Katsabian, Tammy. 2020. “The Telework Virus: How the COVID-19 Pandemic Has Affected Telework and Exposed Its Implications for Privacy and Equality.” SSRN (Social Science Research Network). September 1, 2020. <http://dx.doi.org/10.2139/ssrn.3684702>.
- Liss-Levinson, Rivka. 2021. *2021 Updated Survey Results; Public Sector Employee Views on Finances and Employment Outlook Due to COVID-19*. MissionSquare Research Institute, July 2021. <https://slge.org/wp-content/uploads/2021/07/2021-updated-survey-results-public-employees-and-covid.pdf>.
- Liss-Levinson, Rivka. 2022. *Survey Results: Continued Impact of COVID-19 on Public Sector Employee Job and Financial Outlook, Satisfaction, and Retention*. MissionSquare Research Institute, March 2022. <https://slge.org/wp-content/uploads/2022/03/public-workforce-and-covid-march2022.pdf>.

- Mann, Sandi, and Lynn Holdsworth. 2003. "The Psychological Impact of Teleworking: Stress, Emotions, and Health." *New Technology, Work and Employment* 18 (3): 196-211. <http://dx.doi.org/10.1111/1468-005X.00121>.
- Martz, Michael. 2022. "Back-to-work Deadline Arrives for State Employees Under Evolving Youngkin Policy." *Richmond Times-Dispatch*, July 5, 2022. https://richmond.com/news/state-and-regional/govt-and-politics/back-to-work-deadline-arrives-for-state-employees-under-evolving-youngkin-policy/article_cc1f3520-158d-5d07-993a-9479e52f48f9.html.
- Methods (blog). "Three Leadership and Management Training Challenges Companies Face and How to Solve Them." *Methodsof.com* (website). February 3, 2022. <https://methodsof.com/blog/three-leadership-and-management-training-challenges-companies-face-and-how-to-solve-them/>.
- MissionSquare Research Institute. 2022. "New Study Finds State and Local Governments Hiring, but Face Acute Challenges Retaining Workers." Press release, June 23, 2022. <https://www.slge.org/news-posts/new-study-finds-state-and-local-governments-hiring-but-face-acute-challenges-retaining-workers>.
- Murphy, Jan. 2022. "Transforming the State's Hiring Process to Make Commonwealth a 'Premier Employer.'" *PennLive Patriot-News*, June 6, 2022. <https://www.pennlive.com/news/2022/06/transforming-the-states-hiring-process-to-make-commonwealth-a-premier-employer.html>.
- National Institutes of Health. 2021. "Succession Planning: A Step-by-step Guide." Office of Human Resources, Workforce Support and Development Division, Workforce Planning and Analytics Section. 2021. https://hr.nih.gov/sites/default/files/public/documents/2021-03/Succession_Planning_Step_by_Step_Guide.pdf.
- National Opinion Research Center. 2022. "Amerispeak Omnibus Survey." University of Chicago, 2022. Quoted in Dana Wilkie, "SHRM Survey: Workers Think Managers Need More Training." SHRM (Society for Human Resource Management) (website). August 18, 2020.
- OECD (Organization for Economic Co-operation and Development). 2020. "Productivity Gains from Teleworking in the Post COVID-19 Era: How Can Public Policies Make It Happen?" OECD Policy Responses to Coronavirus (COVID-19). Last modified September 7, 2020. <https://www.oecd.org/coronavirus/policy-responses/productivity-gains-from-teleworking-in-the-post-covid-19-era-a5d52e99/>.
- Office of Administration. n.d. "Hiring Modernization." State of Pennsylvania (website). Accessed 11/9/2022. <https://www.oa.pa.gov/About%20OA/Pages/Hiring-Modernization.aspx>.

- Office of Management & Enterprise Services. n.d. "Longevity Payment." State of Oklahoma (website). Accessed 11/9/2022. <https://oklahoma.gov/omes/services/employee-benefits/longevity-payment.html>.
- Ozimek, Adam, and Eric Carlson. 2022. "The Uneven Geography of Remote Work." Economic Innovation Group (EIG), September 20, 2022. <https://eig.org/the-uneven-geography-of-remote-work/>.
- Pasini, Rachael. 2019. "Remote Work States: 7 Locations That Incentivize Telecommuting." Virtual Vocations (blog), March 20, 2019. <https://web.archive.org/web/20201115192523/https://www.virtualvocations.com/blog/telecommuting-news/7-remote-work-states/>.
- Pennsylvania Office of Administration. n.d. "Job Specification Search." State of Pennsylvania (website). Accessed October 2022. <http://www.jobclass.state.pa.us/>.
- The Predictive Index. 2021. "People Management Report." The Predictive Index (website). 2021. https://media.predictiveindex.com/wp-content/uploads/2021/07/10094204/2021_People_Management_Report-1.pdf.
- Preno, George. 2020. "Long-term Effects of Teleworking during COVID-19 Quarantine." Masters thesis, California State University, Northridge, August 2020. <https://scholarworks.csun.edu/bitstream/handle/10211.3/217481/Preno-George-thesis-2020.pdf?sequence=1>.
- Reynolds, Brie Weiler. n.d. "The Mental Health Benefits of Remote and Flexible Work." Mental Health America (blog). Accessed November 8, 2022. <https://www.mhanational.org/blog/mental-health-benefits-remote-and-flexible-work>.
- Salary Administration. 2017. "Longevity Pay," in *State Human Resources Manual*. North Carolina Office Of State Human Resources. https://files.nc.gov/ncoshr/documents/files/Longevity_Pay_Policy.pdf.
- Saucedo, Selena. 2020. "States Craft Remote Work Policies That Work." *State Legislatures Magazine*, October 16, 2020. <https://www.ncsl.org/research/telecommunications-and-information-technology/telework-remote-work-policies-that-work-magazine2020.aspx>.
- Schwantes, Marcel. 2021. "Why Are Workers Really Quitting? You Can Boil It Down to 1 Simple Reason." *Inc.*, October 30, 2021. <https://www.inc.com/marcel-schwantes/why-are-workers-really-quitting-you-can-boil-it-down-to-1-simple-reason.html>.
- SHRM (Society for Human Resource Management). n.d. "Engaging in Succession Planning." Toolkits. Accessed December 5, 2022. <https://www.shrm.org/resourcesandtools/tools-and-samples/toolkits/pages/engaginginsuccessionplanning.aspx>.

- Spector, Nicole. 2017. "Why Are Big Companies Calling Their Remote Workers Back to the Office?" *NBC News*, July 27, 2017. <https://www.nbcnews.com/business/business-news/why-are-big-companies-calling-their-remote-workers-back-office-n787101>.
- Stobierski, Tim. 2020. "5 Key Benefits of Enrolling in a Management Training Course." *Business Insights* (blog). Harvard Business School Online, January 16, 2020, <https://online.hbs.edu/blog/post/benefits-of-management-training>.
- Talbert, Elizabeth M., Ali Bustamante, Lindsay J. Thompson, and Margaret E. Williams. 2018. "Counting Our Losses: The Hidden Cost to Marylanders of an Inadequate Child Care System." Maryland Family Network. 2018. https://www.marylandfamilynetwork.org/sites/default/files/2020-06/MarylandFamilyNetwork_Countingourlosses_FullReport_Hyperlinked_Singles%20%281%29.pdf.
- Teague, Chris. 2022. "GM Walks Back Plan to Return Salaried Workers to the Office." Autoblog. September 28, 2022. <https://www.autoblog.com/2022/09/28/gm-walks-back-plan-salaried-workers-return-to-office/>.
- United States Bureau of Labor Statistics. 2022. "Labor Force Statistics from the Current Population Survey." Current Population Survey. Accessed October, 2022. <https://www.bls.gov/cps/>.
- United States Census Bureau. 2017 "Commuting Times, Median Rents and Language Other Than English Use in the Home on the Rise." Press release no. CB17-204, December 7, 2017, <https://www.census.gov/newsroom/press-releases/2017/acs-5yr.html>.
- United States Department of the Treasury. 2021. "The Economics of Child Care Supply in the United States." United States Department of the Treasury (website). September 2021. <https://home.treasury.gov/system/files/136/The-Economics-of-Childcare-Supply-09-14-final.pdf>.
- United States Office of Personnel Management. n.d. "USAJOBS." United States of America (website). Accessed October 2022. <https://www.usajobs.gov/>.
- Wang, Kailai, and Basar Ozbilen. 2020. "Synergistic and Threshold Effects of Telework and Residential Location Choice on Travel Time Allocation." *Sustainable Cities and Society* 63 (2020): 102468. <https://doi.org/10.1016/j.scs.2020.102468>.
- West Virginia Division of Personnel. 2021. *Annual Report 2021*. Charleston, West Virginia Division of Personnel. <https://personnel.wv.gov/SiteCollectionDocuments/Miscellaneous%20Documents/DOPAnnualReportFY2021.pdf>.
- Wilkie, Dana. 2020. "SHRM Survey: Workers Think Managers Need More Training." SHRM (Society for Human Resource Management) (website). August 18, 2020. <https://www.shrm.org/resourcesandtools/hr-topics/people-managers/pages/workers-think-managers-need-more-training-.aspx>.

Wright, Aliah D. n.d. “Why Are Some Companies Moving Away from Telework?” SHRM (Society for Human Resource Management) (website). Accessed November 9, 2022. <https://www.shrm.org/resourcesandtools/hr-topics/technology/pages/why-are-some-companies-moving-away-from-telework.aspx>.

Young, Gerald. 2022. *Survey Findings: State and Local Workforce 2022*. MissionSquare Research Institute. June 2022. <https://slge.org/wp-content/uploads/2022/06/2022workforce.pdf>.

