COMMONWEALTH of VIRGINIA

Virginia Employment Commission

Demetrios J. Melis
Commissioner

Post Office Box 26441
Richmond, VA 23261-6441

December 15, 2024

TO: The Honorable Glenn Youngkin
Governor, Commonwealth of Virginia
P.O. Box 1475
Richmond, Virginia 23218

The Honorable Luke E. Torian
Chair, House Appropriations
Virginia House of Delegates
201 North 9th Street
Richmond, Virginia 23219

The Honorable L. Louise Lucas
Chair, Senate Finance and Appropriations
Senate of Virginia
P.O. Box 396
Hampton, Virginia 23218

RE: Virginia Paid Family and Medical Leave Study: 2024 Update

In accordance with the Appropriation Act, Item 471K from Special Session 1, 2024, of the Virginia General Assembly, the Virginia Employment Commission (VEC) is submitting the 2024 update (2024 Update) to the 2021 Virginia Paid Family and Medical Leave Study (2021 Study) previously completed in accordance with Item 111 of Chapter 1289 of the Acts of Assembly of 2020.

As prescribed, the 2024 Update assesses the budgetary impacts of extending application of paid family medical leave (PFML) benefits as contemplated in Senate Bill 373 of the 2024 General Assembly to exempt individuals, while maintaining the benefits provided in § 2.2-1210 of the Code of Virginia for state employees. Furthermore, this assessment also examines

i) the number of exempt individuals that would receive expanded family and medical leave benefits;

ii) the budgetary impact and salary impact associated with providing each type of benefit to each class of employee described in clause (i); and

iii) the budgetary impact on state direct aid to public education

Key Figures (option 1):

Annual Yearly Payout	$1.45 billion
Administrative startup cost	$75 million
Employer PFML payroll tax	0.36%
Employee PFML payroll tax	0.36%

Both studies were commissioned by the VEC and completed independently by the Weldon Cooper Center for Public Service at the University of Virginia (WCC) with Milliman, an international actuarial and consulting firm conducting the actuarial analysis. This 2024 Update represents a significant effort to analyze the feasibility and potential impacts of a PFML program in Virginia. Its detailed actuarial and economic analyses provide valuable insights into program design and financial modeling, offering substantial technical depth.

Both the 2021 Study and the 2024 Update indicate limited research exists on the impacts of PFML programs on employers. Although the 2021 Study incorporated research conducted by state officials and staff, input from industry stakeholders, and results of a public survey, the limited scope and short turnaround of the 2024 Update precluded the additional information gathering.

As an interface between employers, employees, and other government agencies, the VEC regularly engages with businesses of all sizes—as a result we often see how the implementation of legislation and programs can impact employers, employees, and the greater workforce. It should be noted that the gaps in available research regarding the impact of PFML programs on employers underscore the need for additional information-gathering methods to develop a comprehensive understanding of both theoretical assumptions and real-world implications of PFML on businesses.

It should be noted only 13 states, and the District of Columbia have implemented PFML programs. This limited adoption underscores the challenges and complexities associated with these initiatives and suggests the need to carefully evaluate Virginia's unique economic landscape and workforce dynamics, particularly with Virginia's current standing as CNBC's 2024 "Top State for Business." The presence or absence of a PFML program is not the sole determinant of a state's business environment and overall ranking. However, it undoubtedly influences factors which impact a state's attractiveness to businesses. Therefore, gaining insight into the economic and structural differences between the 37 states who have *not* adopted PFML programs and the 13 that have is likely essential.

The state's diverse economic landscape, spanning rural areas in the Southwest to urban centers like Northern Virginia, creates varied conditions for the financial impact of PFML. Key industries such as agriculture, tourism, and retail, which rely heavily on small businesses in resource-constrained sectors, may face challenges with initial implementation costs and other unintended consequences. More in-depth research and informed perspective are essential for a comprehensive assessment of the impact of a PFML program in Virginia.

Please do not hesitate to contact me at demetrios.melis@vec.virginia.gov or (804) 786-3001 with any questions.

Respectfully submitted,

Demetrios J. Melis
Commissioner

NOVEMBER 2024

Virginia Paid Family and Medical Leave Study

2024 UPDATE

University of Virginia

Weldon Cooper Center for Public Service

This report was authored by

TERANCE J. REPHANN, PH.D.
Regional Economist
Center for Economic and Policy Studies
Weldon Cooper Center for Public Service
University of Virginia

EMILY G. LIEN
Academic Consultant
Center for Economic and Policy Studies
Weldon Cooper Center for Public Service
University of Virginia

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

PREFACE

During the 2024 legislative session, a bill was introduced in the Commonwealth of Virginia's General Assembly (SB373) to establish a Paid Family and Medical Leave Program. Among other provisions, the legislation would require the Virginia Employment Commission (VEC) to create an insurance trust fund financed by premiums charged to employees and employers. The legislation would also provide up to 8 weeks of paid leave in any one-year period and a weekly benefit covering up to 80 percent of an individual's weekly wage.

The bill follows legislative efforts during the 2020-2023 legislative sessions to establish similar PFML programs that had slightly different features, including HB2016 and SB1330 that were introduced in the 2021 legislative session. To provide information following that legislative effort, the VEC was then directed by the General Assembly (through a budget amendment during the 2021 Special Session I) to "complete an actuarial study to better understand the costs associated with the implementation of a Paid Family and Medical Leave program in Virginia." The study (Rephann et al. 2021) was overseen by the Weldon Cooper Center for Public Service at the University of Virginia (WCC) with Milliman conducting the actuarial analysis. Milliman is an international actuarial and consulting firm headquartered in Seattle with vast experience in paid leave insurance products and programs.

As part of 2024 Special Session I legislation, an update to the 2021 Paid Family and Medical Leave study was funded. This was authorized by Item 471 (K.1 and K.2) in Budget Bill-HB6001 (Chapter 2) that instructed the VEC to "update its November 2021 Virginia Paid Family Leave study to include an assessment of the budgetary impacts of extending application of paid family and medical leave benefits as contemplated in Senate Bill 373 of the 2024 General Assembly to exempt individuals, while maintaining benefits provided in §2.2-1210 of the Code of Virginia for state employees." The WCC reprised its role as a contractor for the VEC to oversee data collection, research, and analysis as part of an update to the Paid Family and Medical Leave study. The WCC also once again engaged Milliman to conduct the actuarial analysis. Milliman consulting actuary, Paul Correia, worked in consultation with the Weldon Cooper Center study team to develop the assumptions and some of the data inputs used in the analysis. The team included Terance Rephann and Emily Lien from the Weldon Cooper Center.

The authors would like to thank various other people for assistance in completing the study. Professor Christopher Ruhm of the Batten School of Leadership Public Policy provided information about new state paid family and medical leave policies that informed the study. The staff of the Virginia Employment Commission met with Weldon Cooper Center team several times from July to November to develop the framework, data, and assumptions used in the study and to review work products. Special thanks go to Mr. Jeff Ryan, Chief Deputy Commissioner of VEC, for arranging and coordinating the study. Other VEC staff who participated in meetings and discussions included: Kyle Davis, Conrad Buckler, Mario Camardella, and Ashley Irvin. Amy Muldoon of the Weldon Cooper Center, assisted with document editing and preparation. Any errors or omissions are the responsibility of the authors.

EXECUTIVE SUMMARY

This report presents an actuarial and policy analysis for a prospective Paid Family and Medical Leave (PFML) program for the Commonwealth of Virginia, focusing on SB373 legislation introduced during the 2024 General Assembly session. The study examines the economic, social, and demographic impacts of the proposed program and includes an actuarial analysis by Milliman, an international actuarial consulting firm.

Paid Family and Medical Leave (PFML) programs provide temporary replacement income for workers with a serious health condition, those caring for an ill family member, or those welcoming a new child. By 2024, 13 U.S. states and the District of Columbia have enacted PFML programs.

Virginia workers currently rely on a mix of federal programs and employer-provided benefits. The Federal Family and Medical Leave Act (FMLA) offers unpaid leave and covers only 56% of the workforce. Private employers have increasingly offered short-term disability and paid family leave benefits, but coverage remains limited, particularly for part-time, lower-wage workers, and employees of small businesses.

Policy design elements used by states in devising their PFML programs can affect the cost, utilization, distributional effects; and health, social, and economic impacts of PFML programs. Key design features include funding methods, eligibility requirements, benefit structures, and administrative characteristics.

SB373 proposes an 8-week PFML program with 80% wage replacement, funded by payroll taxes shared between employers and employees. It offers exemptions from program participation for state government and selected local government employers and employers with qualified private plans. Small businesses with 10 or fewer employees are exempt from the employer payroll tax share. Also, self-employed individuals may opt into the program.

Virginia's proposed program offers shorter leave compared to other states. However, in many other respects, including the wage replacement rate, it is similar to other state plans. Most states use payroll taxes to fund PFML, with varying splits between employers and employees. Virginia's proposed 50-50 split is common among states with PFML programs.

Milliman Study Findings

Milliman conducted actuarial analyses for several program options based on previous Virginia legislation. Each option assumes that the PFML program is established on July 1, 2025; initial staffing, procurement and education/outreach begins on January 1, 2026; implementation of the payroll tax on workers and businesses starts on January 1, 2026; and benefit payments are initiated on January 1, 2027. Since contributions begin one year before benefits are paid, a one-year period is used to build reserves for the PFML trust fund. The analyses project the revenues and payroll tax needed for benefit payments and the direct and indirect costs of operation and administration to maintain a sufficient cash balance to ensure program solvency over the 2026 to 2035 period. Analyses were performed for the following options:

Option Name	Description	Milliman Finding	Additional Insights *All options result in increased costs*
Option 1: SB373	This option follows the proposed SB373 legislation with an 8-week leave period and 80% wage replacement.	Coverage is projected to rise from 2.688 million in 2027 to 2.766 million in 2035, representing approximately 61% of Virginia workers. Total benefit payments are expected to increase from $1.166 billion in 2027 to $1.715 billion in 2035. The payroll tax starts at 0.72%, decreasing to 0.66% by 2035.	Option 1 requires the lowest contribution rate largely due to the shorter benefit period.
Option 2: HB2016/SB1330	This option follows HB2016/SB1330 legislation proposed during the 2021 General Assembly session. It extends the leave period to 12 weeks and removes certain exemptions, resulting in higher coverage and benefit payments.	Coverage is projected to rise from 3.548 million in 2027 to 3.650 million in 2035, covering approximately 80% of all Virginia workers. Total benefit payments are expected to increase from $1.935 billion in 2027 to $2.834 billion in 2035. The payroll tax starts at 0.92%, decreasing to 0.85% by 2033.	Option 2, which most closely resembles other state PFML programs, produces a payroll contribution rate similar to other state programs that are in the neighborhood of 0.90%.
Option 3: Removing State and Local Employer Exemption	This option eliminates exemptions for state and local government employers, increasing coverage and benefit payments slightly.	Coverage is projected to grow from 3.074 million in 2027 to 3.163 million in 2035, representing 69% of Virginia workers. Total benefit payments are expected to increase from $1.353 billion in 2027 to $1.985 billion in 2035. The payroll tax starts at 0.75%, decreasing to 0.69% by 2031	Contribution rates for option 3 are slightly higher than option 1 because exempted state and local government employees have lower wages and salaries than other eligible workers and experience higher replacement rates on average.
Option 1A: Lower Fund Ratio	This option maintains the same coverage and benefits as option 1 but targets a lower fund ratio, resulting in a lower initial payroll tax rate.	Coverage and benefit payments are the same as option 1. Lower trust fund accumulation reduces initial payroll tax rate to 0.50% in 2026-2028, gradually increasing to 0.68% by 2030.	Option 1A has the same characteristics as option 1 but a lower fund balance requirement. This results in initially lower payroll tax rates, but these rates converge on option 1 as ongoing benefit payout determines the rates after the initial trust fund buildup period.

Research Findings: PFML Economic, Social and Demographic Effects

The study also reviews the academic empirical literature on the economic, social, and demographic effects of PFML programs. The review focuses on studies conducted in the U.S., examining outcomes such as leave utilization, maternal labor market attachment, infant and child health, parental well-being, employer outcomes, and caretaker outcomes. The evidence is generally positive and more indicative of generally positive impacts than a review conducted earlier as part of a 2021 Virginia PFML study. Key findings include the following:

- **PFML Utilization and Duration**: Studies show that both unpaid and paid family leave significantly increase the utilization and length of parental bonding leave. Paid family leave also boosts caretaking leave for ill family members. Program design variables, such as wage replacement rate and maximum leave allowance, affect utilization and leave length.
- **Parental Leave Labor Market Outcomes:** State PFML programs generally have positive short-term effects on maternal labor force participation and employment. PFML programs are also associated with increased earnings for mothers. However, some studies find negligible or negative long-term effects on maternal employment and earnings.
- **Economic Security and Savings Behavior:** PFML programs improve the economic security of mothers, especially for vulnerable groups. PFML can also reduce precautionary savings, particularly for higher income families.
- **Enhanced Health Outcomes for Families:** PFML programs are linked to improved infant and child health outcomes, such as better feeding practices, improved vaccination rates, and reductions in low birth weight. PFML programs also improve parental mental and physical health. Evidence for the effect of PFML programs on long-term effects on child health and development is more varied.
- **Employer Impacts:** Studies generally suggest that the impact of PFML programs on employers is relatively small. Most firms report no significant effects on profitability, productivity, or employee turnover. However, smaller firms may face higher administrative costs and challenges in managing employee absences.
- **Caretaker Labor Market Attachment:** PFML programs have been shown to improve labor market attachment for unpaid caregivers, particularly women and those with higher education levels. Caregivers are more likely to remain in the labor force and maintain employment while providing care for ill or disabled family members.

Economic Analysis: Impact of PFML Scenarios

Weldon Cooper Center staff conducted economic impact analyses of various PFML scenarios using REMI PI+ software. Ten scenarios were modeled, including the four actuarial study options and additional scenarios exploring different payroll tax burdens and potential secondary economic and demographic outcomes. Key results of the analysis are as follows:

- **Baseline Scenarios (Options 1-3 and 1A):** The program scenarios have negative economic impacts initially due to the need to build reserves. However, the long-term effects are smaller and minimal relative to the size of Virginia's economy.
- **Alternative Tax Burden Scenarios:** Shifting the payroll tax burden entirely to workers or employers affects the magnitude of economic impacts and state tax revenues. Negative economic impacts are mitigated somewhat if the payroll tax burden is shifted to employees.
- **Secondary Economic and Demographic Scenarios:** These scenarios show the potential positive impacts from increased female labor force participation, higher birth rates, and lower infant mortality rates, but negative impacts from reduced labor productivity.

Recommendations

Develop Fund Balance Requirement Formula: An analysis by Milliman indicates that competing interpretations can be made from the Virginia PFML legislation fund balance requirements. The choice of formula can make a significant difference in initial target fund levels and initial contribution rates required to fund the program. Lower fund balance requirements would also reduce the initial negative economic impact of program introduction. The General Assembly could provide further clarification on this issue in future legislation.

Revenue Bond for Startup Costs: Negative economic impacts are most concentrated in the first year of the program because of the need to build the trust fund without an associated payout in benefits. To avoid this disruption to state economic activity, the General Assembly may want to consider issuing a revenue bond to smooth startup program costs over time.

Consider Return-to-Work Program: Few states offer return-to-work programs as part of the PFML benefits. These programs can provide financial incentives, therapeutic services, and workplace accommodations to help workers transition back to work, potentially reducing short-term disability leave lengths and costs. The General Assembly may want to consider these services as part of a PFML program.

SECTION 1: INTRODUCTION

This report presents results of an actuarial and policy analysis for a prospective paid family and medical leave (PFML) program for the Commonwealth of Virginia. Paid family and medical leave provides temporary replacement income for workers with a serious health condition, workers who need to care for an ill family member, or workers who are welcoming a new child. Most developed countries have PFML programs and by 2024, 13 U.S. states and the District of Columbia have enacted PFML (up from 9 states and D.C. in 2021). PFML has also been the feature of previous and current federal legislation such as the federal "Build Back Better" legislative package, which includes four weeks of PFML. Several PFML program bills have also been introduced by the Virginia General Assembly in recent years, including SB373 during the 2024 General Assembly (GA) session, (see **Appendix A**. for the text of the bill) which would create a public PFML program of 8 weeks that would provide 80 percent replacement of wages up to a maximum of 80 percent of regional average weekly wages (i.e., based on the planning district in which the worker is located).

Virginia workers are currently covered by a patchwork of federal programs and firm-based leave programs. The federal Family and Medical Leave Act (FMLA) program offers eligible workers up to 12 weeks of job-protected unpaid family and medical leave. However, eligibility conditions limit the protection to approximately 56 percent of the workforce, a percentage that has not improved in at least the last decade. Although Virginia-specific data on FMLA and private coverage is not available, private employers have increasingly offered short-term disability and paid family leave benefits to their workers. According to the Bureau of Labor Statistics National Compensation Survey, private employers nationwide offering short-term disability access rose from 37 percent in 2011 to 45 percent in 2024 and paid family leave access from 11 percent in 2011 to 27 percent in 2023. However, many workers are less likely to be covered, particularly part-time, lower-wage workers, and small business employees. Increases in female labor force participation and the growth of single-parent families; population aging; and some research suggesting beneficial economic, social, and health effects for participants are reasons that the issue has become more salient with members of the public and policymakers.

This report examines the effects of a Virginia PFML, with a focus on SB373 legislation. It examines the features of the Virginia legislation in comparison to other states that have adopted PFML and the potential effects of varying certain program design elements. It also includes a professional actuarial analysis that projects the costs needed for benefit payments and the direct and indirect costs of the operation and administration to maintain a sufficient cash balance to ensure program solvency over the 2026 to 2035 period. The potential short-run and long-run economic, social, and demographic effects on Virginia residents are examined through the lens of recent scholarly research on U.S. state programs. Lastly, the study uses a commercial economic impact model to examine the economic impacts of Virginia PFML legislation, considering expenditures, taxes, and possible secondary economic and demographic effects.

The report is divided into four additional sections:

The second section examines the various PFML policy design elements used by states in devising their PFML programs and how these features can affect the cost, utilization, distributional effects; and health, social, and economic impacts of PFML programs. They include the method of funding, eligibility requirements, benefit structure, administration, and other characteristics. A comparison of PFML programs in 14 jurisdictions (13 states and the District of Columbia) to the program provisions of the Virginia SB373 legislation is included.

The third section provides a summary and interpretation of results of a professional actuarial study for a PFML program in Virginia. The study was conducted by Milliman, an international actuarial and consulting firm headquartered in Seattle, Washington. The study describes the methods and data used as inputs into the actuarial analysis and presents the results of the actuarial analysis, including the projected number of eligible workers, administrative costs, claims and benefit payments, contribution rates, and the target fund balance needed to ensure program solvency over a 10-year period (2026-2035). Results are presented for four scenarios. The first scenario is a baseline scenario constructed to approximate features of the SB373. The second scenario provides an updated actuarial analysis of HB2016/SB1330 legislation examined as the baseline scenario in a previous report (Rephann et al. 2021). That legislation provided for up to 12 weeks in total leave-taking per year, and offered no small business employer payroll exemption, eligible private plan exemption, or state and local government exemption. The third scenario removes the state and local government exemptions to determine the impact on the payroll tax rate and trust funds. The fourth scenario examines the effect of changing the funding ratio from 140 percent to 40 percent for the trust fund. The section also introduces an online digital dashboard that can be used to explore further the economic and distributional effects of the PFML legislation.

The fourth section presents a review of literature regarding outcomes that can be linked to the introduction of PFML. This section reviews the academic empirical literature on the economic, social, and demographic effects of PFML programs. It generally screens for peer-reviewed research, and research using contemporary causal econometric methods (e.g., difference in differences, regression discontinuity) since such studies provide a higher standard of evidence. It also focuses mainly on empirical research conducted for the U.S., including federal unpaid leave (i.e., FMLA), state PFML programs, and state mandated paid sick leave.

The final section presents economic impact analyses of various PFML scenarios using REMI PI+ (Regional Economic Models Inc. Policy Insight Plus) software. Ten PFML scenarios in total were modeled. They include four scenarios modeled in the actuarial analyses; two additional impact scenarios that examine the economic effect of shifting the baseline statutory shared 50-50 split in the SB373 legislation to full payroll tax burdens assigned to either employee or employer; and four scenarios that consider the potential economic impacts of secondary economic and demographic outcomes. These outcomes include increases in maternal labor force participation, reduced labor productivity, and an increase in the infant population due to increased fertility and reduced infant mortality.

SECTION 2: PFML POLICY DESIGN

Many policy design features and parameters can affect the cost, utilization, distributional effects; and health, social, and economic impacts of paid family and medical leave (PFML) programs. They include the method of funding, eligibility requirements, benefit structure, administration, and other characteristics. This section examines each of these areas and specific features in closer detail, with reference to the features of other state and federal PFML programs (see **Appendix B**). Thirteen states plus the District of Columbia have enacted legislation to provide PFML, including four states that have adopted programs since 2021, including Maryland (2022), Delaware (2022), Maine (2023), and Minnesota (2023). **Table 2.1** provides a summary of findings with reference to General Assembly legislation requirements.

2.1 Funding

Financing Mechanism

PFML funding by U.S. states is almost always provided through a payroll tax (Bradley, Veghte, and Hartmann 2019). This model is the most common since it is a familiar way of funding existing employment security programs (e.g., Unemployment Insurance, Workers Compensation) and expected benefit payouts correspond to user contributions. It also provides a sustainable funding stream that is deposited into a dedicated trust fund, making it difficult for policymakers to tap for alternative budget uses (Bradley, Veghte, and Hartmann 2019). Some states that added paid family leave (PFL) to preexisting short-term disability (SDI) programs have also elected to maintain separate SDI and PFL funds, an arrangement that some analysts suggest improves program management and integrity (Milkman and Applebaum 2013).

Several other funding models exist, including social insurance programs with regulated private options, noncontributory programs, employer mandates, and tax incentives (e.g., nonrefundable and refundable tax credits) for voluntary employer adoption of privately sponsored programs (Bradley, Veghte, and Hartmann 2019). Most jurisdictions (except the District of Columbia and Rhode Island) allow businesses to offer private PFML plans through self-insurance or purchasing private plans from insurers in lieu of participating in the public program. State laws stipulate that these "competitive plans" offer benefits that match or exceed state program benefits. The motivation for allowing these exemptions appears to be a desire to accommodate existing business arrangements and union contracts. The pros and cons of such exemptions are discussed further below.

Another funding model is the noncontributory program, whereby funding is provided through the General Fund rather than Non-General PFML Trust Fund. This is the model favored by some analysts and embodied in a proposal put forward by the Biden Administration as part of *The American Families Plan*. Two potential advantages have been cited for this type of funding (Ruhm

2017). First, it creates a larger, more diversified tax base that is not dependent solely on employment. Second, it is less likely to cause reductions in employment of lower-wage workers by raising employment costs of employing lower-wage workers near the minimum wage.

Employer mandates are another way to provide coverage. State employer mandates are common for other benefit programs such as sick leave but less so for PFML. Only one state and a handful of localities (e.g., San Francisco) utilize this model. Hawaii has an employer mandate for SDI but does not currently offer a PFML program. Employer mandates are generally regarded as less desirable policy choices than publicly funded programs that rely on community ratings (Bradley, Veghte, and Hartmann 2019). First, firms would be more likely to discriminate against high-risk employees (e.g., females, individuals with physical disabilities) in hiring decisions in order to reduce benefit costs. Second, it could result in higher and more volatile insurance costs for businesses, particularly small businesses and firms in industries with high-risk employees.

A final funding model uses tax expenditures to subsidize firms that offer PFML. The federal government has offered two recent tax credits in this area. The Federal Employer Credit for Paid Family and Medical Leave has been available since 2017. It was a pilot program during the first two years but was extended through 2025 by additional legislation. It provides a credit of 12.5-25 percent of salary and wages paid to qualifying employees for up to 12 weeks of family and medical leave but cannot be used when PFML is mandated by state or local law. In addition, a temporary PFML tax credit was created as part of the Families First Coronavirus Response Act, emergency legislation adopted before the CARES Act in March 2020 to assist in COVID-19 prevention and mitigation efforts. The resulting Payroll Tax Credit for COVID-19 Sick and Family Leave (FFCRA) provided a credit equal to 100 percent of salary and wages for small business (fewer than 500 employees) to cover the costs of up to two weeks of paid sick and medical leave or ten weeks of family leave related to the coronavirus pandemic. The major downside of tax credits is that they have not been shown to markedly change coverage levels, particularly when compared to compulsory models. Thus, the costs of credits may be prohibitively high per benefit because firms with existing leave programs or ones who would have implemented programs without a federal tax credit benefit from the programs.

Payroll Tax Contribution Splits

In the payroll tax financing model, the tax can be statutorily assessed against the employee through payroll deduction, the employer, or both. The allotment of payroll tax varies among U.S. jurisdictions. Employees pay the full tax in California, Connecticut, and Rhode Island, while employers do in Washington, D.C. A 50-50 split is common as seen in Colorado, Delaware, Maine, Maryland, and Minnesota. The split for Oregon is 60 percent employees and 40 percent employers, and Washington State is 45 percent employees and 55 percent employers. Massachusetts, New Jersey, and New York allotments vary by SDI and PFL programs; workers pay payroll taxes for PFL while employees and employers split the cost of SDI. Split allotments seem to be motivated by a combination of factors such as pragmatic political considerations, social equity, or the benefit principle. A shared contribution can be justified on benefit principle if businesses realize cost

reduction or productivity improvements as a result of improved employee retention, morale, etc. Regardless of the motivation, substantial empirical research suggests that the actual incidence of payroll taxes is roughly evenly split between employer (in the form of reduced profits) and employees (in the form of reduced earnings) in the short-run, while workers pay most of the tax in the long-run (Carloni 2021; Melguizo 2013).[1]

Fund Balance Requirements and Accumulation

PFML programs require substantial fund balances to ensure program solvency against unexpected risks, such as greater than anticipated take-up rates and longer average leave durations. The build-up of such funds can either be provided through fund balance accrual, general fund transfers, loans, or bond issuance. A common funding level target is 140 percent of expected expenditures; this is usually achieved by delaying benefit payouts for a period of time after tax contributions are initiated, with lags of 6-12 months being the norm. The obvious downside of this arrangement is that covered workers are paying into the program without receiving benefits while the program builds an acceptable financial cushion. However, some jurisdictions have foregone this arrangement and start benefits at the same time as contributions.

Taxable Wages and Salaries Ceiling

State programs typically tax worker wages and salaries up to a limit. There are no tax floors. Since eligibility is ordinarily established by level of labor force attachment demonstrated by a minimum degree of continuity in work hours or earnings during a base employment period, some workers who fail to qualify effectively pay into the system but do not receive benefits. Higher earners, on the other hand, are subject to a limit on contributions, sometimes the same earnings limit used for the Social Security payroll tax ($168,600 in 2024). Nine states (Colorado, Connecticut, Delaware, Maine, Maryland, Massachusetts, Minnesota, Oregon, and Washington State) use this cutoff. Several other states (California, New Jersey, New York, and Rhode Island) have established lower taxable wage ceilings, with Rhode Island's being the lowest at $87,000. California and the District of Columbia do not have taxable wage ceilings. Lower taxable wage ceilings will narrow the tax base and increase the payroll tax rate for earners below the ceiling. On the other hand, some upper limit is recommended based on the benefit principle since benefits are also capped.

[1] Tax incidence can be calculated based on labor supply and demand elasticities and factor substitutability. In practice, the shift is effectuated by reducing benefits, real wages, or hours worked over-time. Payroll taxes can also (in general equilibrium frameworks) be shifted to consumers in the form of increasing prices. Taxes may not be fully shifted onto workers because of institutional factors, such as downward wage rigidity due to the existence of union collective bargaining agreements and the presence of minimum wage and employment protection and anti-discrimination laws (Carloni 2021; Gruber 1994).

Payroll Tax Rates

Statutory tax rates are determined by program benefit costs, program administrative costs, and fund balance requirements. They are also a product of the payroll tax base. Programs that should have higher payroll tax rates are those that offer higher benefits (because of higher replacement rates, longer leave, more qualifying events, and/or broader definition of family for family leave); higher administrative costs (e.g., greater outreach costs or other expenses); or narrower tax bases due to lower taxable ceilings and exemptions permitted for self-employed individuals, small businesses, competitive plans, and governments.

2.2 Eligibility Requirements

Employment Requirements

State programs require evidence of some minimal level of job tenure/labor force attachment to be eligible for PFML benefits. This ensures that workers have adequately paid into the system and that it does not become a general purpose entitlement program. This is typically measured by wages earned over some base period, usually four or five quarters immediately prior to taking leave. Hours of work are the eligibility metric for Delaware (1,750 hours), Maryland (680 hours), and Washington State (820 hours), instead of accrued wages, which may be beneficial to lower-wage earners. Tying PFML to unemployment insurance (UI) program eligibility, as occurs with the Virginia legislation, may help standardize eligibility and simplify administration. However, most states do not use the same eligibility standards as UI, perhaps because that would restrict eligibility more than desired (Jacobs 2019).

Industry/Firm Exemptions (e.g., public sector and small businesses)

Most states offer special treatment or exemptions for individual sectors or categories of businesses. Most commonly, states exempt at least some state and local government employees or allow them to opt into the program, either because pre-existing coverage exists for these workers or because of concerns that the added costs would create an unusual financial burden for local governments (Greenfield and Cole 2019). Six states offer exemptions or reductions to small businesses, defined as businesses having employees that number fewer than 10 (Colorado), less than 15 (Maine), 25 or fewer (Massachusetts and Oregon), fewer than 30 (Minnesota), or 50 or fewer (Washington State). Small businesses are not required to pay program payroll taxes, but employees are typically covered and still pay their share.

These carve-outs are sometimes offered because of concerns that smaller businesses face high costs or realize fewer benefits from implementing PFML; firm survey data sometimes support claims that small businesses disproportionately experience higher costs (See Section 4 for examples). Workers at small businesses also exhibit lower utilization of paid leave (Pinnacol Assurance 2019). Higher costs may be more visible during the program startup phase. Small

businesses have been exempted by the federal Family and Medical Leave Act (FMLA) program from having to provide job protected, unpaid leave. Thus, new state programs that extend such protection to employees of small businesses may increase worker utilization more than larger firms already covered by FMLA (Bartel et al. 2023a).

Several competing arguments have been offered why exemptions should be disallowed. In the case of small businesses, lower worker utilization of benefits observed in the data may result from workplace culture or other firm characteristics that discourage PFML use (Bana et al. 2018). Moreover, some analysts dispute that small business employers experience a greater burden than larger business employers (Ruhm 2017). Many small businesses who would like to provide PFML may not be able to access affordable insurance options without a public program (Bradley, Veghte, and Hartmann 2019). In addition, exemptions may contribute to "job lock," whereby workers are more reluctant to move between covered and exempted firms because of fear of losing a PFML benefit. Lastly, permitting exceptions could create adverse selection problems or loss of program economies of scale which would drive up the contribution rates for remaining participants. Similarly, allowing self-employed individuals an option to enroll may create an additional adverse selection problem because those who anticipate needing benefits are more likely to enroll.

Allowance of Competitive Plans (e.g., private or self-insurance)

Most jurisdictions with PFML programs (the exceptions being the District of Columbia and Rhode Island) allow firms to offer regulated private plans that provide similar or better benefits and coverage.

Allowance of private plans offers several potential advantages to firm electors and their workers (Boyens, Smalligan and Bailey 2021). Private deliverance of PFML benefits may simplify and improve firm leave management systems. Firm return to work (RTW) services may also be better able to transition medical leave users back to work with concomitant benefit cost reductions and improvements in worker earning and health outcomes. Workers may also receive their benefits faster than public programs.

There are also several potential downsides to permitting private plans. One is the regulatory cost of verifying and monitoring private plans. For example, California's Voluntary Plan Administration Section employs 12 staff to oversee just 2,500 workers enrolled in private plans (Glynn et. al. 2016). Moreover, it may be difficult to provide full oversight and enforcement of private plans because the extensive performance data required to verify that fiduciary rules are followed and worker applications and claims are treated similar to the public program (Bovens, Smalligan and Bailey 2021). Another disadvantage is that employers with workers that have a lower risk of utilizing the programs may create their own programs, resulting in an adverse selection problem that increases tax rates for remaining higher risk state program participants. Lastly, regulators must ensure that private plans offer immediate coverage in order to ensure that workers do not have lapses in coverage when they change jobs (Bradley, Veghte, and Hartmann 2019).

The demand for offering competitive plans varies from state to state. For states that offer PFML programs, private plan workforce coverage ranges from 33 percent in Massachusetts to less than 5 percent in California. Private plan offerings may be related to prior levels of firm PFML provision, insurance cost and availability, importance of the PFML to company leave management and employee benefits, and state rules governing private plans (Boyens, Smalligan, and Bailey 2021).

Qualifying Events (see qualifying family members)

States generally define qualifying events similarly to include one's own illness, disability, or birth (medical leave); child bonding (parental leave); and illness of a family member (other family caretaking leave). Short-term disability is always the largest component while caretaking leave is the smallest in state PFML programs, in part because the length of medical leave allowed by some programs is longer than family leave. For example, the former constituted approximately 71 percent of total PFML benefits paid in Connecticut in FY 2024 and 55 percent in Washington State in FY 2023 whereas the latter constituted just 12 percent and 14 percent respectively.[2] Thus the effect of changes in caretaking leave qualifying events on program costs will likely be relatively small.

Virginia's legislation is similar to most states offering PFML (California, Colorado, Connecticut, Maine, Maryland, Massachusetts, Minnesota, New York, and Washington State) in extending caretaking to qualified exigency leave for covered service members. A few states provide coverage for other types of qualifying events not specified in the Virginia legislation. Colorado, Maine, Minnesota, New Jersey, and Oregon offer coverage for victims of domestic or sexual violence. Connecticut allows leave for individuals serving as an organ or bone marrow donor. Oregon offers leave for care of a child whose school or childcare provider has closed due to a public health emergency.

Qualifying Family Members/Definition of Family

The statutory definition of family is relevant primarily for the purposes of determining eligibility for caretaking leave. Most U.S. states specify that qualifying family members are immediate family, including spouses and common law partners; birth, adopted, and foster children; mothers and fathers; siblings; parents-in-law; and grandparents and grandchildren. Thus, state laws broaden family scope beyond spouses, children, and parents allowed in the federal FMLA program. A few states expand qualifying members to include brothers- and sisters-in-law (Colorado), spouses and domestic partners of siblings (Oregon), sons- and daughters-in-law (Minnesota), and individuals with close association, equivalent to family relationships due to being related by blood and/or

[2] For Connecticut Paid Leave Annual Report see https://www.ctpaidleave.org/-/media/ctpl/english-pdfs-and-docs/2024-ctpl-annual-report.pdf For Washington State see Paid Family & Medical Leave Report https://media.esd.wa.gov/esdwa/Default/ESDWAGOV/newsroom/Legislative-resources/2023-Annual-Report-Paid-Family-and-Medical-Leave.pdf.

affinity (Colorado, Connecticut, Maine, New Jersey, Oregon, and Washington State). Again, expansion of qualifying family members will likely have only a very small impact on leave utilization since it impacts only family caretaking leave, the smallest component of family leave. Moreover, the vast majority of caretaking leave is for immediate family members (Glynn et al. 2016).

Advanced Notice Requirements

Advanced notice requirements are specified in PFML programs to reduce the costs to businesses of planning work continuity around worker leave (e.g., reassigning work to other employees, delaying the work, hiring temp replacements). The most common is a thirty-day notice for most types of leave (Colorado, Connecticut, Delaware, Maryland, Massachusetts, Minnesota, New York, Oregon, Rhode Island, and Washington). However, the District of Columbia requires 10 days, and some programs such as California and Maine (including Virginia SB373), are silent on the matter. Most programs also indicate that claims can still be submitted for unplanned exigencies like emergency medical leave, where advanced notice would be unrealistic. Thus, although providing inadequate notice can be a reason to deny a claim, it also appears that workers have some degree of latitude, and that inadequate notice will not always disqualify an individual from receiving benefits. Moreover, workers have inbuilt incentives to provide advanced notice since benefits cannot be applied for until after notice is given, typically with some delay in receipt of first payment. Still, failure to provide adequate notice apparently sometimes complicates leave-taking. Interviews from state agency officials, reported by Spring (2019), indicate that failure to provide adequate notice, not meeting PFML program requirements, and not completing applications are the top three reasons for denying claims. More stringent advanced notice requirements may have more deleterious effects on disadvantaged groups since they tend also to have lower levels of program awareness.

2.3 Benefits

Replacement Rate and Structure

Replacement rate refers to the percentage of base wages provided as a PFML benefit over the benefit period. States provide replacement rates in the range of 80-90 percent. Higher replacement rates will increase the costs of PFML programs. Empirical research (reviewed further in Section 5) suggests that as the replacement rate increases, program utilization increases. Rates are generally less than 100 percent to minimize moral hazard, to reflect the fact that living expenses such as commuting will be lower when workers are on leave, and to allow private employers room to "top off" benefits as desired.

Research suggests that lower uniform replacement rates (like provision of unpaid family leave) result in significant disparities in program usage, with lower-wage earners much less likely to utilize

benefits for which they may be eligible (Milkman and Applebaum 2013).[3] This may be because lower-wage workers find it more challenging to live off the benefit. Evidence from other OECD countries suggest that a replacement rate of at least 80 percent is needed to mitigate poverty and achieve more widespread utilization of the family leave benefit by men (Raub et al. 2018). Efforts to improve program equity are important considerations in replacement rate determination and structures. Thus, states with long-standing PFML programs, such as California, have increased their replacement rates in recent years (in the case of California, from 55 percent to 60 percent, then to 70 percent). More recent adopters have tended to offer higher replacement and more progressive rates, replacing a larger share of wages for lower-wage earners than many early adopters motivated by equity considerations and in recognition that many higher-wage earners already have supplementary PFML benefits. In fact, most states now offer a tiered rate structure that offers higher wage replacement rates to lower-wage workers (Correia 2023). For example, Colorado provides 90 percent of an employee's average weekly wage up to an amount equal to 50 percent of the state average weekly wage, and 50 percent of an employee's average weekly wage above an amount equal to 50 percent of the state average weekly wage.

While replacement rates are key to policy design parameters that influence benefit utilization rates, many other variables are important as well (Spring 2019). Utilization rates are higher for short-term disability benefits than family leave and also appear to be less sensitive to replacement rates. Stringency of eligibility requirements, such as advanced notice and qualifying events, influence application denial rates. Population demographics (relative size of the childbearing population and older workers) affect the likelihood of leave activity. State job protection enhancement has been shown to improve leave usage for individuals employed by firms not covered by the federal FMLA (e.g., fewer than 50 employees) (Hartmann and Hayes 2020). A whole host of other factors, such as program longevity, outreach efforts, and firm-level factors (discussed in more detail in Section 4) also appear to affect utilization rates (Spring 2019; Bana et al. 2018).

Maximum Leave

Another key parameter in the determination of program costs is the maximum period of leave allowed for various types of leave. Statutory maximum leave duration affects average durations of leave takers, with parental bonding being more sensitive than other types of family care (Spring 2019). Worker medical/disability conditions are a chief influence on SDI leave durations. State maximum leave durations span a wide range by type of leave with a low for SDI of 6 weeks (Delaware) and a high of 52 weeks (California).[4] PFL varies within a much narrower band from 6 weeks (Rhode Island) to 8 weeks (California) to a high of 12 weeks shared by the 12 different

[3] Lower awareness of benefits and greater fear that using leave benefits will affect workplace opportunities have also been cited as reasons that lower-wage earners, younger adults, and minorities are less likely to utilize PFML benefits (Milkman and Applebaum 2013).

[4] The District of Columbia will expand the maximum duration of SDI to 6 weeks in fiscal year 2022.

jurisdictions. Total allowed leave varies from a low of 12 weeks (Colorado, Connecticut, Delaware, District of Columbia, Maine, and Oregon) to 52 weeks in California with an average of 22 weeks. Average maximum medical leave is greater than PFL at 18 weeks compared to 12 weeks. This is due largely to the fact that states with older SDI programs (California, New Jersey, New York, and Rhode Island) adopted maximum leave durations more typical of private plans, which average 26 weeks.[5] Newer PFML programs have copied the FMLA model of offering 12 weeks of total annual leave regardless of type (Smalligen and Boyens 2020).

In the development of maximum leave time, an important consideration is the policy objectives of promoting worker and family health and wellness and child development while assisting workers in transitioning from leave back to work (Greenfield and Cole 2019). Leave needs to be long enough to facilitate recovery and/or child bonding but not so long that it contributes to worker loss of human capital. International research suggests that negative labor market effects onset at much higher durations (one year duration or more) than allowed by state programs. For maternity leave, durations greater than one year may have a negative impact on female earnings/productivity (Ruhm 1998). Recovery periods for short-term disability and family caretaker care depend on the nature of the illness or disability. State SDI programs use physician's recommendations, program administrative and experience data, and guidelines issued by private firms to determine maximum leave durations (Smalligan and Boyens 2020). Some workers with specific conditions may need more than the 12-20 weeks typically allotted for some conditions, while others may need far less than the statutory limit. For maternity leave, guidelines vary based on the outcome of interest. Many studies suggest that a minimum of 12 weeks is needed to support infant and maternal health following delivery (Ruhm 2017; Jacobs 2019), though longer durations of up to 6 months are recommended for optimal benefits (Jacobs 2019). The recommended minimums of health organizations vary from a 4-8 week minimum time period for maternal recovery after normal childbirth (Academy of Gynecologists and Obstetricians) to 14 weeks (American Academy of Pediatrics) for exclusive breastfeeding (Glynn et al. 2016). Several organizations (American Academy of Pediatrics, American Public Health Association, and Pediatric Policy Council) recommend a minimum of 12 weeks (Holm 2019). International health organizations generally recommend even longer leave times for maternal care and bonding.

Minimum Leave/Allowance of Intermittent Leave

Some state policies specify a minimum period of leave, ranging from 1 hour to 7 days (Rhode Island) with 8 hours or one day being most common (Colorado, District of Columbia, Delaware, Maine, Minnesota, New York, Oregon, and Washington State). Since most states programs allow cumulative leave up to a designated maximum leave duration, leave could, in theory, be utilized at regular intervals throughout the year. Most states also allow leave of various types to accumulate as long as it remains below a specified cap. Although some types of one's own medical care and

[5] https://www.shrm.org/resourcesandtools/tools-and-samples/toolkits/pages/managing-disability-benefits.aspx

caretaking may require intermittent leave (e.g., chemotherapy, eldercare), unpredictable and periodic leave may be more costly for some firms than longer contiguous periods of leave (Lerner and Applebaum 2014). Ruhm (2017) recommends one-week minimum duration combined with advanced notice in order to lessen employer costs in the case of parental leave.

Federal and State Taxation of Benefits

PFML benefits are not subject to Social Security and Medicare taxes or federal unemployment (FUTA) tax. Determination of whether state PFML contributions and benefits are subject to federal income taxes is made by the U.S. Department of Treasury and Internal Revenue Service (IRS). Federal tax treatment of benefits appears to depend on three aspects of the contribution and benefit payment: (1) the type of payment made (i.e., family leave and short-term disability leave are treated differently), (2) who pays the payroll tax (i.e., employee versus employer), and (3) whether the payroll tax was in pre-tax or post-tax dollars. In the case of California's program—which is entirely funded by an employee payroll tax and PFML consists of distinct PFL and SDI components—the IRS has determined that family leave (like unemployment insurance benefits) is a taxed employee benefit, while SDI is regarded as a type of disability benefit and is untaxed. However, newer programs typically mingle program and payment sources by combining SDI and PFL into a single PFML program and levying shared employer-employee payroll taxes. IRS guidance of the federal tax treatment for contributions and benefits has not been provided for these newer state programs.[6] The current Virginia legislation alludes to the unsettled nature of this question and provides individuals the option of having federal income tax deducted and withheld from benefit payments.

The current Virginia legislation does not spell out whether PFML benefits are subject to state taxes. Thus, one must assume that PFML benefits would be taxable since the state conforms to the federal definition of gross income, unless a specific exception is included in a future Virginia law. Bradley, Veghte, and Hartmann (2019) recommend that PFML legislation explicitly state whether benefits are taxable income, which would also affect individuals' options for having state income tax withheld along with any federal tax. Moreover, they recommend that states indicate if benefits can be used in ascertaining whether residents are eligible for means-tested public assistance and other benefits.

Minimum and Maximum Benefits

State programs set benefit caps, usually stated as a certain percentage of statewide average weekly wage, a fixed amount with and without annual cost of living adjustments (District of Columbia, Delaware, and Maryland for PFML and New York for SDI), or a multiple of the minimum wage (Connecticut). The former caps are readjusted annually based on statewide average wage changes and indirectly account for changes in cost-of-living, labor productivity, and macroeconomic

[6] https://tax.thomsonreuters.com/news/governors-ask-irs-for-guidance-on-taxability-of-state-paid-family-leave/

conditions. Several state programs also specify minimum weekly benefit amounts in constant dollar terms ranging from New York ($20) to California and Rhode Island ($50), Delaware ($100), and Rhode Island ($130) or percentage of statewide weekly wages (Oregon sets this at 5 percent of the statewide weekly wage). Nominal dollar amounts have the disadvantage of being eroded over time by inflation if they are not statutorily adjusted frequently.

The most current Virginia legislation specifies a cap of 80 percent of average regional wages. This makes the program different from other state programs and previous legislation that specified a statewide average wage benchmark. Regional weekly wages vary widely by planning district. The average Virginia weekly wage in calendar year 2023 was $1,428 according to Virginia Employment Commission Quarterly Census of Employment and Wages data. However, this varied widely from a high of $1,870 in the Northern Virginia Planning District to a low of $852 in the Lenowisco Planning district. The Virginia minimum is $100 per week.

Imposing benefit ceilings and floors decreases disparities in program benefit allowances and provides another mechanism to improve participation of extremely low earners. Since all programs, except the District of Columbia, also impose taxable wage ceilings, benefit caps are a necessary adjunct to ensure that obligations approximately match benefits. However, the decision to use regional wages as the basis of the caps rather than a uniform statewide average wage introduces a trade-off between tailoring the program to local wage conditions and the complexity and potential disparities this approach might create. On the one hand, the regional wage-cap ensures that the benefit aligns with local wage conditions, which can make the program adhere to the benefit principle. On the other hand, setting and managing wage caps by regions adds administrative complexity, potentially creating confusion for employers and employees trying to navigate the system, and may foster perceptions of inequity.

Interaction of Employer Benefits (Family and Medical Leave, usage of other benefits (e.g., sick leave/vacation leave/etc.)

Some states (e.g., California, Connecticut Delaware, and New Jersey) allow employers to require workers to use sick/vacation leave before tapping the public PFML benefit. This feature may help ease business costs of providing sick and vacation day benefits. It also decreases PFML program costs. New Jersey reportedly found that employers using this practice decreased leave time by 15.4 percent in 2014 (Groves, MacNeil, and Wolfe 2016).

States also often allow beneficiaries to use other types of paid leave benefits (e.g., sick leave) concurrently with PFML, though some states place restrictions on the number of benefits that can be paid.

Benefit Waiting Period

Several jurisdictions (e.g., California, Maine, Massachusetts, New Jersey, New York, and Washington State) require a one-week waiting period for receiving short-term disability benefits, and two

impose the same requirement for at least some types of family leave, such as caretaking leave (Massachusetts and Washington State). This provides greater certainty that the leave is used for a serious qualifying event that requires a longer period of leave as intended by the program (Groves, MacNeil, and Wolfe 2016). Some workers may opt to use other employer paid leave during this period or possibly elect not to pursue PFML because of eligibility and payment delay. Benefit payment delay may have a disproportionate effect on lower-wage earners participation and wellbeing because they have fewer liquid assets and rely more on weekly or biweekly work compensation (Smalligan and Boyers 2020).

Return to Work Incentives and Plans

Return to work (RTW) programs provide financial incentives, therapeutical services, education, and employee workplace accommodations to transition workers back to work. They are sometimes offered as part of private SDI programs and can include "stepwise" payment models that provide a lower rate of wage replacement after a period of time and modified workplace duties to ease workers back into the workplace. Several reviews of private RTW programs find that they can reduce short-term disability leave lengths and costs (Smalligan and Boyens 2020; Franche et al. 2005). One study found that RTW programs decrease claim durations by 3.6-10.8 days (7-18 percent) (Biggs 2020; Gifford and Parry 2016). Smalligan and Boyers (2020) recommend that any federal PFML program should incorporate a RTW component, in part because of its potential to reduce the number of workers who transition into the federally funded Social Security Disability Insurance Program (Smalligan and Boyers 2020).

Return to work does not appear to be a regular feature of state SDI programs. Some state programs will refer participants to other RTW services when requested (Smalligan and Boyers 2020). Rhode Island' SDI program includes a partial return to work program that encourages workers to return to work on reduced hours. To be eligible for the program, the worker must have participated in the regular SDI program for at least seven consecutive days and be allowed to work by the worker's health provider. Weekly SDI benefits are decreased by part-time wages earned during the period for 8-12 weeks to allow workers to ease back into their regular work schedule.[7]

Employment Guarantee

The federal FMLA program has provided 12 weeks of protected unpaid leave since 1994 for care of a new child, one's own medical condition, or a medical condition of a family member.[8] However, it is limited to workers who accumulated at least 1,250 work hours of work for a business that

[7] https://convatecbenefits.com/wp-content/uploads/2018/09/RI-TDI-FAQs-2021.pdf

[8] FMLA was amended in 2008 and 2009 to include military caregiver and exigency leave and to accommodate the atypical work and leave schedules of airline flight staff (Spring 2019).

employs at least 50 workers within a 75-mile radius. Forty-four percent of the labor force, disproportionately lower-wage, minority, part-time, and small business workers, are not eligible for such protection according to 2018 survey data, and this percentage that has not changed since a similar survey was conducted in 2012 (Abt Associates 2020). Some studies indicate that such job protection is an important influence on worker decisions to take leave. Some states have extended job protection beyond FMLA, but they mainly expand coverage to more workers rather than extend the duration of the coverage. For example, Massachusetts provides job-protected leave for employers with fewer than 50 employees, employees who have earned at least $6,000 over the last four calendar quarters regardless of the specific number of hours worked, and caretaking leave for a broader definition of family members.

2.4 Administration/Other

Public or Private Program Administration

States with public PFML programs have generally chosen to administer the programs in-house. The administering agency is typically departments of labor or employment, the same agencies that are charged with administering state UI programs. Some policy analysts have identified potential problems with outsourcing program benefit services to private insurers (Glynn et al. 2016). These include greater administrative complexity requiring protocols for the third-party administrator to access state program administrative records, such as UI data as per statutory requirements, privacy restrictions for usage and disclosure of patient medical data, need for additional oversight of service quality, procedures and chain of command for resolution of claims disputes, premium oversight, and administrative expenses. Based on the experience of other public insurance programs, administrative costs could be substantially higher than public administration because of additional costs or reduced participant benefits (i.e., higher claims denial) (Glynn et al. 2016). For example, federal Medicare costs constitute 2 percent of premiums versus the typical private insurance administrative cost of 12 percent. On the other hand, private insurance company income and property would be taxable.

California, Connecticut, Massachusetts, New Jersey, Rhode Island, the District of Columbia, and Washington state administer their paid leave programs through their employment security agencies, which also administer UI.[9] While a paid leave program cannot be administered or add costs to a state's Unemployment Insurance system, mechanisms, such as memorandums of understanding (MOUs), may allow UI to share wage data. Staff can be cross-trained as long as time is allocated appropriately, which can help the agency manage workloads; while UI is designed to be

[9] The Massachusetts Department of Family and Medical Leave, which is a division within the Executive Office of Labor and Workforce Development, administers PFML. Though not the exact same agency as the Department of Unemployment Assistance, it operates under the same broader workforce umbrella. The Connecticut Paid Leave Authority oversees the PFML program, but it collaborates closely with the Connecticut Department of Labor, which administers UI, especially for claim processes and resources.

counter-cyclical to the business cycle, paid leave is somewhat pro-cyclical with workers gaining access to benefits with employment experience.

Some states have utilized private contractors for specific systems or functions. Services such as IT system development and medical coding systems for determining medical leave eligibility and leave duration are typically outsourced to private entities. Connecticut's PFML program selected a private firm, Aflac, as its claims administrator, after a competitive bidding process. In this role, the company accepts applications, determines program eligibility, and administers benefits.[10]

Experience Rating

Experience ratings are typically used in private short-term disability plans. Such plans assess company personnel usage of benefits in assessing premiums. This differs from "community standard" regulations that require premiums to be charged at a standard rate. State UI systems utilize firm/industry experience ratings in determining UI payroll taxes to better reflect unemployment risk variance. A few states, such as New Jersey with older SDI systems, utilize experience ratings in their programs. However, they are not a feature of newer state PFML programs.

Fraud Detection and Mitigation

Similar to other state social insurance programs, such as Unemployment Insurance and Workers Compensation, some administrative resources should be committed to fraud surveillance and enforcement, including monitoring, researching, and investigation efforts. Examples of fraud would include employers failing to remit payroll taxes that have been collected and workers filing false benefit claims. State detection efforts to date indicate relatively low levels of fraud. For example, in California's most recent fraud reporting for Calendar Year 2022, 132 cases were investigated, 3 criminal complaints filed, and 7 criminal prosecutions completed. Fraudulent SDI claims amounted to less than 0.05 percent of benefits paid.[11]

[10] https://portal.ct.gov/Office-of-the-Governor/News/Press-Releases/2021/07-2021/Governor-Lamont-Announces-Aflac-Selected-as-Claims-Administrator-for-Paid-Leave-Program

[11] Employment Development Department, State of California. 2023. *Annual report: Fraud deterrence and detection activities*. https://edd.ca.gov/siteassets/files/about_edd/pdf/fraud-deterrence-and-detection-activities-report---june-2023.pdf

Table 2.1 Paid Family and Medical Leave Policy Design Features

Feature	SB373	HB2016/SB1330	Pro	Con
FUNDING				
Financing mechanism	Public social insurance (payroll tax) provision (§ 60.2-806. (A))	Public social insurance (payroll tax) provision (§ 60.2-804. (A))	Fiscal sustainability and program stability.	More narrow funding base. Employers unable to shift costs to workers may decrease employment.
Employer/ employee payroll tax contribution split	50 percent employee; 50 percent employer for employer of more than 10 employees. Employers of 10 or fewer employees remit only 50 percent employee share (see § 60.2-806. (D-E))	50 percent employee; 50 percent employer (see § 60.2-804. (D))	Promote equity, decrease costs for workers, ensure that all parties are vested, and benefit principle.	Significant proportion of payroll taxes borne by employee in competitive labor markets.
Benefit accrual period	1 year (see § 60.2-806)	1 year (see § 60.2-804)	Ensure program solvency.	Delay in program availability to public
Fund balance requirement	140 percent (see § 60.2-806. (B) (3)-(5))	140 percent (see § 60.2-804. (B) (3)-(5))	Ensure program solvency.	NA
Taxable wages and salaries ceiling	Maximum contribution is benefit base limit established annual for Social Security ($168,600 in 2024). (see § 60.2-806. (F))	Maximum contribution is benefit base limit established annual for Social Security ($168,600 in 2024). (see § 60.2-804. (E))	Benefit principle of taxation.	Lower taxable wage ceilings will narrow the tax base and increase payroll tax rate for earners below ceiling.
Tax rate	Rate needed to ensure reimbursement of initial start-up loan costs and to maintain Trust Fund balance at 140 percent of percent of previous fiscal year's expenditure (§ 60.2-806. (B))	To be informed by actuarial study (§ 60.2-804. and Part 2.)	NA	NA

Feature	SB373	HB2016/SB1330	Pro	Con
ELIGIBILITY REQUIREMENTS				
Employment requirements (minimum earnings/hours)	Base period is previous four quarters. Eligibility is based on earnings in two highest earning quarters (i.e., $3,000) according to UI covered employment benefit table (https://law.lis.virginia.gov/pdf/12100666D_Table2.pdf). (see § 60.2-612) and § 60.2-800 (1)(a))	Base period is previous four quarters. Eligibility is based on earnings in two highest earning quarters (i.e., $3,000) according to UI covered employment benefit table (https://law.lis.virginia.gov/pdf/12100666D_Table2.pdf). (see § 60.2-612) and § 60.2-800 (1)(a))	Aligns with UI program eligibility (covered employment), ensures that only individuals with demonstrated attachment to labor force receive benefits.	May exclude some categories of workers such as seasonal workers.
Participation requirement for self-employed	Self-employed may opt in (see § 60.2-815)	Self-employed may opt in (see § 60.2-813)	NA	Allowing self-employed option to enroll may create adverse selection problem because individuals who anticipate needing benefits are more likely to enroll.
Industry/firm exemptions (e.g., public sector and small businesses)	Yes. Employers of 10 or fewer employees remit only 50 percent employee share (see § 60.2-806. (E)). Eligible private employer plans are exempt from contributions (see § 60.2-816. (A). Employees of state government, local government school board, and local constitutional officers and their employees are not covered individuals (See § 60.2-800. Definitions).	No	Small businesses have higher administrative costs for paid leave and workers exhibit lower utilization levels.	Smaller businesses have lower utilization levels due to workplace culture. PFML provides access to pooled community rated social insurance product that may otherwise be unavailable or cost prohibitive for small employers. Providing exemption for small businesses raises costs for other employers and employees.

Feature	SB373	HB2016/SB1330	Pro	Con
ELIGIBILITY REQUIREMENTS				
Allowance of competitive (private or self-insurance) plans	Yes. Eligible private employer plans are exempt from contributions (see § 60.2-816. (A).	No	Provides continuity in existing private plans. Provision of private plans may provide synergies with other aspects of firm leave management systems.	Creates possibility of adverse selection problem with public plan enrolling higher risk individuals. Program experiences higher administrative costs to regulate private plans.
Qualifying events	(1) Birth, adoption, or placement through foster care of caring for a new child during the first year after the birth, adoption, or placement of that child, (2) caring for family member with a serious health condition, (3) has a serious health condition that makes the covered individual unable to perform work, (4) caring for a covered service member who is next of kin or other family member, or (5) eligible for qualifying exigency leave arising out of fact that family member of covered individual is on active duty, or has been notified of an impending call or order to active duty in the Armed Forces. (see § 60.2-802. Eligibility for benefits)	(1) Birth, adoption, or placement through foster care of caring for a new child during the first year after the birth, adoption, or placement of that child, (2) caring for family member with a serious health condition, (3) has a serious health condition that makes the covered individual unable to perform work, (4) caring for a covered service member who is next of kin or other family member, or (5) eligible for qualifying exigency leave arising out of fact that family member of covered individual is on active duty, or has been notified of an impending call or order to active duty in the Armed Forces. (see § 60.2-801. Eligibility for benefits)	More qualifying events raise program costs.	NA

Feature	SB373	HB2016/SB1330	Pro	Con
ELIGIBILITY REQUIREMENTS				
Qualifying family members/ definition of family	(1) Biological, adopted, or foster child, stepchild or legal ward, a child of domestic partner or child to whom the covered individual stands in loco parent, (2) biological, adoptive, or foster parent, stepparent, or legal guardian of a covered individual or a covered individual's spouse or domestic partners, or a person who stood in loco parentis when the covered individual's spouse or domestic partner was a minor child; (3) a person to whom the covered individual is legally married under the laws of any state, or a domestic partner of a covered individual; or (4) a grandparent, grandchild, or sibling, whether through a biological, foster, adoptive, or step relationship, of the covered individual or the covered individual's spouse or domestic partner. *(see § 60.2-800. Definitions)*	(1) Biological, adopted, or foster child, stepchild or legal ward, a child of domestic partner or child to whom the covered individual stands in loco parent, (2) biological, adoptive, or foster parent, stepparent, or legal guardian of a covered individual or a covered individual's spouse or domestic partners, or a person who stood in loco parentis when the covered individual's spouse or domestic partner was a minor child; (3) a person to whom the covered individual is legally married under the laws of any state, or a domestic partner of a covered individual; or (4) a grandparent, grandchild, or sibling, whether through a biological, foster, adoptive, or step relationship, of the covered individual or the covered individual's spouse or domestic partner. *(see § 60.2-800. Definitions)*	More expansive family definitions raise program costs.	More expansive family definitions effect on program costs are likely to be small because immediate family members typically account for vast majority of costs.

Feature	SB373	HB2016/SB1330	Pro	Con
ELIGIBILITY REQUIREMENTS				
Advanced notice requirements	Yes, but no minimum number of days specified: "§ 60.2-811. Notice requirements. (B))	Yes, but no minimum number of days specified: "§ 60.2-809. Notice. (B))	Helps reduce disruption to business by improving planning for work continuity while employee is on leave.	Failure to provide adequate advanced notice can be reason for denying claim and would reduce benefit claims rate by unknown factor. Policy may have more deleterious effect on disadvantaged groups with lower levels of program awareness.

Feature	SB373	HB2016/SB1330	Pro	Con
BENEFITS				
Replacement rate and structure	Flat 80 percent rate (see § 60.2-804. (A)	Flat 80 percent rate (see § 60.2-803. (A)	Improved participation and equity in participation can be achieved with higher wage replacement.	Further equity could be achieved with progressive rate structure.
Maximum period of leave	8 weeks total (see § 60.2-803 (A))	12 weeks total (see § 60.2-802 (A))	Many infant and maternal health and development benefits begin at 12 weeks of leave. American medical and health organizations recommend 12 weeks as minimum amount of leave for new mothers.	International organizations recommend minimum of 14 weeks or more for maternal leave. Most private short-term disability programs and some states offer substantially higher maximum amounts of medical leave.
Minimum period of leave	Yes--8 hours (see § 60.2-804 (D) and § 60.2-807.)	Yes--8 hours (see § 60.2-803 (D) and § 60.2-805.)	Intermittency may be needed for certain qualifying events (e.g., elder care, chemotherapy).	Intermittent leaves may increase employer costs of leave.
Taxability (federal and state income tax) of benefits	Yes (if IRS determines that benefits are subject to federal tax). State uses adjusted gross earnings from federal forms. (see § 60.2-817.)	Yes (if IRS determines that benefits are subject to federal tax). State uses adjusted gross earnings from federal forms. (see § 60.2-815.)	State taxation of benefits creates additional revenue stream for state.	Unresolved questions of benefit taxability by federal and state government creates tax uncertainty. Taxation of benefits would lower benefit.
Benefits counted in determining means-tested benefits for other state programs	Not specified but probably related to taxability issue	Not specified but probably related to taxability issue	Counting benefits would lower public assistance costs.	Counting temporary benefits would decrease public assistance and increase administrative complexity for lower earners.

Feature	SB373	HB2016/SB1330	Pro	Con
BENEFITS				
Minimum and maximum benefit	Minimum of $100 per week and maximum of 80 percent of regional average weekly wage. (see § 60.2-804. (B) and (C))	Minimum of $100 per week and maximum of 80 percent of state average weekly wage during the 12 months preceding. (see § 60.2-803. (B) and (C))	Minimum and maximum benefits improve program equity. Maximum benefit is needed to ensure that average benefits are synchronized with tax contributions for high wage earners. Usage of regional wage benchmark better aligns with cost-of-living differences.	Minimum benefit may mean slight departure from benefit principle for some low earners. Minimums stated in nominal dollar terms will erode in real value over time due to inflation. Reliance on regional wage benchmark may increase administrative complexity and lead to perceptions of inequity.
Leave stacking (maximum usage of both family and medical leave in one year)	Yes until 8 total (see § 60.2-803 (A))	Yes until 12 total (see § 60.2-802 (A))	Provides worker flexibility.	Increases program costs over alternative where family and medical leave durations are separate.
Interaction of employer benefits (usage of other benefits allowed (e.g. sick leave/vacation leave) before family and medical leave	Permits supplemental employer PFML benefits (see § 60.2-810 B)	Permits supplemental employer PFML benefits (see § 60.2-808 B)	Decreases availability of other worker benefits.	Allowance of employers to require workers to use sick/vacation leave first helps ease business costs of providing sick and vacation day benefits

Feature	SB373	HB2016/SB1330	Pro	Con
BENEFITS				
Benefit waiting period	No waiting period (see § 60.2-804. (B))	No waiting period (see § 60.2-802. (B))	May decrease utilization by lower earning workers with inadequate savings and reliant on weekly or biweekly work compensation.	Decreases program costs.
Return to work program	No	No	Return-to-work plans add to program administrative costs.	Return-to-work plans may reduce disability program benefit costs by decreasing leave durations and easing transition back to work.
Employment guarantee	Yes (see § 60.2-808.)	Yes (see § 60.2-806.)	Enhances program participation, particularly for lower earning, minority and part-time workers. Federal FMLA provides job protection, but significant portion of labor force (40%) is not covered.	FMLA already provides coverage for majority of working population.

Feature	SB373	HB2016/SB1330	Pro	Con
ADMINISTRATION/OTHER				
Public or private program administration	Public administration by Virginia Employment Commission ((§ 60.2-801))	Public administration by Virginia Employment Commission ((§ 60.2-814))	Private administration of public insurance programs typically has significantly higher administrative costs.	Private insurance firms may provide better customer service. They also pay state and local taxes.
Firm rate adjustment using experience rating	Not specified	Not specified	Charging different firm premiums based on experience rating could result in firm discrimination against higher utilization demographics.	Community rating may increase costs for some firms and industries with lower utilization demographics.
Public education/outreach program	Yes (§ 60.2-819. Public education)	Yes (§ 60.2-818. Public education)	Improve participation levels, particularly for disadvantaged groups.	Increases cost of program.
Financial assistance for small business	Yes. Employers of 10 or fewer employees remit only 50 percent employee share (see § 60.2-806. (E))	No	Eases financial burden for business who may have higher administrative costs.	Raises payroll tax rate for other categories of employers and workers.

SECTION 3: SUMMARY OF ACTUARIAL STUDY RESULTS

This section provides the results of an actuarial study for a PFML program in Virginia. A copy of the full actuarial analysis prepared by Milliman is included in **Appendix C**. The study uses the following timeline in determining program implementation:

Establish family and medical leave program:	July 1, 2025
Begin initial staff hiring, procurement, and education/outreach:	January 1, 2026
Implement contributions system:	January 1, 2026
Implement benefits system:	January 1, 2027

Since contributions begin one year before benefits are paid, a one-year period is used to build reserves for the PFML trust fund. Results are presented for four scenarios, one showing results for SB373 and three scenarios showing alternative policy design choices based on this legislation and previous Virginia legislation.

This section is divided into three parts. The first part describes, compares, and contrasts each of the three scenarios used in the analysis. The second part describes the data and methodology used in the analysis. The third part includes the actuarial study results.

3.1 Scenarios for Analysis

Four scenarios from the actuarial analysis are described here. The baseline scenario (**Option 1**) describes a PFML program with the characteristics specified in SB373 (see **Appendix A** for a copy of the legislation). The key features of the legislation used in the actuarial analysis are described in **Table 3.1**. Eligibility requirements are key in estimating the number of eligible workers. The wage replacement rate, minimum benefit amount, maximum benefit amount, and benefit period are important to estimating benefits. Waiting period, wage replacement rate, and job protection provisions affect program utilization. The legislation specifies that the wage replacement rate is set at 80 percent of a worker's average weekly wages, with a minimum benefit of $100 and maximum benefit amount equal to 80 percent of the regional (i.e., state planning district) average weekly wage. The maximum duration of total PFML leave available for a year is 8 weeks. The funding method is a payroll tax split evenly among firms and workers. However, small businesses (defined as having 10 or fewer employees) would be exempt from paying the 50 percent employer share. The legislation also provides exemptions for state and certain local government workers and qualifying private plans.

The second scenario (**Option 2**) provides an analysis of legislation examined in the previous PFML report (Rephann et al. 2021) for comparison purposes. This scenario shows results for Virginia 2021 General Assembly Session legislation (HB2016/SB1330 or Chapter 8: Paid Family and Medical Leave Program). The legislation offers no exemptions for state and certain local government workers and qualifying private plans. Also, for small businesses with 10 or fewer employees, there is no exemption from paying the 50 percent employer portion of the payroll tax as in SB373. Finally, that bill also provides a total benefit period of 12 weeks versus the 8 weeks offered in SB373. The third scenario (**Option 3**) removes the exemption for state government and certain local government workers (i.e., Constitutional Officers and eligible staff, local school district employees). This scenario is examined to determine the effect of the exemption on the program trust fund balance and payroll tax rate and for input into a separate Virginia Employment Commission fiscal impact analysis of the state and local government exemption. Thus, the scenario is exactly the same as the baseline scenario in terms of eligibility or benefits except for this feature. The fourth scenario (termed **Option 1A**) is exactly the same as Option 1 but targets a fund ratio of 40 percent rather than 140 percent. This scenario (per the actuarial report) provides an analysis for an alternative interpretation of §60.2-806 that requires a trust fund balance of at least 140 percent and more closely resembles the fund balance requirements of other public and private SDI plans. The primary difference between this option and the first one is that the payroll contribution requirements and payroll tax rates are initially lower than Option 1 because the trust fund buildup required at the start of the program is smaller.

The four scenarios are similar in many respects. Each assumes that employers and employees share the costs of the program equally (though Options 1, 3, and 1A exempt small businesses). The maximum contribution is based on the contribution and benefit base established by the Social Security Administration for Social Security in each scenario. Other program design characteristics are also identical, including qualifying family members, qualifying events, and job protections. All of the options also allow the self-employed to opt out. Options 1, 3, and 1A differ from Option 2 in that they provide an exemption for competitive private plans. Options 2 and 3 differ from 1 and 1A in providing no exemption for state and some local government employers.

Table 3.1 Paid Family and Medical Leave Policy Design Scenarios

Feature	Option 1 (Baseline-2024 GA SB 373)	Option 2 (2021 GA HB2016/SB1330)	Option 3	Option 1A
Funding method	Employers and employees share the costs via payroll taxes. Small business exception (per Governor's Workforce Advisor Report). Employers with 10 or fewer employees are not required to pay their share.	Employers and employees share the costs via payroll taxes.	Same as Option 1	Same as Option 1
Fund balance requirement	Target fund ratio of 140%	Same	Same	Target fund ratio of 40%
Maximum taxable wages	Maximum contribution is benefit base limit established annually for Social Security ($168,800 in 2024). (see § 60.2-804. (E))	Same	Same	Same
Eligibility requirements	Eligibility is based on earnings in two highest earning quarters according to UI covered employment benefit table (i.e., $3,000) (see § 60.2-612 and § 60.2-800 (1)(a))	Same	Same	Same

Feature	Option 1 (Baseline-2024 GA SB 373)	Option 2 (2021 GA HB2016/SB1330)	Option 3	Option 1A
Qualifying family members/definition of family	(1) Biological, adopted, or foster child, stepchild or legal ward, a child of domestic partner or child to whom the covered individual stands in loco parent, (2) biological, adoptive, or foster parent, stepparent, or legal guardian of a covered individual or a covered individual's spouse or domestic partners, or a person who stood in loco parentis when the covered individual's spouse or domestic partner was a minor child; (3) a person to whom the covered individual is legally married under the laws of any state, or a domestic partner of a covered individual; or (4) a grandparent, grandchild, or sibling, whether through a biological, foster, adoptive, or step relationship, of the covered individual or the covered individual's spouse or domestic partner. (see § 60.2-800. Definitions)	Same	Same	Same
Qualifying events	(1) Birth, adoption, or placement through foster care of caring for a new child during the first year after the birth, adoption, or placement of that child, (2) caring for family member with a serious health condition, (3) has a serious health condition that makes the covered individual unable to perform work, (4) caring for a covered service member who is next of kin or other family member, or (5) eligible for qualifying exigency leave arising out of fact that family member of covered individual is on active duty, or has been notified of an impending call or order to active duty in the Armed Forces. (see § 60.2-801. Eligibility for benefits)	Same	Same	Same
Wage replacement rate	Flat 80% rate (see § 60.2-803. (A))	Same	Same	Same

Feature	Option 1 (Baseline-2024 GA SB 373)	Option 2 (2021 GA HB2016/SB1330)	Option 3	Option 1A
Maximum period of leave (for Family and Medical Leave)	8 weeks total (see § 60.2-802 (A))	12 weeks total (see § 60.2-802 (A))	Same as Option 1	Same as Option 1
Allowance of intermittent leaves	Yes (see § 60.2-803 (D) and § 60.2-805.)	Same	Same	Same
Minimum and maximum benefit	Minimum of $100 per week and maximum of 80% of state average weekly wage during the 12 months preceding. (see § 60.2-803. (B) and (C))	Same	Same	Same
Minimum benefit	$100	Same	Same	Same
Benefit waiting period	No waiting period (see § 60.2-802. (B))	Same	Same	Same
Job protection	Yes (see § 60.2-806.)	Same	Same	Same
Allowance of competitive (private or self-insurance) Plans	Yes	No	Yes	Yes
Self-employed treatment	Self-employed may opt in (see § 60.2-813)	Same	Same	Same
Other exempted categories	State government employees and certain local government employees	No exemption specified	No exemption specified	Same as Option 1

3.2 Data and Methodology

This section describes methods and data used as inputs into the actuarial analysis. They include data used to estimate eligible workers and taxable wages, incidence rates, leave durations, average benefits, and PFML administrative costs.

Eligible Workers and Taxable Wages

The Weldon Cooper Center provided Milliman demographic, employment, wage, and employment/wage escalation data for use in determining eligible employees and taxable wages over the 2026-2035 period for each of the scenarios. The data included the distribution of workers and total wages for each program scenario by wage category, gender, and age group. These data tabulations were based on 2020 U.S. Census Bureau American Community Survey (ACS) Public Use Microdata merged with microdata from the Current Population Survey to impute workers' employer size that were available from the most recent Worker Plus microdata update (USDOL 2023). This data was utilized because it could be used to compute the number of eligible workers and their corresponding earnings under the various scenarios. The dataset made it possible to identify the number of workers by place of work, by wage category, by age and sex demographics, by industry of employment, and by employer size. For example, the dataset allowed federal workers to be excluded from computations of eligible workers and to determine the amount of worker taxable wages affected by a small business payroll exclusion.

- **Program eligibility based on wages**. Since baseline scenario eligibility is defined in terms of quarterly wage data (Unemployment Insurance covered employment eligibility defined as wages equal to at least $3,000 over two quarters in a four-quarter look-back period), this quantity was converted to an annual wages estimated at $5,000 per annum. The covered employment minimum was not deflated since it is periodically revised by legislation in response to changing price levels over time.
- **Maximum taxable earnings**. The maximum taxable earnings for each of the three scenarios was the Social Security contribution and benefit base, currently $168,600. This quantity was set at the 2020 contribution and benefit base of $137,700 for computing maximum taxable earnings using the 2020 ACS-derived microdata described previously.
- **Projections of eligible workers**. To project the number of eligible workers from 2020 to 2027-2035, REMI PI+ employment and wage data was used. REMI PI+ (Policy Insight Plus) is a dynamic, multi-sector regional economic simulation model used for policy economic impact analysis as well as long-term demographic and economic projections. It is one of the few tools available for doing this type of long-term regional forecasting. The Virginia state model "piggybacks" on national economic forecasts and projections constructed from REMI simulation data, historical data, and growth rate adjustments (based on a University of Michigan RSQE short-term U.S. Macro Forecast, CBO Budget and Economic Data 10-Year and long-term economic projections, and the Energy Information Administration long-term national forecast reported in the Annual Energy Outlook) (Kang 2021).

- **State and local government exempted employees**. The Worker Plus microdata did not segment local government workers by the exemption category of employees who were school district employees or constitutional officers and staff. Therefore, this population was assumed to have the same age, sex, earnings, and other characteristics of all local government employees. This population was prorated using data from the U.S. Census Bureau 2020 Annual Survey of Public Employment and Payroll. The proportion of employees in the categories of Education—Elementary and Secondary Total, Judicial and Legal, and Corrections were assumed to be represent these exemption categories. They constituted approximately 66 percent of local government employees and 63 percent of payroll. These factors were used to apportion this category of exempted employees in the legislation for Option 1 and Option 1A.
- **Private plan exemption employee estimates**. Milliman estimated the proportion of eligible employees and payroll who were likely to be part of exempted private plans. These estimates (15 percent of eligible employees would be enrolled in private plans) were based on analyses of the uptake rates of other PFML states that offer such exemptions, characteristics of the Virginia PFML program, and the demographics of those states.

Administrative Costs

The startup costs for 2026 ($75 million) are based on an estimate of setup expenses obtained from the Virginia Employment Commission based on their experience with the Unemployment Insurance program. After program setup, Milliman assumed administrative expenses are 5 percent of total expenditures based on the experiences of other states with PFML programs.

3.3 Results

Claims and Benefit Payments

In each of the four scenarios, the number of claims and size of benefit payments are projected to increase over time. The number of claims is projected by applying incidence rates by program type and scenario to the projected number of eligible workers estimated as described in the previous subsection. Milliman assumed that incidence rates increase during the initial years of the program in a pattern seen with other newly introduced public PFML programs. Incidence rates level out in later years. In addition, average benefit amounts increase for later years because of earnings escalation factors described previously. Along with the projected increase in eligible workers, rising average benefits contribute to higher benefit payouts. However, taxable wages are projected to increase at the same rate.

Contribution Rates

Contribution rates are computed by dividing worker contributions to PFML by total taxable wages. Allowance is made throughout the period to fill and periodically replenish the target fund to maintain the statutorily required fund balance equal to the required level (140 percent in Options 1-3 and 40 percent for Option 1A) of total expenditures over time. Higher rates during the initial years of the program are required to build the target fund balance for Options 1-3. Higher rates also occur during the early years of the program because incidence rates are assumed to increase before they level off and stabilize as the programs mature.

Scenario Differences

The results for each of the three scenarios are shown in **Tables 3.2-3.4**. The baseline SB373 legislative scenario (Option 1) indicates that the number of eligible workers is projected to rise from 2.688 million in 2027 to 2.766 million in 2035. This represents an estimated 61 percent of all Virginia workers during the period with the remaining workers not meeting covered employment requirements or falling into various exempt employer categories, such as federal workers, exempt state and local employees, self-employed individuals, and employees with exempt private plans. Total benefit payments increase from approximately $1.166 billion in 2027 to $1.715 billion in 2035. A payroll tax of 0.72 percent would need to be levied at the start of the program, dropping to 0.69 percent in 2029 and ending at 0.66 percent in 2033. This rate is generally lower than that levied by other states offering PFML programs. For example, payroll tax rates in California, Colorado, Maine, Maryland, Oregon, and Rhode Island are 0.90 percent or more. However, these programs offer longer PFML maximum leave durations, generally 12 weeks or more.

Three other scenarios are modeled. Option 2 rolls back the exemptions to what was provided in HB2016/SB1330 and expands the maximum benefit duration from 8 to 12 weeks, which increases the number of eligible employees and expands the benefit payments. The number of eligible workers is projected to rise from 3.548 million in 2027 to 3.650 million in 2035 with benefit payments increasing from $1.935 billion in 2027 to $2.834 billion in 2035. The percentage of Virginia workers covered by PFML in this scenario represents approximately 80 percent of all Virginia workers, a nineteen percentage point increase in coverage over Option 1. Higher contribution rates are needed to support the expanded eligibility and higher benefits, starting at 0.92 percent at the beginning of the program and decreasing to 0.88 percent by 2029 and to 0.85 percent in 2033. This policy closely resembles those of other PFML states in terms of maximum duration of leave and correspondingly has a similar payroll tax rate requirement. Moreover, the payroll tax rate results are similar in magnitude to what was computed for the HB2016/SB1330 legislation in the 2021 Virginia PFML report (Rephann et al. 2021).

Option 3 slightly increases the projected number of covered employees by eliminating the state and local employer exemption offered in SB373. Benefit payouts increase slightly due to the increase in covered employees. The number of covered employees is projected to grow from 3.074 million in 2027 to 3.163 in 2035 with benefit payments increasing from $1.353 billion in 2027 to

$1.985 billion in 2035. The percentage of Virginia workers covered represents an estimated 69 percent of total Virginia workers. Contribution rates are slightly higher than Option 1 because exempted state and local government employees have lower wages and salaries than other eligible workers and experience higher replacement rates on average. The contribution rate starts out at 0.75 percent at the start of the program, decreasing to 0.71 percent in 2029 and to 0.69 percent in 2031.

Option 1A is exactly the same as Option 1 but assumes that the target fund ratio is 40 percent rather than 140 percent. According to Milliman, this fund ratio is similar to targets established by other states offering PFML programs and is consistent with target levels used by insurance companies for short-term disability insurance products. The number of covered employees and benefit payments are the same as Option 1. However, the lower trust fund accumulation reduces the initial payroll tax rate to 0.50 percent in 2026-2028 and gradually converges to the Option 1 baseline payroll tax rate of 0.68 percent in 2030 as ongoing benefit payout determines the rates after the initial trust fund buildup period. Since this option significantly reduces the initial contribution rate, the General Assembly may want to clarify the trust fund balance formula to be used in establishing the PFML program.

In order to allow users to explore further the distributional consequences of the scenarios by various economic and demographic variables, an online tool called the ***Paid Family and Medical Leave Dashboard*** was constructed by Weldon Cooper Center staff. The Dashboard is based on simulation data from the Worker Paid Leave Usage Simulator (2023 Worker PLUS Microsimulator) microsimulation model from the U.S. Department of Labor constructed on contract by IMPAQ International. This model is based on an Albelda Clayton-Matthews/IWPR Paid Family and Medical Leave Simulation Model (ACM model) (Hartmann and Hayes 2021; Clayton-Matthews and Albelda 2017). The dashboard allows users to explore the effects of the PFML legislation on the distribution of eligible workers, revenue contributions, annual benefit payouts, and other outcomes by income bracket, age, gender, employer size, ethnicity, industry, and other worker characteristics. Additional information and documentation for this dashboard is provided in **Appendix D**.

Table 3.2 Option 1 Program Actuarial Study Results

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Covered Employees		2,687,730	2,695,819	2,704,516	2,713,875	2,721,014	2,734,370	2,745,084	2,755,680	2,766,317
Taxable Wages ($M)	$190,117	$197,683	$205,865	$214,631	$223,851	$232,923	$242,989	$252,841	$263,007	$273,583
Claims										
Family		53,912	51,603	53,322	54,042	54,184	54,450	54,663	54,874	55,086
Medical		125,923	132,617	137,036	138,886	139,251	139,935	140,483	141,025	141,570
Total		*179,835*	*184,220*	*190,359*	*192,928*	*193,435*	*194,385*	*195,146*	*195,900*	*196,656*
Benefit Payments ($M)										
Family		$338.2	$336.1	$361.0	$380.2	$395.6	$412.7	$429.5	$446.7	$464.7
Medical		$827.3	$904.6	$971.4	$1,023.3	$1,064.8	$1,110.8	$1,155.8	$1,202.3	$1,250.7
Total		*$1,165.5*	*$1,240.8*	*$1,332.4*	*$1,403.5*	*$1,460.4*	*$1,523.5*	*$1,585.3*	*$1,649.0*	*$1,715.3*
Expenses ($M)										
Start-up	$75.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Family		$17.8	$17.7	$19.0	$20.0	$20.8	$21.7	$22.6	$23.5	$24.5
Medical		$43.5	$47.6	$51.1	$53.9	$56.0	$58.5	$60.8	$63.3	$65.8
Total	*$75.0*	*$61.3*	*$65.3*	*$70.1*	*$73.9*	*$76.8*	*$80.2*	*$83.4*	*$86.8*	*$90.3*

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Total Expenditure ($M)										
Family	$0.0	$356.0	$353.8	$379.9	$400.2	$416.5	$434.5	$452.1	$470.2	$489.2
Medical	$0.0	$870.9	$952.2	$1,022.6	$1,077.2	$1,120.8	$1,169.3	$1,216.7	$1,265.6	$1,316.5
Total	*$75.0*	*$1,226.9*	*$1,306.1*	*$1,402.5*	*$1,477.4*	*$1,537.3*	*$1,603.7*	*$1,668.7*	*$1,735.8*	*$1,805.6*
Contribution Rate										
Employer	0.40%	0.40%	0.39%	0.38%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%
Employee	0.40%	0.40%	0.39%	0.38%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%
Total	*0.72%*	*0.72%*	*0.72%*	*0.69%*	*0.68%*	*0.66%*	*0.67%*	*0.66%*	*0.66%*	*0.66%*
Contributions ($M)										
Employer	$613.5	$637.9	$664.0	$661.6	$680.0	$696.2	$728.8	$755.7	$785.8	$817.4
Employee	$751.0	$780.8	$812.7	$809.9	$832.3	$852.2	$892.0	$925.0	$961.8	$1,000.5
Total	*$1,364.5*	*$1,418.8*	*$1,476.7*	*$1,471.4*	*$1,512.3*	*$1,548.3*	*$1,620.8*	*$1,620.8*	*$1,747.6*	*$1,817.9*
Investment Income ($)	$54.4	$59.6	$62.5	$66.4	$70.0	$72.8	$75.9	$79.0	$82.2	$85.5
Fund Balance	$1,343.9	$1,595.4	$1,828.5	$1,963.7	$2,068.6	$2,152.4	$2,245.4	$2,336.5	$2,430.4	$2,528.1
Fund Balance % of Total Expenditure		130%	140%	140%	140%	140%	140%	140%	140%	140%

Source: Milliman (2024)

Table 3.3 Option 2 Program Actuarial Study Results

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Covered Employees		3,548,453	3,558,022	3,568,929	3,580,516	3,593,000	3,603,025	3,620,872	3,635,826	3,650,903
Taxable Wages ($M)	$245,185	$254,832	$265,217	$276,293	$287,940	$299,471	$312,288	$324,915	$337,991	$351,594
Claims										
Family		74,119	70,948	73,314	74,305	74,512	74,881	75,191	75,503	75,816
Medical		173,121	182,334	188,414	190,962	191,494	192,443	193,238	194,039	194,844
Total		*247,240*	*253,282*	*261,728*	*265,267*	*266,007*	*267,324*	*268,428*	*269,542*	*270,659*
Benefit Payments ($M)										
Family		$595.6	$591.5	$634.7	$668.1	$694.8	$724.6	$753.9	$784.2	$815.8
Medical		$1,339.0	$1,463.3	$1,570.1	$1,652.7	$1,718.9	$1,792.4	$1,864.9	$1,939.9	$2,018.0
Total		*$1,934.6*	*$2,054.8*	*$2,204.8*	*$2,320.7*	*$2,413.7*	*$2,517.0*	*$2,618.8*	*$2,724.1*	*$2,833.8*
Expenses ($M)										
Start-up	$75.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Family		$31.3	$31.1	$33.4	$35.2	$36.6	$38.1	$39.7	$41.3	$42.9
Medical		$70.5	$77.0	$82.6	$87.0	$90.5	$94.3	$98.2	$102.1	$106.2
Total	*$75.0*	*$101.8*	*$108.1*	*$116.0*	*$122.1*	*$127.0*	*$132.5*	*$137.8*	*$143.4*	*$149.1*

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Total Expenditure ($M)										
Family		$626.9	$622.6	$668.1	$703.2	$731.4	$762.7	$793.5	$825.5	$858.7
Medical		$1,409.5	$1,540.3	$1,652.8	$1,739.7	$1,809.3	$1,886.8	$1,963.0	$2,042.1	$2,124.2
Total	*$75.0*	*$2,036.4*	*$2,162.9*	*$2,320.9*	*$2,442.9*	*$2,540.7*	*$2,649.4*	*$2,756.6*	*$2,867.5*	*$2,982.9*
Contribution Rate										
Employer	0.46%	0.46%	0.46%	0.44%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
Employee	0.46%	0.46%	0.46%	0.44%	0.43%	0.43%	0.04%	0.43%	0.43%	0.43%
Total	*0.92%*	*0.92%*	*0.92%*	*0.88%*	*0.87%*	*0.85%*	*0.86%*	*0.85%*	*0.85%*	*0.85%*
Contributions ($M)										
Employer	$1,121.7	$1,165.9	$1,216.5	$1,216.2	$1,249.2	$1,278.3	$1,336.9	$1,388.5	$1,443.7	$1,501.8
Employee	$1,121.7	$1,165.9	$1,216.5	$1,216.2	$1,249.2	$1,278.3	$1,336.9	$1,388.5	$1,443.7	$1,501.8
Total	*$2,243.4*	*$2,331.7*	*$2,433.1*	*$2,432.4*	*$2,498.4*	*$2,556.7*	*$2,673.7*	*$2,777.0*	*$2,887.5*	*$3,003.7*
Investment Income ($)	$91.5	$99.2	$103.6	$109.9	$115.7	$120.3	$125.3	$130.4	$135.7	$141.2
Fund Balance	$2,260.0	$2,654.4	$3,028.1	$3,249.6	$3,420.7	$3,557.0	$3,706.6	$3,857.5	$4,013.2	$4,175.1
Fund Balance % of Total Expenditure		130%	140%	140%	140%	140%	140%	140%	140%	140%

Source: Milliman (2024)

Table 3.4 Option 3 Program Actuarial Study Results

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Covered Employees		3,074,148	3,082,438	3,091,886	3,101,925	3,112,740	3,121,425	3,136,887	3,149,842	3,162,903
Taxable Wages ($M)	$211,630	$219,957	$228,920	$238,481	$248,534	$258,487	$269,549	$280,448	$291,735	$303,476
Claims										
Family		64,212	61,465	63,514	64,373	64,553	64,872	65,140	65,410	65,682
Medical		149,981	157,962	163,230	165,437	165,898	166,720	167,409	168,103	168,800
Total		*214,192*	*219,427*	*226,744*	*229,810*	*230,451*	*231,592*	*232,549*	*233,513*	*234,481*
Benefit Payments ($M)										
Family		$392.9	$390.2	$418.7	$440.7	$458.4	$478.0	$497.3	$517.4	$538.2
Medical		$959.7	$1,048.7	$1,125.3	$1,184.4	$1,231.9	$1,284.6	$1,336.5	$1,390.3	$1,446.3
Total		*$1,352.6*	*$1,438.9*	*$1,544.0*	*$1,625.2*	*$1,690.3*	*$1,762.6*	*$1,833.9*	*$1,907.7*	*$1,984.5*
Expenses ($M)										
Start-up	$75.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Family		$20.7	$20.5	$22.0	$23.2	$24.1	$25.2	$26.2	$27.2	$28.3
Medical		$50.5	$55.2	$59.2	$62.3	$64.8	$67.6	$70.3	$73.2	$76.1
Total	*$75.0*	*$71.2*	*$75.7*	*$81.2*	*$85.5*	*$89.0*	*$92.8*	*$96.5*	*$100.4*	*$104.4*

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Total Expenditure ($M)										
Family		$413.6	$410.8	$440.8	$463.9	$482.5	$503.2	$523.5	$544.6	$566.5
Medical		$1,010.2	$1,103.9	$1,184.5	$1,246.8	$1,296.7	$1,352.2	$1,406.9	$1,463.5	$1,522.4
Total	*$75.0*	*$1,423.8*	*$1,514.7*	*$1,625.3*	*$1,710.7*	*$1,779.2*	*$1,855.4*	*$1,930.4*	*$2,008.1*	*$2,088.9*
Contribution Rate										
Employer	0.41%	0.41%	0.41%	0.39%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%
Employee	0.41%	0.41%	0.41%	0.39%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%
Total	*0.75%*	*0.75%*	*0.75%*	*0.71%*	*0.70%*	*0.69%*	*0.69%*	*0.69%*	*0.69%*	*0.69%*
Contributions ($M)										
Employer	$718.10	$746.3	$779.1	$775.1	$796.1	$815.7	$851.9	$884.8	$920.0	$957.0
Employee	$859.4	$893.3	$932.7	$928.0	$953.3	$976.8	$1,020.2	$1,059.7	$1,101.8	$1,146.1
Total	*$1,577.6*	*$1,639.6*	*$1,711.8*	*$1,703.2*	*$1,749.4*	*$1,792.5*	*$1,872.1*	*$1,944.4*	*$2,021.8*	*$2,103.2*
Investment Income ($)	$63.4	$69.1	$72.5	$76.9	$81.0	$84.3	$87.8	$91.4	$95.1	$98.9
Fund Balance	$1,566.0	$1,850.9	$2,120.6	$2,275.4	$2,395.0	$2,492.6	$2,597.1	$2,702.6	$2,811.3	$2,924.5
Fund Balance % of Total Expenditure		130%	140%	140%	140%	140%	140%	140%	140%	140%

Source: Milliman (2024)

Table 3.5 Option 1A Program Actuarial Study Results

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Covered Employees		2,687,730	2,695,819	2,704,516	2,713,875	2,721,014	2,734,370	2,745,084	2,755,680	2,766,317
Taxable Wages ($M)	$190,117	$197,683	$205,865	$214,631	$223,851	$232,923	$242,989	$252,841	$263,007	$273,583
Claims										
Family		53,912	51,603	53,322	54,042	54,184	54,450	54,663	54,874	55,086
Medical		125,923	132,617	137,036	138,886	139,251	139,935	140,483	141,025	141,570
Total		*179,835*	*184,220*	*190,359*	*192,928*	*193,435*	*194,385*	*195,146*	*195,900*	*196,656*
Benefit Payments ($M)										
Family		$338.2	$336.1	$361.0	$380.2	$395.6	$412.7	$429.5	$446.7	$464.7
Medical		$827.3	$904.6	$971.4	$1,023.3	$1,064.8	$1,110.8	$1,155.8	$1,202.3	$1,250.7
Total		*$1,165.5*	*$1,240.8*	*$1,332.4*	*$1,403.5*	*$1,460.4*	*$1,523.5*	*$1,585.3*	*$1,649.0*	*$1,715.3*
Expenses ($M)										
Start-up	$75.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Family		$17.8	$17.7	$19.0	$20.0	$20.8	$21.7	$22.6	$23.5	$24.5
Medical		$43.5	$47.6	$51.1	$53.9	$56.0	$58.5	$60.8	$63.3	$65.8
Total	*$75.0*	*$61.3*	*$65.3*	*$70.1*	*$73.9*	*$76.8*	*$80.2*	*$83.4*	*$86.8*	*$90.3*

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Total Expenditure ($M)										
Family	$0.0	$356.0	$353.8	$379.9	$400.2	$416.5	$434.5	$452.1	$470.2	$489.2
Medical	$0.0	$870.9	$952.2	$1,022.6	$1,077.2	$1,120.8	$1,169.3	$1,216.7	$1,265.6	$1,316.5
Total	*$75.0*	*$1,226.9*	*$1,306.1*	*$1,402.5*	*$1,477.4*	*$1,537.3*	*$1,603.7*	*$1,668.7*	*$1,735.8*	*$1,805.6*
Contribution Rate										
Employer	0.27%	0.27%	0.27%	0.36%	0.37%	0.37%	0.36%	0.37%	0.36%	0.36%
Employee	0.27%	0.27%	0.27%	0.36%	0.37%	0.37%	0.36%	0.37%	0.36%	0.36%
Total	*0.50%*	*0.50%*	*0.50%*	*0.65%*	*0.68%*	*0.67%*	*0.66%*	*0.66%*	*0.66%*	*0.66%*
Contributions ($M)										
Employer	$424.0	$440.9	$464.8	$630.5	$684.6	$703.8	$720.5	$754.3	$782.2	$813.3
Employee	$519.0	$539.7	$568.9	$771.8	$838.0	$861.5	$882.0	$923.3	$957.4	$995.5
Total	*$943.0*	*$980.6*	*$1,033.7*	*$1,402.3*	*$1,522.7*	*$1,565.5*	*$1,677.5*	*$1,677.6*	*$1,739.6*	*$1,808.8*
Investment Income ($)	$36.6	$25.5	$14.6	$149.9	$17.0	$18.6	$19.2	$20.2	$21.0	$21.9
Fund Balance	$904.7	$683.9	$426.1	$440.9	$503.1	$549.7	$567.7	$596.6	$621.4	$646.4
Fund Balance % of Total Expenditure		50%	33%	31%	34%	36%	35%	36%	36%	36%

Source: Milliman (2024)

SECTION 4: PFML EFFECTS LITERATURE REVIEW

This section reviews the academic empirical literature on the economic, social, and demographic effects of PFML programs. Similar to the previous study, it generally screens for peer-reviewed research, and research using contemporary causal econometric methods (e.g., difference in differences, regression discontinuity), since such studies provide a higher standard of evidence. It also focuses mainly on empirical research conducted for the U.S., including federal unpaid leave (i.e., FMLA), state PFML programs, and state mandated paid sick leave. There are several reasons for focusing on U.S. programs. The programs of most developed country counterparts have existed for a longer time period and are much more generous in terms of duration allowance and other program features than U.S. programs. Moreover, the U.S. differs from those countries culturally, economically, and in the size of the overall social support system. Thus, the results of those studies may be less transferable to the U.S. context.

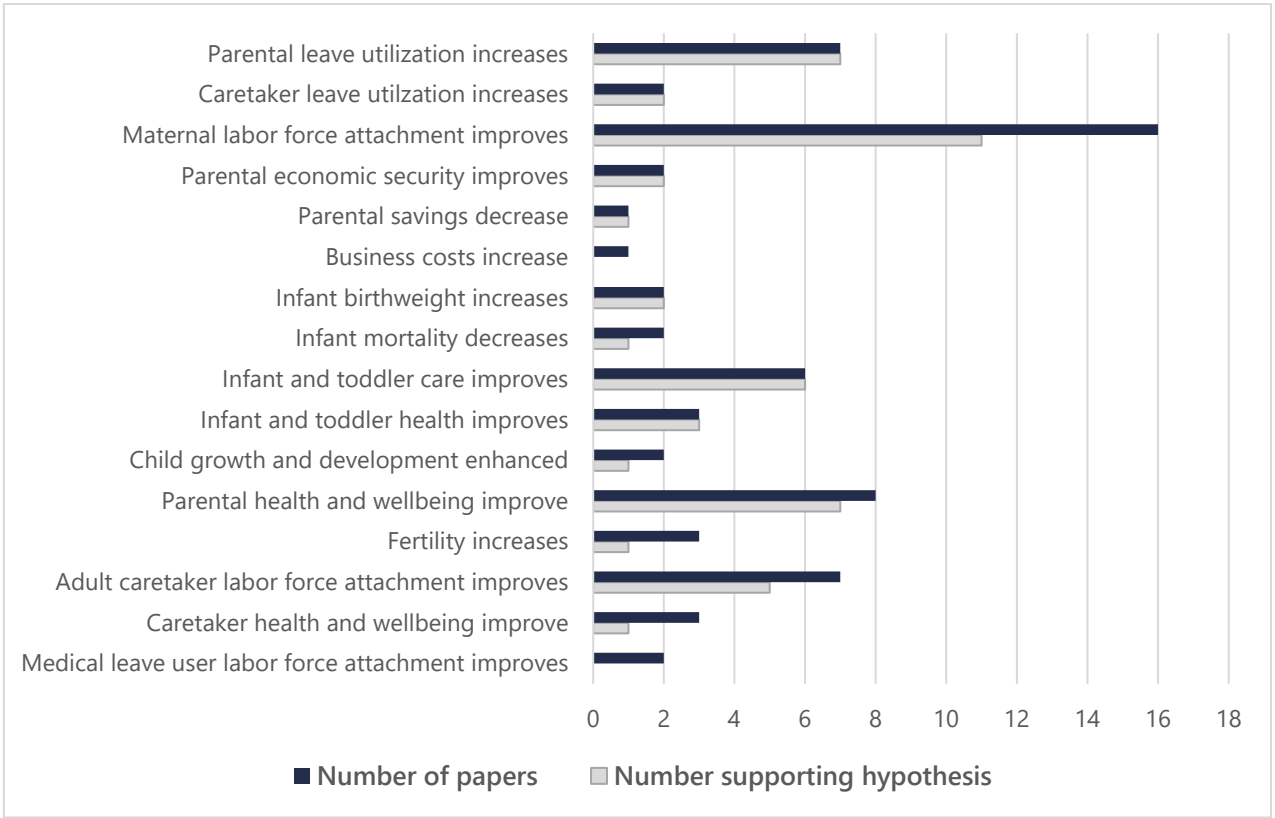
The outcomes are organized into three broad components of PFML: parental leave for bonding with a new child, other family caretaking leave, and short-term disability (otherwise known as "medical leave"). There is substantially much more literature on parental leave than other types of caretaker family leave and relatively little literature on public short-term disability programs, although the later programs have been in existence longer and account for most of PFML expenditures. This disparity in treatment is largely attributed to data availability issues. Many of the empirical studies rely on longitudinal data sets with substantial household demographic detail, allowing researchers to identify with greater accuracy households eligible for paid parental leave due to the recent birth of a child. However, eligibility for other types of leave due to family illness and one's own illness/disability is harder to identify with the same degree of accuracy (Donovan 2020). Family leave durations are also less variable than medical leave ones, which differ based on the severity of documented medical conditions and state medical guidelines.

This study identified approximately two dozen additional studies not reviewed in the previous PFML report, primarily ones published since 2021. These studies examined several different areas: two dealing with parental leave utilization, eight studies that examined maternal labor market attachment, one that examines infant mortality, three that look at infant and toddler care, one additional study focused on child growth and development, one that examined fertility, three concerned with parental health and wellbeing, and four studies that examine caretaker labor market attachment for caretakers of adults and children other than newborns. Several patterns are evident about these studies. First, the focus of evaluation has moved beyond FMLA and California to include other states that later introduced PFML programs, including New York, New Jersey, Rhode Island, and Oregon. Second, proportionately more studies deal with caretaker leave for parental leave compared to a preponderance of studies that previously dealt primarily with maternal leave. Third, the range of subjects is considerably broader than previously. In addition to the 12 areas covered in the previous report, four new areas with one or more papers were identified. Two papers examined caretaker leave utilization after the introduction of PFML (Abramowitz and Dillender 2023; Arora and Wolf 2024); two examined caretaker health and

wellbeing (Gimm and Yang 2016; Coile, Rossin-Slater and Su 2022); two looked at how parental economic security changes (Stancyzk 2019; Kim and Lenhart 2024); and a final paper looked at effects on savings (Rodgers 2020). Lastly, in general, the studies show more consistently beneficial impacts in each of the studied areas.

Table 4.1 below provides a tally of research findings for major PFML outcomes, indicating the number of causal empirical studies reviewed here that address a hypothesis about a particular outcome accompanied by a determination of the number of studies supporting the hypothesis. Individual study summaries, including brief descriptions of the area of study, data sources, methodology, and key findings are included in **Appendix E.** To summarize, there is ample causal evidence that PFML increases leave utilization. Several studies also find that infant and toddler care and outcomes and parental wellbeing improve along various dimensions. Studies of maternal labor outcomes find mixed results and, as will be discussed further below, can be divided into short-term (1-2 years after childbirth) studies that find generally positive outcomes and a few longer-term studies that find no such effects. There is also some evidence that adult caretaker leave has beneficial labor market effects.

Figure 4.1 Summary of Paid Family and Medical Leave Study Findings



Note: Only causal empirical studies reviewed here are summarized.

4.1 PFML Utilization and Duration

PFML utilization rates indicate the degree to which program participants file benefit claims. Along with length of leave, it is a key determinant of program costs. Utilization rates typically vary by the type of leave, with short-term disability benefits higher than parental leave which are in turn higher than other types of family leave (Greenfield and Cole 2019). Less is known about claim behavior for less common program qualifying events such as leave related to military service members or domestic violence (Greenfield and Cole 2019).

A substantial body of empirical research shows that utilization and length of parental bonding leave increases following the introduction of both unpaid and paid family leave (Han, Ruhm and Waldfogel 2009; Rossin 2011; Baum and Ruhm 2016; Bartel et al. 2018; Hayter, Spivey and Traian 2024; Noh 2024). Han, Ruhm, and Waldfogel (2009) find that federal and state family leave laws, which expanded unpaid leave, resulted in greater utilization by both women and men. Access to an additional 10 weeks of leave resulted in a 4-6 percent increase in leave-taking for women and 2-3 percent for men. Estimated effects were higher for college-educated and married women than women from disadvantaged backgrounds, which is consistent with findings reported elsewhere and support the idea that lower earners encounter greater obstacles in taking leave. Rossin-Slater, Ruhm, and Waldfogel (2013) find that the CA-PFL program increased the likelihood of maternal leave-taking by 6 percent and more than doubled the average length of leave from 2.8 to 6 weeks. In contrast to unpaid leave findings, these effects were particularly large for disadvantaged groups. Hayter, Spivey and Traian (2024) found that women with children below the age of one were 41 percent more likely to take time off from work than before paid leave was available. Moreover, maternal use of leave increased by 2.24 weeks and paternal use by 0.5 weeks. Baum and Ruhm (2016) observe that CA-PFL maternal leave use increased by 23 percent and paternal use by 10 percent two weeks after childbirth, accounting for increases of 5 weeks and 2-3 days respectively. Bartel et al. (2018) find that California's PFL increases fathers' likelihood of leave-taking by 46 percent and an estimated additional 2.4 days of leave, with larger effects for fathers of first-born children than later born children. Noh finds a smaller 9.4 percent increase in leave-taking for young women eligible for California PFL using a synthetic control method. Increased benefit levels may also have lagged utilization effects. Bana, Bedard, and Rossin-Slater (2020) find that increasing leave benefits by 10 percent during a mothers' first period of leave increases her likelihood of another PFML claim within the subsequent three years by 0.8 to 1.6 percent.

In addition, some causal empirical evidence is available to show increases in other forms of family leave-taking, but there is no evidence to show the same for short-term disability. Three research articles examine the usage of PFL by adult caretakers (parents or spouses) who are tending to ill or injured family members. These studies suggest that PFL can increase caretaking leave in at least some circumstances. Abramowitz and Dillender (2023) examine the effect of California PFL on eligible persons aged 50 to 79. They find that PFL was associated with a 50 percent increase in hours spent assisting ill parents, but this time was offset by a reduction in time spent caring for grandchildren. Another study (Arora and Wolf 2024) of the effect of PFL programs in California, New Jersey, New York, and Oregon on individuals aged 50 or older indicate that PFL adoption is

not associated with care provision for parents, except for states offering job protection (i.e., New Jersey and New York). A study by Arora and Wolf (2017) provides indirect evidence that caretaking leaves increases after PFML. They find that the proportion of elderly in nursing homes dropped by 0.65 percent after the introduction of CA-PFL, which equates to 11 percent decrease in nursing home use.[12] They attribute this drop in nursing home reliance, in part, to increasing leave-taking by family caregivers.

Several program design variables appear to influence utilization rates across time and various demographic groups. However, even after adjusting for these kinds of factors, substantial unexplained differences remain in state utilization rates (Spring 2019).

Program design elements. Various program eligibility, benefit levels, job protection measures, and other program features might be expected to influence program utilization. Claims incidence modeling by Spring (2019) (although not causal design) indicates that state differences in benefit characteristics and access are important. Increases in the wage replacement rate, improved job protection, and decreases in the waiting period improve utilization rates, according to their estimates. Causal empirical evidence that these policy features affect utilization is not available.[13] Bana et al. (2018) describe several international studies that fail to find a link between program replacement rates and utilization for disability insurance, sick leave, and maternity leave. In a study of CA-PFL, Bana et al. (2020) find no association between wage replacement and increased maternity leave duration for higher earning mothers. Moreover, they find that the 50-employee firm employment threshold used for determining FMLA job protection eligibility does not reach a level around which take-up rates differ, suggesting that FMLA job protection may not play an important role in utilization.

Longevity of program and program awareness. Empirical evidence suggests that program participation improves over time due to greater program awareness, program experience, and changing cultural norms.[14] Data from PFL programs indicates that utilization rates are generally increasing over time as the programs mature and awareness increases (Jacobs 2019). California PFL trends are being propelled by increases in male use of family leave, which may reflect evolving attitudes towards male caretaking roles (Spring 2019; Milkman and Applebaum 2013).

[12] Decreasing nursing home utilization may also result in additional state fiscal benefits since Medicaid "is the primary payer for over 63 percent of nursing home residents" and states pay a substantial portion off this expense (Arora and Wolf 2017).

[13] The dearth of U.S. studies examining this issue may stem from the lack of adequate history for established state PFML programs to provide policy design heterogeneity and changes useful for empirical testing.

[14] Technological advancements over time in health care treatments and care could result in decreased SDI durations that, ceteris paribus, decrease program costs. A one percent technological cost decrease trend was used in a recent Colorado actuarial study (AMI Risk Consultants, Inc. 2019).

Bana, Bedard, and Rossin-Slater (2020) find that increases in benefits received during an earlier period increases the likelihood of filing a PFML claim within the next three years.

There are demographic disparities in program knowledge: Lower earners, minorities, and workers with lower degrees of educational attainment generally exhibit less awareness of state PFML programs (Milkman and Applebaum 2013). These disparities might also be due to the greater difficulties disadvantaged populations have in navigating new and perhaps complex administrative procedures. Levels of awareness also differ among PFML components, with SDI being more widely recognized than family leave (Groves, MacNeil, and Wolfe 2016). These demographic and programmatic disparities motivate the implementation of education and marketing programs, including special targeting of underserved residents.

State demographics. State demographics are a key driver of variation in state aggregate PFML utilization levels (Spring 2019). The number of females of childbearing age (20-44) and childbearing trends rates affect maternal leave (Spring 2019). Older workers are also more likely to use SDI benefits for recovery from illness or injury. Younger women are more likely to use paid leave programs for bonding and caretaking. Adult family caretakers are disproportionately older and female (44 years and older) (Spring 2019). Despite increasing uptake trends, men are much lower users of family leave, a familiar pattern that is attributable to maternal childbirth, male breadwinner roles, and cultural norms (Bartel et al. 2018).

Workplace factors. Workers in small firms and firms in certain lower paying industries (e.g., food service, accommodation) typically exhibit lower levels of PFML usage. This phenomenon has been linked to a "workplace culture" that fosters greater worker uncertainty about job security and promotion (Bana et al. 2018). Bana et al. (2018) find that worker protections are not sufficient to mitigate disparities in utilization since employers may use less overt means to discourage participation.

The duration of leave has also been linked to program design features, such as the statutory maximum period of leave and benefit levels. However, the evidence is generally not causal. For example, Spring (2019) finds that maximum leave allowance is more closely related to parental care than other types of family and medical leave (Spring 2019). While empirical evidence suggests that participation duration increases with benefit level for some social insurance programs, the evidence is quite limited for PFML (Bana, Bedard, and Rossin-Slater 2020). Bedard and Rossin-Slater (2016) find that a $1,000 increase in quarterly PFL benefits is associated with a 0.02 week, 0.14 week, and 0.20 week increase in total leave duration for family bonding, female SDI, and male SDI. In contrast, Bana, Bedard, and Rossin-Slater (2020) find no evidence that leave duration increases in response to higher weekly benefit amounts.

4.2 Parental Leave

4.2.1 Labor Market Outcomes

At least sixteen studies have examined the effect of paid family leave on labor market outcomes using causal empirical frameworks.[15] Generally, these studies examine the experience of California since it has the oldest PFL program, but more recent studies have looked at other states, such as New Jersey, New York, and Rhode Island (Jones and Wilcher 2024; Kim and Lenhart 2024; LaLumia and Tobin 2022). The outcomes examined include mother's labor force participation, employment, unemployment and wages. Most studies find that state PFML programs have positive labor market effects in the short term, including improved labor force participation and increased earnings (Bailey et al. 2019).[16] These outcomes seem to be more prevalent for more disadvantaged groups. Many of these studies rely on longitudinal data sets with relatively small, treated samples. A few studies, some using larger administrative datasets, or examining longer time frames, have found negligible or even some negative effects.

PFL could have either favorable or detrimental effects on maternal labor force outcomes, such as labor force attachment. It could increase female labor force participation if mothers have access to paid leave and therefore are able to remain in their jobs (Baum and Ruhm 2016). PFL could also prove beneficial to employers by decreasing PFL user job turnover and avoiding the costs associated with new employees, including searching, hiring, training, and bringing new hires up to a similar level of productivity. These costs may be particularly high in hard-to-hire occupations requiring higher levels of skill and education. Alternatively, PFL could have negative effects on female labor participation if worker leave causes firms to incur additional expenses such as increased administrative costs, a need to hire temporary replacements, and a payment of overtime to existing workers, any of which could motivate them to substitute hires less likely to take paid leave (Olivetti and Petrongolo 2017; Stock and Inglis 2021). Although anti-discrimination laws exist to prevent this, they are difficult to monitor and enforce in actual practice. Longer maternity leaves may also contribute to the erosion of human capital and jobs skills which inhibits the return of mothers to employment (Olivetti and Petrongolo 2017). This outcome has been detected in a study of European PFL programs at one year of duration, but programs of comparable length are not found in the U.S. (Ruhm 1998). Alternatively, longer leaves could change parental tastes for

[15] In an early study of the effect of FMLA on female employment, Han, Ruhm and Waldfogel (2009) did not find that federal and state expanded unpaid leave led to changes in employment rates.

[16] Some reviews of the broader international and U.S. literature have characterized the empirical work on PFL labor market outcomes literature as either "inconclusive" or "mixed." For example, Olivetti and Petrongolo (2017) state: "No obvious consensus on the labor market impact of parental leave rights and benefits emerges from the empirical literature. . . In a nutshell, there is little compelling evidence that extended parental leave rights have an overall positive effect on female outcomes."

parenting lifestyles and encourage women to drop out of the labor market to invest more time with their children (Bailey et al. 2019).

Several studies find some positive effects of family leave on female labor market outcomes. A Washbrook et al. (2011) study of FMLA and state leave laws finds that state leave laws increased the probability of employment after childbirth by 4.3 percentage points at 9 months and by 5.3 percentage points at child pre-school age (4 years). Baum and Ruhm (2016) find that CA-PFL boosted maternal employment by 18 percent one year after childbirth and increased hours worked during the second year by 11 percent but had no statistically significant effects on wages. Another CA-PFL study finds that hours worked increased by 10 percent to 17 percent for employed mothers 1-3 years after birth, but probability of employment was unchanged (Rossin-Slater, Ruhm, and Waldfogel 2013). Bana, Bedard, and Rossin-Slater (2020) examine the effect of PFL replacement rates on high earning women near the state's maximum benefit threshold. They find that for these women, the CA-PFL replacement rate is not associated with adverse post-birth labor market outcomes. However, an increase in the rate is associated with a higher likelihood of returning to the pre-birth employer. In a study of CA-PFL, Stancyzyk (2019) finds that it had positive effects on mothers' wage and salary income, which contributed to improved household incomes and lower poverty rates. Another CA-PFL study by Kim (2024) finds that PFL is associated with an increased likelihood of mothers to participate in the labor force and to have slightly increased earnings. Lastly, Curtis, Hirsh, and Schroeder (2016) study the effect of CA-PFL on hiring, separations, and recalls of young women. They find that the policy is associated with statistically significant effects on new hires, separations, and recalls of 2-3 percent, indicating increased job churn. Although the study does not examine wages and labor force participation, they argue that their results are consistent with a policy that enhances female labor market flexibility and improved job matching.

While many of these studies focused on California's PFL, which offers no job protection and had lower wage replacement rates than many programs established later in other states, more recent studies have expanded their analysis to these other states. A study of California and New Jersey found that PFL programs have statistically significant positive impacts on maternal labor-force participation (Byker 2016). The results are driven by those without a college education. Another study of laws in those two states found that maternal labor force participation increases by more than 5 percent in the birth year with decreasing, but still statistically significant, improvements detected five years later (i.e., until child enters first grade) (Jones and Wilcher 2020). In contrast to Byker's findings, these effects are higher with greater educational attainment and smaller or nonexistent for ethnic minorities. Additionally, the authors find no effects of PML on maternal unemployment. In a study of NY-PFL, LaLumia and Tobin (2022) find that the program increased employment of mothers with children less than one year old by 2.6-3.4 percentage points, mothers' usual hours worked by 1.1 to 1.3 hours per week, and income by 1.6 to 2.9 percent. Another study of NY-PFL (Kim and Lenhart 2024) finds that the program is associated with an increase in labor force participation of 12.2 percentage points.

Five studies have found primarily negative female employment effects. Two of these studies focus on longer term labor market outcomes, three look at females of childbearing age rather than

mothers because they rely on geographically aggregated data, and another looks at the effect of maternal eligibility for disability benefits triggered by changes in discrimination laws during the 1970s rather than PFL. Thus, they are less pinpointed on the question of PFL on short-term maternal labor force effects and, perhaps, should be given less emphasis in inferring PFL policy impacts. Das and Polachek (2015) examine the impact of CA-PFL on young women's labor force participation rate, the unemployment rate, and duration of unemployment. They find that PFL led to increases in all three measures with labor force participation increasing by 1.5 percent, unemployment by between 0.3 percent and 1.5 percent, and unemployment duration by 4-9 percent. Bailey et al. (2024) examine CA-PFL for first-time mothers, finding that employment and earnings were reduced 6-11 years later. They find that PFL decreased employment by 7 percent and lowered wages by 8 percent 6-10 years after childbirth. Stock and Inglis (2021) also examine long-term impacts of CA-PFL. They find that the law had little impact on young women's labor force participation, unemployment duration, and earnings, but steady negative effects on employment 10 years after implementation. Effects were concentrated among college-educated women. Another study of the effect of CA-PFL by Chang (2021) finds that employment decreased for young women compared to young men by approximately 2-3 percent and wages by 0-0.2 percent. In a study of the impact of changes in anti-discrimination statutes in the 1970s on eligibility for maternal disability benefits, Timpe (2024) finds that hourly wages fell by 5-6 log points for mothers of infants after benefits were more widely available, and employment and hours worked fell 5 points 5-9 years after.

4.2.2 Economic Security

Two studies go beyond the question of whether PFL improves maternal labor market outcomes to examine if PFL improves the economic security of mothers. As reported previously, both Stanczyk (2019) and Kim and Lenhart (2024) find favorable labor market effects of PFL polices. These studies also find that PFL reduces economic security, particularly for more vulnerable mothers. Stancyzk finds California PFL is associated with a 10.9 percent decrease in poverty likelihood and household income increase of 4.1 percent for mothers of one-year-olds. Poverty reduction is concentrated among single and less educated mothers while household income gains are observed for married mothers. Kim and Lenhart's analysis also found that NY-PFL reduced low food security prevalence by 36 percent. The effects are larger for households under 185 percent of the federal poverty line and parents with lower levels of education.

4.2.3. Savings Behavior

One study examines the effect of PFL on household savings. This issue is of interest because of some evidence that social insurance can reduce consumer precautionary saving levels. For example, in a study of the effect of unemployment insurance, Engen and Gruber (1995) find that increasing UI replacement rates by 10 percent results in a 1.4-5.6 percent reduction in financial asset holding. This translates into UI crowd-out effects of up to half of private savings for the average unemployment duration. The mechanisms for this crowd-out are a reduced need for precautionary savings because of the unemployment safety net and "taxing away individual savings through means testing to qualify for government assistance." Rodgers (2020) examines the effect of CA-PFL on expectant mothers, finding that, in comparison to mother's who aren't expecting, expectant mothers decreased their savings levels leading up to birth by 1.4 months of household income (according to one estimate). However, this effect is concentrated among higher income families and not lower income families who are more likely to be liquidity constrained.

4.2.4 Employer Outcomes

There is a relatively small amount of literature on the employer impacts of PFML programs. The empirical evidence consists of several surveys of businesses and residents in states that had earlier adopted PFML in what amounts to before and after assessments. One recent study uses longitudinal firm survey data for causal empirical analysis (Bartel et al. 2023a). These studies generally suggest that employer impacts are relatively small. One possible reason for such findings is that employers do not bear the full direct costs of funding the PFML programs; statutory rates are usually split between workers and employers and the actual tax incidence is likely mostly borne by workers. Another explanation is that businesses experience some productivity or retention improvements that offset other higher costs that some firms may experience.

Employers may incur several costs from establishing a PFML program, including both administrative costs and costs resulting from worker absences. Evidence suggests that firms adjust to worker absences by: (1) shifting work to other workers without overtime, (2) shifting to other

workers with overtime, (3) putting work on hold until an employee returns, (4) hiring temp workers, and (5) hiring permanent replacements (Groves, MacNeil, and Wolfe 2016; Milkman and Applebaum 2013; Ramirez 2012). The former three methods of covering workers on leave are much more common responses than the latter two (Milkman and Applebaum 2013).

Employers could also realize lower costs. Employee wage costs could potentially decrease if temporary replacement workers are hired at wages below the permanent worker or turnover decreases. These turnover costs, which can run from an estimated 17-23 percent of employee annual compensation include: (1) screening applicants and doing paperwork; (2) agency fees, advertising costs, and related expenses; (3) training time; and (4) time for a new employees to achieve full productivity (Milkman and Appelbaum 2013).

Larger firms might be expected to have lower costs of implementing leave policies than smaller firms. They are better able to make adjustment for worker absences through the routine activity of regularly hiring new workers to replenish workforces due to a variety of types of worker separations. They are also more likely to have staffed human resources departments and existing procedures for dealing with other types of leave (e.g., sick leave, vacation leave, workers compensation, military leave). In contrast, small businesses may not have the same infrastructure or processes in place and may resort to ad hoc arrangements for covering worker absences.

A few longitudinal econometric studies of employers find no evidence that PFML appreciably increases employer costs, though one suggests that the findings are not as representative for smaller employers. Bedard and Rossin-Slater (2016) examined employer turnover and wage costs for California as a function of employee-leave-taking rates. Results indicate that increased leave-taking is associated with a statistically significant effect on the average worker wage bill (suggesting that firms do not replace workers on leave) but a very small, but statistically significant increase in employee turnover. In a study of NY-PFL, Bartel et al. (2023a) find that the law improves employers' ratings of how easy it is to handle long employee absences. These effects occur among firms with 50-99 employees in the first year but are not found in the second year. Nor are the effects evident for very small employers (1-49 employees). Furthermore, leave-taking increases 20.8 percentage points in the second year, driven by smaller employers. The authors found no significant impacts on employers' evaluations in several areas of employee performance (i.e., attendance, commitment, cooperation, productivity). Finally, survey data on employer attitudes toward paid family leave indicate that most firms support ("very supportive" or "somewhat supportive") PFL and that the percentage of employers opposed has grown over time. These negative attitudes are more common for small employers (1-49 employees).

Several state PFML employer surveys also examine perceptions of PFML programs after they were introduced:

- **California**. Milkman and Appelbaum (2013) surveyed 250 firms four years after CA-PFL was started about the program's effect on firm profitability/performance, employee productivity, and employee turnover. Although approximately 90 percent of employers indicated that

they were either not affected or experienced positive effects from the introduction of PFL, the percentage of firms reporting negative impacts in each of the areas was more common than positive impacts. Contrary to expectations, small business responses were more favorable than those of larger businesses.

- **New Jersey.** Ramirez (2012) surveyed 259 New Jersey businesses about the state's PFL program, 59 percent of which had employees who had used paid leave during the previous 12 months. Similar to the Milkman and Applebaum California survey findings, most businesses in all size categories indicated that they had experienced no effects from the introduction of the program. However, the percentage of businesses that reported negative effects on various dimensions (31 percent for profitability/performance; 42 percent for employer productivity) was much higher. Moreover, responses were less favorable for smaller businesses. For instance, 44 percent of small businesses, 30 percent of medium-sized businesses, and 23 percent of large businesses reported negative effects on profitability/performance.
- **Rhode Island**. Bartel et al. (2016) conducted surveys of small employers in Rhode Island, Connecticut, and Massachusetts small employers in 2013 (before a RI-PFL policy was implemented) and 2015 (after the RI-PFL policy was in place) with a focus on food service and manufacturing sectors. At the time, Connecticut and Massachusetts did not have PFML programs and served as a control group, while Rhode Island had implemented its PFL policy in 2014. The survey elicited 237 responses; it found no statistically significant differences between Rhode Island and other state employer responses for productivity and other performance metrics. They also found that 61 percent of all Rhode Island employers strongly supported the PFL program, while a smaller majority of small employers were supportive of the policy.
- **San Francisco.** Goodman et al. (2020) surveyed employers in San Francisco after the passage of a San Francisco's PFL mandate that required employers to provide supplemental full wage replacement from a 60-70 percent CA-PFL baseline replacement rate. One might expect employer sentiment to be less positive for this mandate rather than the other programs examined here that are funded at least partly by employee contributions; however, the benefit increment is also significantly smaller than stand-alone PFL programs. Survey results indicated that 82.2 percent of employers coved by the policy "strongly supported" or "supported" it. About half of employers (53.1 percent) reported having difficulty implementing the policy, though few reported that it had negative effects on firm profitability, productivity, employee retention, customer service, or employee morale. These results were reportedly similar across various employer features.

4.2.5 Health Outcomes

A growing amount of empirical literature examines the health and wellbeing benefits of PFML for infants, children, and parents. Several mechanisms are thought to be at work in cultivating positive outcomes. For maternity leave, health improvements may result from (1) decreased prenatal mental

and physical stress, (2) greater time availability for doctor visits, and (3) increased incomes that facilitate better nutrition and access to health care (Stearns 2015). Bonding leave can impact infant and child health and development outcomes through similar mechanisms: (1) lower parental stress levels due to fewer competing demands for time from jobs and family; (2) more time available for mothers to spend with infants on caretaking, breastfeeding, and doctor visits; (3) income increases that improve access to better nutrition and medical care; and (4) reduced nonparental care that results in greater exposure to diseases and income effects (Bullinger 2019; Lichtman-Sadot and Bell 2017; Rossin 2011).

Studies that examine the effect of unpaid FML programs such as FMLA find that its positive effects are restricted to more advantaged households, presumably because it allows mothers with sufficient financial resources to take leave while lower earners are less likely to be able to afford taking time off (Rossin 2011). When paid leave is introduced, lower earning families are more likely to experience health benefits.

Evidence suggests that PFML affects infant and children's outcomes through intermediate improvements such as better feeding practices, improved vaccination, and reductions in low weight births. There is less evidence that PFML decreases overall infant mortality, perhaps because it does not improve outcomes for infants who are at greatest risk. Several studies address other infant, children, and parent outcomes. They are described more completely under the headings: (a) infant birthweight, (b) infant mortality, (c) breastfeeding, (c) vaccinations, (d) other infant health outcomes, (e) long-term child development, and (f) parental health and wellbeing. These studies generally link PFML with improved outcomes in these areas.

- **Infant Birthweight**. Two studies examined the effect of PFML on infant birthweight. Rossin (2011) finds that unpaid maternity leave from the FMLA was associated with birthweight increases and lessened the likelihood of a premature birth. However, these results were restricted to college-educated and married mothers. In a study of SDI programs in California, Hawaii, New Jersey, New York, and Rhode Island, Stearns (2015) finds that paid medical leave was associated with a reduction in low birth weight births of 3.2 percent and decreased early term birth likelihood by 6.6 percent. These impacts were more pronounced for unmarried and black mothers.
- **Infant Mortality**. U.S. studies on infant mortality are quite limited. Rossin (2011) finds that unpaid maternity leave led to substantial decreases in infant mortality for children of college-educated and married mothers but no statistically significant effects on infant mortality in a less-educated and unmarried sub-sample. A study of California PFL by Chen (2021) finds that it reduced post-neonatal mortality rate by 0.135 (equivalent to approximately 339 infant lives). However, the author was not able to find similar effects for New Jersey and Rhode Island PFL. Stearns (2015) suggests that one explanation why PFML

might have a limited effect on reduced infant mortality is that the highest risk births—very early births or very low birth weights—do not appear to be affected by the policy.[17]

- **Breastfeeding.** Three studies find that CA-PFML supports improved breastfeeding practices. However, the studies differ in several ways, including the details regarding the types of breastfeeding (all breastfeeding practices or exclusive breastfeeding) promoted, whether paid leave affects initiation and/or duration, and demographic dimensions of impact. Huang and Yang (2015) find that exclusive breastfeeding (use of only mother's breast milk) increased 3-5 percent while overall breastfeeding improved 10-20 percent at different periods of infancy. Pac et al. (2019) observe that it did not improve the likelihood of taking up breastfeeding. However, the policy was associated with an increased breastfeeding duration of 18 days and 5 percent improved likelihood of breastfeeding for at least six months for those who already breastfed. These effects were larger for some disadvantaged groups. Hamad, Medrek, and White (2019) find that PFL is associated with a 1.3 percent increased likelihood of children being exclusively breastfed at 6 months.
- **Vaccinations.** Two studies suggest that PFML improves the likelihood or frequency of scheduled infant vaccinations. Choudhury and Polachek (2021) find that CA-PFL reduced late vaccinations by up to 5 percentage points or approximately 10 percent for children born to parents in California after the policy was implemented. In a study of New York PFL, Chaterji et al. (2022) find that it is associated with a small increase in probability that firstborn infants had all immunizations on time between ages of 2 and 4 months.
- **Other Infant Health Outcomes**. Three studies examine the effect of CA-PFL on other short-term infant and toddler health outcomes. Pihl and Basso (2019) examine the effect of California's leave laws using hospital discharges data. They find that PFL was associated with a 3 percent to 6 percent reduction in infant hospitalization, with the reductions concentrated among medical conditions most likely to be affected by improved childcare. Infant admissions due to upper respiratory illnesses decreased by 25 percent to 33 percent, while admissions due to gastrointestinal infections declined by 9 percent to 15 percent. Bullinger (2019) observes that the percentage of parents reporting that infant and toddler health was good or excellent increased 4.8-8.6 percent. The study also finds that those reporting asthma decreased 80 percent, while no effects were detected for reported respiratory or food allergies. The final study examines infant and toddler hospital admissions for pediatric head trauma (Klevens et al. 2016), finding that PFL was associated

[17] Results for two studies of other developed countries indicate that PFML has the potential to reduce infant mortality. In a study of 16 European countries (1969-1994), Ruhm (2000) finds that an additional 10 weeks of parental leave decreases post-neonatal deaths by 4.5 to 6.6 percent. Another study of OECD countries (Tanaka 2005) found that extending paid family leave by 10 weeks decreases infant mortality rates by 2.6 percent and post-neonatal mortality rates by 4.1 percent.

with a significant decrease in pediatric head trauma for infants and toddlers. The researchers hypothesize that PFL may reduce physical abuse by decreasing family stress.

- **Long-term Child Growth and Development**. Long-term outcomes are more difficult to measure because of the length of time that must elapse after program initiation for benefits to occur and limitations in longitudinal data sets. In a study of FMLA and state leave laws, Washbrook et al. (2011) find no evidence of positive effects of the policies on child or maternal outcomes at 9 months and 4 years after childbirth. In contrast, a study of California PFL by Lichtman-Sadot and Bell (2017) of the outcomes for school age children finds that the program was associated with improved assessments of overall child health, overweight conditions, ADHD, hearing problems, and ear infections. These improvements were observed for children of disadvantaged mothers.
- **Parental Health and Wellbeing.** Seven studies examine whether family leave is associated with improved parental mental or physical health. Most of these studies examine California PFL. Bullinger (2019) finds that CA-PFL improves maternal mental health status 1-2 percent and that parents are 3-5 percent more likely to report that they are "able to cope with the day-to-day demands of parenting." These effects were more pronounced for low-income households. Irish et al. (2021) find that CA-PFL is associated with a 25 percent decrease in parents' psychological distress score. Lee et al. (2020) report that CA-PFL improved self-rated health and decreased distress, the likelihood of being overweight, and alcohol use. The health and psychological improvements were greater for mothers while decreased alcohol use was greater for fathers. Doran et al. (2020) find that CA-PFL is associated with 0.636 point decrease in postpartum psychological distress symptoms (27.6 percent decrease from pre-treatment mean) and 9.1 percentage point reduction in mild postpartum distress (38.4 percent reduction from pre-treatment mean). Another study of CA-PFL by Kim (2024) finds that maternal health improves after PFL in several ways. Fathers show improved health around childbirth but poorer outcomes 5 months after childbirth. In a study of NY-PFL, Morrissey, Castleberry, and Soni (2024) find that PFL increased the likelihood of exercise among mothers, single parents, and low-income parents by 6.3-10.3 percentage points. Fathers showed a decrease in exercise of 7.8 percentage points. Fathers, single parents, and parents with two or more children saw increased daily sleep by 14-21 minutes per day. Another study of NY-PFL (Kim and Lenhart 2024) finds that PFL is associated with an improvement in self-reported health status. Only one study did not report positive statistically significant results. In a study of FMLA and state leave laws, Washbrook et al. (2011) found no effect of family leave on a measure of maternal depression.
- **Fertility**. Although policies elsewhere in developed countries are often at least partly motived by a desire to boost the number of births (Olivetti and Petrongolo 2017), international evidence is quite inconclusive in this regard. One study of the federal FMLA finds that the law was associated with changes in birth parity but no net increase in fertility because increases in first parity births were offset by decreases in later parity births (Rossin 2011). Bailey et al. (2024) find that CA-PFL is associated with a reduced number of births. In

a longitudinal analysis of U.S. state-level data, Golightly and Meyerhofer (2022) find that California PFL is associated with a statistically significant increase of 2.5 births for females aged 20-39, which represents a 2.8 percent increase. These increased births can be attributed, primarily, to mothers in their 30s and second or greater parity births. The authors find a similar magnitude of effect for New Jersey's PFL program, but the result is not statistically significant.

4.3 Paid Family Caretaking

While empirical research has focused primarily on paid parental leave, an increasing number of studies have begun to examine other caretaking leave. Seven studies examine the effect of other paid family caretaking leave—such as care for illness/disabled household member or parents—on leave-taking behavior, caretaker labor outcomes, and nursing home utilization. One might expect the outcomes for such cases to be similar to parent bonding leave (Anand, Dague and Wagner 2021). However, the demographics are markedly different: the most prevalent users are older females that have lower educational levels and are more likely to experience lower levels of workplace engagement. Moreover, the nature of the leave differs also; it is more likely to involve intermittent spells needed for providing care to elderly adults than a block of continuous leave (Morefield et al. 2016).

4.3.1 Labor Market Outcomes

Most research suggests that PFL improves labor market attachment for adult caretakers. Saad-Lessler (2020) finds that the CA-PFL program improved unpaid care providers' labor force attachment, increasing the likelihood of being in the labor force by 1 percent for women and individuals with higher education attainment. Kang et al. (2019) examine the effect of CA-PFL for women aged 45-64 that have a family member with a physical disability. They find that PFL is associated with a significant increase in the likelihood of being employed. These effects are concentrated among the near-poor and early middle-aged. In another study of CA-PFL, Bartel et al. (2023b) find that the program increased employment of 45-64-year-old women with disabled spouses by 0.9 percentage points (1.4 percent of base rate) and the employment of men increased by 0.7 percentage points (0.8 percent of base rate). Coile, Rossin-Slater and Su (2022) examine the effect of CA-PFL, NJ-PFL, and NY-PFL on caretakers, finding that PFL leads to a 7 percentage point decrease (2.2 percent of base) in the likelihood that wives of persons with medical conditions that are hospitalized or have surgery report "leaving a job to care for home or family." Job continuity improvements are concentrated among caregivers with 12 or fewer years of education. In a study of CA and NJ-PFML, Braga et al. (2022) find that women aged 51 to 70 with a spouse in poor health are 7.4 percentage points more likely to work while providing care while women living within 10 miles of a parent in poor health are 5.6 percentage points more likely to work while providing care.

Two studies are less supportive of improved labor market attachment. One study by Morefield et al. (2016) of CA-PFL and NJ-PFL programs find no evidence that paid leave increases leave-taking or

improved labor force outcomes of likely caretakers. Potential explanations offered for limited findings on caretakers' employment outcomes include lack of awareness about the program, reluctance to take leave because of possible negative employment consequences, and the structure of leave was not conducive to adult caretaking (Morefield et al 2016; Anand, Dague and Wagner 2021). Another study by Anand, Dague and Wagner (2021) examines the effect of CA-PFL and NJ-PFL on potential caregivers for disabled and ill spouses. They find that paid leave decreases the likelihood that caregivers reduce work hours for spousal caregiving due to a work-limiting disability or chronic health condition, attributable to female and lower educated caregivers. But they find no effects on other employment outcomes such as earnings and working full-time.

4.3.2 Health Outcomes

Three research papers examine the effect of PFL on caretaker physical and mental health with somewhat inconclusive results. In a study of CA-PFL, Gimm and Yan (2016) find that CA-PFL was not associated with improved mental health or physical health assessments of caretakers aged 50-64 years. In a study of CA, NJ, and NY-PFL, Coile, Rossin-Slater and Su (2022) find that empirical results do not clearly indicate improved health outcomes. On the other hand, Braga et al. (2022) find that for CA and NJ-PFL, women aged 51 to 70 with a spouse in poor health are 7.9 percentage points less likely to report being depressed, and those women living within 10 miles of a parent in poor health are 8.2 percentage points less likely to report being depressed.

4.4 Medical Leave (Short-Term Disability)

Short-term disability leave is the largest expenditure component for state PFML programs. However, it is also, in many ways, the least understood with far less empirical research than paid family leave. Medical leave provides paid leave for beneficiaries with their own medical condition or disability. But, conditions vary, the length of leave permitted is quite variable, and transitions back to work are not always possible. Anand, Dague and Wagner (2021) distinguish between three different types of medical leave that are likely to have quite different expected impacts: (a) permanent health shocks and disabilities for which paid leave has limited ability to improve employment outcomes, (b) work-limiting chronic health condition or disability, and (c) temporary health shocks, which provide a more recognizable path back to employment. The former categories are more likely to result in transition to long-term disability such as SSDI instead of back to the workplace.

Two empirical studies examine the effect of SDI programs on labor outcomes. Anand, Dague, and Wagner (2021) examined the effect of CA-PFML and NJ-PFML on individuals who experienced a work-limiting disability or health condition, but they found no statistically significant effects on employment outcomes. Another study by Jolls (2020) examined the effect of the introduction of the FMLA on employment for the states that had no job protections for short-term disability in place prior to the federal law. Results indicate that there were some short-term employment effects after introduction of the law, but the significance and magnitude of the effects dwindled over time.

Due to the meager amount of research on SDI, some researchers have suggested that empirical work on family leave, sick paid leave, and long-term disability may provide useful reference points for inferring PML effects (Ben Shalom 2020). We have already reviewed the former. Long-term disability is likely to provide an imperfect reference point for comparison. Long-term disability has much more stringent eligibility requirements. It is issued when prospects of returning to the labor force are limited, and program rules do not facilitate rejoining the workforce (Ben Shalom 2020).

A significant body of empirical research shows that long-term disability programs drastically reduce labor force participation (Ben Shalom 2020). However, SDI should have much smaller effects; indeed, if SDI facilitates recovery, the effects on employment and labor force attachment could be positive as some family leave studies show.

Sick leave, which lasts from hours to a few weeks, offers a much better comparison since it is of temporary duration and the time period even overlaps with some sick leave durations (Ben-Shalom 2020). However, even here the comparison is imperfect because paid leave includes time for medical office visits and leave for longer illnesses and injuries. The balance of empirical evidence suggests that sick leave has neutral or even beneficial effects on labor market outcomes. Although Ahn and Yelowitz (2015) find that the Connecticut sick pay mandate had a negative impact on working likelihood and a positive effect on being unemployed, particularly for workers in middle age brackets, three other studies suggest that the effects are negligible or even positive. Pichler and Pichler (2020) find that state and local sick pay mandates do not have negative impacts on employment or wage growth. Another recent study using different study regions, data, and methods finds no evidence that paid sick leave affects total hours worked (Maclean, Pichler and Ziebarth 2020). They attribute these findings to potential improvements in workplace attendance due to slower transmission of communicable diseases. Stearns and White (2018) find that leave-taking is reduced by up to 18 percent following introduction of mandated sick leave in Connecticut and the District of Columbia. These effects persist for Connecticut but diminish for D.C. They attribute these findings to improved workplace attendance due to the reduced likelihood of spreading communicable diseases to coworkers. Another study of paid sick leave mandates in California, Massachusetts, and Oregon (Slopen 2024) finds that it improves labor market outcomes for females aged 25 to 64 years, increasing employment by 1.1 percentage points and wages and salary by $2,347, and decreasing the proportion of women in poverty by 0.9 percentage points.

SECTION 5: REMI PI+ SIMULATIONS OF PFML SCENARIOS

Weldon Cooper Center staff conducted an economic impact analyses of various PFML scenarios using REMI PI+ (Regional Economic Models Inc. Policy Insight Plus) software. REMI PI+ is a dynamic, multi-sector regional economic simulation model used for economic forecasting and measuring the economic impact of public policy changes on state and regional economies (Treyz 1993). The model combines different contemporary regional economic modeling approaches, such as input-output analysis, econometric forecasting, computable general equilibrium, and New Economic Geography to characterize the mechanics and path of a regional economy. The model has been extensively peer-reviewed and is widely used by federal, state and local agencies, private firms, and non-profit organizations elsewhere in the nation to model economic and tax revenue impacts of federal, state, and regional public policies, including PFML programs (Groves, MacNeil and Wolf 2016; Chow 2019). The model used for this analysis was customized for the state of Virginia. Outcome variables examined here include total employment and real state gross domestic product (GDP). In addition, a state tax revenue impact analysis was conducted based on a methodology described in REMI Inc. (2012). Details regarding the specific input modeling assumptions and REMI PI+ policy variables used is provided in **Appendix F**.

Ten PFML scenarios in total were modeled, which are summarized in **Table 5.1**. They included four program implementation or operation scenarios based on the actuarial analyses described in Section 3 that provide different estimates of program costs and expenditures, namely (a) the baseline GA 2024 SB373 legislation scenario (**Option 1**), (b) the HB2016/SB1330 legislative scenario (**Option 2**), (c) the SB373 scenario without an exemption for state and selected local government employers (**Option 3**), and (d) the SB373 legislation scenario with a 40 percent target fund ratio instead of 140 percent. The next group of scenarios explores the effect of different statutory tax burdens for individuals and businesses using baseline expenditure levels and tax contributions. The split of payroll taxes between worker and firm specified in the baseline scenario is changed in one scenario where 100 percent of the payroll burden is assumed by the worker (**Employee Payroll Tax**) and another where the total payroll burden is borne by the firm (**Employer Payroll Tax**). These additional two scenarios show the sensitivity of the results when modeling how tax revenues are obtained. The second group of scenarios explores the economic impacts of potential PFML secondary economic and demographic outcomes for which suitable REMI PI+ policy handles are available.[18] These scenarios are much more speculative; they are based on program effects suggested by specific empirical studies of PFML or other information. The first scenario boosts maternal labor force participation (**Labor Force Attachment**). This scenario is based on substantial empirical evidence that PFML boosts female labor force attachment. The second scenario considers

[18] The previous Virginia PFML study (Rephann et al. 2021) examined the economic and state government tax revenue impact of the loss of Federal Employer Credit for Paid Family and Medical Leave users when the Virginia Paid Family Leave program is fully implemented. Since the federal tax credit is scheduled to expire in 2025, this analysis was not repeated for this study.

the effect of reduced labor productivity (**Labor Productivity**). While the empirical evidence of PFML effects on worker productivity is mixed, most survey data suggest proportionally more firms report negative productivity effects than positive effects. The third scenario considers the effect of a boost in infant population due to either reduced infant mortality and/or increased fertility rates (**Birth Rate**). The evidence for this outcome is limited; while PFL appears to improve parenting practices and child health, only a few studies show effects on infant mortality and U.S. empirical evidence of fertility effects is even more limited. The final scenario (**Infant Mortality**) considers the potential for PFML to improve infant mortality rates.

Table 5.1 Summary of Scenarios for REMI PI+ Analysis

Scenario	Description
Option 1	Baseline legislative PFML scenario (SB373 in GA 2024)
Option 2	HB2016 and SB1330 (GA 2021)
Option 3	Baseline legislation without state and local government exemption scenario
Option 1A	Baseline legislation with target trust fund ratio of 40 percent
Employee Payroll Tax	Workers assume 100 percent burden of payroll tax
Employer Payroll Tax	Businesses assume 100 percent burden of payroll tax
Labor Force Attachment	Female childbearing age labor participation rate increases
Labor Productivity	Labor productivity decreases
Birth Rate	Female childbearing age fertility increases
Infant Mortality	Infant mortality rate decreases

The remainder of this section is arranged into two subsections. The next subsection describes each scenario in more detail and discusses the assumptions used to prepare the REMI PI+ inputs for use in economic impact analysis. The final subsection presents and describes the model results.

5.1 Model Inputs and Assumptions

5.1.1 Program Operation Scenarios

Payroll Tax Statutory and Actual Incidence

As discussed in section 2, statutory tax assignment and actual tax incidence can differ. Empirical research suggests that workers bear approximately half of employer payroll taxes in the short-run and two-thirds in the long-run. In comparing the three operational scenarios (**Option 1**, **Option 2**, and **Option 3**), it will be assumed that statutory and actual tax incidence align, with the shared tax burden assigned to workers and employers (approximately 45 percent employers and 55 employees because of the small business employer payroll exemption). Within the REMI PI+ model, increased worker payroll taxes are modeled as an increase in personal income taxes, which reduces disposable personal income. Employer taxes are modeled as an increase in firm production costs.

Administration Operational Expenditures

PFML requires expenditures for program administration. They include expenditures for program startup, overall administration, benefit claims, marketing, and other services. For the purposes of this analysis, it will be assumed that these expenses will be provided by a state agency and not outsourced to a private entity. For simplification and because a detailed capital budget is not available, increases in capital equipment are not assumed. Administrative spending is modeled in REMI PI+ as an increase in state government spending.

Benefit Expenditures

Benefit spending includes payment for PFML claims. These claims are divided into PFL and PML for REMI PI+ modeling purposes. The benefits are modeled as transfer payment recipients to individuals, with PFL treated as a form of Unemployment Insurance benefit and PML as Disability Benefits.

5.1.2 Scenarios Varying Payroll Tax Contribution Shares

Two scenarios are presented that vary payroll tax burden from the shared payroll tax contributions by workers and firms. One models the costs of the program as borne entirely by workers and the other borne entirely by firms. In the former scenario, the payroll tax is modeled entirely as an increase in personal income taxes, while in the latter scenario it is modeled as an increase in firm production costs.

5.1.2 Economic and Demographic Outcome Scenarios

Female Childbearing Age Labor Force Participation Increase Scenario

The empirical literature generally supports the finding that PFML enhances female labor force attachment in the form of improved labor force participation or employment, although the specific details vary from study to study. This scenario assumes that labor force participation for females of childbearing age who have access to PFML programs increases by 1.37 percentage points as found in Das and Polachek (2015). In order to maintain labor market clearing, employment is increased by a commensurate amount to maintain approximate full employment equilibrium (Treyz and Evangelakis 2020). Although positive employment impacts are not supported by Das and Polachek (2015), some other studies have found positive employment impacts. For example, Baum and Ruhm (2016) find that PFML boosted maternal employment by 18 percent one year after childbirth. Since the birth rate is approximately 60 per 1,000 (ages 15-44), this equates to a 1 percent increase in employment of women of childbearing age. This scenario is modeled in REMI PI+ as a 1.37 percentage point increase in the labor force participation rate for females of childbearing age and parallel increase in employment that is 95 percent of the increase in labor force to ensure market clearing.

Labor Productivity Loss Scenario

Five firm surveys were reviewed in section 5. These surveys generally find that most firms reported no effects or, in some cases, positive effects from PFML. However, three surveys indicated that a small minority of firms reported negative worker productivity effects of PFML. These productivity effects likely stem from the need to hire temporary replacement workers, delay work, and commit additional time or resources to administrative tasks. Milkman and Applebaum (2013) find that 1.6 percent of firms reported positive effects of CA-PFL while 10.5 percent reported negative effects for a net percentage of 9.9 percent negative impact if one assumes that one firm's loss is offset by another firm's gain.

For the purposes of constructing this scenario, it is assumed that surveyed firms are similar in size; thus, 9.9 percent of workers projected to take leave experience reduced productivity when receiving PFML benefits. It will be assumed further that these workers lost their full productivity in terms of worker weeks on the job for the duration of their leave. It was estimated that labor productivity would decrease by an average of approximately 0.03 percent each year over the period. This finding was based on the number of covered workers for the period 2027-2035, PFML incidence rates, and estimates of the average number of weeks of leave used compared to estimates of weeks worked for all Virginia workers derived from REMI PI+ projections and U.S. Census Bureau data on hours worked per week. This was modeled within REMI PI+ as a decrease in labor productivity.

Birth Rate Improvement Scenario

This scenario assumes that the child population increases due to improved fertility rates from offering PFML. Although the empirical literature is inconclusive about this outcome, Golightly and Meyerhofer (2022) find that CA-PFL is associated with a 2.8 percent increase in fertility rates for females of childbearing age (20-39). Studies of other developed countries have also reported fertility effects associated with PFL policies (Kalwij 2010). This scenario is modeled as an increase in the birth rate for females aged 20 to 39.

Infant Mortality Rate Improvement Scenarios

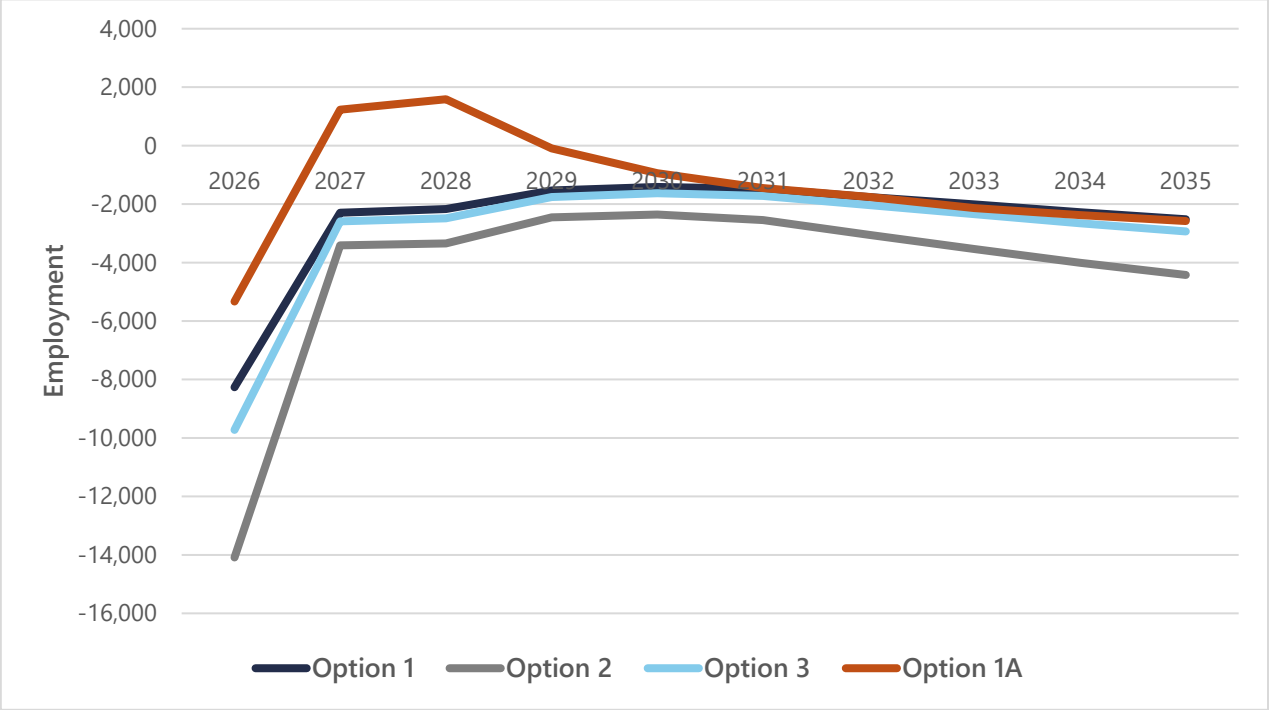
This scenario examines the effect of a reduction in infant mortality rates resulting from PFML. A handful of international studies report that PFML reduces infant mortality. In a study of 16 European countries over the 1969-1994 period, Ruhm (2000) finds that a 10-week increase in PFL decreases infant mortality by 1-1.7 percent. Another study (Tanaka 2005) of 18 OECD counties for 1969-2000 finds that a 10-week extension in PFL decreases infant, post-neonatal, and child mortality by 2.6 percent, 4.1 percent, and by 3 percent respectively. The results of U.S. studies are varied. However, a recent study by Chen (2023) indicates that California PFL reduced the post-neonatal morality by 0.135. In Virginia, this would translate into approximately 14 saved lives each year, which would cumulatively increase the Virginia population over time. This is modeled in REMI PI+ as a reciprocal increase in the survival rate of newborns (i.e., age 0 for all races and genders).

5.2 Results

State economic activity is represented by two metrics: employment and real gross domestic product. Employment includes full-time and part-time workers and the self-employed and is measured by place-of-work. State tax revenue represents general and non-general fund revenue derived from taxes and is a nominal value. Gross-domestic product represents the value of final goods and services produced in Virginia and is expressed in terms of 2012 dollars.

Figure 5.1. shows the total employment impact results for the four operational scenarios (**Option 1**, **Option 2**, **Option 3, and Option 1A**). Average annual employment, real GDP, and state tax revenues for each of the nine scenarios over the 2026-2035 period are shown in **Table 6.2**. Complete annual results are provided in **Appendix Table G.1**. These results reflect the multiplier effects (direct, indirect, induced, and dynamic) of PFML expenditures and payroll taxes on the state economy.

Figure 5.1 Employment Impacts of Virginia PFML, 2026-2035 by Scenarios



Source: Based on Weldon Cooper Center for Public Service Analysis using Virginia REMI PI+ Model

The results indicate that the Option 1 scenario initially has a large negative employment impact. This occurs because the payroll tax kicks in to build up the program trust fund before benefit disbursal. The only expenditures during this first year are $75 million in start-up administrative costs needed one year before benefits are received by eligible employees to build the infrastructure and staffing for the PFML program. To avoid this disruption, the General Assembly may want to consider issuing a revenue bond to smooth startup program costs over time. This economic impact becomes less negative in 2027 as benefits begin to be paid out. The GDP impacts parallel those of employment. Although the economic impacts are large in absolute size, they are generally negligible relative to the size of the Virginia economy. The average employment and real GDP impacts over the 2026-2035 period represent less than 0.05 percent of average Virginia REMI PI+ forecasted total employment and real GDP over the period. The estimated total state tax revenue impacts of -$34 million over the period represent just 0.2 percent of the total $15.599 billion in tax revenue collected from PFML payroll taxes over the period.

The economic impacts are negative over the 2026-2035 period for essentially two reasons. First, program operation requires that reserves be maintained at a consistent percentage of program expenditures over time. The bulk of these funds are removed from the Virginia economy as trust fund savings that are invested in national capital markets. Second, business and personal payroll taxes charged to fund program expenses have a more negative economic impact than the stimulative effect of household spending resulting from the PFML income maintenance payments.

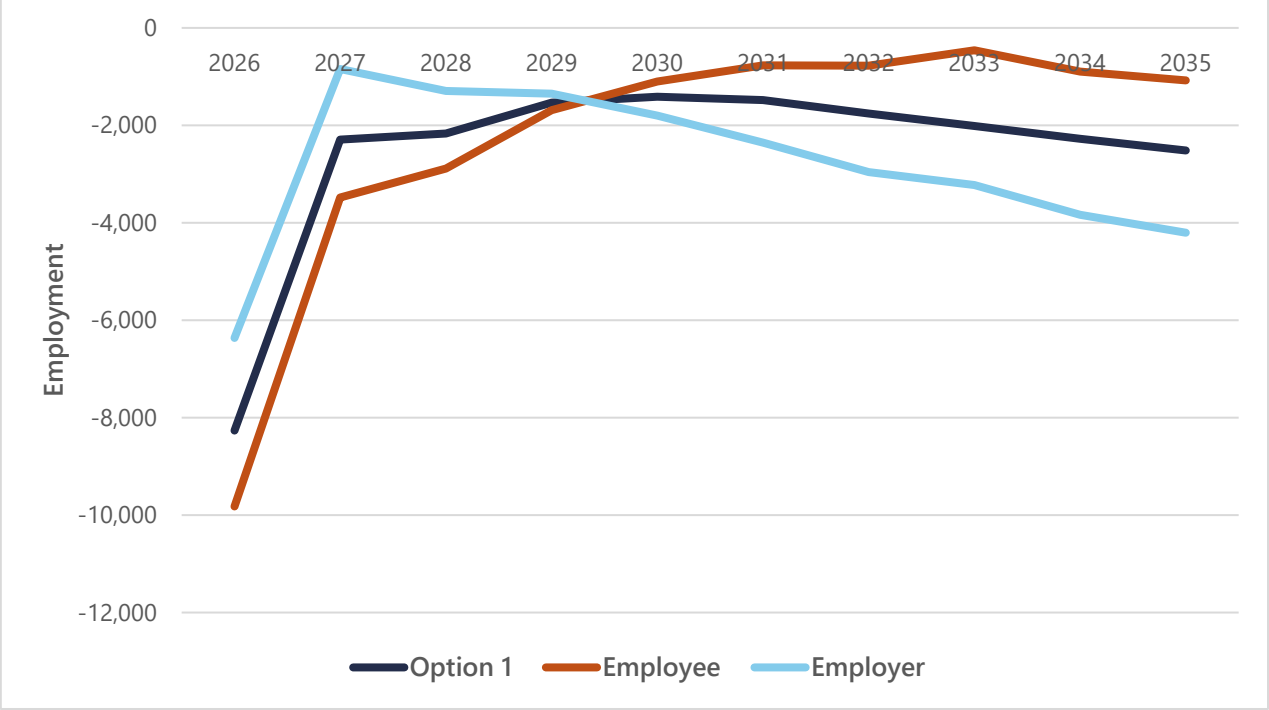
Options 2 and 3, by expanding program access and expenses, increase slightly the negative economic impacts. Option 2, which removes many of the exemptions allowed in SB373 and increases the maximum duration of leave, results in higher payroll taxes and program expenditures which have more negative economic impacts throughout the period. Compared to the average annual baseline scenario impacts of -2,571 jobs, -$281.4 million in real GDP, and $-3.4 million in state tax revenue over the 2026-2035 period, this scenario results in an average annual impact of -4,322 jobs, -$481.7 million in real GDP, and -$1.7 million in state tax revenue. Option 3, which removes the state and local government employer exemption, results in slightly higher payroll taxes and program-related expenditures, and slightly larger negative economic impacts. The average annual employment impact is -2,987, real GDP impact is -$327.3 million, and state tax revenue impact is -$3.7 million over the 2026-2035 period. Option 1A, by lowering the trust fund requirements, reduces the payroll tax requirements required during the early years of the program, reducing the negative economic impacts compared to Option 1 in those initial years. The average annual employment impact is -1,385, real GDP impact is -$177 million, and state tax revenue impact is $5.0 million over the 2026-2035 period.

Table 5.2 Summary of Average Annual Results by Scenario

	ANNUAL AVERAGE 2026-2035		
Scenario	Employment	Real GDP (millions)	State Tax Revenue (millions)
Option 1	-2,571	-$281.4	-$3.4
Option 2	-4,322	-$481.7	-$1.7
Option 3	-2,987	-$327.3	-$3.7
Option 1A	-1,385	-$177.0	$5.0
Employee Payroll Tax	-2,295	-$197.4	-$24.7
Employer Payroll Tax	-2,823	-$376.0	$23.4
Labor Force Attachment	6,601	$747.2	$31.0
Labor Productivity	-1,042	-$97.7	-$5.9
Infant Population	2,403	$219.6	$24.8
Infant Mortality	20	$1.8	$0.2

Figure 5.2 shows the employment impacts for two alternative assumptions that shift the burden of the payroll tax compared to the baseline scenario. Average annual employment, real GDP, and state tax revenues for each the scenarios are again exhibited in **Table 5.2**. Complete annual results are provided in **Appendix Table G.2**. Results from the tax burden scenarios suggest that shifting the payroll tax from employers to employees reduces the magnitude of the negative employment and real GDP impacts (an annual average employment impact of -2,295 and GDP impact of $-197.4 million) while shifting it to employers increases the magnitude of the negative impacts (an annual average employment impact of -2,823 and GDP impact of -$376 million). On the other hand, an employer payroll tax has a positive effect on state tax revenue (annual average state revenue impact of $23.4 million), while an employee tax has a negative impact (-$24.7 million). This is the case because payroll taxes raised on workers reduces consumer disposable incomes and consumer expenditures on goods have a disproportionate impact on sales tax collections.

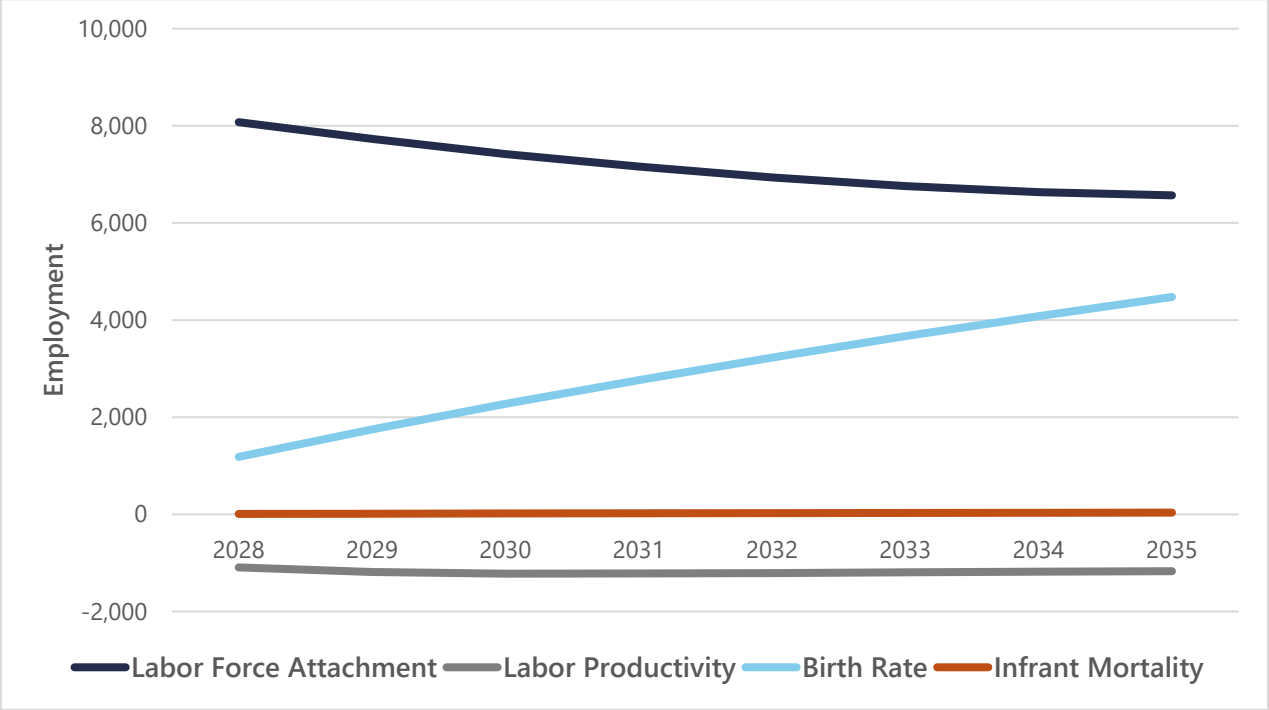
Figure 5.2 Employment Impacts of Virginia PFML, 2026-2035 by Payroll Tax Burden Scenarios



Source: Based on Weldon Cooper Center for Public Service Analysis using Virginia REMI PI+ Model

Figure 5.3. shows the total employment impact results for the four other economic and demographic scenarios (**Labor Force Attachment**, **Labor Productivity**, **Birth Rate**, and **Infant Mortality**) for the period 2026-2035 (there are no economic impacts for 2026 unlike the program operation scenarios). Average annual employment, real GDP, and state tax revenues for each of the scenarios are presented again in Table 5.2. Complete annual results are provided in **Appendix Table G.3**.

Figure 5.3 Employment Impacts of Virginia PFML, 2026-2035 by Economic and Demographic Scenarios



Source: Based on Weldon Cooper Center for Public Service Analysis using Virginia REMI PI+ Model

The first scenario (**Labor Force Attachment**) shows the effect of increasing the labor force participation rate of females of childbearing age by 1.37 percentage points. This scenario results in an average employment impact of 6,601, real GDP impact of $747.2 million, and state revenue impact of $31.0 million over the 2026-2035 period. The hypothetical scenario more than offsets the negative employment, real GDP, and state tax revenue impacts of the baseline PFML operational scenario.

The second scenario shows the effect of a loss in worker productivity due to PFML (**Labor Productivity**). Firms respond to the loss in labor productivity (and thereby comparatively higher expense of labor) by substituting capital for labor. This scenario reinforces the negative economic impacts of the baseline scenario, resulting in an average annual impact of -1,042 jobs, -$97.7 million in real GDP, and -$5.9 million in state tax revenue.

The third scenario shows the effects of an increased birth rate for PFML-eligible females of childbearing age (**Birth Rate**). One major effect of the population increase is elevated consumer spending, which contributes to an average annual impact of 2,403 jobs, $219.6 million in real GDP, and $24.8 million in state tax revenue over the 2026-2035 period. The economic impacts gradually increase over time as the additional births add to the Virginia population starting from a base of zero in 2026 and growing to approximately 26,500 additional residents by 2035.

The final scenario shows the economic impact of a decrease in the infant mortality rate, which also increases the infant population over time (**Infant Mortality**). The scenario shows, by far, the smallest economic impacts because the number of infant deaths is relatively low (there were 497 deaths by place of residence in 2020 in Virginia). Results indicate that an additional population of 216 residents by 2035 would have an average economic impact of 20 jobs, $1.8 million in real GDP, and $0.2 million in state tax revenues.

These results have several implications. First, although the baseline legislative scenario has a relatively small negative impact on state economic activity, uncertainty surrounding other secondary economic and demographic impacts due to changes in female labor attachments, labor productivity, birth rates, and infant mortality rates mean that one cannot rule out that the overall long-run economic impacts of PFML are either more positive or negative when these other factors are taken into consideration. Second, although the effects are relatively small compared to the size of the Virginia economy, instituting the payroll tax before dispensing benefits creates a temporary leakage from the Virginia economy that has a more deleterious economic impact that year than when benefits commence. Third, results indicate that a fuller shifting of payroll taxes to workers can reduce the negative economic impacts of PFML. However, this comes at the expense of larger negative tax revenue impacts. In any event, it is unclear how state statutory payroll tax laws can change the actual tax incidence of the payroll tax. Empirical estimates of incidence suggest that approximately two-thirds of payroll tax incidence is ultimately borne by workers in the long-run regardless of who is statutorily mandated to pay the tax.

APPENDIX A: SB373

2024 SESSION

VIRGINIA ACTS OF ASSEMBLY — CHAPTER

ENROLLED

SB373ER

An Act to amend the Code of Virginia by adding in Title 60.2 a chapter numbered 8, consisting of sections numbered 60.2-800 through 60.2-821, relating to paid family and medical leave insurance program; notice requirements; civil action.

[S 373]

Approved

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding in Title 60.2 a chapter numbered 8, consisting of sections numbered 60.2-800 through 60.2-821, as follows:

CHAPTER 8.

PAID FAMILY AND MEDICAL LEAVE INSURANCE PROGRAM.

§ 60.2-800. Definitions.

As used in this chapter, unless the context requires a different meaning:

"Application year" means the 12-month period beginning on the first day of the calendar week in which an individual files an application for family and medical leave benefits.

"Armed Forces" means the Armed Forces of the United States, the Reserves of the Armed Forces of the United States, or the Virginia National Guard.

"Board" means the Paid Family and Medical Leave Advisory Board.

"Child" includes a child of any age, including an adult child.

"Covered individual" means any individual who is not an exempt individual and who:

1. Either:

a. Meets the minimum monetary eligibility criteria set forth in subdivision A 1 of § 60.2-612; or

b. Is self-employed, elects coverage, and meets the requirements of § 60.2-802;

2. Meets the administrative requirements outlined in this chapter and in regulations; and

3. Submits an application.

"Covered service member" means either (i) a member of the Armed Forces who is (a) undergoing medical treatment, recuperation, or therapy; (b) otherwise in outpatient status; or (c) otherwise on the temporary disability retired list for a serious injury or illness that was incurred by the member in the line of duty while on active duty in the Armed Forces, or a serious injury or illness that existed before the beginning of the member's active duty and was aggravated by service in the line of duty, or (ii) a former member of the Armed Forces who is undergoing medical treatment, recuperation, or therapy for a serious injury or illness that was incurred by the member in the line of duty while on active duty in the Armed Forces, or a serious injury or illness that existed before the beginning of the member's active duty and was aggravated by service in the line of duty and manifested before or after the member was discharged or released from service.

"Domestic partner" means a person not less than 18 years of age who (i) is dependent upon the covered individual for support as shown by either unilateral dependence or mutual interdependence that is evidenced by a nexus of factors, including (a) common ownership of real or personal property, (b) common householding, (c) children in common, (d) signs of intent to marry, (e) shared budgeting, and (f) the length of the personal relationship with the covered individual, or (ii) has registered as the domestic partner of the covered individual with any registry of domestic partnerships maintained by the employer of either party, or in any state, county, city, town, or village in the United States.

"Employer" has the same meaning as provided in § 60.2-210, except that, for the purposes of this chapter, "employer" does not include the employer of a state employee or employee of a local school division. A locality shall be considered an employer for purposes of this chapter for all of their employees who are not local officers.

"Exempt individual" means a state employee, a local officer, or an employee of a local school division.

"Family and medical leave benefits" means the benefits provided under the terms of this chapter.

"Family member" means:

1. A biological, adopted, or foster child, a stepchild or legal ward, a child of a domestic partner, or a child to whom the covered individual stands in loco parentis;

2. A biological, adoptive, or foster parent, stepparent, or legal guardian of a covered individual or a covered individual's spouse or domestic partner, or a person who stood in loco parentis when the covered individual or the covered individual's spouse or domestic partner was a minor child;

3. A person to whom the covered individual is legally married under the laws of any state, or a

domestic partner of a covered individual; or

4. A grandparent, grandchild, or sibling, whether through a biological, foster, adoptive, or step relationship, of the covered individual or the covered individual's spouse or domestic partner.

"FMLA" means the federal Family and Medical Leave Act, 29 U.S.C. § 2601 et seq.

"Fund" means the Family and Medical Leave Insurance Trust Fund established under § 60.2-805.

"Health care provider" means a person licensed under the law of the jurisdiction in which such person practices to provide medical or emergency services, including doctors, nurses, emergency room personnel, and certified midwives.

"Local officer" means the treasurer, commissioner of the revenue, attorney for the Commonwealth, clerk of a circuit court, sheriff of any county or city, regional jail superintendent or regional jail officer, or local director of finance, or deputy or employee of any such officer.

"Military member" means a member of the Armed Forces.

"Next of kin" has the meaning ascribed thereto in § 101(17) of the FMLA, 29 U.S.C. § 2611(17).

"Regional average weekly wage" means that amount determined by the Virginia Employment Commission to be the average weekly wage paid workers in the planning district in which the worker is located. The "regional average weekly wage" shall be determined without regard to any fringe benefits.

"Qualifying exigency leave" means leave based on a need arising out of a covered individual's family member's active duty service or notice of an impending call or order to active duty in the Armed Forces, including providing for the care or other needs of the military member's child or other family member, making financial or legal arrangements for the military member, attending counseling, attending military events or ceremonies, spending time with the military member during a rest and recuperation leave or following return from deployment, or making arrangements following the death of the military member.

"Planning district" means a planning district established pursuant to Chapter 42 (§ 15.2-4200 et seq.) of Title 15.2.

"Retaliatory personnel action" means denial of any right guaranteed under this chapter, including any threat, discharge, suspension, demotion, or reduction of hours, any other adverse action against a covered individual for the exercise of any right guaranteed under this chapter, or reporting or threatening to report a covered individual's suspected citizenship or immigration status or the suspected citizenship or immigration status of a family member of the covered individual to a federal, state, or local agency. "Retaliatory personnel action" also includes interference with or punishment for in any manner participating in or assisting an investigation, proceeding, or hearing under this chapter.

"Serious health condition" means an illness, injury, impairment, pregnancy, recovery from childbirth, or physical or mental condition that involves inpatient care in a hospital, hospice, or residential medical care facility or continuing treatment by a health care provider.

"State employee" means all persons employed by the Commonwealth or a public institution of higher education to provide services, including both salaried and wage employees, whether employed full time or part time.

"Workweek" means a calendar week.

§ 60.2-801. Paid family and medical leave insurance program.

A. By January 1, 2026, the Commission shall establish and administer a paid family and medical leave insurance program and shall begin collecting contributions as provided in this chapter. By January 1, 2027, the Commission shall begin receiving claims and paying family and medical leave benefits to covered individuals.

B. Upon the filing of a claim pursuant to this chapter, the Commission shall notify the employer of such claim within five business days.

C. Information contained in the files and records relating to a claimant under this chapter are confidential and not open to public inspection other than to public employees in the performance of their official duties. However, such claimant or an authorized representative of such claimant may review such files and records or receive specific information from such records upon the presentation of such claimant's signed authorization.

D. The Commissioner shall adopt regulations as necessary to implement this chapter.

§ 60.2-802. Eligibility for benefits; certification.

A. Beginning January 1, 2027, family and medical leave benefits shall be payable to any covered individual who:

1. Because of birth, adoption, or placement through foster care, is caring for a new child during the first year after the birth, adoption, or placement of that child;

2. Is caring for a family member with a serious health condition;

3. Has a serious health condition that makes the covered individual unable to perform the functions of the position of such individual's employment;

4. Is caring for a covered service member who is the covered individual's next of kin or other family

member; or

5. Is eligible for qualifying exigency leave arising out of the fact that a family member of the covered individual is on active duty, or has been notified of an impending call or order to active duty, in the Armed Forces.

B. A claim for family and medical leave benefits shall include one of the following supporting certifications:

1. For a claimant seeking family and medical leave benefits due to a serious health condition, certification from a physician or health care provider (i) describing such condition, (ii) stating the date on which such condition commenced and the probable duration of such condition, (iii) including a statement that such claimant is unable to perform job functions due to such condition, and (iv) including other appropriate medical facts as required by the Commission.

2. For a claimant seeking family and medical leave benefits due to the serious health condition of a family member, certification from a physician or health care provider (i) describing such condition, (ii) stating the date on which such condition commenced and the probable duration of such condition, (iii) including a statement that such condition requires such claimant to care for such family member and an estimated duration of such care, and (iv) including other appropriate medical facts as required by the Commission.

3. For a claimant seeking family and medical leave benefits due to the birth of a child, certification in the form of either (i) such child's birth certificate or (ii) another document issued by a health care provider or physician stating such child's birth date.

4. For a claimant seeking family and medical leave benefits due to the placement of a child with such claimant for adoption or foster care, certification in the form of a document issued by such child's health care provider or physician, an adoption or foster care agency involved in such placement, or by other individuals as determined by the Commission that verifies the occurrence and date of such placement.

5. For a claimant seeking family and medical leave benefits for qualifying exigency leave, certification including (i) a copy of the family member's active-duty orders, (ii) other documentation issued by the Armed Forces, or (iii) other documentation as permitted by the Commission.

6. For a claimant seeking family and medical leave benefits in order to care for a family member who is a covered service member, certification including (i) the date on which the serious health condition commenced, (ii) the probable duration of the condition, (iii) the appropriate medical facts within the knowledge of the health care provider as required by the Commission, (iv) a statement that the claimant is needed to care for the family member, (v) an estimate of the amount of time that the claimant is needed to care for the family member, and (vi) an attestation by the claimant that the health condition is connected to the covered service member's military service as required by this chapter.

C. Any medical or health information required under this section shall be confidential and shall not be disclosed except with permission from the claimant providing such information unless disclosure is otherwise required by law. Nothing in this section shall be construed to require a claimant to provide as certification any information from a health care provider that would be in violation of § 32.1-127.1:03, § 1177 of the Social Security Act, 42 U.S.C. § 1320d-6, or the regulations promulgated under § 264(c) of the Health Insurance Portability and Accountability Act of 1996, P.L. 104-191.

§ 60.2-803. Duration of benefits.

A. Family and medical leave benefits shall be payable under § 60.2-801 for a maximum of eight weeks in an application year for any covered individual.

B. Family and medical leave benefits shall be payable to a covered individual starting the first calendar day in an application year that such covered individual meets the eligibility requirements of § 60.2-802.

C. The first payment of family and medical leave benefits shall be made to a covered individual within two weeks of when such covered individual files an initial claim pursuant to this chapter, and subsequent payments shall be made every two weeks thereafter.

§ 60.2-804. Amount of benefits.

A. A covered individual's weekly benefit amount shall be 80 percent of such covered individual's weekly wages during the 12 months preceding such covered individual's initial claim filing, or 80 percent of such covered individual's average weekly wages during the time such covered individual worked if less than 12 months, subject to the maximum specified in subsection C.

B. A covered individual's minimum weekly benefit amount shall not be less than $100 per week except that if such covered individual's average weekly wage is less than $100 per week, the weekly benefit amount shall be such covered individual's full wage.

C. A covered individual's maximum weekly benefit amount shall be 80 percent of the regional average weekly wage. By September 30 of each year, the Commission shall adjust the maximum weekly benefit to reflect any changes in such regional average weekly wage. The adjusted maximum weekly

benefit amount shall take effect on the following January 1.

D. No family and medical leave benefits shall be payable for less than eight hours of family and medical leave taken in one workweek.

§ 60.2-805. Family and Medical Leave Insurance Trust Fund; appropriation prohibition; reimbursement.

A. There is hereby created in the state treasury a special nonreverting fund to be known as the Family and Medical Leave Insurance Trust Fund. The Fund shall be established on the books of the Comptroller. All payroll contributions remitted pursuant to this chapter, all funds appropriated for the purposes of the Fund, and any gifts, donations, grants, bequests, and other funds shall be paid into the state treasury and credited to the Fund. Interest earned on moneys in the Fund shall remain in the Fund and be credited to it. Any moneys remaining in the Fund, including interest thereon, at the end of each fiscal year shall not revert to the general fund but shall remain in the Fund.

B. Moneys in the Fund shall be used solely for the payment of benefits under the paid family and medical leave insurance program established by the Commission pursuant to this chapter, the administration of such program, and any start-up costs associated with such program.

C. The General Assembly shall not appropriate or transfer any of the payroll contributions remitted to the Fund for any purpose other than purposes provided for in this section.

D. Any funds borrowed for start-up costs of the paid family and medical leave insurance program shall be repaid by the Fund to the general fund. Until such borrowings have been repaid in full, no moneys from the Fund may be disbursed to provide benefits to covered individuals under such program.

E. Expenditures and disbursements from the Fund shall be made by the State Treasurer on warrants issued by the Comptroller upon written request signed by the Commissioner or his designee.

§ 60.2-806. Contributions.

A. Payroll contributions to the Fund shall be authorized in order to finance the payment of benefits under and the administration of the paid family and medical leave insurance program.

B. Beginning on January 1, 2026, each employer shall remit to the Fund contributions in the form and manner determined by the Commission. The Commission shall require employers to remit such contributions for each paycheck paid to an employee. No later than October 1, 2025, and annually thereafter, the Commissioner shall fix the contribution rate for the coming calendar year in the manner described in this subsection, taking into account the reimbursement requirement provided for in subsection D of § 60.2-805. For calendar years 2026 and 2027, the Commissioner shall fix such contribution rate based on sound actuarial principles. For calendar year 2028 and thereafter, the Commissioner shall first certify and publish the following information:

1. The total amount of family and medical leave benefits paid by the Commission during the previous fiscal year;

2. The total amount remaining in the Fund at the close of such fiscal year;

3. The total amount equal to 140 percent of the previous fiscal year's expenditure for family and medical leave benefits paid and for the administration of the paid family and medical leave insurance program;

4. The amount by which the total amount remaining in the Fund at the close of the previous fiscal year is less than or greater than 140 percent of the previous fiscal year's expenditure for family and medical leave benefits paid and for the administration of the paid family and medical leave insurance program; and

5. The amount by which the contribution rate shall be adjusted to ensure that the Fund shall maintain or achieve an annualized amount of not less than 140 percent of the previous fiscal year's expenditure for family and medical leave benefits paid and for the administration of the paid family and medical leave insurance program. The contribution rate adjustment, if any, made as the result of the Commissioner's certification and report under this subsection shall supersede the rate previously set forth and shall become effective on January 1 of the following calendar year.

C. A self-employed individual electing coverage under § 60.2-815 shall be responsible for 100 percent of the contribution per employee required of an employer of more than 10 employees pursuant to subsection B on that individual's income from self-employment.

D. Each employer of more than 10 employees shall (i) deduct from each employee's wages an amount equal to 50 percent, or such lesser percentage as may be agreed upon by such employer and employee, of the contribution required per employee pursuant to subsection B and (ii) remit the full contribution required per employee pursuant to subsection B to the Commission for deposit into the Fund.

E. Each employer of 10 or fewer employees shall deduct from each employee's wages an amount equal to 50 percent of the contribution per employee required of an employer of more than 10 employees pursuant to subsection B. Such employer of 10 or fewer employees shall remit such deducted amount to the Commission for deposit into the Fund and shall not be required to make additional

contributions.

F. Contributions under this section shall not be required for an employee's wages or an individual's income from self-employment above the contribution and benefit base limit established annually by the federal Social Security Administration for purposes of the federal Old-Age, Survivors, and Disability Insurance Benefits program limits pursuant to 42 U.S.C. § 430.

§ 60.2-807. Reduced leave schedule.

A. A covered individual shall have the option to receive paid family and medical leave benefits on an intermittent or reduced leave schedule in which all of the leave authorized under this chapter is not taken sequentially. Family and medical leave benefits for an intermittent or reduced leave schedule shall be prorated.

B. Such covered individual shall make a reasonable effort to schedule paid family and medical leave taken pursuant to this section so as not to unduly disrupt the operations of such covered individual's employer. Such covered individual shall provide such employer with prior notice of the schedule on which such covered individual will be taking the leave, to the extent practicable. Paid family and medical leave taken pursuant to this section shall not result in a reduction of the total amount of leave to which a covered individual is entitled beyond the amount of leave actually taken.

§ 60.2-808. Leave and employment protection; remedies.

A. Any covered individual who receives family and medical leave benefits shall, upon the expiration of such leave, be entitled to restoration by the employer to the position held by such covered individual when such leave commenced, or to a position with equivalent seniority, status, employment benefits, pay, and other terms and conditions of employment, including fringe benefits and service credits, to which the covered individual had been entitled at the commencement of such leave.

B. During any leave taken pursuant to this chapter, an employer shall maintain any health care benefits to which a covered individual was entitled prior to taking such leave, and such covered individual shall continue to pay his share of the cost of health care benefits as required prior to the commencement of the leave.

C. Any employer that violates this section or § 60.2-809 shall be liable to any affected covered individual for:

1. Damages equal to:

a. The amount of:

(1) Any wages, salary, employment benefits, or other compensation denied or lost to such covered individual due to the violation; or

(2) In a case in which wages, salary, employment benefits, or other compensation has not been denied or lost to the covered individual, any actual monetary losses sustained by the covered individual due to the violation, such as the cost of providing care, up to a sum equal to eight weeks of wages or salary for the covered individual;

b. Interest on the amount described in subdivision a, calculated at the legal rate; and

c. An additional amount as liquidated damages equal to the sum of the amount described in subdivision a and the interest described in subdivision b, except that if an employer who has violated this section or § 60.2-809 proves to the satisfaction of the court that the act or omission that violated this section or § 60.2-809 was in good faith and that the employer had reasonable grounds for believing that the act or omission was not a violation of this section or § 60.2-809, such court may reduce the amount of the liability to the amount and interest determined under subdivisions a and b, respectively; and

2. Such equitable relief as may be appropriate, including employment, reinstatement, and promotion.

D. The court in an action to recover such damages or equitable relief prescribed in subsection C shall, in addition to any judgment awarded to the plaintiff, allow reasonable attorney fees, reasonable expert witness fees, and other costs of the action to be paid by the defendant.

E. Except as provided in subsection F, an action may be brought for a violation of this section or § 60.2-809 not later than two years after the date of the last event constituting the alleged violation for which the action is brought.

F. In the case of such action brought for a willful violation of this section or § 60.2-809, such action may be brought within three years of the date of the last event constituting the alleged violation for which such action is brought.

§ 60.2-809. Retaliatory personnel actions prohibited.

A. No employer or other person shall interfere with, restrain, or deny the exercise of, or the attempt to exercise, any right protected under this chapter.

B. No employer, employment agency, employee organization, or other person shall take retaliatory personnel action or otherwise discriminate against an individual due to such individual's lawful exercise of rights protected under this chapter. Such rights include the right to request, file for, apply for, or use benefits provided for under this chapter; the right to communicate to the employer or any other person

or entity that such individual (i) intends to file a claim, a complaint with the Commission or a court, or an appeal, or (ii) has testified in, intends to testify in, or has otherwise assisted in any investigation, hearing, or proceeding under this chapter; the right to inform any person about any employer's alleged violation of this chapter; and the right to inform any individual of the individual's rights under this chapter.

C. It is unlawful for an employer's absence control policy to count paid family and medical leave taken under this chapter as an absence that may lead to or result in discipline, discharge, demotion, suspension, or any other adverse action.

D. Protections of this section shall apply to any person who mistakenly but in good faith alleges a violation of this chapter.

E. This section shall be enforced as provided in subsections C through F of § 60.2-808.

§ 60.2-810. Coordination of benefits.

A. Leave taken with wage replacement under this chapter that also qualifies as leave under the FMLA shall run concurrently with leave taken under the FMLA.

B. An employer may require that payments made pursuant to this chapter be made concurrently or otherwise coordinated with payments made or leave allowed under the terms of disability or family care leave under a collective bargaining agreement or employer policy. Such employer shall give employees written notice of this requirement.

C. Nothing in this chapter shall be construed to limit or reduce an employer's obligation to comply with a collective bargaining agreement, an employer policy, or any other provision of law requiring more generous leave.

D. An individual's right to leave under this chapter shall not be diminished by a collective bargaining agreement entered into or renewed, or an employer policy adopted or retained, after January 1, 2025. Any agreement by an individual to waive the individual's rights under this chapter is void as against public policy.

§ 60.2-811. Notice requirements.

A. An employer shall provide written notice as prescribed in this subsection to each employee upon hiring and annually thereafter. An employer shall also provide such written notice to an employee when such employee requests leave pursuant to this chapter or when the employer acquires knowledge of an employee's intent to take leave that may meet the eligibility requirements of § 60.2-802. Such notice shall include (i) a statement of an employee's right to family and medical leave benefits pursuant to this chapter and the terms under which such benefits may be used; (ii) the amount of family and medical leave benefits available; (iii) the procedure for filing a claim for family and medical leave benefits; (iv) a statement of the right to job protection and benefits continuation under § 60.2-808; (v) a statement that discrimination and retaliatory personnel actions against a person for requesting, applying for, or using family and medical leave benefits are prohibited under § 60.2-809; and (vi) a statement that the employee has a right to file a complaint for a violation of this chapter. An employer shall also display and maintain a poster provided by the Commission in a conspicuous place accessible to employees at the employer's place of business that contains the information required by this section in English, Spanish, and any language that is the first language spoken by at least five percent of the employer's workforce. The Commissioner may adopt regulations to establish additional requirements concerning the means by which employers shall provide such notice.

B. An employee seeking to take leave under the provisions of this chapter shall notify his employer as soon as practicable.

§ 60.2-812. Appeals.

A. The Commissioner shall establish a system for appeals in the case of a denial of a claim for family and medical leave benefits. In establishing such system, the Commissioner may utilize any and all procedures and appeals mechanisms established under this title.

B. Judicial review of any decision with respect to family and medical leave benefits shall be permitted in a court of competent jurisdiction after a party aggrieved thereby has exhausted all administrative remedies established by the Commissioner.

C. The Commissioner shall implement procedures to ensure confidentiality of all information related to any claims filed or appeals taken to the maximum extent permitted by applicable laws.

§ 60.2-813. Enforcement.

A. Contributions required by the provisions of § 60.2-806 that are unpaid on the date on which they are due and payable, as prescribed by the Commissioner under this chapter, shall bear interest at the rate of one and one-half percent per month from and after such date until payment plus accrued interest is received by the Commission. Interest collected pursuant to this chapter shall be paid into the Fund. An employer who fails to timely remit a contribution or any portion thereof under § 60.2-806 shall be solely responsible for the interest due under this section.

B. If, after notice, any employer defaults in any payment of contributions or interest, the amount due

shall be collected by civil action in the name of the Commissioner. The employer adjudged in default shall pay the fees and costs of such action. Civil actions brought under this chapter to collect contributions or interest or any penalty from an employer shall be heard by the court at the earliest possible date. Such civil actions may be brought against any officer, employee, or agent of a corporation or partnership in his individual, personal capacity when that person willfully fails to cause the employer to pay the appropriate contributions or interest and he had the authority to do so. No person shall be subject to this section unless it is proved that such person (i) knew of the failure or attempt to make such payment and (ii) had authority to prevent such failure or attempt. In addition to the foregoing remedies, the Commissioner shall have such other remedies as are available to the State Tax Commissioner and county and city treasurers for the collection of taxes generally. The Commissioner is authorized to compromise, settle, and adjust any contributions, including interest, or any penalty assessed against any employer where in the judgment of the Commissioner the best interests of the Commonwealth will be promoted or served. The Commissioner may in such cases accept in full settlement of the contributions assessed an amount less than that assessed.

C. When an unsatisfied execution has been returned by an officer, and the employer against whom the judgment has been obtained on which the execution was issued continues in default of payment of contributions, or any portion thereof, such employer may be enjoined from operating and doing business in the Commonwealth until such contributions have been paid. The Circuit Court of the City of Richmond shall have exclusive original jurisdiction to grant such injunction upon the complaint of the Commissioner. Notice of the time and place when the application for the injunction will be made shall be served on the employer and a copy of the bill of complaint shall be served with the notice.

§ 60.2-814. Erroneous payments and disqualification for benefits.

A. An individual shall be disqualified from family and medical leave benefits for one year if the individual is determined by the Commissioner to have willfully made a false statement or misrepresentation regarding a material fact, or willfully failed to report a material fact, to obtain benefits under this chapter.

B. If family and medical leave benefits are paid erroneously or as a result of willful misrepresentation, or if a claim for family and medical leave benefits is rejected after benefits are paid, the Commission may seek repayment of benefits from the recipient. The Commissioner shall exercise his discretion to waive, in whole or in part, the amount of any such payments where the recovery would be against equity and good conscience.

§ 60.2-815. Elective coverage.

A. A self-employed person, including a sole proprietor, partner, or joint venturer, may elect coverage under this chapter for an initial period of not less than three years. The self-employed person shall file a notice of election in writing with the Commissioner, as required by the Commission. Such election shall become effective on the date such notice is filed, provided that such self-employed person agrees to supply any information concerning income that the Commission deems necessary.

B. A self-employed person who has elected coverage may withdraw from coverage within 30 days after the end of the three-year period of coverage, or at such other times as the Commissioner may prescribe by rule, by filing written notice with the Commissioner, such withdrawal to take effect not sooner than 30 days after filing such notice.

§ 60.2-816. Private employer plans; exemption from contributions.

A. Employers may apply to the Commission for approval to meet their obligations under this chapter through a private plan. The Commission may approve such private plan if the Commission determines that such private plan:

1. Confers all of the same rights, protections, and benefits provided to covered individuals under this chapter, including:

a. The provision of family and medical leave benefits for all purposes specified in subsection A of § 60.2-802;

b. The provision of family and medical leave benefits for the maximum number of weeks required in § 60.2-803 per application year;

c. The provision of family and medical leave benefits as specified in subdivision A 2 § 60.2-802 for a covered individual caring for any family member;

d. The provision of family and medical leave benefits as specified in subdivision A 3 § 60.2-802 for a covered individual with a serious health condition;

e. A wage replacement rate for all family and medical leave benefits that equals or exceeds the rate required by subdivision A of § 60.2-804;

f. A maximum weekly family and medical leave benefit amount that equals or exceeds the amount specified in subdivision C of § 60.2-804 and a minimum weekly family and medical leave benefit amount that equals or exceeds the amount specified in subdivision B of § 60.2-804;

g. The provision of family and medical leave benefits on an intermittent basis as specified in

§ 60.2-807;

h. No additional conditions or restrictions on family and medical leave benefits, or leave taken in accordance with such benefits, beyond those explicitly authorized by this chapter or regulations issued pursuant to this chapter;

i. The provision of family and medical leave benefits to any employee covered under such private plan who would otherwise be eligible for such benefits pursuant to this chapter; and

j. An employee contribution amount that does not exceed the amount such employee would otherwise contribute for family and medical leave benefits pursuant to § 60.2-806.

2. Complies with the following provisions:

a. Such private plan shall provide family and medical leave benefits for all eligible employees throughout the course of their employment;

b. If such private plan is in the form of self-insurance, the employer shall furnish a bond to the Commonwealth in a form, amount, and manner determined by the Commission; and

c. If such plan is in the form of a third-party provider of insurance, the forms of the policy must be issued by an insurer approved by the Commission.

B. The Commission shall withdraw approval for an employer's private plan pursuant to subsection A if such employer violates the terms or conditions of such private plan, including by:

a. Failing to pay benefits;

b. Failing to pay benefits timely and in a manner consistent with the provisions of this chapter;

c. Failing to maintain an adequate surety bond;

d. Misusing private plan money;

e. Failing to submit reports or comply with other requirements or terms set by the Commission; or

f. Failing to comply with this chapter or regulations promulgated pursuant to this chapter.

C. An employee covered by a private plan approved under this section shall retain all applicable rights provided in §§ 60.2-808 and 60.2-809.

D. A contested determination or denial of family and medical leave insurance benefits by a private plan is subject to appeal before the Commission and any court of competent jurisdiction pursuant to § 60.2-812.

E. The Commission shall establish a fine structure for employers and entities offering private plans that violate this section. The Commission shall transfer any fines collected pursuant to this subsection to the state treasurer for deposit into the Fund. The Commission shall establish a process for the determination, assessment, and appeal of fines under this subsection.

F. The Commission shall annually determine the total amount expended by the Commission for costs arising from the administration of private plans. Each employer offering a private plan pursuant to this section shall reimburse the Commission for the costs arising out of the private plans in the amount, form, and manner determined by the Commission.

§ 60.2-817. Federal income tax.

If the Internal Revenue Service determines that family and medical leave benefits under this chapter are subject to federal income tax, the Commission shall advise any covered individual filing a new claim for family and medical leave benefits, at the time of filing such claim, that:

1. The Internal Revenue Service has determined that benefits are subject to federal income tax;

2. Requirements exist pertaining to estimated tax payments;

3. The individual may elect to have federal income tax deducted and withheld from the individual's payment of benefits in the amount specified in the federal Internal Revenue Code; and

4. The individual is permitted to change a previously elected withholding status.

§ 60.2-818. Reports.

By April 1, 2028, and annually thereafter, the Commission shall report to the General Assembly on projected and actual program participation by purpose listed in § 60.2-802, gender of beneficiaries, race and ethnicity of beneficiaries, age of beneficiaries, amount of benefits paid to beneficiaries per week, premium rates, fund balances, outreach efforts, and, for leaves taken under subdivision A 2 of § 60.2-802, family members for whom leave was taken to provide care.

§ 60.2-819. Public education.

The Commission shall develop and conduct a public education campaign to inform workers and employers regarding the availability of family and medical leave benefits. Such campaign shall include multiple ways to communicate to employers and employees about the new benefit system and leave rights, contributions, timeline, and eligibility requirements. Such campaign shall be an ongoing function of the Commission for the duration of the paid family and medical leave insurance program. In conducting and planning such campaign, the Commission shall consult with the Paid Family and Medical Leave Advisory Board established in § 60.2-821 and work with other stakeholders, including chambers of commerce, trade associations, nonprofit organizations, and labor unions, to develop and implement a statewide communication strategy. Such campaign shall also include targeted outreach and

education for small businesses. Outreach information shall be available in English, Spanish, Korean, Tagalog, Vietnamese, Urdu, Arabic, and other languages spoken by more than five percent of the Commonwealth's population.

§ 60.2-820. Sharing technology.

The Commission is encouraged to use state data collection and technology to the extent possible and to integrate the provisions of this chapter with existing state policies.

§ 60.2-821. Paid Family and Medical Leave Advisory Board.

A. The Paid Family and Medical Leave Advisory Board (the Board) is established as an advisory board, within the meaning of § 2.2-2100, in the executive branch of state government. The purpose of the Board is to report to and advise the Commissioner on the implementation and administration of this chapter.

B. The Board shall have a total membership of 15 members that shall consist of two legislative members and 13 nonlegislative citizen members. Members shall be appointed as follows: one member of the Senate, to be appointed by the Senate Committee on Rules; one member of the House of Delegates, to be appointed by the Speaker of the House of Delegates; one nonlegislative citizen member to be appointed by the Senate Committee on Rules; one nonlegislative citizen member to be appointed by the Speaker of the House of Delegates; and 11 nonlegislative citizen members to be appointed by the Governor, one of whom shall be a representative of the Virginia Chamber of Commerce, one of whom shall be a representative of Main Street Alliance of Virginia, one of whom shall be a representative of the AFL-CIO, one of whom shall be a representative of the SEIU Virginia 512, one of whom shall be a representative of Campaign for Family Friendly Economy, Virginia, one of whom shall be a representative of AARP, one of whom shall be a representative of Voices for Virginia's Children, one of whom shall be a representative of an organization that advocates on behalf of people with disabilities, one of whom shall be a representative of an organization that advocates for people with serious health conditions, one of whom shall have skill, knowledge, and experience in family and medical leave programs, and one of whom shall be an attorney advocating for the rights, benefits, and opportunities of employees.

Nonlegislative citizen members of the Board shall be citizens of the Commonwealth. Legislative members of the Board shall serve terms coincident with their terms of office.

C. Nonlegislative citizen members shall be appointed for a term of four years. Appointments to fill vacancies, other than by expiration of a term, shall be for the unexpired terms. Vacancies shall be filled in the same manner as the original appointments. No nonlegislative citizen member shall serve more than two consecutive four-year terms. The remainder of any term to which a member is appointed to fill a vacancy shall not constitute a term in determining the member's eligibility for reappointment.

D. The Board shall elect a chairman and vice-chairman from among its membership. A majority of the members shall constitute a quorum. The meetings of the Board shall be held at the call of the chairman, but no less than four times a year.

E. Legislative members of the Board shall receive such compensation as provided in § 30-19.12. Nonlegislative citizen members of the Board shall not receive compensation but shall be reimbursed for all reasonable and necessary expenses incurred in the performance of their duties as provided in §§ 2.2-2813 and 2.2-2825.

2. That the Virginia Employment Commission shall promulgate all rules and regulations necessary for implementation of this act by July 1, 2025.

3. That the Family and Medical Leave Insurance Trust Fund (the Fund) established by § 60.2-805 of the Code of Virginia, as created by this act, shall receive a non-interest-bearing treasury loan in an amount provided in the appropriation act, which shall be used to (i) establish the paid family and medical leave insurance program established by § 60.2-801 of the Code of Virginia, as created by this act, and (ii) conduct the study and assessment required by the fourth enactment of this act. The Secretary of Finance and the Commissioner of the Virginia Employment Commission shall approve disbursements from funds provided by this treasury loan prior to expenditure of funds. Borrowings from such treasury loan shall be repaid by the Fund to the general fund. Until such borrowings have been repaid in full, no moneys from the Fund may be disbursed to provide benefits to covered individuals under the paid family and medical leave insurance program established by § 60.2-801 of the Code of Virginia, as created by this act.

4. That the Virginia Employment Commission (the Commission), in collaboration with the Department of Human Resource Management, the Compensation Board, the Virginia Department of Education, and the Department of Planning and Budget, shall update its November 2021 Virginia Paid Family and Medical Leave study, as authorized by Item 111 of Chapter 1289 of the Acts of Assembly of 2020, to include an assessment of the budgetary impacts of extending application of the benefits provided by the first enactment of this act to exempt individuals, as that term is defined in § 60.2-800 of the Code of Virginia, as created by this act, while maintaining the

benefits provided in § 2.2-1210 of the Code of Virginia for state employees. Such assessment shall also examine (i) the number of exempt individuals that would receive expanded family and medical leave benefits; (ii) the budgetary impact and salary impact associated with providing each type of benefit to each class of employee described in clause (i); and (iii) the budgetary impact on state direct aid to public education. The Commission shall submit the updated study to the Chairmen of the House Committee on Appropriations and the Senate Committee on Finance and Appropriations on or before December 1, 2024. The Commission may, upon completion of the updated study, submit legislation to the General Assembly to (a) expand the paid family and medical leave program provided by the first enactment of this act to exempt individuals and (b) establish an expanded state employee benefit program consisting of similar benefits to a private employer plan as is described in § 60.2-816 of the Code of Virginia, as created by this act, while maintaining the benefits currently provided in § 2.2-1210 of the Code of Virginia for state employees.

APPENDIX B: COMPARATIVE STATE PROGRAMS

FUNDING: Virginia, California, Colorado, Connecticut

Feature	Virginia	California	Colorado	Connecticut
Financing mechanism	Public social insurance (payroll tax contribution) (§ 60.2-806. (A)).	Public social insurance (payroll tax contribution) with regulated private options.	Public social insurance (payroll tax contribution) with regulated private options.	Public social insurance (payroll tax contribution) with regulated private options.
Employer/ employee payroll tax contribution split	50% employee; 50% employer for employer of more than 10 employees. Employers of 10 or fewer employees remit only 50% employee share (see § 60.2-806. (D-E)).	100% from employee. (http://www.edd.ca.gov/Payroll_Taxes/Rates_and_Withholding.htm)	Up to 50% from employee and employer. Employers with fewer than 10 employees are not required to pay the employer portion. (Colo. Rev. Stat. § 8-13.3-507)	100% from employee. (S.B. 1 § 3, 2019 Leg., Reg. Sess. (Conn. 2019) (enacted))
Taxable wages and salaries ceiling	Social Security contribution base ($168,600 in 2024) (see § 60.2-806. (F)).	No ceiling on taxable wages (removed January 2024 https://edd.ca.gov/siteassets/files/pdf_pub_ctr/de2530.pdf).	Social Security contribution base ($168,600 in 2024). (ABB combined PFML chart)	Social Security contribution base ($168,600 in 2024). (ABB combined PFML chart)
Tax Rate	Rate needed to ensure reimbursement of initial start-up loan costs and to maintain Trust Fund balance at 140% of percent of previous fiscal year's expenditure. (§ 60.2-806. (B))	1.1% of wages. (https://edd.ca.gov/en/disability/Contribution_Rates_and_Benefit_Amounts)	0.9% of wages initially. Adjusted annually, not to exceed 1.2%. (ABB combined PFML chart) (Colo. Rev. Stat. § 8-13.3-507)	0.5% of wages. (ABB combined PFML chart) (S.B. 1 § 3, 2019 Leg., Reg. Sess. (Conn. 2019) (enacted))

FUNDING: D.C., Delaware, Maine, Maryland

Feature	District of Columbia	Delaware	Maine	Maryland
Financing mechanism	Public social insurance (payroll tax contribution).	Public social insurance (payroll tax contribution) with regulated private options.	Public social insurance (payroll tax contribution) with regulated private options.	Public social insurance (payroll tax contribution) with regulated private options.
Employer/ employee payroll tax contribution split	100% from employer. (D.C. Law 21-264 § 103 (D.C. 2016))	Employers may withhold up to 50% of the premium from a qualifying employee's wages. Employers contribute 50%. (S.B. 1 § 3705(d-f), 151st Gen. Assembly (Del. 2022)) Employers with a qualifying private plan may be exempted from contributions. (S.B. 1 § 3705(i), 151st Gen. Assembly (Del. 2022))	Split between employers and employees. Employers with 15 or more employees may deduct up to 50% of the contribution from the employees' wages. Employers with less than 15 employees may deduct the entire amount from the employees' wages. Self-employed individuals who elect coverage pay up to 50% of the premium otherwise required. (https://www.maine.gov/paidleave/docs/2024/pfml/languages/englishfaq09122024.pdf)	50% split between employer and employee. S.B. 275 § Subtitle 6, 8.3-601(A-C), 444th Leg., Reg. Sess. (Md. 2022)
Taxable wages and salaries ceiling	No ceiling on taxable wages. (Features of State Paid Family Leave Programs chart, Bipartisan Policy Center)	Social Security contribution base ($168,600 in 2024). (ABB combined PFML chart)	Social Security contribution base ($168,600 in 2024). (https://www.maine.gov/paidleave/docs/2024/pfml/languages/englishfaq09122024.pdf)	Social Security contribution base ($168,600 in 2024). (Features of State Paid Family Leave Programs chart, Bipartisan Policy Center)
Tax Rate	0.75% of wages or of annual self-employment income. (https://dcpaidfamilyleave.dc.gov/workers/) (D.C. Law 21-264 § 103 (D.C. 2016))	For 2025 and 2026, 0.8% of employee wages. (S.B. 1 § 3705(c)(3), 151st Gen. Assembly (Del. 2022)) (S.B. 1 § 3705(b)(1-3)(a-b), 151st Gen. Assembly (Del. 2022))	1% for employers with 15 or more employees. 0.5% for employers with less than 15 employees. (https://www.maine.gov/paidleave/docs/2024/pfml/languages/englishfaq09122024.pdf)	0.9% initially. (ABB combined PFML chart)

FUNDING: Massachusetts, Minnesota, New Jersey

Feature	Massachusetts	Minnesota	New Jersey
Financing mechanism	Public social insurance (payroll tax contribution) with regulated private options.	Public social insurance (payroll tax contribution) with regulated private options.	Public social insurance (payroll tax contribution) with regulated private options.
Employer/ employee payroll tax contribution split	Up to 40% from employees for medical leave and remainder from employer. Employers with fewer than 25 employees in Massachusetts are not required to pay the employer portion. 100% from employees for family leave. (H. 4640 §§ 29(6)-(7), 30, 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted)	Up to 50% from employees and 50% from employers. Employer portion of premium will be reduced for employers with fewer than 30 employees (employer premium will only be based on a portion of wages paid to their employees). (ABB combined PFML chart)	Employees and employers share the cost of TDI. Employees cover the full cost of FLI. (A. 3975, 218th Leg., Reg. Sess. (N.J. 2019))
Taxable wages and salaries ceiling	Social Security contribution base ($168,600 in 2024). (ABB combined PFML chart)	Social Security contribution base ($168,600 in 2024). (ABB combined PFML chart)	TDI: The percentage contribution for employees does not apply to an employee's wages above $161,400/year; the percentage contribution for employers does not apply to an employee's wages above $42,300/year. FLI: Taxable wage ceiling of $161,400/year. (ABB combined PFML chart) (A. 3975, 218th Leg., Reg. Sess. (N.J. 2019))
Tax Rate	Current premium for family and medical leave is 0.88% of wages. (ABB combined PFML chart) For each following year, the premium rate is adjusted based on the fund's expenditures. (H. 4640 §§ 29(6)-(7), 30, 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted)	0.7% initially. (ABB combined PFML chart)	TDI: Employees currently contribute 0% of their wages. Employers contribute a percentage of employees' wages ranging from 0.10% to 0.75%. FLI: 0.09% of wages. (ABB combined PFML chart) (A. 3975, 218th Leg., Reg. Sess. (N.J. 2019))

FUNDING: New York, Oregon, Rhode Island, Washington

Feature	New York	Oregon	Rhode Island	Washington
Financing mechanism	Public social insurance (payroll tax contribution) with regulated private options.	Public social insurance (payroll tax contribution) with regulated private options.	Public social insurance (payroll tax contribution).	Public social insurance (payroll tax contribution) with regulated private options.
Employer/ employee payroll tax contribution split	Employees and employers share the cost of TDI. Employees cover the full cost of PFL. A self-employed individual who elects coverage is required to pay the full cost of TDI and PFL premiums. An employer not covered by the law who elects coverage is required to pay the portion of the premium not covered by wages withheld from employees. (http://www.wcb.ny.gov/content/main/DisabilityBenefits/Employer/complyWithLaw.jsp) (https://paidfamilyleave.ny.gov/paid-family-leave-information-employers)	60% employee, 40% employer. Employers with fewer than 25 employees are not required to pay their share. If they do pay, the are eligible for state assistance. (H.B. 2005 § 16, 80th Leg. Assembly, Reg. Sess. (Or. 2019) (enacted))	Employees cover the full cost of both Temporary Disability Insurance (TDI) and Temporary Caregiver Insurance (TCI). (ABB combined PFML chart)	Employees and employers share the cost of medical leave. Up to 45% from employees, with employers covering what remains. Employers with fewer than 50 employees are not required to cover the employer's share. Employees cover the full cost of family leave. S.B. 5975, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted); (https://paidleave.wa.gov/employers#helpques34)
Taxable wages and salaries ceiling	Deduction/taxable wage ceiling at wages above an average of $1,718.15/ week. (ABB combined PFML chart)	Social Security contribution base ($168,600 in 2024). (ABB combined PFML chart)	Taxable wage ceiling at $87,000/year. (ABB combined PFML chart)	Social Security contribution base ($168,600 in 2024). (ABB combined PFML chart)
Tax Rate	TDI: Employers can withhold 0.5% of employees' wages to pay for coverage, up to $0.60/week; employers cover the remaining cost. PFL: Payroll deduction, currently set at 0.373% of wages. (ABB combined PFML chart)	1% of wages. (ABB combined PFML chart) H.B. 2005 § 16, 80th Leg. Assembly, Reg. Sess. (Or. 2019) (enacted))	1.2% of wages. (ABB combined PFML chart) (http://www.dlt.ri.gov/lmi/news/quickref.htm)	0.74% of wages. (State Paid Family Leave Laws chart, National Partnership for Women and Families)

ELIGIBILITY REQUIREMENTS: Virginia, California, Colorado

Feature	Virginia	California	Colorado
Employment requirements (minimum earnings/hours)	Base period is previous four quarters. Eligibility is based on earnings in two highest earning quarters (i.e.. $3,000) according to UI covered employment benefit table. (https://law.lis.virginia.gov/pdf/12100666D_Table2.pdf) (see § 60.2-612) and § 60.2-800 (1)(a))	Employee must have earned at least $300 during the base period. The base period is the first 4 of the 5 most recently completed quarters or may include earlier quarters if the employee was unemployed during part of the base period. This can combine income from more than one employer. (ABB combined PFML chart) (http://www.edd.ca.gov/Disability/Am_I_Eligible_for_PFL_Benefits.htm)	Employee must have earned at least $2,500 during the base period. The base period is the first 4 of the last 5 completed quarters or the 4 most recently completed quarters. This can combine income from more than one employer. (ABB combined PFML chart) (Colo. Rev. Stat. § 8-13.3-503(3)(a))
Opt-in for self employed	Yes (see § 60.2-815)	Yes	Yes
Industry/firm exemptions (e.g., public sector and small businesses)	Employers of 10 or fewer employees remit only 50% employee share (see § 60.2-806. (E)). Eligible private employer plans are exempt from contributions (see § 60.2-816. (A). Employees of state government, local government school board, and local constitutional officers and their employees are not covered individuals (see § 60.2-800. Definitions).	Employees covered by the state unemployment insurance law, except for most public employees, are covered. Many public employers can opt in to coverage, but may need to do so through a negotiated agreement with an authorized bargaining unit. Domestic workers are covered subject to a low minimum payment requirement. Self-employed may opt in. (ABB combined PFML chart) (Cal. Unemp. Ins. Code §§ 3302, 2606, 675, 135) (http://www.edd.ca.gov/disability/FAQ_PFL_Eligibility.htm)	Almost all employees are covered. Public sector employees are automatically covered. However, local government employers may decline coverage. Local government employees whose employers declined coverage can opt in to wage replacement benefits. Domestic workers are covered as well. Self-employed may opt in. (ABB combined PFML chart) (Colo. Rev. Stat. § 8-13.3-503(8), -514, -522)
Allowance of Competitive (private or self insurance) Plans	Yes. Eligible private employer plans are exempt from contributions (see § 60.2-816. (A)).	Yes, for greater benefits than the state plan. (ABB combined PFML chart)	Yes, for equivalent or greater benefits than the state plan. (ABB combined PFML chart)

Feature	Virginia	California	Colorado
Qualifying events	(1) Birth, adoption, or placement through foster care of caring for a new child during the first year after the birth, adoption, or placement of that child, (2) caring for family member with a serious health condition, (3) has a serious health condition that makes the covered individual unable to perform work, (4) caring for a covered service member who is next of kin or other family member, or (5) eligible for qualifying exigency leave arising out of fact that family member of covered individual is on active duty, or has been notified of an impending call or order to active duty in the Armed Forces (see § 60.2-802. Eligibility for benefits).	1. Bonding with new child (birth, adoption, foster). 2. Care for family member with serious health condition. 3. Care for own disability (must be unable to perform regular or customary work), includes pregnancy . 4. As of January 1, 2021, qualifying exigency arising out of spouse, domestic partner, child or parent being on active duty (or having been notified of an impending call or order to active duty). (Cal. Unemp. Ins. Code §§ 2626, 3302(e); S.B. 83, 2019-2020 Leg., Reg. Sess. (Cal. 2019) (enacted))	1. Bonding with new child (birth, adoption, foster). 2. Care for family member with serious health condition. 3. Care for own serious health condition. 4. Qualifying exigency arising out of family member being on active duty (or having been notified of an impending call or order to active duty). 5. Engaging in certain activities related to individual or family member being victim of domestic violence, stalking, sexual assault or abuse. (Colo.Rev. Stat. e 8-13.3-504(2); 8-13.3-503(16), (18))
Qualifying family members/ definition of family	(1) Biological, adopted, or foster child, stepchild or legal ward, a child of domestic partner or child to whom the covered individual stands in loco parent, (2) biological, adoptive, or foster parent, stepparent, or legal guardian of a covered individual or a covered individual's spouse or domestic partners, or a person who stood in loco parentis when the covered individual's spouse or domestic partner was a minor child; (3) a person to whom the covered individual is legally married under the laws of any state, or a domestic partner of a covered individual; or (4) a grandparent, grandchild, or sibling, whether through a biological, foster, adoptive, or step relationship, of the covered individual or the covered individual's spouse or domestic partner (see § 60.2-800. Definitions).	(1) Child, (2) parent, (3) grandparent, (4) grandchild, (5) sibling, (6) spouse, (7) registered domestic partner, (8) parent of a worker's spouse or registered domestic partner. The definition of domestic partner includes any person who is at least 18 years old and "is dependent upon the employee for support as shown by either unilateral dependence or mutual interdependence, as evidenced by a nexus of factors including, but not limited to, common ownership of real or personal property, common householding, children in common, signs of intent to marry, shared budgeting, and the length of the personal relationship with the employee . . . ." (ABB combined PFML chart) (Cal. Stat. §§ 3302(f)-(j))	(1) Child, (2) parent, (3) parent of a spouse or domestic partner, (4) spouse, (5) domestic partner, (6) grandparent, (7) grandparent of a spouse or domestic partner, (8) grandchild, (9) grandchild of a spouse or domestic partner, (10) sibling, (11) sibling of a spouse or domestic partner, or as shown by the worker, any other individual with whom the worker has a significant personal bond that is or is like a family relationship, regardless of biological or legal relationship. The law's definition of domestic partner does not require registration. The definition of domestic partner includes any person who is at least 18 years old and "(a) who is of the same gender as the employee; (b) With whom the employee has shared an exclusive, committed relationship for at least one year with the intent for the relationship to last indefinitely; (c) Who is not related to the employee by blood to a degree that would prohibit marriage pursuant to section 14-2-110, C.R.S.; and (d) Who is not married to another person." (ABB combined PFML chart)
Advanced Notice Requirements	Yes, but no minimum number of days specified. (§ 60.2-811. Notice requirements. (B))	Not specified.	30 days, or as soon as is feasible given unforeseen circumstances. (Colo. Rev. Stat. § 8-13.3.505)

ELIGIBILITY REQUIREMENTS: Connecticut, D.C., Delaware

Feature	Connecticut	District of Columbia	Delaware
Employment requirements (minimum earnings/hours)	Employee must have earned at least $2,325 from one or more employers during the highest-earning quarter of the base period and have been employed by an employer in the previous 12 weeks. The base period is the first 4 of the 5 most recently completed quarters. (S.B. 1 § 1, 2019 Leg., Reg. Sess. (Conn. 2019) (enacted))	Employee must spend more than 50% of work time in the District of Columbia for a covered employer or be based in the District of Columbia and regularly spend a substantial amount of work time for the covered employer in the District of Columbia and not more than 50% of work time for that covered employer in another jurisdiction; and must have been a covered employee for some or all of the 52 calendar weeks preceding the covered event. Self-employed individual must have earned self-employment income for work performed more than 50% of the time in the District of Columbia during some or all of the 52 calendar weeks preceding the covered event, and must have opted into the paid leave program. (D.C. Law 21-264 §§ 101(3)-(4), (6) (D.C. 2016))	Employee must have been employed for at least 12 months by the employer with respect to whom leave is requested, and must have been employed for at least 1,250 hours of service with the employer during the previous 12-month period. (S.B. 1 § 3701(6a), 151st Gen. Assembly (Del. 2022))
Opt-in for self employed	Yes	Yes	Yes, conditionally
Industry/firm exemptions (e.g., public sector and small businesses)	All private sector employers are covered Self-employed individuals and state or local collective bargaining units can opt in. (S.B. 1 § 1, 2019 Leg., Reg. Sess. (Conn. 2019) (enacted)) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	Private sector employers covered by the D.C. Unemployment Compensation Act are covered. Public sector employees are not automatically covered. Employees of the D.C. city government and the United States government, or of any employer the District is not authorized to tax under federal law or treaty, are not covered. Domestic workers are covered subject to a low minimum payment requirement. Self- employed individuals can opt-in. (State Paid Family Leave Laws chart, National Partnership for Women and Families) (D.C. Law 21-264 § 101(4) (D.C. 2016))	State and local government and most private employers are covered. Employers with 10 to 24 employees during the previous 12 months are only required to provide parental leave. Employers with 25 or more employees during the previous 12 months are required to provide parental, family caregiving, and medical leave. The following employers are not covered: 1. Anyone who employs less than 10 employees in this State during the previous 12 months. 2. The federal government. 3. Any business that is closed in its entirety for 30 consecutive days or more per year. Seasonal workers, self-employed, non W-2 business owners, and those working less than 60% of the time within Delaware are excluded by the above definitions. (S.B. 1 § 3701(7a-7b), 151st Gen. Assembly (Del. 2022)) (https://laborfiles.delaware.gov/main/pfl/Employer_and_TPAs_Guide_to_DPL.pdf)

Feature	Connecticut	District of Columbia	Delaware
Allowance of Competitive (private or self insurance) Plans	Yes, for equivalent or greater benefits than the state plan. (ABB combined PFML chart)	No. (ABB combined PFML chart)	Yes, for equivalent or greater benefits than the state plan. (S.B. 1 § 3716, 151st Gen. Assembly (Del. 2022))
Qualifying events	1. Bonding with new child (birth, adoption, foster). 2. Care for family member with serious health condition. 3. Care for own serious health condition. 4. Serving as organ or bone marrow donor. 5. Qualifying exigency arising out of spouse, child or parent being on active duty (or having been notified of an impending call or order to active duty). (S.B. 1 § 18(a)(2), 2019 Leg., Reg. Sess. (Conn. 2019) (enacted))	1. Bonding with new child (birth, adoption, foster). 2. Care for family member with serious health condition. 3. Care for own serious health condition. 4. Care for own pregnancy. (D.C. Law 21-264 §§ 101(12)-(17), 104(a)-(b) (D.C. 2016)) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	(1) Because of a birth, adoption, or placement through foster care of a child, is caring for the child during the first year after the birth, adoption, or placement of the child. (2) Is caring for a family member with a serious health condition. (3) Has a serious health condition that makes the covered individual unable to perform the functions of the covered individual's position. (4) Has a qualifying exigency. (S.B. 1 § 3702(a), 151st Gen. Assembly (Del. 2022))
Qualifying family members/ definition of family	(1) Child, (2) parent, (3) parent-in-law, (4) spouse, (5) grandparent, (6) grandchild, (7) sibling, (8) individual related by blood or affinity whose close association the employee shows to be the equivalent of those family relationships. (S.B. 1 § 17(6), 2019 Leg., Reg. Sess. (Conn. 2019) (enacted))	(1) Child, (2) parent, (3) parent-in- law, (4) spouse, (5) grandparent, (6) sibling, (7) registered domestic partner. (https://dcpaidfamilyleave.dc.gov/frequently-asked-questions/) (D.C. Law 21-264 § 101(7) (D.C. 2016))	(1) A parent, as defined under the FMLA, (2) child, (3) spouse, as defined under the FMLA. (S.B. 1 § 3701(11), 151st Gen. Assembly (Del. 2022))
Advanced Notice Requirements	30 days or as soon as is practicable. (https://www.cga.ct.gov/current/pub/chap_557.htm#sec_31-51ll)	At least 10 days in advance. (https://150551538.v2.pressablecdn.com/wp-content/uploads/2023/06/PFL_EmployeeHandbook-March-2022.pdf)	30 days in advance, if known, or as soon as is practicable. (S.B. 1 § 3710(e), 151st Gen. Assembly (Del. 2022))

ELIGIBILITY REQUIREMENTS: Maine, Maryland, Massachusetts

Feature	Maine	Maryland	Massachusetts
Employment requirements (minimum earnings/hours)	Employee must have earned at least six times the state average weekly wage during the 12-month period preceding the date on which leave begins. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	Employee must have worked at least 680 hours over the 12-month period immediately preceding the date on which leave is to begin. (S.B. 275 § Subtitle 1, 8.3–101(D), 444th Leg., Reg. Sess. (Md. 2022)) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	Employee must meet the financial eligibility requirements of the state unemployment insurance law (currently, one must have earned at least $6,300 (rounded down to nearest hundred dollars) in the last four completed calendar quarters and at least 30 times the weekly unemployment benefit amount that person would be eligible to collect). (H. 4640 § 29(1), 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted); https://www.mass.gov/service-details/check-eligibility-for-unemployment-benefits)
Opt-in for self employed	Yes	Yes	Yes
Industry/firm exemptions (e.g., public sector and small businesses)	Almost all employers are covered. Self-employed individuals can opt in. Public sector employees are covered except for employees of federal and tribal governments and public sector employees who are a party to a collective bargaining agreement in existence on the date the law takes effect. Tribal governments may opt in to coverage. (ABB combined PFML chart) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	Any public or government entity that employes at least one person in the state of Maryland. Self-employed may opt-in. No exemptions. (S.B. 275 § Subtitle 1, 8.3–101(H), 444th Leg., Reg. Sess. (Md. 2022)) (S.B. 275 § Subtitle 2, 8.3–201, 444th Leg., Reg. Sess. (Md. 2022)) (https://paidleave.maryland.gov/workers/Pages/home.aspx)	Employees covered by the state unemployment insurance law, except for some public employees, are covered. State employees are automatically covered. Local government employees are not automatically covered. Public sector employers not covered by the law can opt in to coverage. Domestic workers are covered, and self-employed individuals may opt-in. Certain self-employed individuals may be covered automatically. (ABB combined PFML chart) (H. 4640 §§ 29(1), (6)(e), 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted)
Allowance of Competitive (private or self insurance) Plans	Yes, for equivalent or greater benefits than the state plan. (ABB combined PFML chart)	Yes, for equivalent or greater benefits than the state plan. (S.B. 275 § Subtitle 7, 8.3-705, 444th Leg., Reg. Sess. (Md. 2022)) (ABB combined PFML chart)	Yes, for equivalent or greater benefits than the state plan. (ABB combined PFML chart)

Feature	Maine	Maryland	Massachusetts
Qualifying events	1. Bonding with a new child (birth, adoption, foster). 2. Care for family member with serious health conditions. 3. Care for own serious health conditions. 4. Qualifying exigency arising out of family member being on active duty (or having been notified of an impending call or order to active duty). 5. Engaging in certain activities related to individual or family member being victim of violence, assault, sexual assault, or stalking. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	1. Bonding with new child (birth, adoption, foster, kinship care). 2. Care for family member with serious health condition. 3. Care for own serious health condition. 4. Care for service individual who is next of kin. 5. Qualifying exigency arising out of deployment of service member who is a family member. (S.B. 275 § Subtitle 3, 8.3–302, 444th Leg., Reg. Sess. (Md. 2022)) (S.B. 275 § Subtitle 1, 8.3–101(M), 444th Leg., Reg. Sess. (Md. 2022)) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	1. Bonding with new child (birth, adoption, foster) 2. Care for family member with serious health condition. 3. Care for own serious health condition. 4. Qualifying exigency arising out of family member being on active duty (or having been notified of an impending call or order to active duty). 5. Care for family member who is a covered service member. (H. 4640 § 29(2)(a), 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted))
Qualifying family members/ definition of family	(1) Child, (2) parent or parent of a spouse, (3) spouse, (4) domestic partner, (5) grandparent or spouse's grandparent, (6) sibling, (7) grandchild, (8) designated individual with whom the covered individual has a significant personal bond that is or is like a family relationship, regardless of biological or legal relationship. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	(1) Child, (2) parent, (3) parent-in-law, (4) legal guardian or ward, (5) spouse, (6) legal guardian or ward of the covered individual's spouse, (7) grandparent, (8) grandchild, (9) sibling. (S.B. 275 § Subtitle 1, 8.3–101(I), 444th Leg., Reg. Sess. (Md. 2022)) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	(1) Spouse, (2) domestic partner, (3) child, (4) parent, (5) parent of a spouse or domestic partner, (6) grandchild, (7) grandparent, (8) sibling. The law's definition of domestic partner is flexible and does not require registration. The definition of domestic partner includes any person who is at least 18 years old and "is dependent upon the covered individual for support as shown by either unilateral dependence or mutual interdependence that is evidenced by a nexus of factors including, but not limited to: (A) common ownership of real or personal property; (B) common householding; (C) children in common; (D) signs of intent to marry; (E) shared budgeting; and (F) the length of the personal relationship with the covered individual . . . ." (ABB combined PFML chart)
Advanced Notice Requirements	Reasonable notice required but not defined. (P.L. 2023 §§ 850-B(7), ch. 412, 131st Leg., 1st Spec. Sess. (Me. 2023))	30 Days notice, or as soon as practicable. (S.B. 275 § Subtitle 7, 8.3–701(A)(2), 444th Leg., Reg. Sess. (Md. 2022))	At least 30 days in advance, or as soon as practicable. (https://www.mass.gov/info-details/paid-family-and-medical-leave-pfml-overview-and-benefits)

ELIGIBILITY REQUIREMENTS: Minnesota, New Jersey, New York

Feature	Minnesota	New Jersey	New York
Employment requirements (minimum earnings/hours)	Employee must have earned at least 5.3% of the state's average annual wage, rounded down to the next lower $100, during the base period. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	Employee must have either earned at least 20 times the minimum wage (currently, $283) in at least 20 weeks or earned at least 1,000 times the minimum wage (currently, $14,200) during the base year. The base year is the first 4 of the 5 most recently completed quarters or the 4 most recent completed quarters or the 3 most recent completed quarters and the portion of the current quarter that has already occurred. This can combine income from more than one employer. (ABB combined PFML chart) (https://myleavebenefits.nj.gov/labor/myleavebenefits/worker/tdi/)	Own health: Employee generally must have been employed for at least 4 consecutive weeks by a single employer (or 25 days of employment for part-time employees) ; previously qualified employees qualify immediately upon the start of employment with a new covered employer. Paid family leave: Employee generally must have been employed by their current employer for at least 26 consecutive weeks; those who work less than 20 hours per week must have worked at least 175 days for their current employer. (ABB combined PFML chart) (N.Y. Workers' Comp. Law § 203 (as amended by S. 6406C))
Opt-in for self employed	Yes	No	Yes
Industry/firm exemptions (e.g., public sector and small businesses)	Most Minnesota employers with one or more employees are covered, with exceptions for employees of tribal nations or the federal government and self-employed individuals who choose to provide their own coverage for themselves. (https://mn.gov/deed/paidleave/employers/faq/)	Employees covered by the state unemployment insurance law are covered, with some exceptions for public sector employees. Public sector employees are not automatically covered for Own Health, with a few exceptions. Public employers can opt in to coverage. Public sector employees are automatically covered for paid family leave. Domestic workers are covered, subject to a low minimum payment requirement. Self-employed may NOT opt-in. (ABB combined PFML chart) (http://lwd.state.nj.us/labor/fli/content/fli_faq.html; http://lwd.state.nj.us/labor/tdi/employer/state/sp_emp_coverage.html)	Most private sector employees are covered. For a list of exceptions, visit http://www.wcb.ny.gov/content/main/offthejob/WhoCovered_DB.jsp. Public employers can opt in to coverage and unions covering public sector workers can opt in to paid family leave through the collective bargaining process. Full-time domestic workers (those who work at least 40 hours per week for a single employer) are covered. Self-employed individuals may opt-in. (ABB combined PFML chart) (N.Y. Workers' Comp. Law §§ 201(4), 212(2), (4)(B), 212-A, 212-B (as amended by S. 6406C))

Feature	Minnesota	New Jersey	New York
Allowance of Competitive (private or self insurance) Plans	Yes, for equivalent or greater benefits than the state plan. (https://www.house.mn.gov/hrd/bs/93/HF0002.pdf)	Yes, for equivalent or greater benefits than the state plan. (ABB combined PFML chart)	Yes, employers can provide coverage by purchasing insurance (either from the state fund or a private insurer) or by becoming an approved self-insurer. (ABB combined PFML chart)
Qualifying events	1. Bonding with a new child (birth, adoption, foster). 2. Care for family member with serious health condition. 3. Care for own serious health condition. 4. Qualifying exigency arising out of family member being on active duty (or having been notified of an impending call or order to active duty). 5. Engaging in certain activities related to individual or family member being victim of domestic abuse, sexual assault, or stalking. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	1. Care for new child (birth, adoption, foster). 2. Care for family member with serious health condition. 3. Care for own disability (must be continuously and totally unable to perform customary work), includes pregnancy. 4. Engaging in certain activities related to individual or family member being victim of domestic or sexual violence. (N.J. Stat. Ann. §§ 43:21-27(g), (o); A. 3975,	1. Bonding with new child (birth, adoption, foster). 2. Care for family member with serious health condition. 3. Qualifying exigency arising out of spouse, domestic partner, child or parent being on active duty (or having been notified of an impending call or order to active duty). 4. Care for own disability (must be unable to perform work). (N.Y. Workers' Comp. Law § 201(14) (as amended by S. 6406C))
Qualifying family members/ definition of family	(1) Child, (2) spouse or domestic partner, (3) parent, (4) parent of a spouse or domestic partner, (5) grandparent, (6) spouse's/domestic partner's grandparent, (7) sibling, (8) grandchild, (9) son- or daughter-in-law, (10) individual with whom the covered individual has a relationship that creates an expectation and reliance that the applicant care for the individual, whether or not the applicant and the individual reside together. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	A family member includes an employee's child, parent, parent-in-law, sibling, grandparent, grandchild, spouse, registered domestic partner, civil union partner, any other person related to the employee by blood, and any other person that the employee shows to have a close association with the employee which is the equivalent of a family relationship. (ABB combined PFML chart) (N.J. Stat. Ann. § 43:21-27(n); A. 3975, 218th Leg., Reg. Sess. (N.J. 2019))	(1) Child, (2) parent, (3) parent-in-law, (4) spouse, (5) grandchild, (6) grandparent, (7) domestic partner, (8) sibling. The law's definition of domestic partner is flexible and does not require registration. The definition of domestic partner includes any person who is at least 18 years old and "is dependent upon the employee for support as shown by either unilateral dependence or mutual interdependence, as evidenced by a nexus of factors including, but not limited to, common ownership of real or personal property, common householding, children in common, signs of intent to marry, shared budgeting, and the length of the personal relationship with the employee . . . ." (ABB combined PFML chart) (N.Y. Workers' Comp. Law § 201(16), (17), (19)-(21) (as amended by S. 6406C))

Feature	Minnesota	New Jersey	New York
Advanced Notice Requirements	30 days or as soon as is practicable. (https://www.house.mn.gov/hrd/bs/93/HF0002.pdf)	For family leave to care for a family member with a serious health condition, reasonable advance notice is required unless the need for leave is unexpected, or the time of the leave changes for unforeseeable reasons. For intermittent family leave, 15 days' notice. For leave to bond with a newborn or newly adopted child, 30 days' notice. (https://www.nj.gov/labor/forms_pdfs/tdi/WPR-119%20(1-18).pdf)	At least 30 days in advance, if foreseeable. (https://paidfamilyleave.ny.gov/paid-family-leave-family-care)

ELIGIBILITY REQUIREMENTS: Oregon, Rhode Island, Washington

Feature	Oregon	Rhode Island	Washington
Employment requirements (minimum earnings/hours)	Employee must have earned at least $1,000 during the base year and paid into the Paid Family and Medical Leave Insurance Fund. The base year is the first 4 of the last 5 completed quarters or the 4 most recently completed quarters. This can combine income from more than one employer. (H.B. 2005 §§ 2(11), 3, 80th Leg. Assembly, Reg. Sess. (Or. 2019) (enacted))	Employee must have been paid wages in Rhode Island and paid into the TDI/TCI fund and must have been paid at least $16,800 in the base period. Alternately, employees qualify if they earned at least $2,800 in a quarter of their base period, their total base period taxable wages were at least 150% of their highest quarter of earnings, and their taxable wages during their base period are $5,600 or more. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	Employee must have worked at least 820 hours in the qualifying period. The qualifying period means the first 4 of the 5 most recently completed quarters or the 4 most recent completed quarters. This can combine hours worked at more than one employer. (ABB combined PFML chart) (S.B. 5975 §§ 2-3, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))
Opt-in for self employed	Yes	No	Yes
Industry/firm exemptions (e.g., public sector and small businesses)	Almost all employers are covered Self-employed individuals and independent contractors can opt in. Employees of federal and tribal governments are not covered. Tribal governments may opt in to coverage. (ABB combined PFML chart) (H.B. 2005 §§ 2(14), 3, 80th Leg. Assembly, Reg. Sess. (Or. 2019) (enacted))	Employees covered by the state unemployment insurance law, except for public employees, are covered. Public employers can opt in to coverage, as can some unions covering public sector employees through the collective bargaining process. (ABB combined PFML chart) (R.I. Gen. Laws §§ 28-39-2, -3)	All employees are covered. (ABB combined PFML chart) (S.B. 5975, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))
Allowance of Competitive (private or self insurance) Plans	Yes, for equivalent or greater benefits than the state plan. (ABB combined PFML chart)	No. (ABB combined PFML chart)	Yes, for equivalent or greater benefits than the state plan. (ABB combined PFML chart)

Feature	Oregon	Rhode Island	Washington
Qualifying events	1. Bonding with new child (birth, adoption, foster). 2. Care for family member with serious health condition. 3. Care for own serious health condition. 4. Certain purposes arising out of employee or employee's minor child/dependent experiencing domestic violence, harassment, sexual assault or stalking. 5. Effective in 2022, care for a child whose school or childcare provider has closed due to a public health emergency. (State Paid Family Leave Laws chart, National Partnership for Women and Families) (H.B. 2005 § 2(17), (19), (21), § 4; 80th Leg. Assembly, Reg. Sess. (Or. 2019) (enacted); Or. Rev. Stat. § 659A.272)	1. Bonding with new child (birth, adoption, foster). 2. Care for family member with serious health condition. 3. Care for own disability (must be unable to perform regular or customary work; partially unemployed workers may be able to claim benefits). (R.I. Gen. Laws §§ 28-39-2, 28-41-5(d)), 28-41-35(a))	1. Bonding with new child (birth, adoption, foster). 2. Care for family member with serious health condition. 3. Care for own serious health condition. 4. Qualifying exigency arising out of family member being on active duty (or having been notified of an impending call or order to active duty). (S.B. 5975, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))
Qualifying family members/ definition of family	(1) Child, (2) parent or parent of a spouse or domestic partner, (3) spouse, (4) domestic partner, (5) grandparent or grandparent's spouse or domestic partner, (6) grandchild or grandchild's spouse or domestic partner, (7) sibling or sibling's spouse or domestic partner, (8) individual related by blood or affinity whose close association with the employee is the equivalent of a family relationship. (H.B. 2005 § 2(18), 80th Leg. Assembly, Reg. Sess. (Or. 2019) (enacted))	(1) Child, (2) parent, (3) parent-in-law or parent of the employee's registered domestic partner, (4) grandparent, (5) spouse, (6) registered domestic partner. (ABB combined PFML chart) (R.I. Gen. Laws § 28-41-35(a))	(1) Child, (2) child's spouse or domestic partner, (3) grandchild, (4) grandparent, (5) parent, (6) parent-in-law or parent of the employee's registered domestic partner, (7) sibling, (8) spouse, (9) registered domestic partner, (10) any individual who regularly resides in a worker's home where there is an expectation that the worker care for the individual; or any individual where the relationship creates the expectation that the worker care for the individual and that individual depends on the worker for care (see ABB combined PFML chart) (S.B. 5975 § 2, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))
Advanced Notice Requirements	Minimum 30 days notice for planned leave, within 24 hours of taking leave for unplanned leave. (https://paidleave.oregon.gov/employees/applying-for-medical-leave.html)	30-days notice in writing, unless "unforeseeable circumstances" prevail. (https://dlt.ri.gov/individuals/temporary-disability-caregiver-insurance/employers)	At least 30 days notice as circumstances allow. (https://paidleave.wa.gov/get-ready-to-apply/)

BENEFITS: Virginia, California, Colorado

Feature	Virginia	California	Colorado
Replacement Rate and Structure	Flat 80% rate (see § 60.2-804 (A)).	For employees whose quarterly earnings are at least $929 but less than 1/3 of the state average quarterly wage, the weekly benefit will be 70% of the employee's weekly wage; For employees whose quarterly earnings are at least 1/3 of the state average quarterly wage, the weekly benefit rate will be 23.3% of the state average weekly wage OR 60% of the employee's weekly wage, whichever is greater. Beginning on January 1, 2025: For employees whose quarterly earnings are at least $722.50 but 70% or less of the state average quarterly wage, the weekly benefit will be 90% of the employee's weekly wage; for employees whose quarterly earnings are more than 70% of the state weekly wage, the weekly benefit rate will be 63 percent of the state average weekly wage OR 70% of the employee's weekly wage, whichever is greater. Employees with quarterly earnings less than $722.50 will receive a weekly benefit of $50. (https://www.edd.ca.gov/Disability/Calculating_PFL_Benefit_Payment_Amounts.htm) (A.B. 908, 2015-2016 Leg., Reg. Sess. (Cal. 2016) (enacted)) (http://www.edd.ca.gov/about_edd/Quick_Statistics.htm) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	90% of an employee's average weekly wage up to an amount equal to 50% of the state average weekly wage, and 50% of an employee's average weekly wage above an amount equal to 50% of the state average weekly wage. (ABB combined PFML chart) (Colo. Rev. Stat. § 8-13.3.506)
Maximum period of leave (for Family and Medical Leave)	8 weeks total (see § 60.2-803 (A)).	8 weeks for family leave. (Cal. Unemp. Ins. Code § 3301(c); S.B. 83, 2019-2020 Leg., Reg. Sess. (Cal. 2019) (enacted)) 52 weeks for own disability. (Cal. Unemp. Ins. Code § 2653)	Up to 12 weeks in an application year. Employees with certain pregnancy- and childbirth-related health needs may receive up to an additional 4 weeks of benefits, which can be combined with other uses up to a total of 16 weeks in a 12-month period. (ABB combined PFML chart) (Colo. Rev. Stat. § 8-13.3-505)
Minimum period of leave (for Family and Medical Leave)	8 hours (see § 60.2-804 (D) and § 60.2-807).	No minimum length of leave time specified.	1 hour, but benefits aren't payable until a minimum of 8 hours. (Colo. Rev. Stat. § 8-13.3-505(3))

Feature	Virginia	California	Colorado
Taxability of benefits (federal and state income tax)	Yes (if IRS determines that benefits are subject to federal tax). State uses adjusted gross earnings from federal forms (see § 60.2-817).	Yes, federal taxes. (https://www.edd.ca.gov/Disability/FAQ_PFL_Benefits_Payments.htm)	Yes, federal taxes. (https://famli.colorado.gov/individuals-and-families/how-famli-works/individuals-and-families-faqs)
Minimum and maximum benefit	Minimum of $100 per week and maximum of 80% of regional average weekly wage (see § 60.2-804. (B) and (C)).	Maximum benefit of about 100% of the state average weekly wage (currently $1,620/week). Employees with quarterly earnings less than $722.50 will receive a weekly benefit of $50. (ABB combined PFML chart) (A.B. 908, 2015-2016 Leg., Reg. Sess. (Cal. 2016) (enacted)) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	Maximum benefit of $1,100 per week initially, adjusted annually after the first year to 90% of the statewide average weekly wage. (ABB combined PFML chart) (Colo. Rev. Stat. § 8-13.3.506)
Leave stacking (maximum usage of both family and medical leave in one year)	Yes until 8 weeks total (see § 60.2-803 (A)).	Not specified.	12 weeks, with an additional 4 weeks for pregnancy and child-birth-related health needs as applicable for a total of 16 weeks. (Colo. Rev. Stat. § 8-13.3-505) (ABB combined PFML chart)
Interaction of employer benefits before family and medical leave [usage of other benefits allowed (e.g. sick leave/vacation leave)]	Permits supplemental employer PFML benefits (see § 60.2-810 (B)).	Employer may require employee to use up to two weeks of vacation leave or paid time off prior to receiving Paid Family Leave benefits. Program permits employer-supplemented wages. (https://edd.ca.gov/disability/integration-coordination.htm)	Must be used before paid sick leave/annual leave. Taken concurrently with leave under the FMLA. (Colo. Rev. Stat. § 8-13.3-510(1)) (https://dpa.colorado.gov/about-us/faqs/paid-family-medical-leave-faq) (https://famli.colorado.gov/employers/employer-faqs)
Benefit waiting period	No waiting period (see § 60.2-804. (B)).	7 days for own health, no waiting period for family leave. (ABB combined PFML chart) (Cal. Unemp. Ins. Code §§ 2627(b), 3303 (as amended by A.B. 908))	No waiting period. (ABB combined PFML chart) (Colo. Rev. Stat. § 8-13.3-505(3))
Employment guarantee	Yes (see § 60.2-808.).	No. Employees may have protections under other laws, such as the FMLA or the California Family Rights Act. (ABB combined PFML chart)	Yes, if they have been employed by their employer for at least 180 days before taking leave. (ABB combined PFML chart) (Colo. Rev. Stat. § 8-13.3-509)

BENEFITS: Connecticut, D.C., Delaware

Feature	Connecticut	District of Columbia	Delaware
Replacement Rate and Structure	95% of an employee's average weekly wage up to 40 times the Connecticut minimum wage plus 60% of an employee's average weekly wage above 40 times the Connecticut minimum wage. (S.B. 1 § 3(c)(2), 2019 Leg., Reg. Sess. (Conn. 2019) (enacted))	90% of an employee's average weekly wage up to an amount equal to 40 times 150% of the D.C. minimum wage and 50% of an employee's average weekly wage above an amount equal to 40 times 150% of the D.C. minimum wage. Employees with less than a year of total covered employment will receive a smaller benefit, pro-rated based on the numbers of weeks the employee has worked in covered employment. (State Paid Family Leave Laws chart, National Partnership for Women and Families) (D.C. Law 21-264 § 104(g) (D.C. 2016))	Weekly benefit of 80% of the covered individual's average weekly wages. (S.B. 1 § 3704(a)(1), 151st Gen. Assembly (Del. 2022))
Maximum period of leave (for Family and Medical Leave)	12 weeks (14 if employee experiences incapacitating serious health condition that occurs during pregnancy); if two spouses work for same employer, can only take 12 weeks combined (S.B. 1 § 18, 2019 Leg., Reg. Sess. (Conn. 2019) (enacted))	12 weeks. (https://dcpaidfamilyleave.dc.gov/workers/) (D.C. Law 21-264 §§ 101(12)-(17), 104(d) (D.C. 2016))	6 weeks in any 24-month period (SDI and family caretaking). 12 weeks for paretntal leave. (S.B. 1 § 3703(a)(2), 151st Gen. Assembly (Del. 2022))
Minimum period of leave (for Family and Medical Leave)	Not specified, but intermittent leave is not explicitly permitted, it has to be negotiated between employee and employer. (https://www.cga.ct.gov/current/pub/chap_557.htm#sec_31-51ll)	1 day. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	1 work day per week. (S.B. 1 § 3704(b), 151st Gen. Assembly (Del. 2022))
Taxability of benefits (federal and state income tax)	Yes, if the IRS determines that benefits are subject to federal income tax. (https://service.ctpaidleave.org/s/frequently-asked-questions?language=en_US)	Yes, federal and District taxes. (https://does.dc.gov/page/dc-paid-family-leave)	Yes, federal and state taxes. (S.B. 1 § 3714, 151st Gen. Assembly (Del. 2022))

Feature	Connecticut	District of Columbia	Delaware
Minimum and maximum benefit	Maximum benefit of 60 times the Connecticut minimum wage. (S.B. 1 § 3(c)(2), 2019 Leg., Reg. Sess. (Conn. 2019) (enacted))	Maximum of $1,118 per week, adjusted annually based on inflation. (Features of State Paid Family Leave Programs chart, Bipartisan Policy Center) (D.C. Law 21-264 § 104(g) (D.C. 2016))	Maximum benefit of $900 initially, with an annual increase proportional to the annual average wage increase after 2027. Minimum benefit of $100 or the employee's full average weekly wage if average weekly wage is less than $100. (S.B. 1 § 3704(a)(2-3), 151st Gen. Assembly (Del. 2022))
Leave stacking (maximum usage of both family and medical leave in one year)	12 weeks. (ABB combined PFML chart)	12 weeks. (D.C. Law 21-264 §§ 101(12)-(17), 104(d) (D.C. 2016)) (Features of State Paid Family Leave Programs chart, Bipartisan Policy Center)	12 weeks. (S.B. 1 § 3703(a), 151st Gen. Assembly (Del. 2022))
Interaction of employer benefits before family and medical leave [usage of other benefits allowed (e.g. sick leave/vacation leave)]	Employer may require or allow an employee to use their PTO concurrently with PFML. (https://ctpaidleave.org/s/frequently-asked-questions?language=en_US)	Employer-determined. (https://dcpaidfamilyleave.dc.gov/frequently-asked-questions/)	Leave that also qualifies for FMLA runs concurrently with leave taken under the FMLA and may not be taken in addition to leave under the FMLA. Concurrence of disability leave or the use of accrued PTO before family and medical leave are at the employers discretion. (S.B. 1 § 3709(a), 151st Gen. Assembly (Del. 2022))
Benefit waiting period	No waiting period. (ABB combined PFML chart)	No waiting period. (D.C. Law 21-264 § 104(b) (D.C. 2016)) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	No waiting period. (State Paid Family Leave Laws chart, National Partnership for Women and Families)
Employment guarantee	Yes, if employee has been employed for at least three months immediately preceding request for leave, except for leaves taken for safe time. Safe time may be protected under CT's family violence leave law. (ABB combined PFML chart) (S.B. 1 § 17, 2019 Leg., Reg. Sess. (Conn. 2019) (enacted))	Not more than FMLA and D.C. FMLA (D.C. FMLA covers individuals at employers with 20 or more employees). (https://dcpaidfamilyleave.dc.gov/frequently-asked-questions/)	Yes. (S.B. 1 § 3707(a), 151st Gen. Assembly (Del. 2022))

BENEFITS: Maine, Maryland, Massachusetts

Feature	Maine	Maryland	Massachusetts
Replacement Rate and Structure	90% of an employee's average weekly wage up to an amount equal to 50% of the state average weekly wage, and 66% of an employee's average weekly wage above an amount equal to 50% of the state average weekly wage. (ABB combined PFML chart)	90% of an employee's average weekly wage up to an amount equal to 65% of the state average weekly wage, and 50% of an employee's average weekly wage above an amount equal to 65% of the state average weekly wage. (ABB combined PFML chart) (S.B. 275 § Subtitle 7, 8.3–703(B), 444th Leg., Reg. Sess. (Md. 2022))	80% of an employee's average weekly wage up to an amount equal to 50% of the state average weekly wage and 50% of an employee's average weekly wage above an amount equal to 50% of the state average weekly wage. (ABB combined PFML chart) (H. 4640 § 29(3(b)), 30, 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted)
Maximum period of leave (for Family and Medical Leave)	12 weeks, all forms of leave. (State Paid Family Leave Laws chart, National Partnership for Women and Families) (Features of State Paid Family Leave Programs chart, Bipartisan Policy Center)	12 weeks. (S.B. 275 § Subtitle 7, 8.3–701(B), 444th Leg., Reg. Sess. (Md. 2022)) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	Own health: Up to 20 weeks in any benefit year. Family leave: Up to 12 weeks in any benefit year. Military caregivers can receive up to 26 weeks of family leave in any benefit year. (ABB combined PFML chart) (H. 4640 § 29(2)(c), 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted))
Minimum period of leave (for Family and Medical Leave)	8 hours. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	4 hours. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	1 hour (per requirements for intermittent leave). (https://www.mass.gov/info-details/understanding-the-different-ways-you-can-schedule-your-leave#types-of-leave-schedules-)
Taxability of benefits (federal and state income tax)	Yes, if the IRS determines that benefits are subject to federal income tax. P.L. 2023 §§ 850-M, ch. 412, 131st Leg., 1st Spec. Sess. (Me. 2023)	Yes, if the IRS determines that benefits are subject to federal income tax. (S.B. 275 § Subtitle 7, 8.3–704, 444th Leg., Reg. Sess. (Md. 2022))	Yes, if the IRS determines that benefits are subject to federal income tax. (https://www.mass.gov/info-details/paid-family-and-medical-leave-pfml-overview-and-benefits#getting-paid-and-taxes-on-benefits-)

Feature	Maine	Maryland	Massachusetts
Minimum and maximum benefit	Maximum benefit of 100% of the state average weekly wage. (ABB combined PFML chart)	Maximum benefit of $1,000, minimum benefit of $50, adjusted for inflation in the future. (ABB combined PFML chart) (S.B. 275 § Subtitle 7, 8.3–703(B), 444th Leg., Reg. Sess. (Md. 2022))"	Maximum benefit of 64% of the state average weekly wage (currently $1,149.90/week). (ABB combined PFML chart) (H. 4640 § 29(3(b)), 30, 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted)
Leave stacking (maximum usage of both family and medical leave in one year)	12 weeks. (ABB combined PFML chart)	12 weeks, with an additional 12 weeks if the covered individual is eligible for leave both to bond with a new child (birth, adoption, foster, kinship care) AND is eligible for leave to care for own serious health condition in the same year. Either event can come first. (S.B. 275 § Subtitle 7, 8.3–701(B), 444th Leg., Reg. Sess. (Md. 2022)) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	26 weeks. (H. 4640 § 29(2)(c), 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted))
Interaction of employer benefits before family and medical leave [usage of other benefits allowed (e.g. sick leave/vacation leave)]	Not specified.	Employees must exhaust employer-provided leave not required under law before receiving family and medical leave benefits. (S.B. 275 § Subtitle 7, 8.3–702(C), 444th Leg., Reg. Sess. (Md. 2022))	Employer determined. (Chapter 175M, section 2(h)(2) https://malegislature.gov/Laws/SessionLaws/Acts/2018/Chapter121)
Benefit waiting period	7 days for own health, no waiting period for family leave. (ABB combined PFML chart)	No waiting period. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	7 days, but waiting period is not required for family leave taken immediately after a period of medical leave for pregnancy or childbirth recovery. (ABB combined PFML chart) (H. 4640 §§ 29(3(a)), 30, 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted))
Employment guarantee	Yes, if they have been employed by their employer for at least 120 days before taking leave. (ABB combined PFML chart)	Yes, with an exception for "substantial and grievous economic injury to the operations of employer." (S.B. 275 § Subtitle 7, 8.3-706, 444th Leg., Reg. Sess. (Md. 2022)) (State Paid Family Leave Laws chart, National Partnership for Women and Families)	Yes. (H. 4640 §§ 29(2(e)), 30, 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted))

BENEFITS: Minnesota, New Jersey, New York

Feature	Minnesota	New Jersey	New York
Replacement Rate and Structure	90% of an employee's average weekly wage up to 50% of the state average weekly wage, 66% of an employee's wages between 50% and 100% of the state average weekly wage, and 55% of an employee's wages that exceed the state average weekly wage. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	85% of an employee's average weekly wage. (ABB combined PFML chart) (A. 3975, 218th Leg., Reg. Sess. (N.J. 2019)) (https://www.myleavebenefits.nj.gov/labor/myleavebenefits/worker/fli/index.shtml)	Own health (TDI): 50% of an employee's average weekly wage. Family leave: 67% of an employee's average weekly wage. (ABB combined PFML chart) (N.Y. Workers' Comp. Law §§ 204(2)(A), (B) (as amended by S. 6406C))
Maximum period of leave (for Family and Medical Leave)	12 weeks for serious health condition. 12 weeks for bonding, family leave, safe leave or caring for a covered servicemember. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	Own health (TDI): Up to 26 weeks for any period of disability. Family leave: Up to 12 weeks in a 12-month period. (ABB combined PFML chart) (N.J. Stat. Ann. § 43:21-38; A. 3975, 218th Leg., Reg. Sess. (N.J. 2019))	Own health (TDI): Up to 26 weeks for any period of disability or in any 52-week period. Family leave: Up to 12 weeks in a 52-week period. (ABB combined PFML chart) (N.Y. Workers' Comp. Law §§ 204(2)(A), 205(1)(A) (as amended by S. 6406C))
Minimum period of leave (for Family and Medical Leave)	1 day per week; other than for bonding claims, qualifying event must last at least 7 calendar days. (State Paid Family Leave Laws chart, National Partnership for Women and Families)	No minimum specified.	1 day. (State Paid Family Leave Laws chart, National Partnership for Women and Families)
Taxability of benefits (federal and state income tax)	Yes, state taxes. Federal taxability status pending a decision from the IRS. (https://mn.gov/deed/paidleave/employers/faq/)	Yes, federal taxes. (https://www.lfg.com/public/employersorganizations/employeebenefits/benefitsolutions/paidfamilyleave/newjersey)	Yes, federal taxes. (https://www.tax.ny.gov/pit/file/paid_family_leave.htm)
Minimum and maximum benefit	Maximum benefit of 100% of the state average weekly wage. (ABB combined PFML chart)	Maximum benefit of 70% of the state average weekly wage (currently $903/week). (ABB combined PFML chart) (A. 3975, 218th Leg., Reg. Sess. (N.J. 2019))	Maximum benefit of $170/week for own health leave (TDI) and 67% of the state average weekly wage for family leave (currently $1,151.16/week). Minimum benefit of $20. (ABB combined PFML chart) (N.Y. Workers' Comp. Law §§ 204(2)(A), (B) (as amended by S. 6406C))

Feature	Minnesota	New Jersey	New York
Leave stacking (maximum usage of both family and medical leave in one year)	18 weeks. An applicant may receive six more weeks due to pregnancy complications or pregnancy recovery only, for a total of 24 weeks in a single benefit year. (https://www.house.mn.gov/hrd/bs/93/HF0002.pdf)	Not specified.	26 weeks. (N.Y. Workers' Comp. Law §§ 204(2)(A), 205(1)(A) (as amended by S. 6406C))
Interaction of employer benefits before family and medical leave [usage of other benefits allowed (e.g. sick leave/vacation leave)]	Employers may require that leave taken under Paid Leave run concurrently with leave taken for the same purpose under the Minnesota Parental Leave Act. Employees may elect, but employers are not allowed to require, to use vacation, sick, paid time off, or disability insurance payments instead of the family and medical leave benefits when they are concurrently eligible for both, and affords an employee making that election the same employment protections. (https://mn.gov/deed/paidleave/employers/faq/) (https://www.house.mn.gov/hrd/bs/93/HF0002.pdf)	Certain employers may be able to require the use of PTO before TDI. Employers cannot require the use of PTO before FLI, but employees may choose to use PTO in addition to FLI benefits. (https://www.nj.gov/labor/myleavebenefits/help/faq/fli.shtml) (https://www.nj.gov/labor/myleavebenefits/help/faq/tdi.shtml)	Employer may require PFML to run concurrently with FMLA. Short-term disability cannot be taken at the same time. Cannot claim PFML at the same time as Workers' Comp. Employer decides how to handle other maternity/paternity leave policies they may have. Sick/vacation time interaction is up to the employer. (https://paidfamilyleave.ny.gov/paid-family-leave-and-other-benefits)
Benefit waiting period	No waiting period. (ABB combined PFML chart)	7 days for own health. Back paid if the employee is eligible for benefits during the following 3 consecutive weeks. (ABB combined PFML chart) (N.J. Stat. Ann. § 43:21-38; A. 3975, 218th Leg., Reg. Sess. (N.J. 2019))	7 days for own health, no waiting period for family leave. (ABB combined PFML chart) (N.Y. Workers' Comp. Law § 204(1) (as amended by S. 6406C))
Employment guarantee	Yes, for employees with employment beginning at least 90 days before taking leave. (ABB combined PFML chart)	Not more than FMLA and NJ FLA. Beginning on June 30, 2019, NJ FLA is expanded to apply to employers with 30 or more employees. (A. 3975, 218th Leg., Reg. Sess. (N.J. 2019))	Own health: No more than under FMLA or NY PFMLA. PFL: Yes. (N.Y. Workers' Comp. Law § 203-b (as amended by S. 6406C))

BENEFITS: Oregon, Rhode Island, Washington

Feature	Oregon	Rhode Island	Washington
Replacement Rate and Structure	100% of an employee's average weekly wage up to an amount equal to 65% of the state average weekly wage and 50% of an employee's average weekly wage above an amount equal to 65% of the state average weekly wage. (ABB combined PFML chart) (H.B. 2005 § 7, 80th Leg. Assembly, Reg. Sess. (Or. 2019) (enacted))	4.62% of an employee's wages in the highest earning quarter of the base year. Employees may also be entitled to a dependency allowance for minor children or adult children who are incapacitated due to physical or mental illness. (ABB combined PFML chart) (http://www.dlt.ri.gov/tdi/tdifaqs.htm) (http://www.dlt.ri.gov/lmi/uiadmin.htm)	90% of an employee's average weekly wage up to an amount equal to 50% of the state average weekly wage and 50% of an employee's average weekly wage above an amount equal to 50% of the state average weekly wage. (ABB combined PFML chart) (S.B. 5975, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))
Maximum period of leave (for Family and Medical Leave)	12 weeks (14 if employee experiences limitations related to pregnancy, childbirth or a related medical condition, including but not limited to lactation). (H.B. 2005 § 4, 80th Leg. Assembly, Reg. Sess. (Or. 2019) (enacted))	Own health (TDI): Up to 30 weeks in a 52-week period. Family leave (TCI): Up to 6 weeks in a 52-week period. (ABB combined PFML chart) (R.I. Gen. Laws §§ 28-41-7, 28-41-35(e)))	Own health: Up to 12 weeks in a 52-week period. Family leave: Up to 12 weeks in a 52-week period. Employees with certain pregnancy-related health needs may receive up to an additional 2 weeks of benefits, which can be combined with other uses up to a total of 18 weeks in a 52-week period. (ABB combined PFML chart) (S.B. 5975 § 6, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))
Minimum period of leave (for Family and Medical Leave)	1 work day. (https://paidleave.oregon.gov/employees/applying-for-medical-leave.html)	7 days. (https://dlt.ri.gov/individuals/temporary-disability-caregiver-insurance/claimants/temporary-disability-tdi-faq)	8 consecutive hours. (S.B. 5975 § 6, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))
Taxability of benefits (federal and state income tax)	Not specified at this time	TDI is not, but TCI is subject to state and federal tax. (https://dlt.ri.gov/individuals/temporary-disability-caregiver-insurance/claimants/tdi-and-tci-tax-information)	Yes, if the IRS determines that benefits are subject to federal income tax. (https://paidleave.wa.gov/app/uploads/2022/01/2023-2024-1099s-insert.pdf)

Feature	Oregon	Rhode Island	Washington
Minimum and maximum benefit	Maximum benefit of 120% of the state average weekly wage (currently $1,568.60/week). Minimum benefit of 5% of the state average weekly wage (currently $65.36). (https://paidleave.oregon.gov/employees/overview.html) (H.B. 2005 § 7, 80th Leg. Assembly, Reg. Sess. (Or. 2019) (enacted))	Maximum benefit of 85% of the state average weekly wage (currently $1,043/week). Minimum benefit of $130/week. (https://dlt.ri.gov/tdi/) (https://dlt.ri.gov/sites/g/files/xkgbur571/files/2023-12/quickref-2024.pdf)	Maximum benefit of 90% of the state average weekly wage (currently $1,456/week). (ABB combined PFML chart) (S.B. 5975, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))
Leave stacking (maximum usage of both family and medical leave in one year)	12 weeks. (ABB combined PFML chart)	30 weeks. (R.I. Gen. Laws §§ 28-41-7, 28-41-35(e))) (ABB combined PFML chart)	16 weeks. (S.B. 5975 § 6, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))
Interaction of employer benefits before family and medical leave [usage of other benefits allowed (e.g. sick leave/vacation leave)]	Employer discretion. (https://paidleave.oregon.gov/resources/common-questions.html)	Unclear. One policy document states: Employees are required to discharge other forms of leave concurrently with PFML. (http://www.hr.ri.gov/documents/Policies%20&%20Communications/FMLA%20Policy%206-6-17.pdf Duration and Nature of Leave, Relationship to Other Leave). Bill legislation states: The taking of parental leave or family leave pursuant to this chapter shall not result in the loss of any benefit accrued before the date on which the leave commenced. (http://webserver.rilin.state.ri.us/Statutes/TITLE28/28-48/28-48-4.HTM § 28-48-4(a))	Not specified.
Benefit waiting period	No waiting period. (ABB combined PFML chart)	No waiting period. (ABB combined PFML chart) (11-000-002 R.I. Code R. §§ 16(G), 37(D))	No waiting period for bonding leave, 7 days for all other leave. (ABB combined PFML chart) (S.B. 5975, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))
Employment guarantee	Yes, if they have been employed by their employer for at least 90 days before taking leave. (ABB combined PFML chart) (H.B. 2005 § 10, 80th Leg. Assembly, Reg. Sess. (Or. 2019) (enacted))	Own health (TDI): No more than under FMLA or RI PFMLA. Family leave (TCI): Yes. (R.I. Gen. Laws § 28-41-35(f))	Not more than FMLA or WA FMLA. Leave for pregnancy disability is protected for six weeks for individuals at employers with eight or more employees. (S.B. 5975, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))

ADMINISTRATION/OTHER

State	Public or Private Program Administration
Virginia	Public administration by Virginia Employment Commission. ((§ 60.2-801))
California	Public administration by the California Employment Development Department. (https://edd.ca.gov/siteassets/files/pdf_pub_ctr/de2530.pdf)
Colorado	Publicly administered by the created Division of Family and Medical Leave Insurance within the Colorado Department of Labor. (Colo. Rev. Stat. § 8-13.3-508)
Connecticut	Public Administration by the Paid Family and Medical Leave Insurance Authority under the Connecticut Department of Administrative Services. (https://portal.ct.gov/DAS/Communications/PFMLI-Authority)
District of Columbia	Public administration through the Department of Employment Services. (https://dcpaidfamilyleave.dc.gov/)
Delaware	Public administration by the Delaware Department of Labor. (S.B. 1 § 3705(a), 151st Gen. Assembly (Del. 2022)) (S.B. 1 § 3701(5), 151st Gen. Assembly (Del. 2022))
Maine	Public. Non-specified department administering the program under the authority of the Paid Family and Medical Leave Benefits Authority. (P.L. 2023 §§ 850-O, ch. 412, 131st Leg., 1st Spec. Sess. (Me. 2023))
Maryland	Public administration by the Maryland Department of Labor. (S.B. 275 § Subtitle 4, 8.3–401, 444th Leg., Reg. Sess. (Md. 2022)) (S.B. 275 § Subtitle 4, 8.3–402, 444th Leg., Reg. Sess. (Md. 2022)) (S.B. 275 § Subtitle 1, 8.3–101(F), 444th Leg., Reg. Sess. (Md. 2022))
Massachusetts	Public administration by a department of family and medical leave within the executive office of labor and workforce development. (https://malegislature.gov/Laws/SessionLaws/Acts/2018/Chapter121 Chapter 175M, section 8(a))

Minnesota	Public administration by the Family and Medical Benefits Insurance Division to be created within the Department of Employment and Economic Development. (https://www.house.mn.gov/hrd/bs/93/HF0002.pdf)
New Jersey	Public administration by the Division of Temporary Disability and Family Leave Insurance under the Department of Labor and Workforce Development. (https://www.nj.gov/labor/myleavebenefits/)
New York	Public administration by the New York state government. (https://paidfamilyleave.ny.gov/)
Oregon	Public administration by a division of the Oregon Employment Department. (https://paidleave.oregon.gov/)
Rhode Island	Public administration by the Rhode Island Department of Labor and Training. (https://dlt.ri.gov/individuals/temporary-disability-caregiver-insurance)
Washington	Public administration by the state Employment Security Department. (https://paidleave.wa.gov/)

Source: A Better Balance, National Partnership for Women and Families, Bipartisan Policy Center, Various State Legislative Websites

APPENDIX C: MILLIMAN ACTUARIAL STUDY

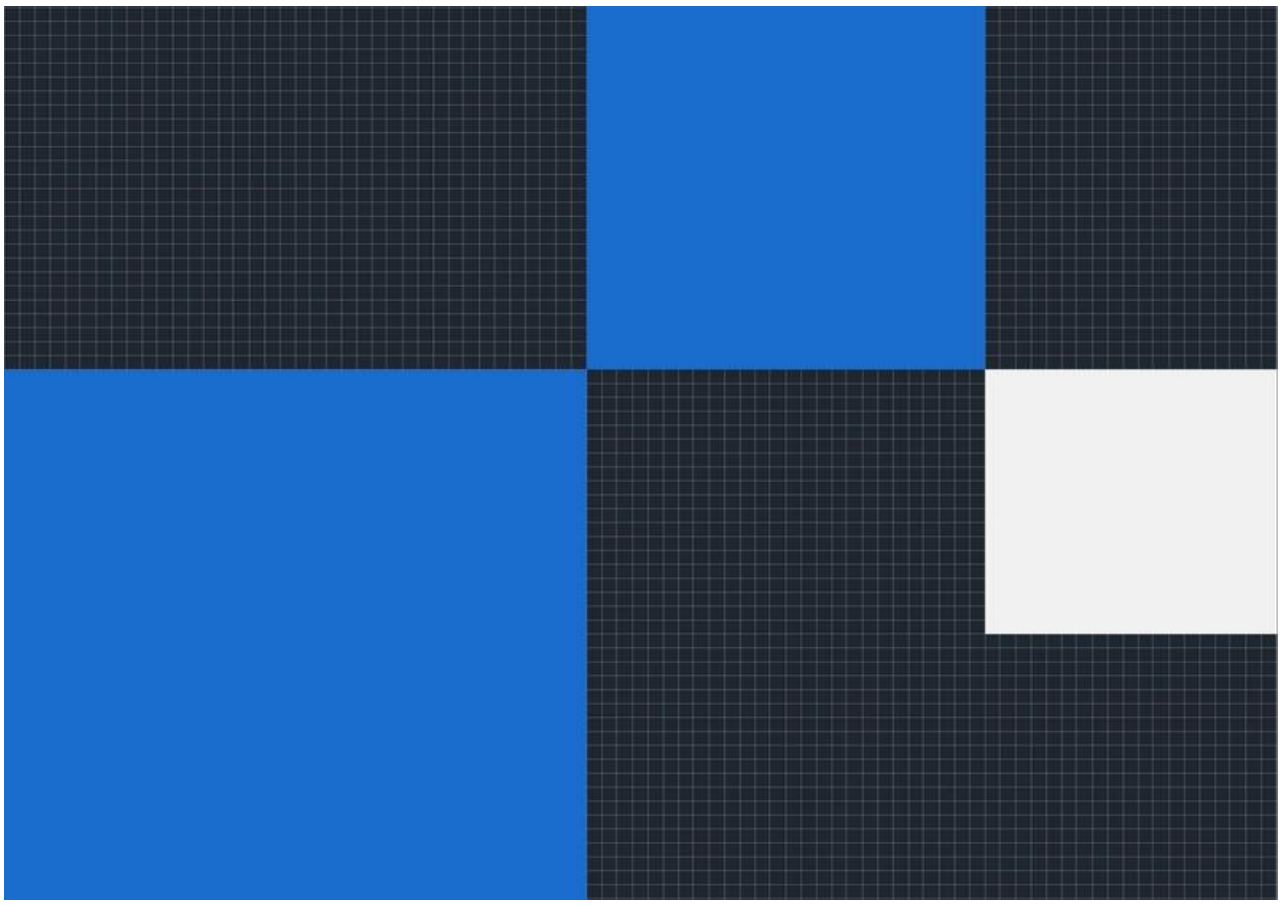
MILLIMAN REPORT

Actuarial Analysis for a Paid Family and Medical Leave Program in Virginia

Commissioned by the Rector and Visitors of the University of Virginia

November 13, 2024

Paul Correia, FSA, MAAA



Milliman

Table of Contents

Section 1 – Introduction

Milliman was engaged by the Rector and Visitors of the University of Virginia (UVA) to perform an actuarial analysis for a mandatory paid family and medical leave (PFML) program in the State of Virginia. In performing this analysis, we considered three different PFML program options specified by UVA and summarized below:

- **Option 1** – This option includes the PFML benefits defined in Virginia Senate Bill 373 (SB 373) of the 2024 legislative session, which include benefit amounts equal to 80% of an employee's average weekly wages up to 80% of the regional average weekly wage. This structure provides a maximum of 80% wage replacement at lower income levels, and the replacement ratio decreases at higher wage levels due to the maximum weekly benefit amount. The maximum benefit period is 8 weeks within an application year. State, designated local government, and federal employers are excluded from participating in the program. Participating employers are allowed to provide PFML benefits through private plans (i.e., insurance coverage that provides PFML benefits at least equivalent to the benefits defined in statute) rather than the *Family and Medical Leave Insurance Trust Fund* ("Fund"). Employers with 10 or fewer employees are exempt from remitting the employer portion of premium contributions to the Fund.

- **Option 2** – This option includes the PFML benefits defined in Virginia House Bill 2016 (HB 2016) of the 2021 legislative session, which also features benefits equal to 80% of an employee's average weekly wages; however, the maximum weekly benefit amount is 80% of the state average weekly wage and the maximum benefit period is 12 weeks within an application year. Also, HB 2016 requires participation from all employers except federal employers, it does not include a small employer exemption, and private plan options are excluded from the program (meaning all employers would provide benefits through the Fund).

- **Option 3** – This option is the same as Option 1 except that all employers are assumed to participate in the program, excluding federal employers. All other benefits and provisions are the same between Options 1 and 3.

This report contains estimated contribution rates and financial projections for the PFML program options described above, along with documentation of the data, assumptions, and methods we used. We estimated contribution rates in 2026 and 2027 based on sound actuarial methods (as required in the proposed legislation), and we calculated contribution rates in 2028 and beyond based on guidelines from SB 373 Section 60.2-806 and HB 2016 Section 60.2-804 that specify setting the contribution rates in a manner that would maintain a target fund ratio (i.e., end-of-year fund balance divided by expenditure from the prior 12-months) of 140%.

At UVA's request, we also calculated an alternative set of contribution rates for the Virginia PFML program options based on a different interpretation of these guidelines that would maintain a target fund ratio of 40% rather than 140% in 2028 and beyond. This alternative interpretation is consistent with the approaches used by California, Colorado, and Washington for setting PFML contribution rates. The contribution rates and financial projections for this alternative scenario are included in Appendix A of this report.

Appendix B includes additional details on the PFML benefits assumed in our analysis, and Appendix C contains a bibliography of sources we used to develop the actuarial assumptions.

Data Reliance

In performing the research and analysis for this project, Milliman relied on publicly available data from states with mandatory PFML programs, and other publicly available information from short-term disability rating manuals, the US Census Bureau, and the Social Security Administration. Milliman also relied on Virginia employment and demographic data provided to us by UVA. To the extent that any of the data or other information is incorrect or inaccurate, the results of our analysis could be affected and may need to be revised.

Distribution

Milliman's work is prepared solely for the use and benefit of UVA. Milliman recognizes that this report may be public records subject to disclosure to third parties. Milliman does not intend to benefit and assumes no duty or liability to any third-party recipients of the report. To the extent that this report is not subject to disclosure under applicable public records laws, UVA shall not disclose Milliman's work to any third parties without our prior written consent.

Variability of Results

In order to provide this information, we have constructed a model and have made assumptions about future claim experience. Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is nearly certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

Certification

On the basis of the foregoing, I hereby certify that, to the best of my knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices that are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying Opinions, and supporting Recommendations of the American Academy of Actuaries.

Qualifications

I, Paul Correia, FSA, MAAA, am a consulting actuary for Milliman, Inc. and a member of the American Academy of Actuaries. I meet the qualification standards of these organizations for rendering the actuarial opinions contained herein.

Section 2 – Executive Summary

We developed actuarial assumptions for estimating PFML claim costs and required contributions for the Virginia PFML program options, and we calculated contribution rates as a percentage of taxable wages capped at the *Old-Age, Survivors, and Disability Insurance* (OASDI) wage limit. We calculated contribution rates in 2026 and 2027 that keep rates level in those years, and we calculated contribution rates for 2028 and beyond by targeting a fund ratio of 140%. The estimated overall contribution rates for the Virginia PFML program options are shown below in Table 1:

Table 1
Estimated Overall PFML Contribution Rates as a Percentage of Taxable Wages
Taxable Wages: OASDI

Program Option	2026*	2027**	2028	2029	2030	2031	2032	2033+
1	0.72%	0.72%	0.72%	0.69%	0.68%	0.66%	0.67%	0.66%
2	0.92%	0.92%	0.92%	0.88%	0.87%	0.85%	0.86%	0.85%
3	0.75%	0.75%	0.75%	0.71%	0.70%	0.69%	0.69%	0.69%

** Premium contributions begin*
*** Benefits begin*

Options 1 and 3 feature the same benefits and only vary in terms of participation—i.e., we assumed only private and nonexempted local government employers participate in Option 1 whereas all employers, except federal employers, are assumed to participate in Option 3. The contribution rates for Option 3 are slightly higher than Option 1 due to differences in demographics for the assumed covered employees. Option 3 (which includes state and designated local government employers) assumes a higher percentage of female employees and lower average wages than Option 1, resulting in higher contribution rates because female employees have higher incidence rates than male employees (e.g., maternity claims) and because Virginia PFML benefits provide higher income replacement to lower wage workers.

The estimated contribution rates for Option 2 are highest among the PFML program options because the maximum benefit period for Option 2 is 12 weeks in an application year, and it is only 8 weeks for Options 1 and 3.

We developed financial projections for the Virginia PFML program options from 2026 through 2035. Tables 2A, 2B, and 2C below summarize the projected contributions, expenditure (i.e., benefit payments and administrative expenses), investment income, and end-of-year Fund balances from 2026 through 2029. The estimated contributions shown below correspond to the contribution rates in Table 1 for each program option. We have assumed that 15% of eligible employees in Virginia would be covered under private plans for developing the financial projections shown below (i.e., we assumed 85% of eligible employees would be covered through the Fund based on experience from other states).

Table 2A
Estimated Contributions, Expenditure, Investment Income, and EOY Fund Balances
Assuming 85% of Eligible Employees are Covered through the Fund
Option 1
($ Millions)

	2026*	2027**	2028	2029
Estimated Contributions	$1,364.5	$1,418.8	$1,476.7	$1,471.4
Estimated Expenditure	$75.0	$1,226.9	$1,306.1	$1,402.5
Estimated Investment Income	$54.4	$59.6	$62.5	$66.4
Estimated EOY Fund Balance	$1,343.9	$1,595.4	$1,828.5	$1,963.7

** Premium contributions begin*
*** Benefits begin*

Table 2B
Estimated Contributions, Expenditure, Investment Income, and EOY Fund Balances
Assuming All Eligible Employees are Covered through the Fund
Option 2
($ Millions)

	2026*	2027**	2028	2029
Estimated Contributions	$2,243.4	$2,331.7	$2,433.1	$2,432.4
Estimated Expenditure	$75.0	$2,036.4	$2,162.9	$2,320.9
Estimated Investment Income	$91.5	$99.2	$103.6	$109.9
Estimated EOY Fund Balance	$2,260.0	$2,654.4	$3,028.1	$3,249.6

** Premium contributions begin*
*** Benefits begin*

Table 2C
Estimated Contributions, Expenditure, Investment Income, and EOY Fund Balances
Assuming 85% of Eligible Employees are Covered through the Fund
Option 3
($ Millions)

	2026*	2027**	2028	2029
Estimated Contributions	$1,577.6	$1,639.6	$1,711.8	$1,703.2
Estimated Expenditure	$75.0	$1,423.8	$1,514.7	$1,625.3
Estimated Investment Income	$63.4	$69.1	$72.5	$76.9
Estimated EOY Fund Balance	$1,566.0	$1,850.9	$2,120.6	$2,275.4

** Premium contributions begin*
*** Benefits begin*

Section 3 – Contribution Rates

This section contains additional details on the estimated overall contribution rates and the guidelines for setting contribution rates from SB 373. It also discusses the impact of small employer exemptions on employer and employee contribution rates for the Virginia PFML program options.

Estimated Overall Contribution Rates

Section 60.2-806 of SB 373 includes the following guidelines for determining overall contribution rates for PFML benefits provided through the Fund. These same guidelines are included in HB 2016, except the effective dates are different.

- For calendar years 2026 and 2027, the Commissioner shall fix such contribution rate based on sound actuarial principles. For calendar year 2028 and thereafter, the Commissioner shall first certify and publish the following information:

    1. The total amount of family and medical leave benefits paid by the Commission during the previous fiscal year;

    2. The total amount remaining in the Fund at the close of such fiscal year;

    3. The total amount equal to 140 percent of the previous fiscal year's expenditure for family and medical leave benefits paid and for the administration of the paid family and medical leave insurance program;

    4. The amount by which the total amount remaining in the Fund at the close of the previous fiscal year is less than or greater than 140 percent of the previous fiscal year's expenditure for family and medical leave benefits paid and for the administration of the paid family and medical leave insurance program; and

    5. The amount by which the contribution rate shall be adjusted to ensure that the Fund shall maintain or achieve an annualized amount of not less than 140 percent of the previous fiscal year's expenditure for family and medical leave benefits paid and for the administration of the paid family and medical leave insurance program. The contribution rate adjustment, if any, made as the result of the Commissioner's certification and report under this subsection shall supersede the rate previously set forth and shall become effective on January 1 of the following calendar year.

After discussing these guidelines with UVA, we have assumed that the objective is to maintain a fund ratio of 140% in 2028 and beyond. An alternative interpretation of the guidelines and alternative contribution rates are provided in Appendix A of this report.

We developed actuarial assumptions for projecting benefit payments and administrative expenses for the Virginia PFML program options, using historical data from states that have adopted PFML programs. Based on these projections, we calculated contribution rates for 2026 and 2027 that keep the contribution rates level in those years, and we calculated contribution rates in 2028 and

beyond that maintain a fund ratio of 140%. The estimated contribution rates are provided in Table 3 below.

Table 3
Estimated Effective Virginia PFML Contribution Rates as a Percent of Taxable Wages
Taxable Wages: OASDI

Program Option	2026*	2027**	2028	2029	2030	2031	2032	2033+
1	0.72%	0.72%	0.72%	0.69%	0.68%	0.66%	0.67%	0.66%
2	0.92%	0.92%	0.92%	0.88%	0.87%	0.85%	0.86%	0.85%
3	0.75%	0.75%	0.75%	0.71%	0.70%	0.69%	0.69%	0.69%

** Premium contributions begin*
*** Benefits begin*

For every option, the contribution rates are higher in the initial years, then reduce gradually and stabilize in later years. This is because the initial contribution rates must subsidize the cost of building the Fund and achieving a fund ratio of 140% by 2028, in addition to covering benefits and administration in those years. Also, we assumed that claim rates would increase gradually in the initial years as the program phases in and would stabilize by 2031. The contribution rates in 2031 and beyond are relatively stable because the Fund is already established by then, and projected claim experience is stable in those years.

Small Employer Exemptions

Options 1 and 3 include a small employer exemption that exempts employers with 10 or fewer employees from paying the employer portion of PFML contributions (although the employees would still be eligible for benefits and would still pay the employee portion of contributions). PFML programs that feature small employer exemptions, like Options 1 and 3, subsidize the cost of these exemptions through contributions from non-exempt employers and employees. Therefore, the sum of the employer and employee contribution rates would be greater than the overall contribution rate if the program features small employer exemptions.

For example, assuming that the contribution rates are the same for employers and employees, and that taxable wages are different because small employers are included for employee contributions and excluded for employer contributions, then the effective contribution from employers is smaller than the effective contribution for employees, meaning the overall effective contribution rate is lower than the sum of the two pieces. Table 4 below provides an example of these dynamics, based on illustrative taxable wages of $1,000,000 for all participating employers and $200,000 for small employers, and by assuming an overall contribution rate of 1.00%.

Table 4
Illustrative Dynamics for Small Employer Exemptions

(A) Contributor	(B) Total Taxable Wages	(C) Contribution Rates	(D) Contributions (B x C)
Employer	$800,000	0.5556%	$4,444
Employee	$1,000,000	0.5556%	$5,556
Total	**$1,000,000**	**1.0000%**	**$10,000**

In the example above, the taxable wages for employers are lower than the employees (column B) due to the small employer exemption—i.e., $200,000 is excluded from the taxable wage base for employers. The employee and total taxable wages are equal because all eligible employees make premium contributions. The sum of employer and employee contributions is equal to total contributions (column D), but the sum of employer and employee contribution rates is greater than the overall contribution rate (column C).

If there were no small business exemptions, like Option 2, employer and employee contribution rates would be lower and would sum to the overall contribution rate, although the overall contribution rate would be the same in either case because the expected claim costs (i.e., expected benefits and expenses) do not depend on small business exemptions.

We have estimated employer and employee contribution rates for the Virginia PFML program options by assuming that employers with 10 or fewer employees would qualify for the small employer exemption in Options 1 and 3, and that no small employer exemption would be included in Option 2. The estimated contribution rates for employers and employees are equal because we assumed non-exempt employers would deduct 50% of total contributions from employee wages, per SB 373 Section 60.2-806 and HB 2016 Section 60.2-804. The estimated contribution rates for the Virginia PFML program options are summarized in Table 5 below. The overall contribution rates shown below are the same as the contribution rates in Table 1 because the required overall annual contribution does not depend on small employer exemptions.

Table 5
Estimated Contribution Rates as a Percent of Taxable Wages
Taxable Wages: OASDI

	2026	2027	2028	2029	2030	2031	2032	2033
Option 1								
Employer	0.40%	0.40%	0.39%	0.38%	0.37%	0.37%	0.37%	0.37%
Employee	0.40%	0.40%	0.39%	0.38%	0.37%	0.37%	0.37%	0.37%
Overall*	**0.72%**	**0.72%**	**0.72%**	**0.69%**	**0.68%**	**0.66%**	**0.67%**	**0.66%**
Option 2								
Employer	0.46%	0.46%	0.46%	0.44%	0.43%	0.43%	0.43%	0.43%
Employee	0.46%	0.46%	0.46%	0.44%	0.43%	0.43%	0.43%	0.43%
Overall*	**0.92%**	**0.92%**	**0.92%**	**0.88%**	**0.87%**	**0.85%**	**0.86%**	**0.85%**
Option 3								
Employer	0.41%	0.41%	0.41%	0.39%	0.38%	0.38%	0.38%	0.38%
Employee	0.41%	0.41%	0.41%	0.39%	0.38%	0.38%	0.38%	0.38%
Overall*	**0.75%**	**0.75%**	**0.75%**	**0.71%**	**0.70%**	**0.69%**	**0.69%**	**0.69%**

** The Overall contribution rates shown above represent total contributions divided by total taxable wages and do not equal the sum of employer and employee contribution rates due to the small business exemptions.*

Section 4 – Financial Projections

This section contains financial projections from 2026 through 2035 for the Virginia PFML program options. The projected contributions are based on the contribution rates included in prior sections of this report. We developed separate projections for the three Virginia PFML program options, each of which include the following items:

- **Covered Employees** – Projection of Virginia employees who are eligible for PFML benefits through the Fund, based on Virginia employment data and forecasts provided to Milliman by UVA. The projection of covered employees assumes that 85% of eligible employees will be covered through the Fund and that 15% of eligible employees would be covered under private plans.
- **Taxable Wages** – Projection of taxable wages based on Virginia taxable wage data and forecasts provided to Milliman by UVA, in which the taxable wages are based on the OASDI definition of taxable wages.
- **Claims** – Projection of estimated claims approved for benefits between 2027 and 2035, for family leave, medical leave, and in total. The projection assumes claim incidence rates will increase gradually during the initial years as the program phases in, based on patterns observed in other states with new PFML programs. The projection also assumes children born, adopted, or fostered in 2026 will be eligible for bonding benefits in 2027.
- **Benefit Payments ($ millions)** – Projection of estimated benefit payments between 2027 and 2035 for family leave, medical leave, and in total. The estimated benefit payments for family claims are higher in 2027 than 2028 due to backlog bonding claims for children born, fostered, or adopted in 2026.
- **Expenses ($ millions)** – Projection of start-up and ongoing expenses for administering the PFML program. We assumed $75 million in start-up costs, which was specified by UVA. The projection of ongoing administrative expenses equals 5% of total expenditure in each year, based on average expense ratios in other states with PFML programs.
- **Total Expenditure ($ millions)** – Sum of benefit payments and expenses.
- **Contribution Rate** – Projection of estimated contribution rates for employers, employees, and overall. We developed contribution rates for 2026 and 2027 that keep rates level in those years. The contribution rates in 2028 and beyond were determined from the premium formula included in SB 373.
- **Contributions ($ millions)** – Projection of estimated contributions for employers, employees, and in total.
- **Investment Income ($ millions)** – Projection of estimated income on assets in the fund, based on the US Treasury 1-year forward curve as of October 10, 2024. At this time, the use of 1-year forward rates is conservative relative to shorter maturities (e.g., 3-month or 6-month forward rates) because yields were inverted as of October 10, 2024.

- **Fund Balance ($ millions)** – Projection of end-of-year Fund balances equal to the beginning-of-year fund balance plus the contributions in that year, minus total expenditure in that year, plus the assumed investment income.
- **Fund Ratio** – Ratio of the end-of-year fund balance to total expenditure from the preceding twelve months. The projected contribution rates maintain a fund ratio of 140% in 2028 and beyond for each of the program options.

The financial projections shown below depend on a variety of actuarial assumptions about future experience, including but not limited to employment and wage growth, PFML claim experience, expenses, and investment income. It is nearly certain that actual experience will vary from these assumptions, meaning that actual fund balances will be higher or lower than the illustrated values.

Projection 1
Virginia PFML Program Option 1

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Covered Employees		2,687,730	2,695,819	2,704,516	2,713,875	2,721,014	2,734,370	2,745,084	2,755,680	2,766,317
Taxable Wages ($ millions)										
Exempt Employers (<= 10 Employees)	$34,799	$36,184	$37,682	$39,286	$40,974	$42,634	$44,477	$46,280	$48,141	$50,077
All Other Employers	$155,318	$161,499	$168,184	$175,345	$182,877	$190,289	$198,512	$206,561	$214,867	$223,506
Total	**$190,117**	**$197,683**	**$205,865**	**$214,631**	**$223,851**	**$232,923**	**$242,989**	**$252,841**	**$263,007**	**$273,583**
Claims										
Family		53,912	51,603	53,322	54,042	54,184	54,450	54,663	54,874	55,086
Medical		125,923	132,617	137,036	138,886	139,251	139,935	140,483	141,025	141,570
Total		**179,835**	**184,220**	**190,359**	**192,928**	**193,435**	**194,385**	**195,146**	**195,900**	**196,656**
Benefit Payments ($ millions)										
Family		$338.2	$336.1	$361.0	$380.2	$395.6	$412.7	$429.5	$446.7	$464.7
Medical		$827.3	$904.6	$971.4	$1,023.3	$1,064.8	$1,110.8	$1,155.8	$1,202.3	$1,250.7
Total		**$1,165.5**	**$1,240.8**	**$1,332.4**	**$1,403.5**	**$1,460.4**	**$1,523.5**	**$1,585.3**	**$1,649.0**	**$1,715.3**
Expenses ($ millions)										
Start-up	$75.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Family		$17.8	$17.7	$19.0	$20.0	$20.8	$21.7	$22.6	$23.5	$24.5
Medical		$43.5	$47.6	$51.1	$53.9	$56.0	$58.5	$60.8	$63.3	$65.8
Total	**$75.0**	**$61.3**	**$65.3**	**$70.1**	**$73.9**	**$76.9**	**$80.2**	**$83.4**	**$86.8**	**$90.3**
Total Expenditure ($ millions)										
Family		$356.0	$353.8	$379.9	$400.2	$416.5	$434.5	$452.1	$470.2	$489.2
Medical		$870.9	$952.2	$1,022.6	$1,077.2	$1,120.8	$1,169.3	$1,216.7	$1,265.6	$1,316.5
Total	**$75.0**	**$1,226.9**	**$1,306.1**	**$1,402.5**	**$1,477.4**	**$1,537.3**	**$1,603.7**	**$1,668.7**	**$1,735.8**	**$1,805.6**
Contribution Rates										
Employer	0.40%	0.40%	0.39%	0.38%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%
Employee	0.40%	0.40%	0.39%	0.38%	0.37%	0.37%	0.37%	0.37%	0.37%	0.37%
Overall	**0.72%**	**0.72%**	**0.72%**	**0.69%**	**0.68%**	**0.66%**	**0.67%**	**0.66%**	**0.66%**	**0.66%**
Contributions ($ millions)										
Employer	$613.5	$637.9	$664.0	$661.6	$680.0	$696.2	$728.8	$755.7	$785.8	$817.4
Employee	$751.0	$780.8	$812.7	$809.8	$832.3	$852.2	$892.0	$925.0	$961.8	$1,000.5
Total	**$1,364.5**	**$1,418.8**	**$1,476.7**	**$1,471.4**	**$1,512.3**	**$1,548.3**	**$1,620.8**	**$1,680.8**	**$1,747.6**	**$1,817.9**
Investment Income ($ millions)	$54.4	$59.6	$62.5	$66.4	$70.0	$72.8	$75.9	$79.0	$82.2	$85.5
Fund Balance ($ millions)	**$1,343.9**	**$1,595.4**	**$1,828.5**	**$1,963.7**	**$2,068.6**	**$2,152.4**	**$2,245.4**	**$2,336.5**	**$2,430.4**	**$2,528.1**
Fund Balance % of Total Expenditure		130%	140%	140%	140%	140%	140%	140%	140%	140%

** The overall contribution rate is equal to total contributions divided by total taxable wages every year, and does not equal the sum of the employer and employee contribution rates due to the small business exemptions.*

Projection 2
Virginia PFML Program Option 2

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Covered Employees		3,548,453	3,558,022	3,568,929	3,580,516	3,593,000	3,603,025	3,620,872	3,635,826	3,650,903
Taxable Wages ($ millions)										
Exempt Employers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
All Other Employers	$245,185	$254,832	$265,217	$276,293	$287,940	$299,471	$312,288	$324,915	$337,991	$351,594
Total	**$245,185**	**$254,832**	**$265,217**	**$276,293**	**$287,940**	**$299,471**	**$312,288**	**$324,915**	**$337,991**	**$351,594**
Claims										
Family		74,119	70,948	73,314	74,305	74,512	74,881	75,191	75,503	75,816
Medical		173,121	182,334	188,414	190,962	191,494	192,443	193,238	194,039	194,844
Total		**247,240**	**253,282**	**261,728**	**265,267**	**266,007**	**267,324**	**268,428**	**269,542**	**270,659**
Benefit Payments ($ millions)										
Family		$595.6	$591.5	$634.7	$668.1	$694.8	$724.6	$753.9	$784.2	$815.8
Medical		$1,339.0	$1,463.3	$1,570.1	$1,652.7	$1,718.9	$1,792.4	$1,864.9	$1,939.9	$2,018.0
Total		**$1,934.6**	**$2,054.8**	**$2,204.8**	**$2,320.7**	**$2,413.7**	**$2,517.0**	**$2,618.8**	**$2,724.1**	**$2,833.8**
Expenses ($ millions)										
Start-up	$75.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Family		$31.3	$31.1	$33.4	$35.2	$36.6	$38.1	$39.7	$41.3	$42.9
Medical		$70.5	$77.0	$82.6	$87.0	$90.5	$94.3	$98.2	$102.1	$106.2
Total	**$75.0**	**$101.8**	**$108.1**	**$116.0**	**$122.1**	**$127.0**	**$132.5**	**$137.8**	**$143.4**	**$149.1**
Total Expenditure ($ millions)										
Family		$626.9	$622.6	$668.1	$703.2	$731.4	$762.7	$793.5	$825.5	$858.7
Medical		$1,409.5	$1,540.3	$1,652.8	$1,739.7	$1,809.3	$1,886.8	$1,963.0	$2,042.1	$2,124.2
Total	**$75.0**	**$2,036.4**	**$2,162.9**	**$2,320.9**	**$2,442.9**	**$2,540.7**	**$2,649.4**	**$2,756.6**	**$2,867.5**	**$2,982.9**
Contribution Rates										
Employer	0.46%	0.46%	0.46%	0.44%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
Employee	0.46%	0.46%	0.46%	0.44%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%
Overall	**0.92%**	**0.92%**	**0.92%**	**0.88%**	**0.87%**	**0.85%**	**0.86%**	**0.85%**	**0.85%**	**0.85%**
Contributions ($ millions)										
Employer	$1,121.7	$1,165.9	$1,216.5	$1,216.2	$1,249.2	$1,278.3	$1,336.9	$1,388.5	$1,443.7	$1,501.8
Employee	$1,121.7	$1,165.9	$1,216.5	$1,216.2	$1,249.2	$1,278.3	$1,336.9	$1,388.5	$1,443.7	$1,501.8
Total	**$2,243.4**	**$2,331.7**	**$2,433.1**	**$2,432.4**	**$2,498.4**	**$2,556.7**	**$2,673.7**	**$2,777.0**	**$2,887.5**	**$3,003.7**
Investment Income ($ millions)	$91.5	$99.2	$103.6	$109.9	$115.7	$120.3	$125.3	$130.4	$135.7	$141.2
Fund Balance ($ millions)	**$2,260.0**	**$2,654.4**	**$3,028.1**	**$3,249.6**	**$3,420.7**	**$3,557.0**	**$3,706.6**	**$3,857.5**	**$4,013.2**	**$4,175.1**
Fund Balance % of Total Expenditure		130%	140%	140%	140%	140%	140%	140%	140%	140%

Projection 3
Virginia PFML Program Option 3

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Covered Employees		3,074,148	3,082,438	3,091,886	3,101,925	3,112,740	3,121,425	3,136,887	3,149,842	3,162,903
Taxable Wages ($ millions)										
Small Employers (<= 10 Employees)	$34,799	$36,184	$37,682	$39,286	$40,974	$42,634	$44,477	$46,280	$48,141	$50,077
All Other Employers	$176,831	$183,773	$191,238	$199,195	$207,560	$215,853	$225,072	$234,168	$243,594	$253,399
Total	$211,630	$219,957	$228,920	$238,481	$248,534	$258,487	$269,549	$280,448	$291,735	$303,476
Claims										
Family		64,212	61,465	63,514	64,373	64,553	64,872	65,140	65,410	65,682
Medical		149,981	157,962	163,230	165,437	165,898	166,720	167,409	168,103	168,800
Total		**214,192**	**219,427**	**226,744**	**229,810**	**230,451**	**231,592**	**232,549**	**233,513**	**234,481**
Benefit Payments ($ millions)										
Family		$392.9	$390.2	$418.7	$440.7	$458.4	$478.0	$497.3	$517.4	$538.2
Medical		$959.7	$1,048.7	$1,125.3	$1,184.4	$1,231.9	$1,284.6	$1,336.5	$1,390.3	$1,446.3
Total		**$1,352.6**	**$1,438.9**	**$1,544.0**	**$1,625.2**	**$1,690.3**	**$1,762.6**	**$1,833.9**	**$1,907.7**	**$1,984.5**
Expenses ($ millions)										
Start-up	$75.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Family		$20.7	$20.5	$22.0	$23.2	$24.1	$25.2	$26.2	$27.2	$28.3
Medical		$50.5	$55.2	$59.2	$62.3	$64.8	$67.6	$70.3	$73.2	$76.1
Total	**$75.0**	**$71.2**	**$75.7**	**$81.3**	**$85.5**	**$89.0**	**$92.8**	**$96.5**	**$100.4**	**$104.4**
Total Expenditure ($ millions)										
Family		$413.6	$410.8	$440.8	$463.9	$482.5	$503.2	$523.5	$544.6	$566.5
Medical		$1,010.2	$1,103.9	$1,184.5	$1,246.8	$1,296.7	$1,352.2	$1,406.9	$1,463.5	$1,522.4
Total	**$75.0**	**$1,423.8**	**$1,514.7**	**$1,625.3**	**$1,710.7**	**$1,779.2**	**$1,855.4**	**$1,930.4**	**$2,008.1**	**$2,088.9**
Contribution Rates										
Employer	0.41%	0.41%	0.41%	0.39%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%
Employee	0.41%	0.41%	0.41%	0.39%	0.38%	0.38%	0.38%	0.38%	0.38%	0.38%
Overall	**0.75%**	**0.75%**	**0.75%**	**0.71%**	**0.70%**	**0.69%**	**0.69%**	**0.69%**	**0.69%**	**0.69%**
Contributions ($ millions)										
Employer	$718.1	$746.3	$779.1	$775.1	$796.1	$815.7	$851.9	$884.8	$920.0	$957.0
Employee	$859.4	$893.3	$932.7	$928.0	$953.3	$976.8	$1,020.2	$1,059.7	$1,101.8	$1,146.1
Total	**$1,577.6**	**$1,639.6**	**$1,711.8**	**$1,703.2**	**$1,749.4**	**$1,792.5**	**$1,872.1**	**$1,944.4**	**$2,021.8**	**$2,103.2**
Investment Income ($ millions)	$63.4	$69.1	$72.5	$76.9	$81.0	$84.3	$87.8	$91.4	$95.1	$98.9
Fund Balance ($ millions)	**$1,566.0**	**$1,850.9**	**$2,120.6**	**$2,275.4**	**$2,395.0**	**$2,492.6**	**$2,597.1**	**$2,702.6**	**$2,811.3**	**$2,924.5**
Fund Balance % of Total Expenditure		130%	140%	140%	140%	140%	140%	140%	140%	140%

** The overall contribution rate is equal to total contributions divided by total taxable wages every year, and does not equal the sum of the employer and employee contribution rates due to the small business exemptions.*

Section 4 – Data, Assumptions, and Analytical Methods

We obtained demographic data from UVA that includes a distribution of Virginia employees from 2022 split by age, gender, employer type (private, state, nonexempted local government, and designated local government employers), and employer size (10 or fewer employees; more than 10 employees). We also obtained data for self-employed workers in Virginia. We used this data to develop demographic assumptions for our analysis. We assumed that 3% of self-employed workers would participate in the Virginia PFML program based on average participation rates in other states with PFML programs. Tables 6A and 6B below show the number of eligible employees and annual wages assumed in 2027, when PFML benefits begin. Table 6A assumes participation from private and nonexempted local government employers (Option 1) whereas Table 6B assumes participation from all employers except federal employers (Options 2 and 3).

Table 6A
Assumed Eligible Employees and Annual Wages in 2027
Private and Nonexempted Local Government Employers

Age	Eligible Employees		Annual Wages ($ Millions)	
	Female	Male	Female	Male
Less than 25	219,537	225,642	$7,379.1	$8,638.2
25 - 34	359,159	402,228	$22,954.4	$31,936.2
35 - 44	313,047	361,031	$25,497.6	$41,828.4
45 - 54	317,444	345,704	$26,612.8	$45,636.4
55 - 64	230,559	252,748	$17,893.7	$33,233.9
65 and above	65,103	69,832	$3,893.4	$6,752.7
Total	**1,504,849**	**1,657,186**	**$104,231.0**	**$168,025.6**

Table 6B
Assumed Eligible Employees and Annual Wages in 2027
All Employers Except Federal Employers

Age	Eligible Employees		Annual Wages ($ Millions)	
	Female	Male	Female	Male
Less than 25	237,078	238,923	$7,886.6	$9,066.7
25 - 34	405,378	435,222	$25,381.3	$33,763.4
35 - 44	363,653	393,194	$28,444.6	$44,205.5
45 - 54	375,397	380,620	$30,055.7	$48,615.5
55 - 64	280,259	282,019	$20,823.9	$35,726.3
65 and above	76,806	79,903	$4,438.5	$7,533.5
Total	**1,738,571**	**1,809,882**	**$117,030.7**	**$178,910.9**

We also obtained employment and wage growth forecasts from UVA which were used to estimate the number of eligible employees and taxable wages in future years in our projections. The following table shows the employment and wage growth assumptions used in our analysis:

Table 7 Employment and Wage Growth Assumptions				
Year	Private Only		Public & Private	
	Employment Growth	Wage Growth	Employment Growth	Wage Growth
2026	0.40%	4.33%	0.40%	4.22%
2027	0.27%	3.70%	0.27%	3.66%
2028	0.30%	3.83%	0.31%	3.76%
2029	0.32%	3.92%	0.32%	3.84%
2030	0.35%	3.94%	0.35%	3.85%
2031	0.26%	3.78%	0.28%	3.72%
2032	0.49%	3.81%	0.50%	3.77%
3033	0.39%	3.65%	0.41%	3.62%
2034	0.39%	3.62%	0.41%	3.59%
2035	0.39%	3.62%	0.41%	3.59%

We researched employer participation rates in private plans from states that allow employers to provide benefits through private plans rather than the state plan. The participation rates vary from state to state, ranging from less than 5% of eligible employees in California[1] to approximately 33% of eligible employees in Massachusetts[2]. There are many reasons why an employer may choose to provide benefits through a private plan in lieu of the state plan, such as existing leave policies, ease of administration, benefit levels, and cost. In addition, private plan requirements vary in each state and may impact participation—e.g., employers in California must obtain consent from a majority of employees to use private plans. We have assumed that 15% of eligible employees in Virginia would be covered by private plans (approximately mid-range of the participation rates in other states) and that 85% of eligible employees would be covered by the state plan for developing the financial projections included in this report.

We developed morbidity assumptions for estimating claims and benefit payments for the Virginia PFML program options, based on recent PFML claim experience in states with mandatory programs. We adjusted the experience for differences between PFML benefits in Virginia and the other states (e.g., waiting period, replacement ratio, definition of family member, etc.). We also adjusted the experience for differences in industry and geographic risk between Virginia and the other states. The maternity and bonding incidence rates were also adjusted for differences in birth rates between Virginia and the other states. The morbidity assumptions include claim incidence rates and average claim durations that vary by age, gender, and leave type (i.e., family and medical).

We considered the impact of private plans on the morbidity assumptions by taking the following factors into consideration:

- There could be adverse selection into the state plan if insurers set premium rates based on risk characteristics such as industry and demographics, whereas the state rate is a single community rate that applies equally to all employers.
- We used experience from states with existing paid leave laws to develop the morbidity assumptions. Many of these states allow employers to provide benefits through private plans, so any adverse selection risk would be embedded in the experience.

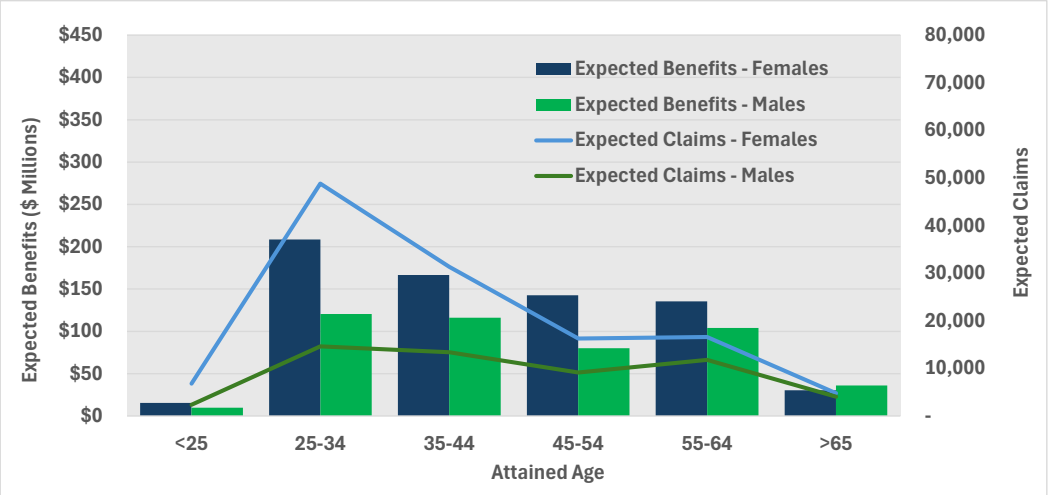
[1] May 2023 Disability Insurance (DI) Fund Forecast, State of California Employment Development Department, Table 2
[2] Paid Family and Medical Leave and Employer Private Plans, The Center for Law and Social Policy, July 2021

- Employers may choose to provide benefits through private plans in lieu of the state plan for other reasons besides cost. There is evidence that large employers are more likely than small employers to provide PFML benefits through private plans, and large employers have higher claim rates than small employers. According to reports from the New York Department of Financial Services[3], paid family leave incidence rates for employers with 500 or more employees are much higher than the incidence rates for employers with fewer than 500 employees. Other considerations, such as plan design and existing benefits, can also influence an employer's decision to use private plans for providing PFML benefits.
- Administrative expenses tend to be significantly lower for PFML benefits provided through the state fund versus private plans, which translates directly to lower premium rates for the state plan versus private plans, with all else equal. Similarly, premium rates for private plans are typically loaded for broker commissions whereas the state rate is not loaded for commissions.
- The state plan is prefunded by 12-months of premium payments before benefits begin, whereas there is no pre-funding for private plans.
- In our experience working with insurance companies, we have noticed many cases where the premium rate is greater than the state rate.

For these reasons, we did not make an explicit adjustment to our morbidity assumptions for allowing employers to provide benefits through private plans.

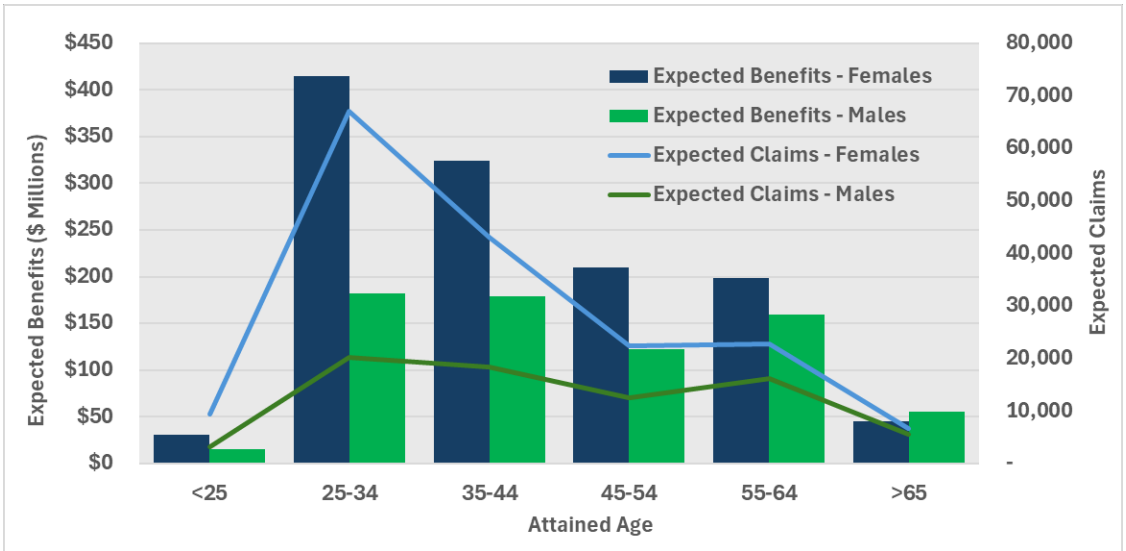
We used the morbidity and demographic assumptions to estimate Virginia PFML claims and benefit payments in 2027 and beyond. Because regional wage data was not available for performing the analysis, we used the SAWW rather than the regional average weekly wage for estimating benefit payments for Options 1 and 3, which we consider reasonable and would not expect to have a material impact on results. The following charts show the expected claims and benefit payments in 2027 for the Virginia PFML program options:

Expected Benefit Payments and Claims in 2027
Virginia PFML Program Option 1

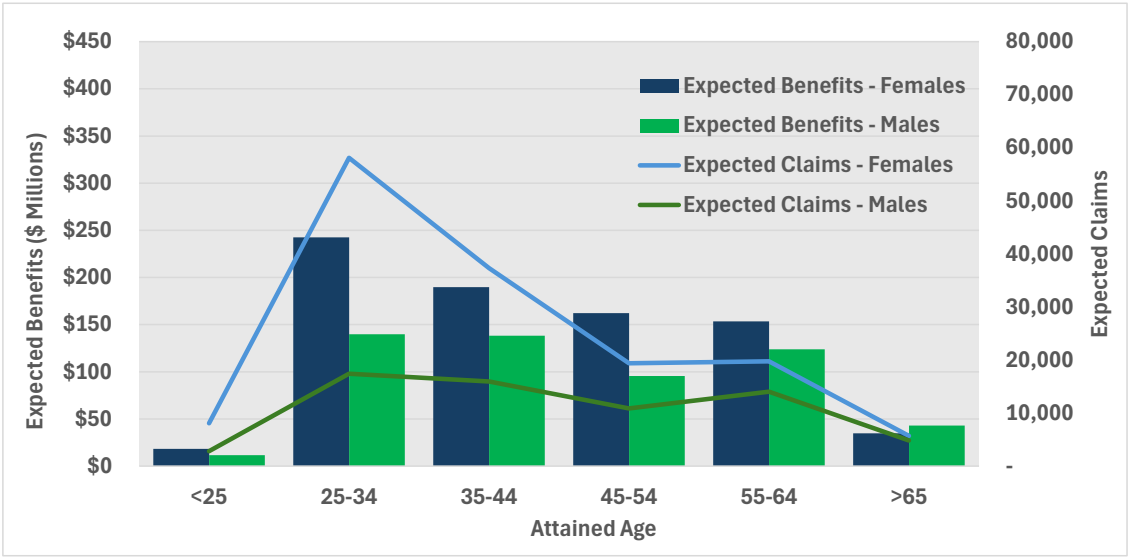


[3] New York State Paid Family Leave Report 2018 – 2022, Department of Financial Services

Expected Benefit Payments and Claims in 2027
Virginia PFML Program Option 2



Expected Benefit Payments and Claims in 2027
Virginia PFML Program Option 3



The estimated claims and benefit payments shown above are skewed towards young female workers for several reasons. They include backlog bonding claims for parents of children born, adopted, or placed in foster care prior to the benefit begin date. Also, young female workers have high PFL incidence rates due to bonding leave and high PML incidence rates due to maternity leave. Based on claim experience in states with PFML programs, bonding claims represent approximately 75 - 80% of PFL claims, and maternity claims represent approximately 25 - 30% of PML claims.

We assumed administrative expenses equal to 5% of total expenditure in every year, based on PFML expense ratios reported in states with PFML programs[4], as shown below. Administration for the Connecticut program is different than the other states because Connecticut has engaged a third party to administer claims whereas the other states do not use third party administrators.

Table 8
PFML Administrative Expense Ratios
% of Total Expenditure

State	Expense Ratio
California (2022)	4.4%
New Jersey (2022)	3.5%
Rhode Island (2022	4.6%
Connecticut (2022-23)	11.7%
Washington (2023)	4.3%

We assumed $75 million in start-up costs for each of the Virginia PFML program options. This assumption was specified by UVA.

We developed assumptions for projecting investment income on Fund assets based on the US Treasury 1-year forward curve as of October 10, 2024. We used the 1-year forward curve rather than forward rates for shorter maturities because the current US Treasury yield curve is inverted, which is likely conservative. The following interest rate assumptions were applied to the projected fund balances to estimate investment income in our financial projections:

Table 9
Interest Rate Assumptions

Year	Interest Rate
2026	4.22%
2027	3.88%
2028	3.54%
2029	3.50%
2030	3.50%
2031	3.50%
2032	3.50%
2033	3.50%
2034	3.50%
2035	3.50%

We tested the impact of using lower interest rate assumptions for projecting investment income, which results in slightly higher contribution rates for the PFML program options, but the impact is relatively minor.

[4] https://edd.ca.gov/siteassets/files/disability/pdf/edddiforecastjan24.pdf
https://nj.gov/labor/myleavebenefits/assets/pdfs/Annual%20FLI%20TDI%20Report%20for%202022.pdf
https://dlt.ri.gov/labor-market-information/publications
https://egov.ct.gov/PMC/Event/Details/17111
https://paidleave.wa.gov/app/uploads/2024/04/2024.04.10-April-Advisory-Presentation.pdf

Appendix A – Alternative Contribution Rates

At UVA's request, we have calculated an alternative set of contribution rates for the Virginia PFML program options based on a different interpretation of the guidelines for determining overall contribution rates from Section 60.2-806 of SB 373, in which contribution rates would be determined by targeting a fund ratio of 40% rather than 140%. Under this alternative approach, contribution rates in 2028 and beyond are determined from the following formula:

- Contribution Rate = $\frac{140\% \times \text{Total expenditure from prior 12 months} - \text{EOY Fund Balance}}{\text{Taxable Wages}}$

This formula is similar to the formulas used by California, Colorado, and Washington for setting PFML contribution rates:

California:

- Contribution Rate = $\frac{130\% \times \text{Disbursements from the Fund} - \text{Ending Fund Balance}}{\text{Taxable Wages}}$

Colorado:

- Contribution Rate = $\frac{135\% \times \text{Benefit Payments} + 100\% \times \text{Expenses} - \text{EOY Fund Balance}}{\text{Taxable Wages}}$

Washington:

- Contribution Rate = $\frac{140\% \times (\text{Benefits Paid} + \text{Administrative Costs}) - \text{EOY Fund Balance}}{\text{Taxable Wages}}$

The estimated contribution rates under this alternative approach are provided in Table A1 below:

Table A1
Estimated Overall PFML Contribution Rates as a Percentage of Taxable Wages
Alternative Rating Method
Taxable Wages: OASDI

Program Option	2026*	2027**	2028	2029	2030	2031	2032	2033+
1	0.50%	0.50%	0.50%	0.65%	0.68%	0.67%	0.66%	0.66%
2	0.63%	0.63%	0.63%	0.84%	0.87%	0.86%	0.85%	0.85%
3	0.52%	0.52%	0.52%	0.68%	0.71%	0.70%	0.69%	0.69%

The alternative contribution rates are lower in initial years than the contribution rates discussed in prior sections of this report because the initial target fund levels are lower than 140% under the alternative scenario. In later years, the alternative contribution rates are the same as the rates discussed in prior sections of this report because the expected costs for benefits and administration are the same in both cases.

Financial projections corresponding to these alternative contribution rates are provided on the following pages. The contribution rate formula shown above would maintain a fund ratio of 40% throughout the projection if there were no changes in the experience from year to year – i.e., no changes in covered employees, demographics, claims, etc. Because our projections assume employment growth and wage growth throughout the projection period, as well as increasing claim incidence rates during the initial years as the program phases in, the projected fund ratio is variable in the initial years and ultimately stabilizes to 36% in later years. The 36% fund ratio is in line with targets set by other states that have mandatory PFML programs and in line with target surplus levels reported by insurance companies for short-term disability insurance business.

The financial projections shown below depend on a variety of actuarial assumptions about future experience, including but not limited to employment and wage growth, PFML claim experience, expenses, and investment income. It is nearly certain that actual experience will vary from these assumptions, meaning that actual fund balances will be higher or lower than the illustrated values.

Projection A1
Virginia PFML Program Option 1 Based on Alternative Contribution Rates

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Covered Employees		2,687,730	2,695,819	2,704,516	2,713,875	2,721,014	2,734,370	2,745,084	2,755,680	2,766,317
Taxable Wages ($ millions)										
Exempt Employers (<= 10 Employees)	$34,799	$36,184	$37,682	$39,286	$40,974	$42,634	$44,477	$46,280	$48,141	$50,077
All Other Employers	$155,318	$161,499	$168,184	$175,345	$182,877	$190,289	$198,512	$206,561	$214,867	$223,506
Total	$190,117	$197,683	$205,865	$214,631	$223,851	$232,923	$242,989	$252,841	$263,007	$273,583
Claims										
Family		53,912	51,603	53,322	54,042	54,184	54,450	54,663	54,874	55,086
Medical		125,923	132,617	137,036	138,886	139,251	139,935	140,483	141,025	141,570
Total		**179,835**	**184,220**	**190,359**	**192,928**	**193,435**	**194,385**	**195,146**	**195,900**	**196,656**
Benefit Payments ($ millions)										
Family		$338.2	$336.1	$361.0	$380.2	$395.6	$412.7	$429.5	$446.7	$464.7
Medical		$827.3	$904.6	$971.4	$1,023.3	$1,064.8	$1,110.8	$1,155.8	$1,202.3	$1,250.7
Total		**$1,165.5**	**$1,240.8**	**$1,332.4**	**$1,403.5**	**$1,460.4**	**$1,523.5**	**$1,585.3**	**$1,649.0**	**$1,715.3**
Expenses ($ millions)										
Start-up	$75.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Family		$17.8	$17.7	$19.0	$20.0	$20.8	$21.7	$22.6	$23.5	$24.5
Medical		$43.5	$47.6	$51.1	$53.9	$56.0	$58.5	$60.8	$63.3	$65.8
Total	**$75.0**	**$61.3**	**$65.3**	**$70.1**	**$73.9**	**$76.9**	**$80.2**	**$83.4**	**$86.8**	**$90.3**
Total Expenditure ($ millions)										
Family		$356.0	$353.8	$379.9	$400.2	$416.5	$434.5	$452.1	$470.2	$489.2
Medical		$870.9	$952.2	$1,022.6	$1,077.2	$1,120.8	$1,169.3	$1,216.7	$1,265.6	$1,316.5
Total		**$1,226.9**	**$1,306.1**	**$1,402.5**	**$1,477.4**	**$1,537.3**	**$1,603.7**	**$1,668.7**	**$1,735.8**	**$1,805.6**
Contribution Rates										
Employer	0.27%	0.27%	0.28%	0.36%	0.37%	0.37%	0.36%	0.37%	0.36%	0.36%
Employee	0.27%	0.27%	0.28%	0.36%	0.37%	0.37%	0.36%	0.37%	0.36%	0.36%
Overall	**0.50%**	**0.50%**	**0.50%**	**0.65%**	**0.68%**	**0.67%**	**0.66%**	**0.66%**	**0.66%**	**0.66%**
Contributions ($ millions)										
Employer	$424.0	$440.9	$464.8	$630.5	$684.6	$703.8	$720.5	$754.3	$782.2	$813.3
Employee	$519.0	$539.7	$568.9	$771.8	$838.0	$861.5	$882.0	$923.3	$957.4	$995.5
Total	**$943.0**	**$980.6**	**$1,033.7**	**$1,402.3**	**$1,522.7**	**$1,565.2**	**$1,602.5**	**$1,677.5**	**$1,739.6**	**$1,808.8**
Investment Income ($ millions)	$36.6	$25.5	$14.6	$14.9	$17.0	$18.6	$19.2	$20.2	$21.0	$21.9
Fund Balance ($ millions)	**$904.7**	**$683.9**	**$426.1**	**$440.9**	**$503.1**	**$549.7**	**$567.7**	**$596.6**	**$621.4**	**$646.4**
Fund Balance % of Total Expenditure		56%	33%	31%	34%	36%	35%	36%	36%	36%

** The overall contribution rate is equal to total contributions divided by total taxable wages every year, and does not equal the sum of the employer and employee contribution rates due to the small business exemptions.*

Projection A2
Virginia PFML Program Option 2 Based on Alternative Contribution Rates

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Covered Employees		3,548,453	3,558,022	3,568,929	3,580,516	3,593,000	3,603,025	3,620,872	3,635,826	3,650,903
Taxable Wages ($ millions)										
Exempt Employers	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
All Other Employers	$245,185	$254,832	$265,217	$276,293	$287,940	$299,471	$312,288	$324,915	$337,991	$351,594
Total	**$245,185**	**$254,832**	**$265,217**	**$276,293**	**$287,940**	**$299,471**	**$312,288**	**$324,915**	**$337,991**	**$351,594**
Claims										
Family		74,119	70,948	73,314	74,305	74,512	74,881	75,191	75,503	75,816
Medical		173,121	182,334	188,414	190,962	191,494	192,443	193,238	194,039	194,844
Total		**247,240**	**253,282**	**261,728**	**265,267**	**266,007**	**267,324**	**268,428**	**269,542**	**270,659**
Benefit Payments ($ millions)										
Family		$595.6	$591.5	$634.7	$668.1	$694.8	$724.6	$753.9	$784.2	$815.8
Medical		$1,339.0	$1,463.3	$1,570.1	$1,652.7	$1,718.9	$1,792.4	$1,864.9	$1,939.9	$2,018.0
Total		**$1,934.6**	**$2,054.8**	**$2,204.8**	**$2,320.7**	**$2,413.7**	**$2,517.0**	**$2,618.8**	**$2,724.1**	**$2,833.8**
Expenses ($ millions)										
Start-up	$75.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Family		$31.3	$31.1	$33.4	$35.2	$36.6	$38.1	$39.7	$41.3	$42.9
Medical		$70.5	$77.0	$82.6	$87.0	$90.5	$94.3	$98.2	$102.1	$106.2
Total	**$75.0**	**$101.8**	**$108.1**	**$116.0**	**$122.1**	**$127.0**	**$132.5**	**$137.8**	**$143.4**	**$149.1**
Total Expenditure ($ millions)										
Family		$626.9	$622.6	$668.1	$703.2	$731.4	$762.7	$793.5	$825.5	$858.7
Medical		$1,409.5	$1,540.3	$1,652.8	$1,739.7	$1,809.3	$1,886.8	$1,963.0	$2,042.1	$2,124.2
Total		**$2,036.4**	**$2,162.9**	**$2,320.9**	**$2,442.9**	**$2,540.7**	**$2,649.4**	**$2,756.6**	**$2,867.5**	**$2,982.9**
Contribution Rates										
Employer	0.32%	0.32%	0.32%	0.42%	0.44%	0.43%	0.42%	0.43%	0.43%	0.42%
Employee	0.32%	0.32%	0.32%	0.42%	0.44%	0.43%	0.42%	0.43%	0.43%	0.42%
Overall	**0.63%**	**0.63%**	**0.63%**	**0.84%**	**0.87%**	**0.86%**	**0.85%**	**0.85%**	**0.85%**	**0.85%**
Contributions ($ millions)										
Employer	$777.9	$808.5	$841.9	$1,157.8	$1,258.6	$1,292.7	$1,323.5	$1,385.0	$1,436.6	$1,494.1
Employee	$777.9	$808.5	$841.9	$1,157.8	$1,258.6	$1,292.7	$1,323.5	$1,385.0	$1,436.6	$1,494.1
Total	**$1,555.7**	**$1,616.9**	**$1,683.7**	**$2,315.7**	**$2,517.2**	**$2,585.5**	**$2,646.9**	**$2,769.9**	**$2,873.2**	**$2,988.1**
Investment Income ($ millions)	$62.5	$43.6	$24.4	$24.8	$28.2	$30.8	$31.8	$33.3	$34.7	$36.1
Fund Balance ($ millions)	**$1,543.2**	**$1,167.3**	**$712.4**	**$732.0**	**$834.5**	**$910.1**	**$939.3**	**$986.0**	**$1,026.4**	**$1,067.7**
Fund Balance % of Total Expenditure		57%	33%	32%	34%	36%	35%	36%	36%	36%

** The overall contribution rate is equal to total contributions divided by total taxable wages every year, and does not equal the sum of the employer and employee contribution rates due to the small business exemptions.*

Projection A3
Virginia PFML Program Option 3 Based on Alternative Contribution Rates

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Covered Employees		3,074,148	3,082,438	3,091,886	3,101,925	3,112,740	3,121,425	3,136,887	3,149,842	3,162,903
Taxable Wages ($ millions)										
Small Employers (<= 10 Employees)	$34,799	$36,184	$37,682	$39,286	$40,974	$42,634	$44,477	$46,280	$48,141	$50,077
All Other Employers	$176,831	$183,773	$191,238	$199,195	$207,560	$215,853	$225,072	$234,168	$243,594	$253,399
Total	$211,630	$219,957	$228,920	$238,481	$248,534	$258,487	$269,549	$280,448	$291,735	$303,476
Claims										
Family		64,212	61,465	63,514	64,373	64,553	64,872	65,140	65,410	65,682
Medical		149,981	157,962	163,230	165,437	165,898	166,720	167,409	168,103	168,800
Total		**214,192**	**219,427**	**226,744**	**229,810**	**230,451**	**231,592**	**232,549**	**233,513**	**234,481**
Benefit Payments ($ millions)										
Family		$392.9	$390.2	$418.7	$440.7	$458.4	$478.0	$497.3	$517.4	$538.2
Medical		$959.7	$1,048.7	$1,125.3	$1,184.4	$1,231.9	$1,284.6	$1,336.5	$1,390.3	$1,446.3
Total		**$1,352.6**	**$1,438.9**	**$1,544.0**	**$1,625.2**	**$1,690.3**	**$1,762.6**	**$1,833.9**	**$1,907.7**	**$1,984.5**
Expenses ($ millions)										
Start-up	$75.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Family		$20.7	$20.5	$22.0	$23.2	$24.1	$25.2	$26.2	$27.2	$28.3
Medical		$50.5	$55.2	$59.2	$62.3	$64.8	$67.6	$70.3	$73.2	$76.1
Total	**$75.0**	**$71.2**	**$75.7**	**$81.3**	**$85.5**	**$89.0**	**$92.8**	**$96.5**	**$100.4**	**$104.4**
Total Expenditure ($ millions)										
Family		$413.6	$410.8	$440.8	$463.9	$482.5	$503.2	$523.5	$544.6	$566.5
Medical		$1,010.2	$1,103.9	$1,184.5	$1,246.8	$1,296.7	$1,352.2	$1,406.9	$1,463.5	$1,522.4
Total		**$1,423.8**	**$1,514.7**	**$1,625.3**	**$1,710.7**	**$1,779.2**	**$1,855.4**	**$1,930.4**	**$2,008.1**	**$2,088.9**
Contribution Rates										
Employer	0.28%	0.28%	0.28%	0.37%	0.39%	0.38%	0.37%	0.38%	0.38%	0.38%
Employee	0.28%	0.28%	0.28%	0.37%	0.39%	0.38%	0.37%	0.38%	0.38%	0.38%
Overall	**0.52%**	**0.52%**	**0.52%**	**0.68%**	**0.71%**	**0.70%**	**0.69%**	**0.69%**	**0.69%**	**0.69%**
Contributions ($ millions)										
Employer	$496.5	$515.9	$544.1	$739.6	$802.2	$823.9	$843.5	$882.6	$915.6	$952.2
Employee	$594.2	$617.5	$651.3	$885.4	$960.6	$986.7	$1,010.1	$1,057.1	$1,096.5	$1,140.4
Total	**$1,090.6**	**$1,133.5**	**$1,195.3**	**$1,625.0**	**$1,762.8**	**$1,810.6**	**$1,853.6**	**$1,939.7**	**$2,012.1**	**$2,092.6**
Investment Income ($ millions)	$42.9	$29.8	$16.9	$17.3	$19.8	$21.6	$22.2	$23.3	$24.3	$25.3
Fund Balance ($ millions)	**$1,058.5**	**$798.0**	**$495.5**	**$512.6**	**$584.4**	**$637.3**	**$657.8**	**$690.5**	**$718.8**	**$747.7**
Fund Balance % of Total Expenditure		56%	33%	32%	34%	36%	35%	36%	36%	36%

** The overall contribution rate is equal to total contributions divided by total taxable wages every year, and does not equal the sum of the employer and employee contribution rates due to the small business exemptions*

Appendix B – Assumed Program Design

A summary of the benefits and provisions for the Virginia PFML program options is provided below:

Option 1	Option 2	Option 3
Qualifying Reasons		
Bonding	Bonding	Bonding
Care for family member with serious health condition	Care for family member with serious health condition	Care for family member with serious health condition
Own serious health condition	Own serious health condition	Own serious health condition
Caring for service member next of kin	Caring for service member next of kin	Caring for service member next of kin
Qualifying exigency	Qualifying exigency	Qualifying exigency
Maximum Benefit Period		
8 weeks in application year	12 weeks in application year	8 weeks in application year
Waiting Period		
No waiting period	No waiting period	No waiting period
Weekly Benefit Amount		
80% of average weekly wages	80% of average weekly wages	80% of average weekly wages
Min benefit $100 or weekly wages if less	Min benefit $100 or weekly wages if less	Min benefit $100 or weekly wages if less
Max benefit 80% of regional average weekly wage	Max benefit 80% of regional average weekly wage	Max benefit 80% of regional average weekly wage
Contribution Rates		
2026 and 2027 rate based on sound actuarial principles	2026 and 2027 rate based on sound actuarial principles	2026 and 2027 rate based on sound actuarial principles
2028+ based on guidelines from SB 373	2028+ based on guidelines from SB 373	2028+ based on guidelines from SB 373
Employers can deduct up to 50% of premium from Employee wages	Employers can deduct up to 50% of premium from Employee wages	Employers can deduct up to 50% of premium from Employee wages
Small Employer Exemption		
Small ER exemption for employers with 10 or fewer employees	No small ER exemption	Small ER exemption for employers with 10 or fewer employees
Other Exemptions		
State employees, local officers, or employees of local school divisions. Federal employers. Qualifying private employer plan.	None	State employees, local officers, or employees of local school divisions. Federal employers. Qualifying private employer plan.
Taxable Wages		
OASDI wage limit	OASDI wage limit	OASDI wage limit
Other Provisions		
Intermittent (8-hour increments)	Intermittent (8-hour increments)	Intermittent (8-hour increments)
Job protection	Job protection	Job protection
Concurrent with FMLA	Concurrent with FMLA	Concurrent with FMLA

Appendix C – Reliance Items

In preparing this report, we have relied on information provided to us by UVA as well as other information and data that is publicly available, the principal items of which are listed below:

- Virginia Senate Bill 373 of the 2024 Legislative session
- Virginia House Bill 2016 of the 2021 Legislative session
- Virginia employee demographics developed by UVA
- Virginia employment and wage forecasts developed by UVA
- Publicly available short-term disability rate manuals
- Publicly available reports and exhibits from states with PFML laws

Milliman

Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in life insurance and financial services, property & casualty insurance, healthcare, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

milliman.com

CONTACT

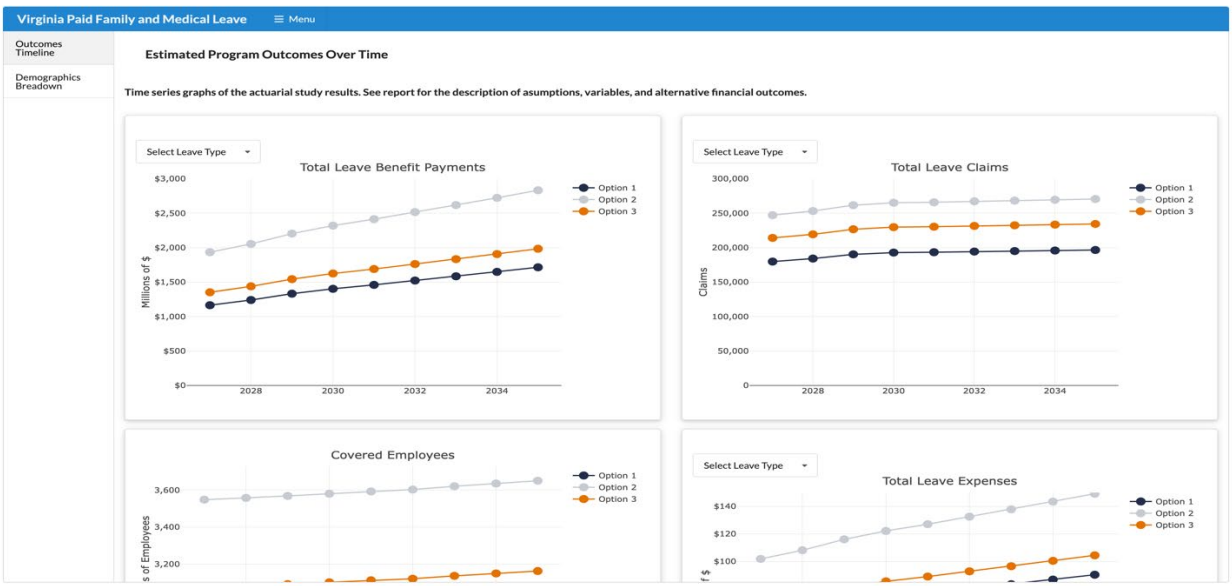
Paul Correia, FSA, MAAA
paul.correia@milliman.com

APPENDIX D: PAID FAMILY AND MEDICAL LEAVE INTERACTIVE DASHBOARD

The Paid Family and Medical Leave dashboard synthesizes results from the actuarial study by Milliman and the Worker Paid Leave Usage Simulator (Worker PLUS) model from the U.S. Department of Labor. The aim of this dashboard is to provide a way to explore the effect of PFML program scenario parameters on program outcomes over time, such as the number of annual claims, total claims costs, program contributions, and contribution tax rate required to fund the program. In addition, the dashboard breaks out the program eligible population, revenue contributions, annual payouts, and other information by worker demographics. With this information, the user can explore the distribution of eligibility, benefit payouts, and tax contributions and take a closer look at who is paying for the program and who is likely to use it. This information can be used to examine disparities in program eligibility, utilization, and net benefits received. The demographic characteristics that can be selected for stratifying results are (a) income bracket, (b) age, (c) gender, (d) race/ethnicity, (f) industry, and (g) leave type.

The results are split into two main sections, the outcomes timeline that shows the time series graphs of results from Milliman and the demographics breakdown that shows the distribution of several outcomes across a user-selected demographic. Certain time series graphs can be filtered to view the outcomes for total, family, or medical leave. Both the time series and demographics visualizations compare outcomes for the PFML legislation. The dashboard can be found here: https://paid-family-and-medical-leave.shinyapps.io/pfml_2024/

Figure D.1 Paid Family and Medical Leave Interactive Dashboard



The Worker PLUS model

The Worker PLUS model was developed by IMPAQ International and the Institute for Women's Policy Research (IWPR) for the Chief Evaluation Office of the U.S. Department of Labor. IMPAQ International and the IWPR based this tool on the existing Albelda Clayton-Matthews/IWPR Paid Family and Medical Leave Simulation Model (ACM model). These models were developed to provide estimates of PFML policy usage and costs for research purposes. The Worker PLUS model allows a great deal of flexibility in setting policy parameters including replacement rates, replacement structure (flat or progressive), earnings and work requirements, weeks of leave for each specified leave type, and the types of workers covered.

The Worker PLUS model runs a machine learning algorithm on sample microdata constructed from the American Community Survey, Current Population Survey, and Family and Medical Leave Act survey data to produce estimates for the given PFML scenario cost and use outcomes. The default algorithm is Logistic Regression, but other options are available. For more detail on how the model is designed and operates, see here: https://www.dol.gov/agencies/oasp/evaluation/completedstudies/Microsimulation-Model-on-Worker-Leave.

Milliman results incorporated into Worker PLUS model

A key result from the Milliman actuarial study is the projected take-up rates for each scenario. These numbers are necessary to run the Worker PLUS model, and using the results from the actuarial study helps align the model predictions with the study for consistent results. Additionally, the actuarial study provides an estimate of the administrative costs, which the Worker PLUS model does not provide.

APPENDIX E: SUMMARY OF STUDIES ON PFML OUTCOMES

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (Parental)-Labor Outcomes							
Han, Ruhm, and Waldfogel (2009)	United States	FMLA and state leave laws	Parents of infants 0-12 months old	Employment, leave-taking	Difference-in-difference	Current Population Survey (CPS), 1987-1994	Expanded leave increases maternal and paternal leave-taking but is not associated with employment. Leave laws have higher effects for mothers with some college or more.
Washbrook et al. (2011)	United States	FMLA and state leave laws	Mothers employed in 12 months prior to birth and single mothers	Work participation	Difference-in-difference	Early Childhood Longitudinal Study Birth Cohort (ECLS-B)	State leave laws increase probability of employment after childbirth by 4.3 percentage points at 9 months and by 5.3 percentage points at child pre-school age (4 years).
Rossin-Slater, Ruhm, and Waldfogel (2013)	United States	CA-PFL	Women aged 15 to 64 years of age	Employment, leave-taking	Difference-in-difference	Current Population Survey (CPS), 1999-2010	Maternal employment was unchanged 1-3 years after childbirth, but hours worked increased.
Das and Polachek (2015)	United States	CA-PFL	State, gender, age group means	Labor force participation, unemployment	Difference-in-difference;	Current Population Survey (CPS), 1996-2009	PFL led to increases in all three measures with labor force participation

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (Parental)-Labor Outcomes							
				rate, unemployment duration	Triple difference, Quadruple difference		up by about 1.5%, unemployment between 0.3% and 1.5% and unemployment duration by 4%-9%.
Byker (2016)	Sample of women who gave birth in CA, NJ, TX, FL, NY	CA-PFL, NJ-PFL	Mothers aged 24 to 45	Labor force participation	Event study difference-in-difference	Survey of Income and Program Participation (SIPP), 1996, 2001, 2004 and 2008 panels	PFL policies have statistically significant impact on maternal labor-force participation. The results are driven by those without a college education.
Bahm and Ruhm (2016)	United States	CA-PFL	Parents who had a child between 2000 and 2010	Employment, leave-taking	Difference-in-difference	1997 cohort of National Longitudinal Survey of Youth (NLSY)	Policy boosted maternal employment by 18% one year after childbirth. It also increased weeks and hours worked during second year by 18% and 11%. No statistically significant effect on wages.
Curtis, Hirsh, and Schroeder (2016)	United States	CA-PFL	County-level data for women in the 19-21, 22-24,	New hire earnings, new hires, separations and recalls	Difference-in-difference;	Quarterly Workforce indicators (QWI) from Local Employment	No new hire earnings effects but statistically significant effects on new hires, separations

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (Parental)-Labor Outcomes							
			and 25-34 age categories		Triple difference	Dynamics (LED) data (2002-2006)	and recalls of 2-3% indicating increased job churn for young women.
Bailey et al. (2019)	United States	CA-PFL	Women giving birth in 3rd quarter 2004; control group of women giving birth in 2003, 2005, and 2006	Employment, wages, leave-taking	Event study	IRS tax data (2001-2015) linked with Social Security Administration data on household member birth dates. National Vital Statistics System (NVSS) natality files.	PFL decreased employment by 7% and lowered wages by 8% 6-10 years after childbirth. Contrary to previously reported studies, they also find that access to leave was not associated with greater likelihood of returning to a pre-birth employer.
Stanczyk (2019)	California	CA-PFL	Mothers of 1 year and 2-year old children	Poverty status, household income	Difference-in-difference; Triple difference	American Community Survey (2000-2013)	CA-PFL associated with 10.9% decrease in poverty likelihood and household income increase by 4.1% for

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (Parental)-Labor Outcomes							
							others of 1- year-olds. Gains are evident for single and less-educated mothers. Household income gains are evident for married mothers. No gains observed for mothers of 2-year-old children.
Bana, Bedard, and Slater (2020)	California	CA-PFL	Mothers 20-44 with PFL bonding claims	Employment, earnings, leave-taking	Regression Kink Design	Administrative data from California Employment Development Department (EDD) for universe of PFL claims (2005-2014) and quarterly earnings (2000-2014)	Replacement rate is not associated with adverse post-birth labor market outcomes for high earning mothers. However, increases in the rate are associated with a higher likelihood of returning to the pre-birth employer.
Stock and Inglis (2021)	United States	CA-PFL	Individuals 18-64	Labor force participation, employment, unemployment duration, earnings	Difference-in-difference; Triple difference	Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC) Integrated Public Use Microdata Series from 1996-2016	PFL had little impact on young women's labor force participation, unemployment duration, and earnings, but steady effects on employment 10 years after

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (Parental)-Labor Outcomes							
							implementation. Effects were concentrated among college-educated women.
Chang (2021)	California	CA-PFL	County-level data for women in the 14-44 age category	Employment and wages	Event-study, difference in difference, triple difference	Quarterly Workforce indicators (QWI) from Local Employment Dynamics (LED) data (1991-2015)	CA-PF program decreases employment for young women compared to young men by approximately 2-3% and wages of 0-0.2%.
LaLumia and Tobin (2022)	New York	NY-PFL	Women aged 16-50	Employment, Hours worked, Labor	Event-Study, Difference-in-difference, Synthetic Control Group	American Community Survey (2015-2019) Public Use Microdata Sample	PFML increased employment of mothers with children less than one year old by 2.6-3.4 percentage points., mothers' usual hours worked by 1.1 to 1.3 hours per week and income by 1.6-2.9%.
Jones and Wilcher (2024)	United States	CA-PFL, NJ-PFL, RI-PFL, NY-PFL	Civilian women aged 25 to 54	Labor force participation, unemployment, full-time working status, working in professional or managerial occupation	Difference-in-difference and synthetic control group	American Community Survey Public Use Microdata Series (IPUMS) 2000-2021	For CA maternal labor force participation increases by 5.4 percentage points in the birth year with decreasing, but still statistically significant, improvements detected

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (Parental)-Labor Outcomes							
							nine years later. These effects are higher with greater educational attainment and are smaller or nonexistent for black women. PFL has no effect on maternal unemployment. Labor force participation results for NJ, RI, and NY are comparable to CA.
Kim and Lenhart (2024)	United States	NY-PFL	Households with youngest child less than one	Household food security status, annual household food expenditures, labor force participation status, self-reported health status	Difference-in-difference, triple-difference	Current Population Survey Food Security Supplement (2012-2017) and Panel Study on Income Dynamics (2013-2021)	PFL is associated with improvement in self-reported health status.
Kim (2024)	United States	CA-PFL	Mothers at childbirth aged between 18 and 45 and all fathers	Labor force participation, employment, earnings	Difference-in-difference; Triple difference	Survey of Income and Program Participation (SIPP), 1996-2013	Mothers are more likely to participated in labor force, work and have slightly increased earnings. There are no statistically significant differences in these measures for fathers.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (Parental)-Labor Outcomes							
Timpe (2024)	United States	U.S. disability policy and anti-discrimination statutes in the 1970s and 1970s	Women aged 18 to 45	Employment, hours worked, hourly wages, and family income.	Event study	Survey of Income and Program Participation (SIPP) (1984-1989), Current Population Survey (CPS) (1969-1987)	Hourly wages fell by 5-6 log points after benefits were more widely available. Employment and hours worked also fell 5 and 5-9 years after. Wage and employment decreases lead to decreased family income for women.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL-ECONOMIC SECURITY AND SAVINGS							
Stanczyk (2019)	California	CA-PFL	Mothers of 1 year and 2-year old children	Poverty status, household income	Difference-in-difference; Triple difference	American Community Survey (2000-2013)	CA-PFL associated with 10.9% decrease in poverty likelihood and household income increase by 4.1% for others of 1 year olds. Gains are evident for single and less-educated mothers. Household income gains are evident for married mothers. No gains observed for mothers of 2-year old children.
Kim and Lenhart (2024)	United States	NY-PFL	Households with youngest child less than one	Household food security status, annual household food expenditures, labor force participation status, self-reported health status	Difference-in-difference, triple-difference	Current Population Survey Food Security Supplement (2012-2017) and Panel Study on Income Dynamics (2013-2021)	PFL reduced low food security prevalence by 36%. Effects are larger for households under 185% of federal poverty line and lesser educated parents.
Rodgers (2020)	United States	CA-PFL	Women who gave birth	Savings	Difference-in-difference; Triple difference	Survey of Income and Program Participation, 1996-2008	Expectant mothers reduce their savings leading up to birth.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL-EMPLOYERS							
Bartel et al. (2024)	New York	NY-PFL	Firms	Ratings of employee performance (attendance, commitment, cooperation, productivity, teamwork), ratings of ease of coordination and handling of employee absences, employee leave-taking, views about PFL policy	Difference-in-difference; Event-study	Longitudinal survey of approximately 4,500 employers.	Employers with 50-99 workers indicate improved ease of handling long employee absences but effect disappears in second policy year. Small firms experience increase in employee leave-taking in second policy year. Opposition to PFL is small but growing.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (PARENTAL)-HEALTH							
Washbrook et al. (2011)	United States	FMLA and state leave laws	Mothers employed in 12 months prior to birth	Duration of breast feeding, at least 4 wellness baby visits, maternal depression score, maternal parenting score	Difference-in-difference	Early Childhood Longitudinal Study Birth Cohort (ECLS-B)	No evidence of positive effects on child or maternal outcomes at 9 months and 4 years after childbirth.
Rossin (2011)	United States	FMLA	Birth-year/birth-month/county /mother-education/mother-race/mother-age/mother marital-status counts	Birth outcomes (birth weight, low birth weight, premature infant) and infant mortality	Difference-in-difference; Triple difference	National Center for Health Statistics National Vital Statistics System (NVSS), 1989-1999	FMLA had small effects on birth weight and likelihood of premature birth. Effects were larger and statistically significant for college-educated and married mothers.
Huang and Yang (2015)	United States	CA-PFL	Child-Mother pairs	Various measures of breastfeeding initiation and duration	Difference-in-difference	Infant Feeding Practices Study, Wave 1 (1993) and Wave II (2005-2006)	PFL increases breastfeeding prevalence by 10-20 percentage points and 3-5 percentage points for exclusive breastfeeding.
Stearns (2015)	United States	States with short-term	Child-Mother pairs	Birth outcomes (birth weight, low	Difference in difference	National Center for Health Statistics	SDI reduces share of low birth weight births

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (PARENTAL)-HEALTH							
		disability programs in 1978 (i.e., California, Hawaii, New York, New Jersey, and Rhode Island)		birth weight, premature infant) and infant mortality	with synthetic control	National Vital Statistics System (NVSS), 1972-1985	by 3.2% and likelihood of early term birth by 6.6%. Low birth weight effects are larger for black and unmarried women. SDI does not have effect on overall infant mortality but small effects for high employment counties and black infants.
Lichtman-Sadot and Bell (2017)	U.S. states covered in ECLS	CA-PFL	Children who reside with biological mother, born in US, and do not have twin sibling.	Parent reported child outcomes for overweight, attention deficit/hyperactivity disorder (ADHD), child's overall health, hearing problems, communication problems, and frequent ear infections.	Difference-in-difference	National center for Education Statistics (NCES) Early Childhood Longitudinal Studies (ECLS), 1999 and 2011 and CDC early Hearing Detection and Intervention screening data.	PFL is associated with improvement in elementary school children health outcomes. Decreases in children reported overweight, ADHD, hearing problems, and frequent ear infections. Results are driven by children from disadvantaged backgrounds.
Bullinger (2019)	United States	CA-PFL	Parents	Various measures of child health and parental mental health	Difference-in-difference	National Survey of Children's Health (NSCH), 2003, 2007, 2011-2012.	PFL program associated with overall child health, asthma and maternal mental health

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (PARENTAL)-HEALTH							
							improvements. No effects for food and respiratory allergies or parental mental health.
Hamad, Modrek, and White (2019)	United States	CA-PFL and NJ-PFL	Child-Mother pairs	Various measures of breastfeeding initiation and duration	Difference-in-difference	National Immunization Survey (NIS), 2003-2015	PFL is associated with increase in likelihood of children being exclusively breastfed at 6 months. Effects are more positive for advantaged mothers.
Pac et al. (2019)	United States	CA-PFL	Child-Mother pairs	Various measures of breastfeeding initiation and duration	Difference in difference with synthetic control	National Immunization Survey (NIS), 2003-2014	PFL increases duration of breastfeeding by almost 18 days and likelihood of breastfeeding for at least six months by 5 percentage points. Effects are more positive for disadvantaged mothers.
Pihl and Basso (2019)	CA, AZ, NY, WA	CA-PFL	Infants	Admissions for lower respiratory illness, upper respiratory illness, gastrointestinal infections, skin	Difference-in-difference	Hospitalization data from California Office of Statewide Health Planning and Development and Health Care	PFL is associated with 3-6% decline in infant hospital admissions. Upper respiratory admissions declined 25-33% and

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (PARENTAL)-HEALTH							
				infections, and cancer		Utilization Project (HCUP) data for Arizona, New York, and Washington State	gastrointestinal admissions by 9-15 %.
Doran et al. (2020)	United States	CA-PFL	Mothers with infants	Measures of maternal postpartum psychological stress.	Difference in difference with synthetic control	National Health Interview Survey (2000-2010)	CA-PFL associated with 0.636 point decrease in postpartum psychological l distress symptoms (27.6% decrease from pre-treatment mean) and 9.1 percentage point reduction in mild postpartum distress (38.4% reduction from pre-treatment mean)
Lee et al. (2020)	United States excluding NJ and RI	CA-PFL	Parents of child under two with recorded birth, at least one parent employed before child's	Parent self-reported health, psychological distress, BMI, and alcohol use	Difference-in-difference	Panel Study of Income Dynamics (PSID), 1993-2017	PFL effects include improved self-rated health, lower distress, and lower likelihood of being overweight and lower alcohol use.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (PARENTAL)-HEALTH							
			birth, and excluding households with children born before PFL.				
Chen (2021)	United States	CA-PFL	State-month cells for women whose youngest child is less than 1 year old	Post-neonatal mortality rate	Difference-in-difference, synthetic control group	Cohort-linked birth and infant death data from the National Vital Statistics System (NVSS) and Current Population Survey (CPS) (2000-2008 for CA and 1999 to 2017 for NJ and RI)	PFL reduced post-neonatal mortality rate by 0.135 (equivalent to approximately 339 infant lives). Reductions in neonatal mortality rate for NJ and RI but not statistically significant.
Choudhury and Polachek (2021)	United States	CA-PFL, NJ-PFL, RI-PFL, NY-PFL	Infants	On-time vaccination for HepB, DTP, DTP, and HIB	Difference in difference with synthetic control	National Immunization Survey (NIS), 2000-2010	CA-PFL decreases probability of being late for vaccination for poorer households.
Irish et al. (2021)	United States	CA-PFL and NJ-PFL	Working adults and their children for which measures were available.	Parental psychological distress and child behavioral problem indicators	Difference-in-difference	National Health Interview Survey (NHIS), 1997-2016.	PFL is associated with 25% decrease in parents' psychological distress score but no change in children's behavioral problem indicator.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (PARENTAL)-HEALTH							
Chaterji et al. (2022)	New York	NY-PFL	Infants born to mothers who were employed during pregnancy	Timeliness of six types of immunizations by the 2 and 4 months.	Difference-in-difference	National Vital Statistics birth data and New York Immunization Information System (2015-2018)	PFL is associated with small increase in probability that firstborn infants have had all immunizations on time between ages of 2 and 4 months.
Kim (2024)	United States	CA-PFL	Mothers with age at childbirth between 18 and 45 and all fathers	Reported excellent health, number of days sick, hospital stay, prescription medication usage, number of doctor visits, labor force participation, employed	Difference-in-difference; Triple difference	Survey of Income and Program Participation (SIPP), 1996-2013	Mothers' health improves after PFL in every measure. Fathers show improved health around childbirth but poorer outcomes 5 months after childbirth.
Kim and Lenhart (2024)	United States	NY-PFL	Households with youngest child less than one	Household food security status, annual household food expenditures, labor force participation status, self-reported health status	Difference-in-difference, triple-difference	Current Population Survey Food Security Supplement (2012-2017) and Panel Study on Income Dynamics (2013-2021)	PFL with improvement in self-reported health status.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (PARENTAL)-HEALTH							
Morrissey, Castleberry, and Soni (2024)	United States	NY-PFL	Parents 21-30 years of age with one or more children under 18 years of age	Exercise in past month, average hours of sleep	Difference-in-difference and synthetic control group	Behavioral Risk Factor Surveillance System (BRFSS), 2011-2019	PFL increased likelihood of exercise among mothers, single parents, and low-income parents by 6.3-10.3 percentage points. Fathers showed decreased in exercise of 7.8 percentage points. Fathers, single parents, and parents with two or more children saw increased daily self by 14-21 minutes per day.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (PARENTAL)-FERTILITY							
Rossin (2011)	United States	FMLA	Birth-year/birth-month/county/mother-education/mother-race/mother-age/mother marital-status counts	First, second, and third parity births	Difference-in-difference; Triple difference	National Center for Health Statistics National Vital Statistics System (NVSS), 1989-1997	Federal FMLA is associated with changes in birth parity but no net increase in fertility because increases in first parity births were offset by decreases in later parity births.
Bailey et al. (2019)	United States	CA-PFL	Women giving birth in 3rd quarter 2004	Number of children born, births, first births	Event study	IRS tax data (2001-2015) linked with Social Security Administration data on household member birth dates. National Vital Statistics System (NVSS) natality files.	PFL decreased employment by 7% and lowered wages by 8% 6-10 years after childbirth. Contrary to previously reported studies, they also find that access to leave was not associated with greater likelihood of returning to a pre-birth employer.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL (PARENTAL)-FERTILITY							
Golightly and Meyerhofer (2022)	United States	CA-PFL and NJ-PFL	States	Fertility rate for women aged 20-39	Difference-in-difference and synthetic control group	National Vital Statistics birth data (1999-2008 monthly)	California PFL is associated with a statistically significant increase of 2.5 births for females aged 20-39, which represents a 2.8% increase. These increased births are caused primarily by mothers in their 30s and 2nd or greater parity births. The authors find a similar magnitude of effect for New Jersey's PFL program, but the result is not statistically significant

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL-CARETAKER EFFECTS							
Gimm and Yang (2016)	United States	CA-PFL	Caretakers aged 5- to 64 years	Depression score, Self-reported physical health	Difference-in-difference	Health and Retirement Survey, 1994-2010	Program was not associated with impact on mental health score or physical health assessment.
Morefield et al. (2016)	United States	CA-PFL and NJ-PFL	Individuals aged 40-64	Employment status, labor force participation status	Difference-in-difference	U.S. Census Bureau American Community Survey (2000-2013) and Rand Corporation Health and Retirement Study (HRS) (1998-2012)	PFL is not associated with changes in leave-taking, employment, or labor force participation for likely caregivers.
Arora and Wolf (2018)	United States	CA-PFL	States	Nursing home utilization	Difference-in-difference	Center for Medicare and Medicaid Services (SMS Nursing Home Compendium, and Minimum Data Set (MDS) assessments, 1999-2008	PFL is associated with reduction in proportion of elderly population in nursing homes by 0.5-0.7, which represents approximately 11% decline in nursing home utilization.
Saad-Lessler (2020)	United States	CA-PFL	Individuals 20-65 who are not business owners	Incidence of being a care provider and labor force participation	Difference-in-difference	Survey of Income and Program Participation, 1998, 2003, 2006, and 2011	PFL is associated with 1% increase in likelihood of being unpaid care provider in the labor force.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL-CARETAKER EFFECTS							
Kang et al. (2019)	United States	CA-PFL	Women aged 45-64 with family member with physical disability	Employment status	Difference in difference with synthetic control	Current Population Survey, 2000-2014	PFL is associated with significant increase in likelihood of being employed. Effects are concentrated among near-poor and early middle-aged.
Braga et al. (2022)	United States	CA-PFL, NJ-PFL	Respondents aged 51 to 70 who have potential to serve as caregivers for parent or spouse.	Employment status, caregiving activity, caretaker mental well-being, caretaker physical wellbeing	Difference-in-difference; Triple difference, Synthetic control method	Health and Retirement Study (HRS), 1996-2016.	Women with spouse in poor health are 7.4 percentage points more likely to work while providing care and are 7.9 percentage points less likely to report being depressed. Women living with 10 miles of a parent in poor health are 5.6 percentage points more likely to work while providing care and are 8.2 percentage points less likely to report being depressed.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL-CARETAKER EFFECTS							
Coile, Rossin-Slater and Su (2022)	United States	CA-PFL, NJ-PFL, NY-PFL	Respondents aged 25 to 64 who are employed or have job to return to.	Employment status, job leave indicators, usual hours worked per week, self-reported mental health status, use of mental health-related prescription drugs.	Event study, difference-in-difference	Medical Expenditure Panel Survey (MEPS), 1996-2019	PFL leads to 7 percentage point decrease (2.2 percent of base) in likelihood that wives of persons with medical conditions that are hospitalized or have surgery report "leaving a job to care for home or family." Job continuity improvements are concentrated among caregivers with 12 or fewer years of education. No statistically significant labor market outcomes for parents of children who experience health shocks. Empirical results for health outcomes are mixed and not conclusive.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PFL-CARETAKER EFFECTS							
Bartel et al. (2023)	United States	CA-PFL	Workers aged 45-64 with a disabled spouse	Employment status	Triple difference	American Community Survey Public Use Microdata sample (PUMS), 2001-2008.	Program increased employment of 45-64-year-old women with disabled spouse by 0.9 percentage points (1.4% of base rate). Employment of men increased by 0.7 percentage points (0.8% of base rate).
Arora and Wolf (2024)	United States	CA-PFL, NJ-PFL, NY-PFL, OR-PFL	Individuals aged 50 years or older	Provision of personal care to parents	Event study, staggered difference-in-difference	Health and Retirement Study 1998-2020	PFL adoption was not associated with care provision for parents except for states offering job protection (i.e., NJ, NY).
Abramowitz and Dillender (2023)	United States	CA-PFL	Persons aged 50 to 79	(1) Time spent in last 2 years taking care of grandchildren (2) time spent in the last 2 years helping parents with basic needs	Difference-in-difference	Health and Retirement Study 1998-2016	PFL associated with additional hours spent helping parents (50% increase) and reduced time spent caring for grandchildren and parents by 22 22 hours.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
SHORT-TERM-DISABILITY							
Jolls (2020)	United States	States in which FMLA provided Medical Leave mandate	Individuals aged 21-58	Number of weeks worker per year	Event study difference-in-difference	Current Population Survey (CPS), 1990-1999	Results show some short-term employment effects after introduction of the law, but the significance and magnitude of the effects diminish toward the end of the 1990s.

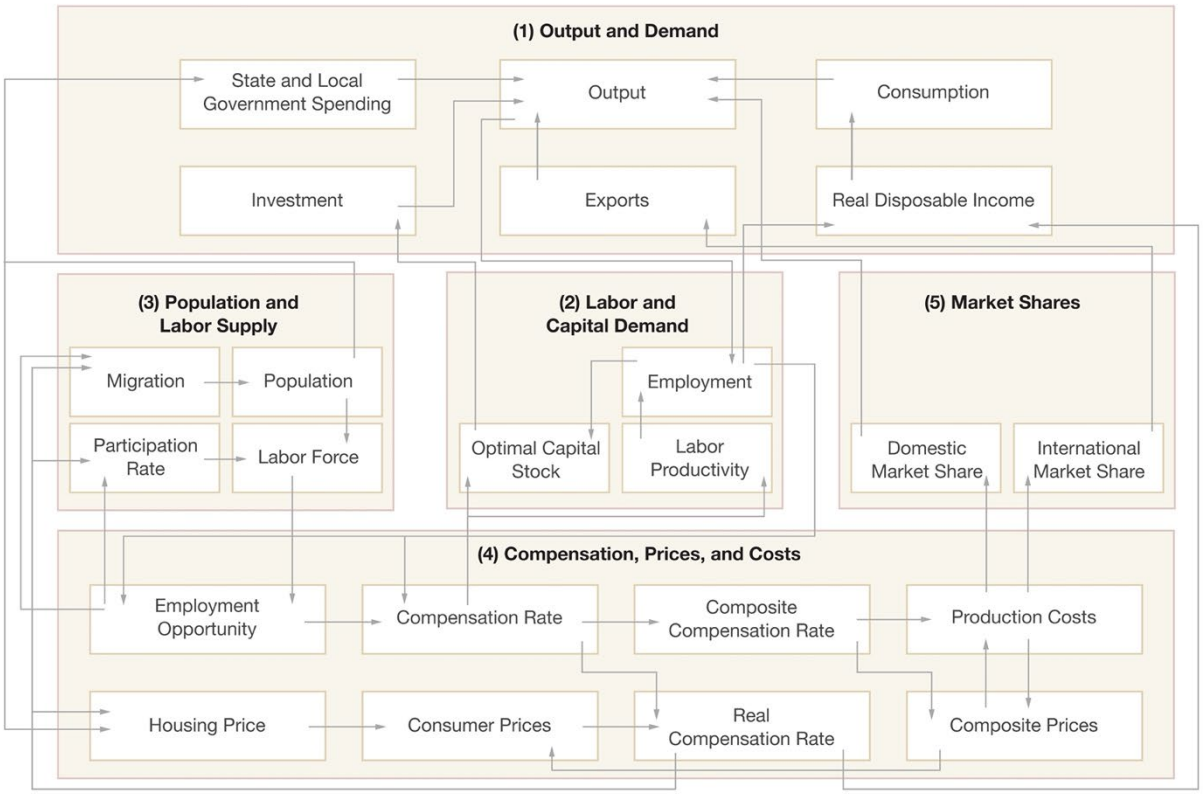
Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PAID SICK LEAVE							
Ahn and Yelowitz (2015)	United States	Connecticut Paid Sick Leave Mandate	Individuals aged 16-64	Labor force participation, working, unemployed	Difference-in-difference	American Community Survey (ACS) Public Use Microdata Sample, 2009-2012	Policy has negative labor market impacts. It increases likelihood of being unemployed and decreases likelihood of working. Negative effects are concentrated among males 30-54 years of age and females 40-54.
Stearns and White (2018)	United States	Connecticut and D.C. Paid Sick Leave Mandates	Full-time workers aged 16-64	Leave-taking	Difference in difference with synthetic control	Current Population Survey (CPS), 2006-2015	Leave-taking is reduced by up to 18% following introduction of policies. Effects persist for Connecticut but diminish for the District of Columbia.
Pichler and Pichler (2020)	United States	City and State Paid Sick Leave Mandates	Counties and states	Private sector employment and wages	Difference in difference with synthetic control	Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW), 2000-2016	No evidence of negative employment or wage effects.

Paper	Region	Program	Units of Analysis	Dependent Variables	Method	Data Source	Findings
PAID SICK LEAVE							
Maclean, Pichler, and Ziebarth (2020)	United States	State Paid Sick Leave Mandates	Employees	Employee utilization of paid and unpaid sick leave, hours worked.	Difference-in-difference	National Compensation Survey, 2000-2017	No evidence that sick leave affects hours worked. However, mandate increases sick leave time by two days per year.
Slopen (2024)	United States	PSL-CA, MA, and OR	Females aged 25 to 64 years	Employment, wages and salary, poverty status	Event-study and difference-in-difference	American Community Survey Public Use Microdata Samples (IPUMS), 2010-2019	PSL mandates increase female employment by 1.1 percentage points, wages and alary by $2,347 and 0.9 percentage point decrease in proportion of women in poverty.

APPENDIX F: REMI PI+ MODEL DESCRIPTION

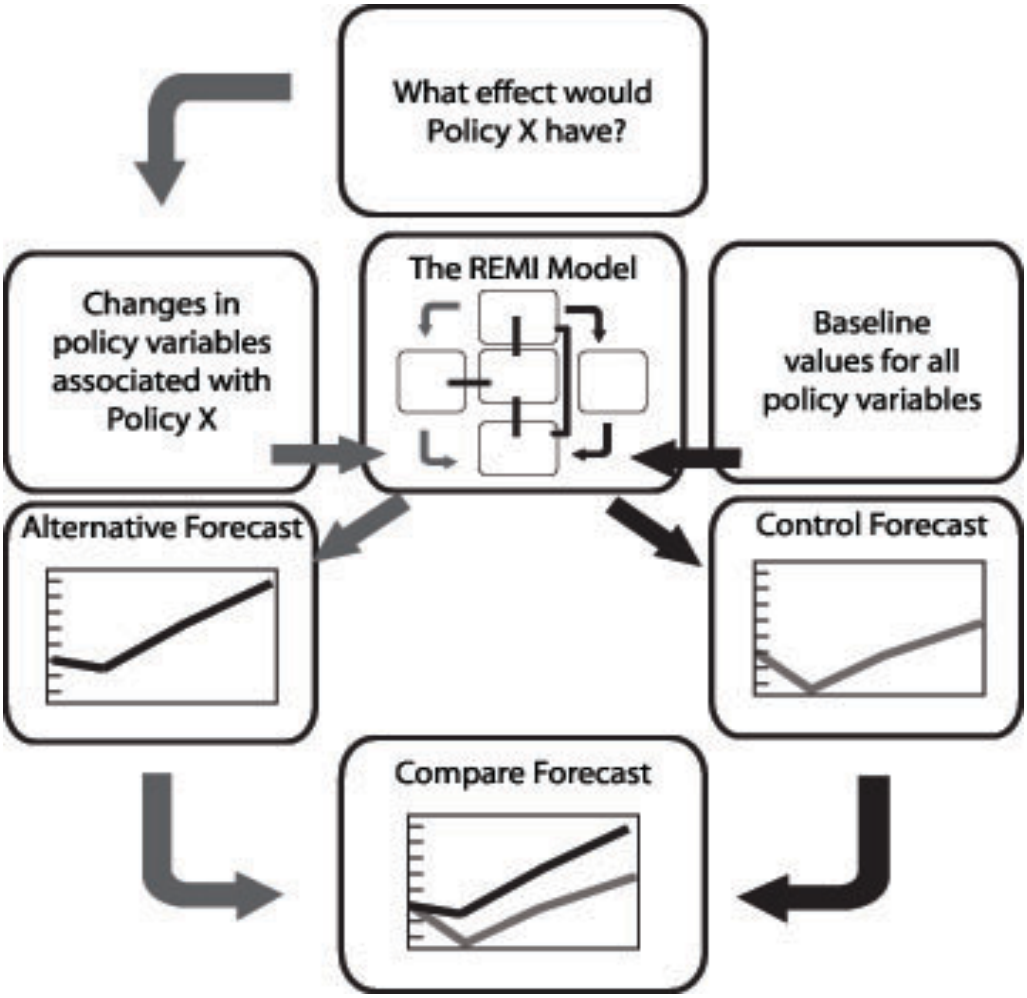
The REMI model is made up of five major modules or blocks (see **Figure F.1**), which interact simultaneously. The Output Block determines expenditures for final demand, including consumption, investment, government and imports, and demand for intermediate inputs. Final demand responds to changes in other model blocks. This module contains a key engine in the model—an input-output model based on the Bureau of Economic Analysis (BEA) benchmark transactions table that measures flows of goods and services among industries. The Labor and Capital Demand Block determines employment, capital and fuel demand, and labor productivity. The Population and Labor Force Block models the population characteristics of the region, including age, race, and sex composition. Labor force participation adjusts in response to changes in wages and employment opportunities. A key driver of population changes is migration, which is influenced by relative wage levels as well as amenities. The Wage, Price and Costs Block determines factor and product price. The Market Shares Block helps to measure exports from and imports to the region. Changes in market share are driven by production costs, demand characteristics, distance to markets, and output.

Figure F.1 Simplified Economic Structure of the Key Interactions in Regional Economies Based on the REMI PI+ Model



The basic procedure used to obtain PFML economic impacts is illustrated in **Figure F.2** and briefly summarized here. A control forecast for the Virginia economy was generated using REMI PI+. An alternative forecast was then run in which input data associated with the particular PFML scenario was used. For instance, in the reduced labor productivity scenario, negative values were entered for the REMI PI+ labor productivity policy variable in the Labor and Capital Demand block (2) for 2026 to 2035. The difference between the baseline control forecast and the alternative forecast provides an estimation of the economic impact of reduced labor productivity.

Figure F.2 REMI PI+ Model Simulation Flow



REMI PI+ does not provide state tax revenue estimates. In order to conduct tax revenue analysis, this study utilized a method outlined in Regional Economic Models, Inc. (2012). State tax revenues were obtained from the Census of Government's *Annual Survey of State Tax Collections* for 2023. Revenue estimates are calculated by multiplying state revenue rates by the corresponding base quantity, which included state-level demand for selected industries (general sales tax, selective sales tax, license taxes), state-level personal income less transfer payments (individual income tax), corporate income tax (gross domestic product), and personal income (other taxes).

The modeling of each program component and scenario was conducted differently depending on the type of expenditure, tax, and economic or demographic outcome considered. **Table F-1** describes the REMI PI+ modeling inputs for each feature on REMI PI+ modeling blocks and policy variables.

Table F.1 REMI P+ Model Inputs

PFML Feature/Outcome	REMI Model Policy Variables	Modeling Description	Source of Data/Assumption
Payroll Tax	(1) Employer Tax. Compensation and Prices->Production Costs->Production Costs (grouped industries) (2) Employee Tax. Output and Demand->Real Disposable Income->Personal Taxes	Model business payroll tax increase as reduced production costs. Model worker payroll increase as increase in personal taxes.	Actuarial Study Estimates
Program Start-up and Administration Costs	Output and Demand->State and Local Government Spending>-State Government	Model administrative spending as increase in state government spending.	Actuarial Study Estimates
Benefit Payments	(1) Medical Leave. Personal Income->Personal current Transfer Receipts->Transfer Payments->Other Retirement and Disability Insurance Payments (2) Family Leave. Personal Income->Personal current Transfer Receipts->Transfer Payments->State Unemployment Insurance Compensation	Model PFML benefit payments as transfer payment. Medical leave is modeled as other retirement and disability insurance payments. Family leave is modeled as state unemployment insurance compensation.	Actuarial Study Estimates

PFML Feature/Outcome	REMI Model Policy Variables	Modeling Description	Source of Data/Assumption
Labor Force Attachment	(1) Population and Labor Supply>-Labor Force>-Participation Rate->Female->Ages 18-41 (2) (2) Labor and Capital Demand>-Employment>-Firm (grouped industries)	Model increase in labor force participation and employment for females of childbearing age.	Das and Polachek (2015) empirical result of 1.37 percent increase in labor force participation rate for females aged 18 to 41 accompanied by labor market clearing assumption.
Labor Productivity	Labor and Capital Demand->Labor Productivity->Immediate Market Share Response, Include Effect on Labor Intensity* (grouped industries)	Model labor productivity decrease for firms.	Survey data from Milkman and Applebaum (2013). Assume 9.9 percent of firms lose productivity of workers on leave. This translates into a statewide loss of productivity of 0.03 percent.
Birth Rate	Population and Labor Supply>-Population>-Birth Rate->Ages 20-39	Model increase in fertility rate as birth rate increase.	Golightly and Meyerhofer (2022) empirical result which indicates that PFML increases births to mothers aged 20-39 by 2.8 percent.
Infant Mortality	Population and Labor Supply>-Population>-Survival Rate->Age 0 (all races and genders)	Model decrease in mortality rate as survival rate increase.	Chen (2023) empirical result that PFL reduced post-neonatal mortality rate by 0.135.

** Decrease in labor intensity is modeled because the change is expected to make labor less attractive to businesses.*

APPENDIX G: RESULTS OF STATE ECONOMIC AND TAX REVENUE IMPACT ANALYSES

Table G.1 Employment Impacts of Virginia PFML, 2026-2035 by Scenarios

Scenario	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Option 1										
Employment	-8,265	-2,292	-2,167	-1,534	-1,413	-1,480	-1,758	-2,012	-2,277	-2,517
Real GDP ($ millions)	-$682.3	-$219.8	-$225.7	-$184.4	-$184.5	-$198.5	-$232.9	-$263.9	-$296.0	-$326.0
State Tax Revenue ($ millions)	-$46.0	-$4.0	-$1.8	$2.9	$4.8	$5.0	$3.8	$2.3	$0.5	-$1.4
Option 2										
Employment	-14,088	-3,409	-3,344	-2,454	-2,356	-2,548	-3,050	-3,538	-4,007	-4,423
Real GDP ($ millions)	-$1,165.2	-$337.2	-$360.4	-$306.7	-$317.0	-$348.1	-$410.1	-$468.5	-$525.5	-$578.0
State Tax Revenue ($ millions)	-$74.1	-$0.4	$2.9	$9.8	$12.2	$12.0	$9.7	$6.8	$3.5	$0.3
Option 3										
Employment	-9,724	-2,590	-2,488	-1,757	-1,627	-1,721	-2,031	-2,344	-2,654	-2,934
Real GDP ($ millions)	-$802.7	-$249.6	-$260.1	-$212.5	-$213.7	-$231.3	-$270.1	-$307.8	-$345.3	-$380.3
State Tax Revenue ($ millions)	-$53.8	-$4.0	-$1.6	$3.9	$5.9	$6.1	$4.7	$2.9	$0.7	-$1.4
Option 1A										
Employment	-5,332	1,231	1,587	-94	-942	-1,453	-1,753	-2,136	-2,378	-2,576
Real GDP ($ millions)	-$441.0	$78.0	$99.1	-$52.7	-$136.3	-$190.2	-$227.3	-$270.6	-$301.2	-$327.9
State Tax Revenue ($ millions)	-$29.9	$17.9	$23.5	$15.8	$10.7	$7.1	$4.9	$2.1	$0.1	-$1.7

Table G.2 Employment Impacts of Virginia PFML, 2022-2032 by Payroll Tax Burden Scenarios

Scenario	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Option 1 (50-50 Split)										
Employment	-8,265	-2,292	-2,167	-1,534	-1,413	-1,480	-1,758	-2,012	-2,277	-2,517
Real GDP ($ millions)	-$682.3	-$219.8	-$225.7	-$184.4	-$184.5	-$198.5	-$232.9	-$263.9	-$296.0	-$326.0
State Tax Revenue ($ millions)	-$46.0	-$4.0	-$1.8	$2.9	$4.8	$5.0	$3.8	$2.3	$0.5	-$1.4
Employee Payroll Tax										
Employment	-9,823	-3,482	-2,886	-1,687	-1,100	-767	-774	-459	-897	-1,076
Real GDP ($ millions)	-$790.2	-$287.0	-$244.6	-$147.6	-$100.5	-$74.2	-$76.8	-$50.4	-$92.0	-$110.4
State Tax Revenue ($ millions)	-$76.9	-$34.6	-$30.6	-$21.9	-$17.1	-$13.8	-$13.4	-$9.9	-$13.7	-$15.3
Employer Payroll Tax										
Employment	-6,364	-844	-1,293	-1,350	-1,799	-2,354	-2,959	-3,225	-3,835	-4,204
Real GDP ($ millions)	-$550.7	-$138.1	-$203.1	-$229.6	-$287.6	-$350.7	-$423.6	-$461.6	-$532.7	-$581.9
State Tax Revenue ($ millions)	-$8.2	$33.3	$33.3	$33.3	$31.5	$28.2	$24.9	$22.0	$19.3	$16.6

Table G.3 Employment Impacts of Virginia PFML, 2022-2032 by Economic and Demographic Scenarios

Scenario	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Labor Force Attachment										
Employment	0	8,722	8,075	7,731	7,419	7,162	6,938	6,760	6,634	6,569
Real GDP ($ millions)	$0.0	$913.0	$864.0	$844.4	$827.8	$814.5	$805.6	$800.0	$798.9	$803.8
State Tax Revenue ($ millions)	$0.0	38.67	36.93	35.08	33.77	33.03	32.60	32.56	32.97	34.03
Labor Productivity										
Employment	0	-958	-1,092	-1,187	-1,221	-1,217	-1,208	-1,192	-1,179	-1,170
Real GDP ($ millions)	$0.0	-$83.2	-$96.3	-$106.7	-$111.9	-$113.9	-$115.1	-$115.7	-$116.5	-$117.7
State Tax Revenue ($ millions)	$0.0	-$3.5	-$5.0	-$6.1	-$6.7	-$7.1	-$7.4	-$7.6	-$7.8	-$8.0
Birth Rate										
Employment	0	600	1,184	1,748	2,275	2,763	3,229	3,670	4,082	4,476
Real GDP ($ millions)	$0.0	$51.5	$102.8	$153.8	$202.8	$249.9	$294.6	$338.5	$380.6	$421.9
State Tax Revenue ($ millions)	$0.0	$4.6	$9.8	$15.2	$21.0	$26.8	$32.9	$39.3	$45.7	$52.4
Infant Mortality										
Employment	0	5	10	14	19	23	26	30	33	36
Real GDP ($ millions)	$0.0	$0.4	$0.8	$1.3	$1.7	$2.0	$2.4	$2.8	$3.1	$3.4
State Tax Revenue ($ millions)	$0.0	$0.0	$0.1	$0.1	$0.2	$0.2	$0.3	$0.3	$0.4	$0.4

REFERENCES

Abt Associates. 2020. *Employee and worksite perspectives of the Family and Medical Leave Act: Results from the 2018 surveys*. Report prepared for the U.S. Department of Labor, Chief Evaluation Office.

Abramowitz, Joelle and Marcus Dillender. 2023. Effects of California's paid family leave law on caregiving by older adults. *Journal of Aging & Social Policy* 36, 4: 490-507.

Ahn, Thomas and Aaron Yelowitz. 2015. The short-run impacts of Connecticut's paid sick leave legislation. *Applied Economic Letters* 22, 15: 1267-1272.

AMI Risk Consultant, Inc. 2019. State of Colorado Department of Labor and Employment actuarial study of the solvency of the proposed Colorado family and medical leave insurance program. December 9, 2019.

Anand, Priyanka, Laura Dague, and Kathryn L. Wagner. 2021. The role of paid family leave in labor supply responses to a spouse's disability or health shock. National Bureau of Economic Research. Working Paper 28808.

Arora, Kanika and Douglas A. Wolf. 2024. Parent leave mandates and care for older parents. *The Milbank Quarterly* 102, 3: 732-764.

Arora, Kanika and Douglas A. Wolf. 2017. Does paid family leave reduce nursing home use? The California experience. *Journal of Policy Analysis and Management* 37, 1: 38-62.

Bailey, Martha J., Tanya S. Byker, Elena Patel, and Shanthi Ramnath. 2024 The long-run effects of California's paid family leave act on women's careers and childbearing: New evidence from a regression discontinuity design and U.S. tax data. *American Economic Journal: Economic Policy* (Forthcoming)

Bana, Sarah, Kelly Bedard, Maya Rossin-Slater, and Jenna Stearns. 2018. Unequal use of social insurance benefits: The role of employers. National Bureau of Economic Research. Working Paper 25163.

Bana, Sarah H., Kelly Bedard, and Maya Rossin-Slater. 2020. The impacts of paid family leave benefits: Regression kink evidence from California administrative data. *Journal of Policy Analysis and Management* 39, 4: 888-929.

Bartel, Ann, Maya Rossin-Slater, Christopher Ruhm, and Jane Waldfogel. 2016. Assessing Rhode Island's Temporary Caregiver Insurance Act: Insights from a survey of employers. January 2016.

Bartel, Ann P., Maya Rossin-Slater, Christopher J. Ruhm, Jenna Stearns, and Jane Waldfogel. 2018. Paid family leave, fathers' leave-taking, and leave-sharing in dual-earner households. *Journal of Policy Analysis and Management* 37, 1: 10-37.

Bartel, Ann P. Maya Rossin-Slater, Christopher J. Ruhm, Meredith Slope, and Jane Waldfogel. 2023a. The impact of paid family leave on employers: Evidence from New York. *Community, Work & Family* 1–19. https://doi.org/10.1080/13668803.2023.2168516

Bartel, Ann Po., Soohyun Kim, Christopher J. Ruhm, and Jane Waldfogel. 2023b. California's paid family leave law and the employment of 45-to-64-year-old adults. *Work, Aging and Retirement* 9, 2: 168-178.

Baum, Charles L. II and Christopher J. Ruhm. 2016. The effects of paid family leave in California on labor market outcomes. *Journal of Policy Analysis and Management* 35, 2: 333-356.

Bedard, Kelly and Maya Rossin-Slater. 2016. The economic and social impacts of paid family leave in California: Report for the California Employment Development Department.

Ben-Shalom, Yonatan. 2020. What can we learn from state temporary disability insurance programs? In *Paid leave for illness, medical needs, and disabilities*. AEI-Brookings Paid Leave project. Angela Richidi and Christopher J. Ruhm, coeditors.

Biggs, Andrew G. 2020. Integrating employer-sponsored disability plans with the social security disability insurance program. In *Paid leave for illness, medical needs, and disabilities*. AEI-Brookings Paid Leave project. Angela Richidi and Christopher J. Ruhm, coeditors.

Boyens, Chantel, Jack Smalligan, and Patricia Bailey. 2021. *Paid family and medical leave and employer private plans*. The Center for Law and Social Policy.

Bradley, Alexandra L., Benjamin W. Veghte, and Heidi Hartmann. 2019. Designing a state-based social insurance program for paid family and medical leave. In *Designing universal family care: state-based social insurance programs for early child care and education, paid family and medical leave, and long-term services and supports*. (Eds. Benjamin W. Veghte, Alexandra L. Bradley, Marc Cohen, and Heidi Hartmann). Washington, D.C.: National Academy of Social Insurance.

Braga, Breno, Barbara A. Butrica, Stipica Mudrazija, and H. Elizabeth Peters. 2022. Impacts of state paid family leave policies for older workers with spouses or parents in poor health. IZA Institute of Labor Economics Discussion Paper Series. IZA DP. No. 15007.

Bullinger, Lindsey Rose. 2019. The effect of paid family leave on infant and parental health in the United States. *Journal of Health Economics* 66: 1010-116.

Byker, Tanya S. 2016. Paid parental leave laws in the United States: Does short-duration leave affect women's labor-force attachment? *AEA Papers and Proceedings* 106, 5: 242-246.

Carloni, Dorian. 2021. Revisiting the extent to which payroll taxes are passed through to employees. Washington, D.C.: Congressional Budget Office. Working Paper 2021-06.

Chang, Chia Jung. 2021. Is the road to unemployment paved with good intentions? Labor market outcomes of young women. *Journal of Labor Research* 42: 244-302.

Chatterji, Pinka, Trang Nguyen, Butho Ncube, and Barbara A. Dennison. Effects of New York state paid family leave on early immunizations. *Social Science & Medicine* 215: 115539.

Chen, Feng. 2023. Does paid family leave save infant lives? Evidence from California's paid family leave program. *Contemporary Economic Policy* 41: 319-337.

Choudhury, Anitra Roy and Solomon W. Polachek. 2021. The impact of paid family leave on the timely vaccination of infants. *Vaccine* 39: 2886-2893.

Chow, Michael J. 2019. Economic effect of implementing a paid family and medical leave program on the Colorado economy. NFIB Research Center.

Clayton-Matthews, Alan and Randy Albelda. 2017. Description of the Albelda Clayton-Matthews/IWPR 2017 Paid Family and Medical Leave Simulator Model. Economic Faculty Publication Series 41. http://scholarworks.umb.edu/econ_faculty_pubs/41

Coile, Courtney, Maya Rosin-Slater, and Amanda Su. 2022. The impact of paid family leave on families with health shocks. National Bureau of Economic Research. Working Paper 30739.

Congressional Budget Office (CBO). 2024. An update to the budget and economic outlook: 2024 to 2034. https://www.cbo.gov/publication/60039

Correia, Paul. 2023. *Guide to domestic and international paid family and medical leave programs*. SOA Research Institute.

Curtis, E. Mark, Barry T. Hirsch, and Mary C. Schroeder. 2016. Evaluating workplace mandates with flows versus stocks: An application to California paid family leave. *Southern Economic Journal* 83, 2: 501-526.

Das, Tirthatanmoy and Solomon W. Polachek. 2015. Unanticipated effects of California's paid family leave program. *Contemporary Economic Policy* 33, 4L: 619-6356.

Donovan, Sarah A. 2020. Paid family and medical leave in the United States. Congressional Research Service. R44835.

Doran, Elizabeth L, Ann Bartel, Christopher J. Ruhm, and Jane Waldfogel. 2020. California's paid family leave law improves maternal psychological health. *Social Science & Medicine* 256: 113003.

Engen, Eric M. and Jonathan Gruber. 1995. Unemployment insurance and precautionary saving. National Bureau of Economic Research. Working Paper 5252.

Franche, Renée, Kimberley Cullen, Judy Clarke, et al. 2005. Workplace-based return-to-work interventions: A systematic review of the quantitative literature. *Journal of Occupational Rehabilitation* 14, 4: 607-631.

Gifford, Brian and Skyler Parry. 2016. The value of disability return-to-work programs. Integrated Benefits Institute.

Gimm, Gilbert and Y. Tony Yang. 2016. The effect of paid leave laws on family caregivers for the elderly. *Ageing International* 41: 214-226.

Glynn, Sarah Jane, Gayle Goldin, Jeffrey Hayes, Sarah Fleisch Fink, Sherry Leiwant and Vicki Shabo. 2016. *Implementing paid family and medical leave insurance Connecticut*. Washington, D.C.: Institute for Women's Policy Research.

Goodman, Julia, Holly Elser, and William H. Dow. 2020. Employer-reported access to paid parental leave: A study of San Francisco's paid parental leave ordinance. *SSM-Population Health* 11, 100627.

Golightly, Eleanor and Pamela Meyerhofer. 2022. Does paid family leave cause mothers to have more children? Evidence from California. *Journal of Labor Research* 43: 203-238.

Greenfield, Jennifer C. and Paula M. Cole. 2019. Expert analysis for potential Colorado paid family and medical leave program. Prepared for the Colorado FAMLI Task Force.

Groves, Susanna, John MacNeil, and Joseph Wolfe. 2016. Economic and policy impact statement: Universal paid leave amendment act of 2016. Report by the Office of the Budget Director, Council of the District of Columbia.

Gruber, Jonathan. 1994. The incidence of mandated maternity benefits. *The American Economic Review* 84, 3: 622-641.

Hamad, Rita, Sepideh Modrek, and Justin S. White. 2019. Paid family leave effects on breastfeeding: A quasi-experimental study of US policies. *American Journal of Public Health* 109, 1: 164-166.

Han, Wen-Jui, Christopher Ruhm, and Jane Waldfogel. 2009. Parental leave policies and parents' employment and leave-taking. *Journal of Policy Analysis and Management* 28, 1: 29-54.

Hartmann, Heidi I and Jeffrey Hayes. 2021. Estimating benefits: Proposed national paid family and medical leave programs. *Contemporary Economic Policy* 39, 3: 537-556.

Hayter, Jill, Christy Spivey, and Anca Traian. 2024. The effects of paid family leave on parents' labor market outcomes. *International Review of Economics* 71: 225-255.

Holm, Abby Johnson. 2019. The health benefits of paid family and medical leave: A report for the Colorado Department of Labor and Employment's Family and Medical Leave Implementation Task Force. Colorado Department of Public Health and Employment.

Huang, Rui and Muzhe Yang. 2015. Paid maternity leave and breastfeeding practice before and after California's implementation of the nation's first paid family leave program. *Economics and Human Biology* 16: 45-59.

Irish, Amanda M., Justin S. White, Sepideh Modrek, and Rita Hamad. 2021. Paid family leave and mental health in the U.S.: A quasi-experimental study of state policies. *American Journal of Preventive Medicine* 61, 2: 182-191.

Jacobs, Elisabeth. 2019. An evidence-backed policy framework for paid family and medical leave in Colorado. Prepared for the Colorado FAMLI Task Force.

Jolls, Christine. 2020. Employment effects of mandated medical leave: Some evidence from state-law variation. In *Paid leave for illness, medical needs, and disabilities*. AEI-Brookings Paid Leave project. Angela Richidi and Christopher J. Ruhm, coeditors.

Jones, Kelly and Britni Wilcher. 2024. Reducing maternal labor market detachment: A role for paid family leave. *Labour Economics* 87: 102478.

Kalwij, Adriaan. 2010. The impact of family policy expenditure on fertility in Western Europe. *Demography* 47, 2: 503-519.

Kang, Ji Young, Sojung Park, BoRin Kim, Eunsun Kwon, and Joonyoung Cho. 2019. The effect of California's paid family leave program on employment among middle-aged female caregivers. *The Gerontologist* 59, 6: 1092-1102.

Kang, Wei. 2021. National forecasts in REMI models. Presentation at 2021 Annual REMI Users' Conference, October 20-22 in St. Petersburg, Florida. https://www.remi.com/wp-content/uploads/2021/10/Wei-Kang.pdf

Kim Jiyoon. 2024. The effects of paid family leave—does it help fathers' health, too? *Journal of Population Economics* 37: 19.

Kim, Jiyoon and Otto Lenhart. 2024. Paid family leave and the fight against hunger: Evidence from New York. *Health Economics* 33, 7: 1502-1527.

Klevens, Joanne, Feijun Luo, Likang Xu, Cora Peterson, and Natasha E. Latzman. 2016. Paid family leave's effect on hospital admissions for pediatric abusive head trauma. *Injury Prevention* 22, 6: 442-445.

LaLumia, Sara and Jonah Tobin. 2022. The short-term effects of New York's paid family and medical leave policy on mothers of newborns. Williams College: Department of Economics.

Lee, Bethany C., Sepideh Modrek, Justin S. White, Akansha Batra, Daniel F. Collin, and Rita Hamad. 2020.. The effect of California's paid family leave policy on parent health: A quasi-experimental study. *Social Science & Medicine* 251: 112915.

Lerner, Sharon and Eileen Appelbaum. 2014. *Business as usual: New Jersey employers' experiences with family leave insurance*. Washington, D.C.: Center for Economic and Policy Research.

Lichtman-Sadot, Shirlee and Nervier Pillay Bell. 2017. Child health in elementary school following California's paid family leave program. *Journal of Policy Analysis and Management* 36, 4: 790-827.

Maclean, Johanna Catherine, Stefan Pichler, and Nicolas R. Ziebarth. 2020. Mandated sick pay: Coverage, utilization, and welfare effects. National Bureau of Economic Research. Working Paper 26832.

Melguizo, Ángel, José Manuel González-Páramo. 2013. Who bears labour taxes and social contributions? A meta-analysis approach. *SERIEs - Journal of the Spanish Economic Association.* 4: 247-271.

Milkman, Ruth and Eileen Appelbaum. 2013. *Unfinished business: Paid family leave in California and the future of U.S. work-family policy*. Ithaca, NY: Cornell University Press.

Milliman. 2024. Virginia paid family and medical leave program actuarial study.

Morefield, Brant, Abby Hoffman, Jeremy Bray, and Nicholas Byrd. 2016. Leaving it to the family: the effects of paid leave on adult child caregivers. Research on Paid Family Leave. DOL-OPS-14-C-0003.

Morrissey, Taryn W., Neko Michell Castleberry, and Aparna Soni. 2024. The impacts of New York state's paid family leave policy on parents' sleep and exercise. *Maternal and Child Health Journal* 28: 1042-1051.

Noh, Kyoungah. 2024. Paid family leave policy and leave-taking: a synthetic control approach. *Applied Economics Letters* 1–5. https://doi.org/10.1080/13504851.2024.2302894

Offices of the Secretary of Commerce and Trade and the Chief Workforce Development Advisor. 2020. Paid family and medical leave study. September 2020. https://www.labor.virginia.gov/media/governorvirginiagov/workforce/pdf/PFML-Study_final.pdf

Olivetti, Claudia and Barbara Petrongolo. 2017. The economic consequences of family policies: Lessons from a century of legislation in high-income countries. *Journal of Economic Perspectives* 31, 1: 205-230.

Pac, Jessica E., Ann P. Bartel, Christopher J. Ruhm, and Jane Waldfogel. 2019. Paid family leave and breastfeeding evidence from California. National Bureau of Economic Research. Working Paper 25784.

Pichler, Stefan and Nicolas Pichler. 2020. Labor market effects of U.S. sick pay mandates. *Journal of Human Resources* 55, 2: 611-659.

Pihl, Ariel Marek and Gaetano Basso. 2019. Did California paid family leave impact infant health? *Journal of Policy Analysis and Management* 38, 1: 155-180.

Pinnacol Assurance. 2019. *Estimate of claims costs and premium rates for a market-based PFML plan*.

Ramirez, Miriam. 2012. The impact of paid family leave on New Jersey Businesses. New Jersey Business and Industry Association.

Raub, Amy, Arijit Nandi, Alison Earle, Nicolas de Guzman Chorny, Elizabeth Wong, Paul Chung, Priya Batra, Adam Schickedanz, Bijetri Bose, Judy Jou, Daniel Franken, and Jody Heymann. 2018. *Paid parental leave: A detailed look at approaches across OECD countries*. Los Angeles, CA: WORLD Policy Analysis Center, UVLA Fielding School of Public Health.

Regional Economic Models, Inc. 2012. Predicted revenue & expenditure effects.

Rephann, Terance J, Emily G. Lien, Arthur Small, and Jeffrey Hayes. 2021. *Virginia paid family and medical leave study*. Charlottesville, VA: Weldon Cooper Center for Public Service, University of Virginia.

Rodgers, Luke P. 2020. The impact of paid family leave on household savings. *Labour Economics* 67: 101921.

Rossin, Maya. 2011. The effects of maternity leave on children's birth and infant health outcomes in the United States. *Journal of Health Economics* 30: 221-239.

Rossin-Slater, Maya, Christopher J. Ruhm, and Jane Waldfogel. 2013. The effects of California's paid family leave program on mothers' leave-taking and subsequent labor market outcomes. *Journal of Policy Analysis and Management* 32, 2: 224-245.

Ruhm, Christopher J. 1998. The economic consequences of parental leave mandates: Lessons from Europe. *The Quarterly Journal of Economics* 113, 1: 285-317.

Ruhm, Christopher J. 2000. Parental leave and child health. *Journal of Health Economics*. 19, 6: 931-960.

Ruhm. Christopher J. 2017. A national paid parental leave policy for the United States. The Hamilton Project (Brookings Institution). Policy Proposal 2017-13.

Saad-Lessler, Joelle. 2020. How does paid family leave affect unpaid care providers? *The Journal of the Economics of Ageing* 17: 100265.

Slopen, Meredith. 2024. The impact of paid sick leave mandates on women's employment and economic security. *Journal of Policy Analysis and Management* 43, 4: 1129-1151.

Smalligan, Jack and Chantel Boyens. 2020. Paid medical leave landscape: trends, existing programs, and recommendations for a federal program. In *Paid leave for illness, medical needs, and disabilities*. AEI-Brookings Paid Leave project. Angela Richidi and Christopher J. Ruhm, coeditors.

Spring. 2019. Paid family leave program impact study. Prepared for Legislative Reference Bureau, State of Hawaii. November 13, 2019.

Stanczyk, Alexandra Boyle. 2019. Does paid family leave improve household economic security following a birth? Evidence from California. *Social Service Review* 93, 2: 262-304.

Stearns, Jenna. 2015. The effects of paid maternity leave: #Evidnece from temporary disability insurance. *Journal of Health Economics* 43: 85-102.

Stearns, Jenna and Corey White. 2018. Can paid sick leave mandates replace leave-taking? *Labour Economics* 51: 227-246.

Stock, Wendy A. and Myron Inglis. 2021. The longer-term labor market impacts of paid parental leave. *Growth and Change* 52, 2: 838-884.

Tanaka, Sakiko. 2005. Parental leave and child health across OECD countries. *The Economic Journal* 115: F7-F28.

Timpe, Brenden. 2024. The labor market impacts of America's paid maternity leave policy. *Journal of Public Economics* 231: 105067

Treyz, Frederick and Peter Evangelelakis. 2018. Immigration and United States economic growth. *Business Economics* 53: 134-140.

Treyz, George I. 1993. *Regional economic modeling: A systematic approach to economic forecasting and policy analysis*. Boston: Kluwer Academic Publishers.

U.S. Department of Labor (USDOL). 2023 worker plus microsimulator. https://www.dol.gov/agencies/oasp/evaluation/completedstudies/Microsimulation-Model-on-Worker-Leave/2023

Washbrook, Elizabeth, Jane Waldfogel, Christopher J. Ruhm, and Wen-Jui Han. 2011. Public policies, women's employment after childbearing, and child well-being. *The B.E. Journal of Economic Analysis & Policy* 11, 1 (Topics), Article 43.