Economic and Policy Impact Statement:
Universal Paid Leave Amendment Act of 2016 (B21-415)

December 2, 2016

Research Team:
Susanna Groves, Senior Budget Analyst
John MacNeil, Senior Budget Analyst
with Joseph Wolfe, Senior Budget Analyst

Report by the Office of the Budget Director, Council of the District of Columbia
Jennifer Budoff, Budget Director

Economic and Policy Impact Statement

District of Columbia Council Rule 308 provides that the Council Budget Director may, at his or her discretion, prepare an economic-impact analysis on permanent bills beginning January 1, 2016. The Office of the Budget Director is implementing this rule by preparing analyses on permanent pieces of legislation that are expected to have a fiscal impact of at least 0.1 percent of the District's gross domestic product (GDP), or $123 million, and as staffing resources permit. The purpose of these statements is to offer Councilmembers an independent, data- and evidence-based resource for weighing the policy implications and economic costs and benefits of major pieces of legislation. These statements do not make policy recommendations, and their findings and conclusions are non-binding.

This report is the Office of the Budget Director's first policy and economic impact statement. Copies of this report and supporting documents can be found at: http://dccouncil.us/news/entry/economic-and-policy-impact-statement-universal-paid-leave

The economic and policy impact statement is not a substitute for the Chief Financial Officer's (CFO) fiscal impact statements, which the CFO is required for to produce for every piece of legislation. These statements address the impact of legislation on the District's budget and four-year financial plan.

Acknowledgements

The Office of the Budget Director extends its sincerest gratitude to the members of the Economic and Policy Impact Statement Research Advisory Board for lending their precious time and deep expertise to this study: Norton Francis of the Urban Institute, Professor Haydar Kurban of Howard University, and Dr. Alan van der Hilst.

The Office of the Budget Director also extends its thanks to Jesus Ranon of the Bureau of Labor Statistics, Jamie Lantinen and Dr. Yi Geng of the District of Columbia Office of the Chief Financial Officer's Office of Revenue Analysis, and Dr. Frederick Treyz, Chris Brown, and Scott Nystrom of REMI, Inc.

Table of Contents

Executive Summary

For significant legislation under consideration during Council Period 21, the Office of the Budget Director may prepare an Economic and Policy Impact Statement that offers Councilmembers an independent, evidence-based resource for weighing the legislation's policy implications and economic costs and benefits.

The subject of the first Economic and Policy Impact Statement is the "Universal Paid Leave Amendment Act of 2016" (UPLAA), which would create a paid family leave benefit for all private sector workers in the District of Columbia. The proposed legislation would replace up to 90 percent of qualifying workers' wages for 11 weeks of parental leave or 8 weeks of caregiving leave over a 52-week period. (Appendix A provides a full summary of the bill, as scheduled to be marked up by the Committee of the Whole on December 6, 2016.)

To analyze the policy implications of UPLAA, the Budget Office undertook a review of more than 170 peer-reviewed studies and government reports on paid family leave's impacts on the health and well-being of individuals, households, the labor market, and businesses. In order to project the potential economic impacts of UPLAA on the District of Columbia, the Office developed a forecasting model tailored to the specifics of the legislation. It relies upon a 70-sector regional economic model built by REMI, Inc. and customized to the Washington, DC Metropolitan Statistical Area.

1. Empirical Evidence: Effects of Paid Family and Medical Leave on Labor Markets, Businesses, and Health and Family Well-Being

Based on a review of the academic research, the Budget Office found that after public paid family leave programs were implemented in other states, most managers that participated in follow-up surveys reported that the program had either negligible or positive effects on their business. Still, the effects of providing paid family leave may vary across different firms and employees. Given the immense variety in firms' structure, function, needs, and labor costs, it is impossible to generalize about how all businesses are impacted by paid family leave programs. Firms that employ higher percentages of professionals and women may have a stronger relationship between the provision of work-life benefits, such as paid family leave, and productivity.

Employers reported in a 2008 survey that their two greatest barriers to implementing work-life initiatives such as paid family leave were cost (30 percent) and potential loss of productivity (11 percent). Other surveys of businesses located in California, Rhode Island, and New Jersey suggest that overall paid family leave entitlements have a positive or negligible impact on firms' profitability or performance. A handful of studies concluded that family-friendly policies can have positive impacts on companies and individuals' productivity by increasing employee satisfaction. This can result in improved customer service, reduced employee turnover, and lower recruitment and training costs. However, some of these savings may be offset by added costs associated with shifting a leave taker's duties to other employees. Paid family leave programs may also allow firms to draw upon a larger talent pool when hiring, because there is substantial evidence linking paid family leave programs with increasing women's labor force participation.

Some firms may pass along the costs of offering paid family or medical leave to their workers in the form of lower wages. In upstate New York, employers who offered benefits like flexible scheduling policies

and childcare tended to pay lower entry-level wages than their competitors and experienced less turnover. A separate study indicated that workers in Britain and Australia would accept as much as 20 percent lower wages to work at a firm with family-friendly practices.

Evidence suggests that paid family leave can reduce the average amount of time that mothers and family caregivers spend out of the workforce, in part by decreasing their need to change jobs in order to fulfill their parental or familial obligations. In reducing the amount of time women spend out of the workforce and increasing the chances that they will return to their same employer following the leave period, paid family leave also has the potential to narrow the gender wage gap. Numerous studies have found that mothers of small children with access to moderate lengths of paid leave tend to go back to work sooner. Strengthening women's attachment to the labor force would raise their total work experience and accumulated job-specific human capital, both of which are factors in career advancement and wage growth.

Paid family leave has been shown to increase the average length of time that new parents spend at home with their infants and improve family health and well-being. Research has linked paid parental leave rights to reductions in child and infant mortality. In addition, breastfeeding's health benefits to children and mothers are well documented, and paid maternity leave has been shown to increase its rate and duration. After California implemented its paid family leave program, the state's exclusive breastfeeding rate rose 3 to 5 percentage points and by 10 to 20 percentage points at several key developmental moments. Many reports have also found that new mothers who return to work later tend to exhibit better general health, fewer symptoms of depression, and less anxiety. Paid family leave can provide those caring for ailing relatives with economic stability and reduce their likelihood of experiencing depression.

New fathers are also more likely to take paternity leave and stay out for more days when the leave is paid, especially with higher wage replacement rates. Studies examining the effects of California's paid family leave program found that it raised the chances that men would go on paternity leave by 46 percent, and it extended the average length by nearly a week. Research has shown a positive association between more frequent fathers' engagement with their children and enhanced cognitive development as well as decreased behavioral problems.

2. Benchmarking: Paid Family and Medical Leave Programs in Other U.S. Jurisdictions

California created the nation's first state paid family leave program in 2004, followed by New Jersey in 2009, and Rhode Island in 2014. New York will begin its paid family leave program in 2018. All of these states also have paid medical leave programs, as do Hawaii and Puerto Rico. San Francisco has a paid parental leave mandate that will supplement the California state program starting in 2017.

All of the existing state paid family and medical leave plans function as insurance regimes. California, New Jersey, and Rhode Island rely on government agencies to administer their family leave plans. In contrast, states takes three different approaches to administering their medical leave plans: 1) a competitive model that allows employers to choose a government plan or a private plan that provides equal or better coverage; 2) a private model that requires employers to self-insure or privately secure a plan that meets state guidelines; and 3) a public model.

San Francisco is the only jurisdiction that has a paid parental leave ordinance, which will function quite differently than any of the state programs. Rather than creating a government-administered insurance

fund or directing employers to purchase a private insurance plan, employers will be required to directly compensate workers when they take leave to bond with a new child.

Paid family and medical leave programs' benefit structures differ from one another according to their wage replacement rate, the minimum and maximum weekly benefit payment, the benefit period, and how family and medical leaves interact with one another. Wage replacement rates range from a low of 50 percent in New York to a high of 100 percent in San Francisco. All of the existing state programs currently have a flat wage replacement rate, meaning that low- and high-income workers receive the same share of their wages in benefits up to the replacement ceiling. However, California and New York are moving towards a tiered system that will scale claimants' wage replacement rate to their income.

All jurisdictions with paid family leave and short-term disability plans limit the amount of leave that workers can qualify for each year. California and New Jersey allow for up to six weeks of paid family leave, while Rhode Island insures wages for up to four weeks. New York's family leave program will initially provide eight weeks of paid family leave and increase to 12 weeks in 2021, as its fund balance allows. In addition, short-term disability and family leave benefits can be stacked in California, New Jersey, and Rhode Island, which means that an eligible person can qualify to use both types of paid leave over the course of a year.

Levying a payroll tax is the most common way that states fund their paid leave programs, but each state uses a different formula for determining their tax's incidence. Employees in California and Rhode Island bear the statutory tax obligation at the 2016 rate of 0.9 and 1.2 percent, respectively. In contrast, New Jersey and Puerto Rico divide the tax obligation between employers and employees. Administrative expenses in California, New Jersey, and Rhode Island represent between 4.3 and 6.4 percent of their net benefits paid. Some states allow employers to self-insure or acquire private insurance and opt out of the disability insurance tax.

3. Policy Context: District Workers' Access to Unpaid and Paid, Job-Protected Leave

Local and federal laws guarantee many workers in the District access to unpaid, job-protected family and medical leave. Under the federal Family and Medical Leave Act of 1993 (FMLA) and the District of Columbia Family and Medical Leave Act of 1990 (DCFMLA), eligible workers can qualify for up to 12 weeks of unpaid family leave and 12 weeks of unpaid medical leave in any 12-month period, or 16 weeks in any 24-month period. District law also guarantees workers some paid sick days, which for full-time workers means three to seven days per year.

However, many people cannot afford to exercise their rights under the DCFMLA/FMLA. During 2012, 4.6 percent of U.S. workers needed but could not take FMLA leave. Financial strain was the leading reason why employees forewent leave, accounting for 46 percent of unmet leave. More than 8 percent of low-income employees who needed family or medical leave in the prior year did not take it or took less time than they required, a rate two and a half times greater than for high-income workers. When workers took FMLA leave with partial or no pay, two-thirds said that they found it somewhat to very difficult to make ends meet. Thirty percent of unpaid and partially paid leave takers had to borrow money, and 15 percent went on public assistance.

Further, not all workers qualify for job-protected DCFMLA/FMLA leave. The right is circumscribed by the employer's size and the worker's tenure and number of hours worked in the previous year. The DCFMLA has a lower qualifying standard than the FMLA, but even so, approximately 30 percent of the District's

private industry workers – or 147,400 people – are not protected under the DCFMLA because of their firm's size and job tenure.

Among private-sector employees in the South Atlantic, about 14 percent have some form of paid family leave. Across the U.S., worker salaries are closely and positively associated with access to paid family leave. While a quarter of the highest 10 percent of wage earners had this benefit in 2015, only 3 percent of the lowest 10 percent of wage earners received it. Work schedules, employer size, occupation, and industry also seem to be factors in access to paid leave. Workers in the District may be, on average, more likely to have family leave benefits than other U.S. workers. This is because managerial, professional, financial, and information occupational groups have some of the highest rates of paid family leave and are also overrepresented in DC's workforce. In addition, full-time District government employees are eligible for up to eight weeks of paid family leave per year. Many federal government workers can use up to six weeks of advanced sick leave during a qualifying FMLA leave.

4. Economic Model

To evaluate the potential impacts of UPLAA on the District's economy, the Budget Office developed an economic model of the legislation's costs and benefits, to the extent that these factors could be quantified. The study compares the projected economic conditions under the "baseline" economic forecast, in which the District continues to have no requirement for paid family leave, to the projected economic conditions under the "policy" forecast, which captures the impact of the legislation if implemented. The analysis assumes that the paid family leave fund would begin collecting payroll taxes in 2019 and start paying benefits in 2020. The study estimates the differences between the baseline and policy forecasts over a ten-year time horizon, beginning in 2017.

Since uncertainty is inherent to any forecasting exercise, the study evaluates the impact of the proposed legislation under three different behavioral response scenarios.

- **Employees Absorb the Tax:** This behavioral response scenario assumes that businesses would primarily manage the cost of the payroll tax by shifting it on to their employees in the form of eliminated or delayed salary and benefit increases. It assumes that individual firms would choose to lower their per employee labor costs by the amount of the tax, but the number of employees they hire would be the same as the baseline forecast.

- **Firms Absorb the Tax:** This behavioral response scenario assumes that businesses would mostly absorb the payroll tax primarily by reducing their labor cost. Firms would also react by raising the prices they charge for their goods and services. Per employee labor costs would be the same as they would be under the baseline forecast, but some businesses would react by shrinking the relative size of their workforce.

- **Hybrid Tax Absorption:** This behavioral response scenario assumes that firms would respond to the new tax by shifting approximately half of it on to employees and absorbing the rest. Some firms also react by raising their prices.

The study finds that implementing the proposed legislation would have a minimal impact on the District's labor market and economy over a ten-year period (2016-2027). Since the magnitude of the program's impact on employment and GDP is minor, it is unlikely to alter the current upward trajectory of the District's economy. Some businesses and industries might experience the impacts of the proposed

legislation more sharply than others, but this study estimates that its effects on the District economy as a whole would be small. The study projects that if the proposed legislation is implemented:

- The paid family leave program would pay out $242 million in benefits during its first 12 months, which the Budget Office assumes would occur in 2020.
- Women's labor force participation in the District would increase.
- The District's infant mortality rate would decrease.
- The cumulative impact of the legislation on the District's GDP would range from a gain of $15 million to a loss of $122 million by 2027. This means that over the next 10 years, the District's GDP would grow at an average annual rate of 1.913 to 1.921 percent, rather than 1.920 percent. To put this in context, under the baseline forecast, GDP for the District is projected to grow from $123.9 billion in 2016 to $152.1 billion in 2027.
- The cumulative impact of the legislation on the District's private sector employment would range from a decrease of 90 to 1,300 jobs by 2027. This means that over the next ten years, private sector employment in the District would increase at an average annual rate of 1.340 to 1.358 percent, rather than 1.359 percent. To put this in context, under the baseline forecast, private sector employment for the District is projected to grow from 534,000 jobs in 2016 to 621,000 jobs in 2027.

If businesses absorb all of the payroll tax, the model forecasts that the District's economy would support approximately 1,300 fewer jobs by 2027 compared to the baseline economic forecast. In contrast, if the payroll tax incidence falls on employees, the model predicts that the District economy would support approximately 90 fewer jobs by 2027 than the baseline economic forecast. To put this in perspective, the Office of the Chief Financial Officer reported that employment in the District increased by an average of 11,039 jobs per year between 2013 and 2015. Thus, a loss of 1,300 jobs is about the number of jobs that the District typically adds in 6 weeks, whereas a loss of 90 jobs is equal to about three days of average job growth.

If employers shift half of the payroll tax incidence on to employees, the model forecasts an impact on GDP and the economy that falls between the two scenarios described above.

One limitation of the proposed legislation's economic forecast is that its costs are more readily quantifiable than its benefits. The bill specifies the payroll tax rate and would redistribute a predictable amount of money across the economy. However, many of the bill's estimated health, family, and social equality benefits cannot be readily assigned a monetary value, especially over the long term. For example, the time that one spends with a dying parent may be deeply meaningful on a personal level, but there is no widely accepted method for translating this experience into economic terms. Even when there is substantial evidence of similar programs providing specific health and wellness benefits that can generate economic benefits, such as promoting infant health by raising breastfeeding rates, there may not be a straight forward way to assign a monetary value. Thus, the proposed legislation's impact on economic forecasts should be considered alongside its other estimated non-monetary impact.

Introduction

The Council of the District of Columbia is considering the "Universal Paid Leave Amendment Act of 2016" (UPLAA), which would create a paid family leave benefit for all private sector workers in the District of Columbia. The proposed legislation would insure workers against wage loss when they take time off from work to bond with a new child or care for a family member with a serious health condition. The paid leave insurance fund would replace up to 90 percent of qualifying workers' wages for 11 weeks of parental leave or 8 weeks of caregiving leave over a 52-week period. Appendix A provides a full summary of the bill, as scheduled to be marked up by the Committee of the Whole on December 6, 2016.

To fulfill its responsibilities under District of Columbia Council Rule 308, the Office of the Budget Director has prepared an Economic and Policy Impact Statement of the UPLAA. Unlike a Fiscal Impact Statement, which the Office of the Chief Financial Officer must prepare as an estimate of a bill's impact on the District's four-year financial plan, the Budget Office's Economic and Policy Impact Statement is an analysis of the policy implications and economic costs and benefits of the UPLAA.

The study begins by evaluating the empirical evidence on how individuals and employers respond to paid family leave programs in Section 1. It then considers the policy context: Section 2 analyzes how other U.S. states and cities' paid leave programs function; and Section 3 describes District residents' current access to paid leave. The study continues in Section 4 with an outline of the economic model's technical approach, core assumptions, and the legislation's projected economic impacts. Six appendices summarize the proposed legislation, provide details of how the legislation and policy landscape compares to other states with paid leave programs, and offer a full account of modeling assumptions.

Table 1: Glossary of Key Terms

Child bonding leave (also known as parental leave): Leave that is available around the time of childbirth, adoption, or legal assumption of parenting duties (such as becoming a foster care parent or guardian). Maternity and paternity leave are types of child bonding leave. This type of leave is a subset of family leave.

DC Family and Medical Leave Act; U.S. Family and Medical Leave Act (DCFMLA; FMLA): Local and federal laws that guarantee qualifying workers access to job-protected, unpaid family and medical leave for qualifying events.

Family leave: Leave that is taken to bond with a new child or provide family caregiving.

Family caregiving leave: Leave that is taken to provide care for a seriously ill family member. This is a subset of family leave.

Job-protected leave: Dismissal is prohibited during the leave, and the leave taker is guaranteed reinstatement at the end of the leave period.

Leave stacking: A provision of leave policies that allows worker to qualify for multiple forms of leave that do not run concurrently. For example, a pregnant woman could take four weeks of medical leave to rest before and after childbirth and then four more weeks of family leave to bond with her new child.

Maternity leave: Leave that is only available to mothers at the time of either childbirth or adoption. This is a form of child bonding leave, parental leave, and family leave.

Medical leave: Leave that is taken for several weeks to a year to receive treatment for or recover from one's own serious medical condition, which can include pregnancy. Differs from sick leave, compensation for workplace-related injuries or conditions, and long-term disability benefits.

Paid leave mandate: A law that requires that employers provide compensation while their workers are on leave. This differs from a social insurance fund.

Paternity leave: Leave that is only available to fathers around the time of childbirth or adoption. This is a form of child bonding leave, parental leave, and family leave.

Sick days: Time off from work for a passing illness, such as influenza, which typically lasts several days to a week.

Short-term disability insurance (also known as temporary disability insurance): Insures workers against lost wages and salary while taking medical leave.

Social insurance fund: A publicly or privately administered fund that employers or employees pay into at a set rate. When employees take leave for a qualifying event, they can apply to the fund to claim wage replacement benefits. Social insurance funds differ from employer mandates.

Uptake rate: The rate at which individuals insured by paid leave plans take paid leave.

Wage replacement rate: The percentage of workers' average wage or salary that is disbursed by a paid leave fund during a leave event.

1 Empirical Evidence: Paid Family Leave's Effects on Businesses, Labor Markets, Health, and Family Well-Being

The Budget Office analyzed more than 170 peer-reviewed studies and government reports on paid family leave's impacts on the health and well-being of individuals, households, the labor market, and businesses. The Office also considered studies released as white papers or presented at academic conferences and, when appropriate, those published by independent research institutions or media outlets. The Office used this evidence to inform its economic model. Section 1 synthesizes these research findings and relates them to the people and economy of the District of Columbia using data collected by the U.S. Census Bureau, the U.S. Bureau of Labor Statistics, the Centers for Disease Control and Prevention (CDC), and others. Most of the U.S. experience with paid family leave is drawn from California, since this is the only state that has had a plan for at least a decade.

Low- and moderate-income families in the District stand to benefit the most from a paid leave mandate. Adults in these families tend to be the least likely to have employer-provided paid leave or flexible workplaces, and may be least able to afford to take unpaid time off from work (see Section 3). Low-income households are also more likely to suffer economic hardship as a result of an unpaid absence from work. It is also possible that a paid leave mandate may reduce the District's significant racial disparities in health outcomes (Georgetown University School of Nursing, 2016).

1.1 Businesses

Employers reported in a 2008 survey that their two greatest barriers to privately providing work-life initiatives such as paid family leave were cost (30 percent) and potential loss of productivity (11 percent) (Gomby & Pei, 2009). As Kathy Hollinger, President and CEO of the Restaurant Association of Metropolitan Washington testified before the Committee of the Whole on December 2, 2015, many small business owners in the District "are really just treading water trying to stay afloat." Restaurants balance "razor thin profits" against "increased competition, astronomical rent prices, higher labor and food costs, and new or amended legislation which result in administrative and financial burdens."

Based on a review of the academic research, the Budget Office found that after public paid family leave programs were implemented in other states, most managers that participated in follow-up surveys reported that the program had either negligible or positive effects on their business. Still, the effects of providing paid family leave may differ across firms and employees. Given the immense variety in firms' structure, function, needs, and labor costs, it is impossible to generalize about how all businesses are impacted by paid family leave programs.[1] Firms that employ higher percentages of professionals and women may have a stronger relationship between the provision of work-life benefits, such as paid family leave, and productivity (Konrad & Mangel, 2000).

A handful of studies concluded that family-friendly policies can have positive impacts on companies and individuals' productivity, which may in large part be a result of reducing employee turnover (Clifton & Shepard, 2004; Konrad & Mangel, 2000; OECD, 2007). Substantial research shows that workers at firms with these benefits expressed greater intention to remain at their current employer, higher levels of job satisfaction, and were more committed to their employer, whether or not they themselves would be likely to use the policy (Baughman, et al., 2003; Lyness, et al., 1999; Butts, et al., 2013; Grover &

Crooker, 1995; Thomas & Ganster, 1995; Gomby & Pei, 2009). For instance, when Aetna Insurance raised the amount of maternity leave they offered and provided flexible work options, the company increased retention of its highest performing workers from 77 to 91 percent. Employee satisfaction can also be good for business. A 1997 study conducted at Sears found a 5 percentage point increase in employee satisfaction with improved customer service and a 1.6 percent increase in revenue growth the following quarter (Gomby & Pei, 2009).[2] Employers and employees who are assured of an ongoing working relationship might also be more likely to invest in training (OECD, 2007; Tzannatos, 1998).

Not only is replacing workers expensive, but productivity can fall if the replacement employee lacks job-specific skills. The Congressional Budget Office (2009) projected that offering a four week paid parental leave benefit to federal employees "may enhance the […] government's ability to retain employees after the birth or adoption of a child and thereby lower recruitment and training costs." Employee turnover costs businesses thousands of dollars. The Center for American Progress estimated that businesses spend about one-fifth of an employee's annual salary to replace that worker (Boushey & Glynn, 2012). A panel survey of California businesses in 2003 and 2008 found that $4,000 was the average cost of replacing a worker. Businesses spent about $2,000 to hire a replacement blue collar or manual labor worker while their replacement costs for professional and managerial employees soared as high as $7,000 (Dube, et al., 2010). Another report examining employee replacement costs for hotels found an average range of $4,000 to $9,000 per employee. The researchers found that productivity loss was the biggest cost, which was mostly caused by the inexperience of new employees (Tracey & Hinkin, 2006). Paid family leave programs may also allow firms to draw upon a larger talent pool when hiring, because there is substantial evidence linking paid family leave programs with increasing women's labor force participation, as discussed in Section 1.2.

Some studies suggest that companies which provide family-friendly benefits report stronger growth, profitability, or performance (Lau & May, 1998; Lau, 2000; Perry-Smith & Blum, 2007; Dex & Smith, 2002; Gray, 2002). Two papers also reported that the stock market reacted positively to Fortune 500 companies' adoption of work-family human resource policies. Shareholder returns tended to be higher in the day following the policy announcement (Arthur, 2003; Arthur & Cook, 2004). Nevertheless, other research indicates that firms with paid family leave programs do not outperform businesses without them (Preece & Filbeck, 1999; Heiland & Macpherson, 2005). However, providing such benefits at the firm-level may be less efficient than public provision, since employees who anticipate that they may need such benefits in the future may find themselves locked to a job that they do not enjoy so that they can have paid time off when baby arrives or an ailing relative requires care. This could potentially lead to decreases in productivity and profitability for the economy as a whole as well as the company offering these benefits (Gomby & Pei, 2009). Moreover, publicly providing paid family leave rather than privately reduces the risks born by any individual business.

Since the UPLAA would create a publicly-provided paid family leave benefit, DC firms that already privately offer this benefit could offset the cost of the new payroll tax by coordinating their benefits with the public program (Appelbaum & Milkman, 2006). For example, an employer that currently provides eight weeks of maternity leave at full pay could decide to shift this benefit on to the public program or pay leave takers the difference between their full salary and the wage replacement benefit that they could claim from the public insurance fund. Employer-provided paid time off is among the most expensive benefits that employees in private industry offer. Paid leave benefits represented 6.9 percent of private employers' compensation costs in 2015 (Bureau of Labor Statistics, 2015a). Still, not all firms

might realize these savings. Some firms may not change their employee benefit programs in reaction to the public benefit, especially in the short term. One year after Rhode Island implemented its family leave program, an employer survey found no evidence of changes to employee benefits or policies (Bartel, et al., 2016). Further, the Congressional Budget Office (2009) noted that a paid parental leave benefit for federal employees might create costs if leave substitution occurs. Employees who would use their vacation or sick leave when welcoming a new child might instead choose to use this new form of paid leave and continue to save their accrued vacation or sick leave, which could impose additional costs to the organization.

Nevertheless, surveys of businesses located in California, Rhode Island, and New Jersey suggest that paid family leave entitlements generally have a positive or negligible impact on individual firms' profitability or performance. Six years after California's family leave program began, 91 percent of employers sampled reported that the program had either no noticeable effect or a positive effect on their firm's profitability, performance, or turnover rates. A minority of employers (13.1 percent) reported that the program increased their costs, typically as a result of added hiring or training expenses. Nearly all (98.6 percent) employers surveyed in California reported that paid family leave had either a positive or no effect on overall employee morale (Appelbaum & Milkman, 2011). Two-thirds of New Jersey employers also reported that their state's plan had no impact on their business's profitability or performance. Small businesses in the state were more likely than medium or large businesses to say that the paid family leave plan had a negative effect on their profitability or performance (Rodriguez, 2012). In contrast, a series of interviews conducted with New Jersey employers found that the family leave program helped boost the morale of the individual worker taking leave, and to some extent, the morale of their co-workers (Lerner & Appelbaum, 2014). A study on Rhode Island employers also found that the state's policy led to no significant changes in productivity or perceptions of employee morale, cooperation, or attendance (Bartel, et al., 2015).[3]

Firms already use a number of strategies to minimize the impact of an employee's absence due to medical or family leave. How employers choose to cover the work often depends on the ability of colleagues to substitute for one another, the length of the leave, and workload. Substantial research shows that employer's most common response is to temporarily reassign work (Abt Associates Inc., 2014; Appelbaum & Milkman, 2011; Rodriguez, 2012; Lerner & Appelbaum, 2014). Shifting a leave taker's duties to other employees sometimes results in higher overtime pay costs for businesses. However, only 4 percent of leave takers in Rhode Island said that their absence was covered by their colleagues putting in overtime hours, and researchers in Connecticut observed similar results. Another approach is to hire a temporary or permanent replacement worker, although this strategy may not be commonly used: one survey found that 3.2 percent of worksites hired a temporary replacement worker while 0.1 percent hired a permanent replacement worker. Employers may also manage an employee's leave by putting the person's work on hold until they return. This strategy was also used by about 3 percent of U.S. worksites, while 9.4 percent of leave takers in Rhode Island reported that their worksite took this approach (Abt Associates Inc., 2014; Silver, et al., 2015; Trzcinski & Finn-Stevenson, 1991).

Some firms have also been shown to pass along the costs of offering paid family or medical leave to their workers in the form of lower wages. In upstate New York, employers who offered benefits like flexible scheduling policies and child care tended to pay lower entry-level wages than their competitors and experienced less turnover (Baughman, et al., 2003). A separate study indicated that workers in Britain and Australia would accept as much as 20 percent lower wages to work at a firm with family-

friendly practices (Heywood, et al., 2007). Another researcher found that having paid parental leave significantly increased employee-reported satisfaction with pay (Gray, 2002).

1.2 Women's Labor Force Participation and the Gender Pay Gap

The labor force participation rate has great influence over an area's economic vitality, and women's labor force participation may be especially critical. According to the World Bank, women's growing participation in the labor force is instrumental to reducing extreme poverty (Pack, 2014; World Bank, 2012). Increasing women's attachment to the labor force would also raise their total work experience and accumulated job-specific human capital, both of which are factors in career advancement and wage growth. Further, in lifting artificial constraints placed on women's labor supply, the economy would benefit from full utilization of women's labor while ameliorating gender wage inequality and promoting social justice (Tzannatos, 1998). As one study noted, "women's labor force status relative to that of men is an important benchmark of their status in society" (Mammen & Paxson, 2000). At a more basic level, women's employment is the most important factor in keeping many households out of poverty (OECD, 2007; Heintz, 2006).

Figure 1: Women's Labor Force Participation Rate Relative to Men, Percent Difference (2009-14)

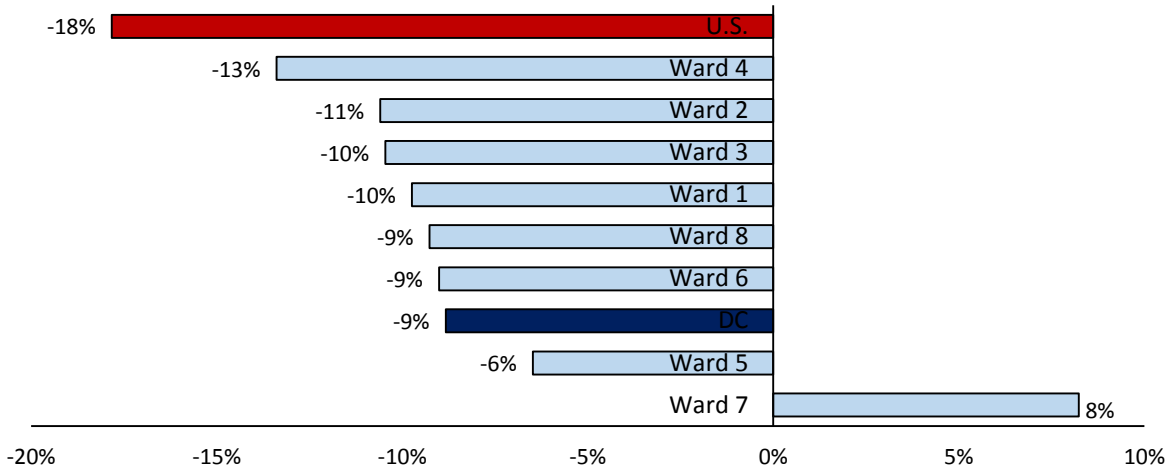
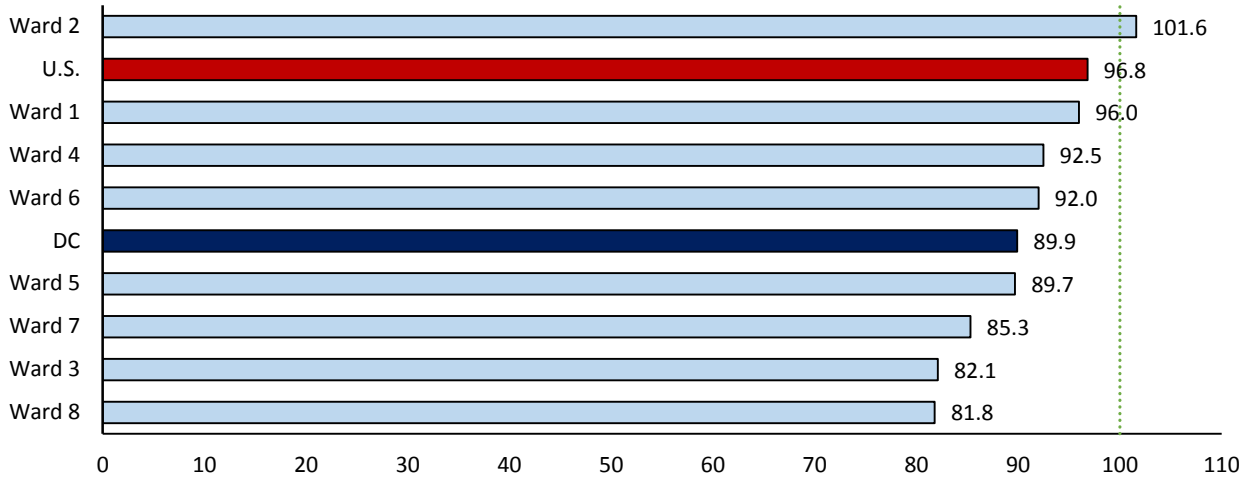


Figure 2: Population Sex Ratio: Males per 100 Females (2009-14)



The District's labor market and economy may be especially sensitive to policy changes that affect women's employment and earnings. Women comprised more than half (51.0 percent) of DC's labor force in 2015, versus 45.8 percent of the U.S. workforce. The District is also more heavily female than any other state. Between 2010 and 2014, 53 percent of residents were women, compared to 51 percent of the U.S. population. Still, Figure 2 demonstrates that sex ratios vary widely across wards (Howden & Meyer, 2011; U.S. Census Bureau, 2015b; Bureau of Labor Statistics, 2016b).

At least one cross-national study found that the U.S. women's labor force participation rate has fallen relative to other OECD countries and that a substantial share (28 to 29 percent) of the decline is attributable to the U.S.'s lack of family-friendly social insurance programs, including paid parental leave and guaranteed access to part-time work schedules (Blau & Kahn, 2013). U.S. women reached peak labor force participation in 1999 at a rate of 60 percent and subsequently declined (Bureau of Labor Statistics, 2015c). A District woman's odds of being in the workforce were 9 percent lower than a man's between 2009 and 2014, with significant variation between wards (U.S. Census Bureau, 2015).

The higher unpaid household work burden that typically falls upon women constrains their ability to earn a living (Elborgh-Woytek, et al., 2013). Women in the U.S. are responsible for most family caregiving. Two-thirds of U.S. family caregivers are women and on average spend more time providing this care than male caregivers (AARP and the National Alliance for Caregiving, 2015; Bureau of Labor Statistics, 2015b; U.S. Department of Labor, 2015; Bittman, et al., 2007). Mothers typically devote twice as many hours per week caring for their children and 91 percent more time performing other unpaid household work, such as cooking and cleaning, than fathers (Krantz-Kent, 2009). Working mothers are 13 times more likely than working fathers to take time off to stay home when their child is sick (Ranji & Salganicoff, 2014). Inequitable division of paid employment and unpaid household and caregiving work between women and men is a social construct that reinforces established gender dynamics (Heintz, 2006; Tzannatos, 1998). Paid paternity leave is one policy lever that has been shown to improve gender equity in unpaid household work, as discussed in Section 1.6.

Parental leave policies have also been associated with lowering the "child penalty" in mothers' employment patterns (Gornick, et al., 1998). Numerous reports also show that women in the U.S. face significant wage penalties for childbearing—perhaps as much as a 7 percent income drop—which may persist long after the baby is born. It is common for mothers that switch employers after childbirth to be offered less pay than their previous job. In contrast, some evidence suggests that fatherhood may be associated with a wage boost (Budig & England, 2001; Avellar & Smock, 2003; Wilde, et al., 2010; Waldfogel, 1998; Waldfogel, 1997; Reitman & Schneer, 2005; Goldin & Katz, 2008). The majority of mothers with an infant are in the labor force, most of whom work full time (Bureau of Labor Statistics, 2016a). However, married women in the U.S., especially those with young children, are particularly vulnerable to falling out of the labor force (Cohany & Sok, 2007). About one in five U.S. women quit their job before or shortly after the birth of their child (Laughlin, 2011; Han, et al., 2008). Women with the least resources—including those who are unmarried, have low levels of educational attainment, or are younger—are more likely to return to work within two months of childbirth than more resourced women (Han, et al., 2008). Thirty-six percent of mothers of young children were not in the labor force, compared with 7 percent of fathers. Women who are not in the labor force are about 50 percent more likely than men to be prevented from actively job searching by family responsibilities (Miller & Alderman, 2014; Bureau of Labor Statistics, 2015; 2016c). Being out of the workforce for long periods of time results in reductions in total work experience and human capital depreciation, which may be

especially true for highly skilled workers (Anderson, et al., 2002; OECD, 2007). For example, a U.S. mother with a young child's odds of being unemployed are 86 percent higher than for fathers (7.8 versus 4.2 percent). As of December 2015 it took an average of 27.7 weeks for an unemployed person to secure a new position (Bureau of Labor Statistics, 2016d; 2015).

Higher caregiving rates is one of the major reasons women tend to have lower lifetime earnings than men. Working-age caregivers are more likely to earn less money, reduce their hours of work or leave the labor force than non-caregivers. Over the course of a lifetime, women caregivers lose about $274,044 in wages and Social Security benefits, as well as $50,000 in pension income. Other studies suggest that family caregiving duties tend to more negatively impact employment outcomes of female than male caregivers in terms of ability to continue working, number of hours worked, and performance (Keene, 2005; AARP and the National Alliance for Caregiving, 2015; Lee & Tang, 2015; MetLife and the New York Medical College, 2011).

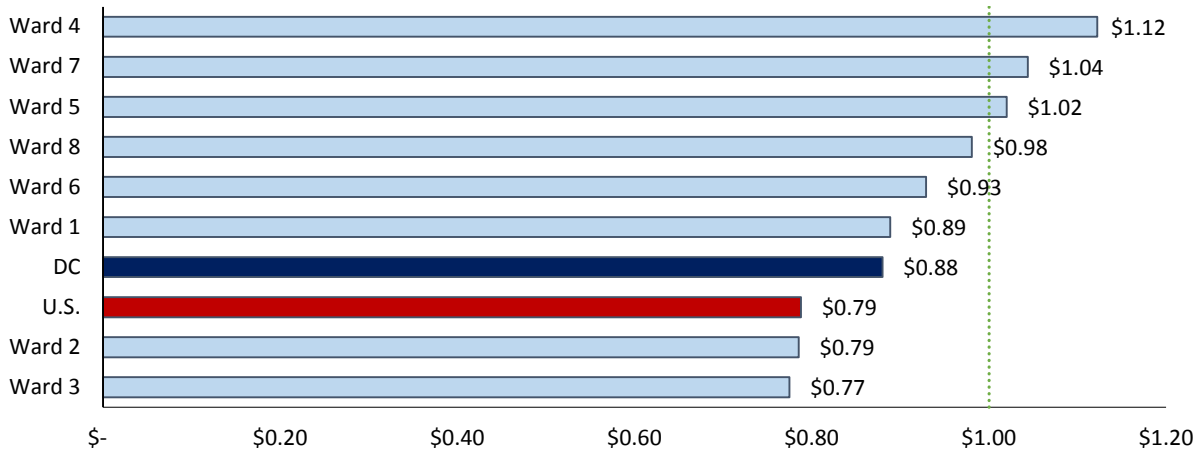
Paid family leave benefits that are contingent upon labor force participation can increase the incentives for women to rejoin the labor market after childbirth or a family caregiving event, since only those who are working are eligible for the benefit (Elborgh-Woytek, et al., 2013). One study found that an additional week of guaranteed paid leave boosted the rate at which young women were employed or actively seeking paid employment by about 0.60 to 0.75 percentage points (Winegarden & Bracy, 1995). Research suggests that paid family leave can reduce the average amount of time that mothers and family caregivers spend out of the workforce, in part by decreasing their need to change jobs in order to fulfill their parental or familial obligations (Ruhm, 1998; Brugiavani, et al., 2013; Toledo, et al., 2015; Council of Economic Advisers, 2015; Pavalko & Henderson, 2006).

Numerous studies have found that mothers of small children with access to moderate lengths of paid leave tend to go back to work sooner (Lyness, et al., 1999; Schott, 2012) (Council of Economic Advisers, 2015; Kenjo, 2005; Waldfogel, et al., 1999; Waldfogel & Berger, 2004; Kluve & Tamm, 2012; Laughlin, 2011). California's paid leave program was associated with raising the odds that a woman would be employed 9 to 12 months after childbirth (Baum & Ruhm, 2014). Another report found that young women in the Golden State participated in the workforce at higher rates relative to young women in states without this benefit (Das & Polachek, 2015). Similar results were observed in Canada, where its maternity leave program decreased the proportion of women who quit their jobs after childbirth and increased the probability of employment for women with young children by 3 to 4 percent (Baker & Milligan, 2005; ten Cate, 2003). Other studies link access to paid leave with more hours worked per week and more weeks worked. For instance, evidence from California's program suggests that it raised new mothers' hours and weeks of work by as much as 19 percent during the second year of the child's life (Kluve & Schmitz, 2014; Goldin, 2014; Rossin-Slater, et al., 2013; Baum & Ruhm, 2014).

By reducing the amount of time women spend out of the workforce and increasing the chances that they will return to their same employer following the leave period, paid family leave also has the potential to reduce the gender wage gap. Women in the U.S. working full-time, year-round civilian jobs between 2009 and 2014 earned 79 cents for every dollar men were paid, while District women earned 88 cents. The District's gender wage gap was among the smallest in the nation—12 percentage points—but still significant. Women living in DC were paid on average $8,474 less per year than their male counterparts. The chasm was widest in Wards 2 and 3. However, Figure 3 shows that the average earnings of employed women surpassed men in Wards 4, 5, and 7 (U.S. Census Bureau, 2015c). Working

age U.S. women are also 23 percent more likely to be in poverty than men, but in the District their odds are 31 percent higher. Poverty is more common for women than men in every ward. The gender poverty gap is particularly wide east of the Anacostia River, as working age women in Wards 7 and 8 are 8 and 13 percentage points more likely than men to live at or below the federal poverty line, respectively (U.S. Census Bureau, 2015a).

Figure 3: Women's Earnings per $1 in Men's Earnings (2009-14)



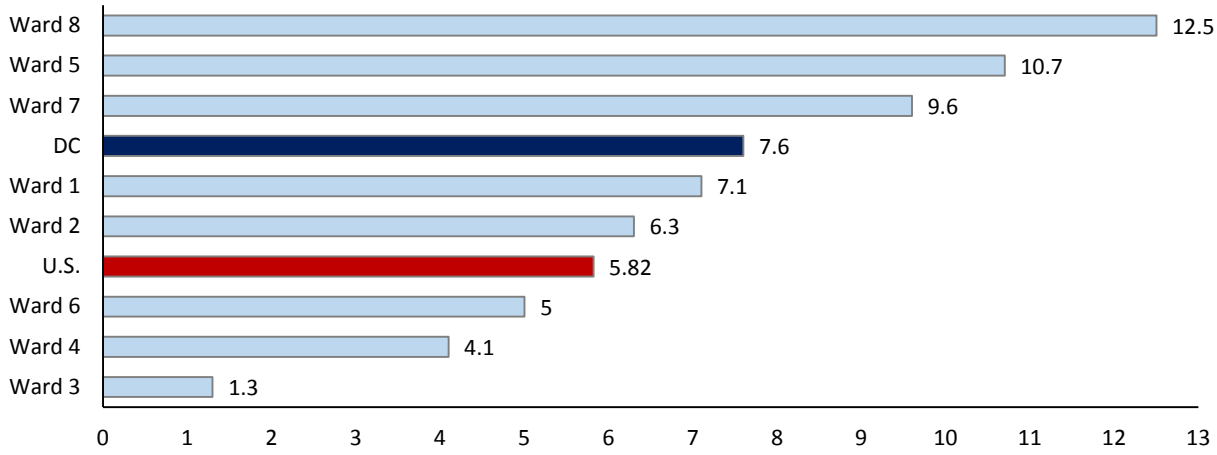
Some economists argue that closing the gender wage gap will require altering the labor market to enhance temporal flexibility options. The fact that earnings differences by sex expand greatly with age and that women without children are almost equal to those of comparable men suggests that life cycle events may be largely responsible for the gender wage gap (Goldin, 2014; Adda, et al., 2011). The right to paid time off means that parents and other caregivers no longer have to quit their job and give up seniority and earnings in order to be with their new child or ailing relative. Thirty-one percent of women who switched employers after childbirth saw a decline in their pay level, compared with 3 percent of women who returned to the same employer (Laughlin, 2011). One study found that 64 percent of U.S. mothers with paid maternity leave returned to their employer within a year after childbirth, compared with 43 percent who did not have this benefit. A second survey of California employers revealed that 95 percent of those who took paid family leave returned to work at the end of the leave period, and four-fifths returned to the same employer. (Hofferth & Curtin, 2006; Waldfogel, et al., 1999). Other examinations of California's program have found evidence that linked women's access to paid leave to a 7 percent higher hourly wage after childbirth (Rossin-Slater, et al., 2013; Baum & Ruhm, 2014). Another less robust analysis of national survey data found that mothers who took at least 30 paid family days off from work were 54 percent more likely to report a wage increase in the year following childbirth than women who did not take family leave (Houser & Vartanian, 2012). Nevertheless, other studies identified links between paid leave entitlements that are nine months or longer and reductions in women's wages and workforce attachment (Ruhm, 1998; Schönberg & Nudsteck, 2007).

1.3 Infant Mortality[4]

Research has linked paid parental leave rights to reductions in child and infant mortality. According to a 141 cross-country comparison, increasing paid maternity leave by 10 weeks was associated with a 10 percent decline in neonatal and infant deaths and a 9 percent reduction in mortality among children under age five (Heymann, et al., 2011). Other economists found that infant mortality fell by about 0.5

deaths per 1,000 live births for each additional week of publicly-available paid maternity leave (Winegarden & Bracy, 1995). The CDC identified differences in death rates immediately before and after birth as one of the leading causes of the racial gap in life expectancy (Kochanek, et al., 2015). Some studies also indicate a possible link between availability of paid parental leave and earlier achievement of developmental milestones, more regular attendance at well-baby doctors' visits, and higher vaccination rates (Mohammad, et al., 2015; Berger, et al., 2005; Winston, 2014; Brooks-Gunn, et al., 2002). Further, most parents of children with special health care needs report that taking leave had positive effects on their child's physical (81 percent) and emotional (85 percent) health, with stronger effects noted by parents that received full pay during their leave than those who took unpaid leave (Schuster, et al., 2009).

Figure 4: Infant Mortality, Deaths per 1,000 Births (2014)



Without wage replacement new parents are reluctant to take parental leave, and, perhaps consequently, access to unpaid family leave has not been found to have substantial effects on infant mortality rates. One study found that the right to paid parental leave in Europe led to a 2.5 to 3.4 percent decline in infant mortality, while unpaid leave had no impact. The researcher estimated that a year of job-protected paid parental leave is associated with a 20 percent decline in deaths of babies between 2 and 12 months old, and a 15 percent decrease in deaths of children age 1 to 5 (Ruhm, 2000). Two subsequent cross-national studies confirmed these results, finding that job protected paid leave of 10 weeks and longer resulted in declines in infant mortality, but unpaid or non-job protected leave had no effect (Tanaka, 2005; Shim, 2015). Another report found that the right to unpaid leave under the FMLA only reduced infant mortality among the children of college-educated, married women, perhaps because they were the only group of mothers that could qualify for FMLA leave and afford to take it (Rossin, 2013). Refer to Section 3 for more information on access to FMLA leave.

The District's infant mortality rate continued to surpass the national average (7.6 versus 5.82) in 2014, and DC has among the country's highest rates of perinatal deaths. Seventy-two DC infants died that year. Save the Children (2015) highlighted the District as an example of a city in which the overall infant mortality rate masks huge disparities between children in its richest and poorest households. Infant mortality rates vary significantly in DC by neighborhood and race, as seen in Figure 4 (DC Department of Health, 2016). Babies born to non-Hispanic black mothers in the District have far greater odds of dying within their first year of life than those born to white or Hispanic mothers. Between 2011 and 2013, the

mortality rate for babies born to non-Hispanic black mothers in DC was 11.12 per thousand births, comparable to Romania and Bulgaria. In contrast, the infant mortality rate for babies born to Hispanic mothers was 5.51, similar to Canada and New Zealand. There were so few deaths among babies born to white mothers that the CDC did not estimate the infant mortality rate for this racial group (Matthews, et al., 2015; World Bank, 2016; Kochanek, et al., 2016).

1.4 Breastfeeding Rate and Duration

Paid maternity leave has been shown to improve child health by increasing the rate and duration of breastfeeding. Empirical research has repeatedly found that women who take maternity leaves of six weeks or longer are significantly more likely to start and maintain breastfeeding, and women with longer maternity leaves continue to breastfeed after returning to work at higher rates (Ogbuanu, et al., 2011; Guendelman, et al., 2009; Canen, 2007; Arthur, et al., 2004; Fein & Roe, 1998; Baker & Milligan, 2007). After California implemented its paid family leave program, the state's rate for exclusive breastfeeding rose three to five percentage points and by 10 to 20 percentage points at several key developmental moments (Huang & Yang, 2015). A separate analysis showed that every additional week of maternity leave extended breastfeeding by half a week (Roe, et al., 1999).

Breastfeeding's health benefits to children and mothers are well documented (American Academy of Pediatrics, 2016; World Health Organization, 2002).[5] It has also been found to confer broader societal and economic advantages. One study predicted that the United States would save $13 billion annually and prevent 740 infant deaths if 90 percent of families complied with the medically recommended six-month exclusive breastfeeding period (Bartick & Reinhod, 2010; American Academy of Pediatrics, 2016). If families in Louisiana met these same standards, researchers estimated that the state could save $216 million and prevent 18 infant deaths (Ma, et al., 2013). The CDC explains that since increasing breastfeeding rates and duration would lead to better infant health, it would translate into "fewer health insurance claims, less employee time off to care for sick children, and higher productivity, all of which concern employers" (U.S. Department of Health and Human Services, 2011). Switching to breastfeeding could also reduce economic strain on families with young children, as one year's supply of infant formula costs about $1,500 (Bartick, 2011).

Once new mothers return to work, it is often challenging for them to continue breastfeeding, especially for those who hold low-wage jobs. For example, hourly workers might have to clock out to use a breast pump, and they are less likely to have access to a private space at their worksite and less control over their work day than salaried professionals (U.S. Department of Health and Human Services, 2011; Centers for Disease Control and Prevention, 2007a). In DC, 30.5 percent of workers are paid hourly. They are more likely to be women, low-income, African American, young, or have less than a high school education than salaried workers (DC Department of Health, 2015a).[6] The Surgeon General reported that differing access to maternity leave may contribute to socioeconomic and racial disparities in breastfeeding (U.S. Department of Health and Human Services, 2011). The CDC has repeatedly documented that U.S. babies born to low income, less educated, unmarried, and younger mothers were the least likely to be breastfed. The agency has also identified persistently lower rates of breastfeeding among African American mothers. While 80 percent of Hispanic mothers and 75 percent of white mothers who gave birth in 2008 attempted to breastfeed, this was true of only 59 percent of African American mothers. African American mothers were also about 16 percentage points less likely than Hispanic or white mothers to breastfeed for the medically recommended period.

New mothers in the District start breastfeeding their babies at a lower rate and are less likely to breastfeed for the recommended length of time than the national average. A quarter of new DC mothers never attempt breastfeeding. While 45 percent of mothers still breastfeed at six months, fewer than 15 percent of them do so exclusively (Centers for Disease Control and Prevention, 2013).

1.5 Long-Term Effects on Children's Educational Outcomes and Future Earnings

Possible long-term development effects of paid leave on children are difficult to isolate, as benefits may not manifest themselves until many years later, and they are challenging to measure in most large-scale data sets (Ruhm, 2011). The bulk of the research does not find evidence that increasing the length of paid parental leave has long-term effects on children's educational outcomes or future earnings. Whatever gains that can be quantified are least pronounced in places where high-quality, subsidized childcare is also available (Ruhm & Waldfogel, 2012; Lowenstein, 2011; Liu & Nodström Skans, 2009; Rasmussen, 2010; Dahl, et al., 2013). Still, one paper from Norway found that children of mothers who were eligible for paid leave showed a 2.7 percentage point increase in high school completion rate, a 3.6 percentage point increase in college attendance, and slightly elevated IQ scores (Carniero, et al., 2010).

1.6 Bonding with Baby and Parental and Caregiver Well Being

Paid family leave has been shown to increase the average length of time that new parents spend at home with their infants. Studies consistently show that access to paid parental leave delays parents' return to work after childbirth (Ruhm, 2000; Waldfogel, 1999; Schönberg & Nudsteck, 2007). In fact, the most important determinant of whether parents take leave is if the leave is paid or job-protected (Gomby & Pei, 2009). Women in states with paid temporary disability insurance or paid family leave are twice as likely to take paid family leave after the birth of a child, taking an average of 22 more paid leave days (Houser & Vartanian, 2012). Two separate groups of researchers found that California's right to paid family leave doubled the average length of maternity leave in the state from three to six weeks. Other studies showed that California boosted the proportion of mothers on leave by as much as 15 percentage points in the first six weeks after childbirth. Six to 13 weeks after childbirth, new mothers were 18 to 30 percentage points more likely to be on leave than before the program was implemented (Baum & Ruhm, 2014; Bartel, et al., 2015; Rossin-Slater, et al., 2013).

Research has repeatedly shown that new fathers are also more likely to take paternity leave and stay out for more days when the leave is paid, especially when the wage replacement rate is higher (Harrington, et al., 2014; Han, et al., 2007; Huerta, et al., 2013; O'Brien, 2009; Han & Waldfogel, 2003). Two studies examining the effects of California's paid family leave program found that it raised the chances that men would go on paternity leave by 46 percent, and it extended the average length by nearly a week. The policy was also found to boost fathers' solo leave taking (Baum & Ruhm, 2014; Bartel, et al., 2015). Despite the high demands of infant care, U.S. fathers typically return to work shortly after welcoming their new child. About 70 percent of new fathers take 10 days or less of paternity leave, and approximately 1 in 10 men do not take any time off (Abt Associates Inc., 2014; Nepomnyaschy & Waldfogel, 2007; Harrington, et al., 2014). One survey of white collar professional fathers working at Fortune 500 companies found that three-quarters of men stayed out for one week or less after the birth of their most recent child, and 16 percent took no time at all (Harrington, et al., 2011). Men of color may be more likely to take paternity leave than white men. Fathers with stable social positions and healthy lifestyles may also be more likely to use paternity leave (Armenia & Gerstel, 2006; Fredlund, et al., 2010). Several studies have found that men often decide not to take paternity leave, even when their

employer provides it, with many fathers expressing fear that it could damage their careers. The consensus among U.S. fathers is that paternity leave should last two to four weeks. Even when employers offer four to six weeks of paid leave, a significant number of fathers only take two weeks (Harrington, et al., 2014; Malin, 1998; Coltrane, et al., 2013). Workplace norms may reinforce men's anxiety about paternity leave, perhaps mirroring U.S. workers' reluctance to use all of their vacation days (Abt Associates Inc., 2014; Neighmond, 2016).

California's program has also been linked with increases in the amount of time mothers spend caring for their children, with the strongest effects among less educated women (Goodman, 2012). Two other studies found that length of leave appears to influence the strength of the mother-child relationship (Gomby & Pei, 2009). Paid parental leave may also help fathers establish relationships with their newborns and stay involved as their child grows. A number of research teams have found that fathers who take longer leaves perform more childcare activities than fathers who do not, although one study from Germany disputes this conclusion (Nepomnyaschy & Waldfogel, 2007; Sakiko & Waldfogel, 2007; Haas & Hwang, 2008; Huerta, et al., 2013; Tanaka & Waldfogel, 2007; O'Brien, 2009; Kluve & Tamm, 2009). Research has shown a positive association between more father-child engagement and enhancement in cognitive development as well as decreased behavioral problems (Sarkadi, et al., 2008; Nepomnyaschy & Waldfogel, 2007).

Other reports show that paid paternity leave benefits mothers. Paternity leave has also been associated with increased mother's well-being three months after childbirth in England; while a French study found that when paternity leave facilitates caregiving by fathers, women were less likely to experience postpartum depression (Redshaw & Henderson, 2013; Séjourné, et al., 2012). This type of leave can reshape gender norms around division of childcare duties (Patnaik, 2016). When fathers take on more household duties such as childcare, women have greater latitude to participate in paid employment. Women whose partners took longer paternity leave used fewer sick days, and a Swedish study found that mothers' earnings rose by 6.7 percent for each additional month of paternity leave their partner took (Bratberg & Naz, 2014; Johansson, 2010).

Studies have shown paid family leave to have positive health effects on new mothers and other family caregivers. Many reports have found that new mothers who return to work later tend to exhibit better general health, fewer symptoms of depression, and less anxiety (Chatterji & Markowitz, 2005; 2012; Aitken, et al., 2015; Dagher, et al., 2014; Avendano, et al., 2015). When parents take unpaid leave, they are significantly more likely to report that it caused them emotional stress than if the leave was paid (Schuster, et al., 2009). Moreover, maternity leave has also been found to prolong the gestation period and reduce the chances of a caesarean delivery, especially among workers in physically demanding jobs (Guendelman, et al., 2009). Caesarean delivery is far more expensive than vaginal delivery ($12,739 versus $9,048 for private health insurers in 2010), and it can put both the mother and the baby's health at risk (Kozhimannil, et al., 2013). Further, one study from Sweden found that fathers who took paternity leave had lower mortality risk than those that did not, producing net savings of €11 million (Månsdotter, et al., 2007).

Family caregivers are becoming increasingly important as the U.S. population ages and health insurance companies promote shorter hospital stays. Paid family leave can help provide caregivers with economic stability while they balance family and professional duties. Some or all of the negative physical and mental health effects of family caregiving have also been shown to be offset for both men and women

when paid leave is available and a supervisor is supportive (Earle & Heymann, 2011). Caregivers often face significant emotional strain, and the rate of depression among them is high. They are also more likely to miss days of work, which may leave them financially vulnerable. Family caregivers can face significant time costs and out-of-pocket expenditures that can amount to a sizeable financial burden (Ho, et al., 2005). One study estimated that family caregivers of cancer patients spend an average of 8.3 hours per day providing care for 13.7 months, and bear an economic burden over the course of cancer of $7,028 during the first year following diagnosis, $19,701 in the year to six months before the patient's death, and $14,234 in the terminal phase (Northouse, et al., 2012).

1.7 Fertility Rate

Some contend that the proposed legislation could increase the District's fertility rate, thereby driving up the use of costly public services such as pre-K through 12th grade school enrollment. The empirical research suggests that workers covered by the proposed legislation are unlikely to change their childbearing plans in response to the bill's passage, although it is possible that people who already intended to have children will find the District a relatively more attractive place to live and work. Currently, DC residents with children are more likely to move out of the District than those without children (Moored & Metcalf, 2016).

It is unlikely that the proposed legislation would have much effect on fertility, given other countries' experience with similar social insurance programs and the relative modesty of the proposed benefit (Ruhm, 2011). Several countries have implemented paid family leave entitlements in the hopes of raising fertility rates or stemming their decline with limited success. Such policies tend to influence birth spacing, or the length of time that parents wait between conceptions, rather than the number of children born per family (Björklund, 2006; Gupta, et al., 2008; Lalive & Zweimüller, 2009; Matysiak & Ivett, 2014; Winegarden & Bracy, 1995; Cannonier, 2014). Empirical evidence of the impact on fertility of the unpaid leave provided under FMLA is limited and inconclusive (Rossin, 2013; Averett & Whittington, 2001).

Women in the District are less likely to have children than women living elsewhere in the U.S. but are more likely to bear children later in life. If the District were a state, it would have the country's 47th lowest fertility rate. Out of every 1,000 women in DC of childbearing age (15 to 44 years old), 53.6 gave birth in 2014, versus 62.9 nationally. Fertility rates in DC and the U.S. are below the population replacement rate of 2.1 children born per woman. In 2014, there were approximately 1.5 children born per DC woman and 1.8 per U.S. woman (Matthews & Hamilton, 2016; Hamilton, et al., 2015; Philips, 2013). More information on birth and fertility rates in the District can be found in Section 2.3.

2 Benchmarking: Paid Leave Programs in Other U.S. Jurisdictions

Federal law does not guarantee U.S. workers the right to wages when taking family or medical leave. Nevertheless, four states, one local government, and one territory have created their own paid family and medical leave insurance program or mandate that employers provide paid leave. While there are many similarities across these public plans, there are variations in benefit structure, funding mechanism, eligibility criteria, and definitions of qualifying events. These plans can serve as useful points of comparison for the proposed legislation, which are also summarized in Appendix B.

California, New Jersey, and Rhode Island are the only U.S. jurisdictions that currently have both paid family and medical leave programs. New York's paid family leave plan will begin disbursing benefits in 2018, but the state's paid medical leave program dates back to 1948. San Francisco's mandate supplements the California state program and is the only jurisdiction that has a paid parental leave ordinance. [7] The "Universal Paid Leave Amendment Act" would make the District the only U.S. jurisdiction to have paid family leave without paid medical leave. None of the District's neighboring jurisdictions entitle workers to paid family or medical leave.[8] However, Maryland recently established a task force to study family and medical leave insurance, which is required to report its findings by December 2017.

Since the 1960s, Hawaii and Puerto Rico have provided stand-alone paid medical leave plans, also known as state short-term or temporary disability insurance. Their programs offer partial wage replacement to qualifying individuals when a serious illness or medical condition prevents them from working for several weeks or months. Short-term disability insurance is not intended to replace workers' compensation programs, which offer benefits for workplace-related injuries (U.S. Department of Labor, 2016). Neither is paid medical leave a substitute for the federal disability benefits program, Social Security Disability Insurance (SSDI), which pays monthly cash benefits to those who are unable to work for a year or more.

All of the state paid family and medical leave plans function as insurance regimes, meaning that employees and/or employers pay into a state or privately-administered fund, and when an employee has to take a leave of absence for a qualifying event, money is drawn from the fund to fully or partially replace their lost wages.

California, New Jersey, and Rhode Island rely on government agencies to administer their family leave plans, but states' medical leave plans take three different approaches. California and New Jersey provide short-term disability insurance through a competitive model. Employers in these states can choose to either enroll in the government's plan or purchase a private plan that provides equal or better coverage. Private disability plans insure approximately 3 percent of workers in California and 20 percent of workers in New Jersey. In recent years, enrollment in the Garden State's public plan has gone up, particularly among small employers. The New Jersey legislature explained that many insurers have chosen not to compete with the state's plan (CA Employment Development Department, 2016a; NJ Legislature, 2016).

In contrast, New York and Hawaii use a private model. They require employers to privately secure a plan that meets state guidelines. Employers also have the choice to self-insure, meaning that they pay their

employees out of pocket during a disability leave. Rhode Island and Puerto Rico are the only jurisdictions that employ a purely public disability insurance model (Rhode Island Public Expenditure Council, 2015).

San Francisco's parental leave ordinance functions quite differently than any of the state programs. First, it supplements the benefits that employees receive under California's paid family leave plan. Second, rather than creating a government-administered insurance fund or directing employers to purchase private insurance, the city mandates that employers directly compensate workers when they take parental leave. Third, the ordinance only applies to leave taken when bonding with a new child. San Francisco is the only known instance of a U.S. city or county that has created its own public paid family or paid medical leave benefit. It passed its parental leave ordinance in April 2016, which the Office of Labor Standards Enforcement will implement over a two-year period beginning in January 2017.

States with paid short-term disability laws all began their programs before 1970, whereas paid family leave and parental leave laws were implemented more recently. California created the nation's first state paid family leave program in 2004, followed by New Jersey in 2009, Rhode Island in 2014, and New York, which will begin paying benefits in 2018.

No jurisdiction has simultaneously created a short-term disability and family leave plan or built a stand-alone family leave plan. All of the state paid family leave programs expanded upon existing medical leave programs, which in turn generally stemmed from federal and state unemployment insurance laws. Thus, states' family and medical leave programs are often framed by the "Federal Unemployment Tax Act" (FUTA) eligibility requirements and statutory language as well as the state's own unemployment insurance program (Williamson, 2016). Unemployment insurance and paid leave plans tend to have similar eligibility requirements and benefits structure. They are typically administered under a single agency. However, their funding mechanisms and benefits period often differ.

Although few states currently have paid family and medical leave plans, interest is mounting. In 2015, paid leave bills were introduced to state legislatures in Connecticut, Maryland, New Mexico, Vermont, and Wisconsin (National Partnership for Women and Families, 2016). The U.S. House of Representatives also considered creating a national paid family and medical leave insurance program that year, and President Obama mentioned it during his State of the Union address. Further, the two major political parties' presidential candidates in 2016 both supported a national paid family leave program. President-elect Donald Trump proposed creating six weeks of paid leave for new mothers, which he planned on paying for by reducing unemployment insurance fraud (Donald J. Trump for President, Inc., 2016). In contrast, Secretary Hillary Clinton's campaign platform included a pledge to create a paid family and medical leave program that provided up to 12 weeks of leave benefits and replaced at least two-thirds of wages up to a ceiling. Secretary Clinton intended to pay for the program by increasing taxes on the wealthy (Hillary for America, 2016).

2.1 Benefit Structure

State paid leave programs' benefit structures differ from one another according to their wage replacement rate, the minimum and maximum weekly benefit payment, the benefit period, and how family and medical leaves interact with one another (*see* Table 2).

California has the country's most generous state leave benefit due to a combination of its relatively high maximum weekly benefit and long medical leave period. Currently, an individual worker in California can qualify for up to $58,708 in paid disability benefits or $6,774 in paid family leave in a single year.

Further, many workers in San Francisco will also be entitled to additional salary replacement from their employer when taking parental leave. Workers whose annual salary is below $106,740 will be able to receive 100 percent of their weekly salary for up to six weeks.

In contrast, the greatest annual benefit available to workers in Rhode Island is roughly 50 percent lower than California's statewide program. The Bay State will pay up to $23,850 in disability benefits and $3,180 in paid family leave per year. With dependents, the annual ceiling rises to $32,190 and $4,292, respectively. Individuals employed in New Jersey can receive up to $15,990 in disability benefits and $3,690 in family leave benefits in a single year. In Hawaii, the highest possible annual disability benefit is $14,280. The maximum annual disability benefits in New York and Puerto Rico lie below $4,500.

Table 2: Family and Medical Leave Benefits Structure

	Medical Leave Length	Family Leave Length	Wage Replacement Rate	Min. Weekly Benefit	Max. Weekly Benefit	Waiting Period	Intermittent Leave
UPLAA	--	Parental: 11 weeks Caregiving: 8 weeks	90% up to 150% of minimum wage and 50% above threshold	--	$1,000	1 week	Yes, period unspecified
CA	52 weeks	6 weeks	55%*	$50	$1,129	1 week	1 hour
SF	--	6 weeks	45%	$0	$924	1 week	1 hour
HI	26 weeks	--	58%	$14	$570	1 week	--
NJ	26 weeks	6 weeks	66.67%	--	$615	1 week	1 day
NY	26 weeks	8-12 weeks	50%**	$20	SDI: $170 PFL: 50% of NY avg. weekly wage**	1 week	1 day
PR	26 weeks	--	65%	$12	$133†	1 week	--
RI	30 weeks	4 weeks	4.62% of wages in highest 4 of 5 quarters††	$89	$795	--	1 week

* State plans to raise rate to 60-70% in January 2018; ** State plans to raise rate to 67% by 2021; † Farm workers have a maximum weekly benefit of $55. †† Does not include a benefit for each of the worker's dependents worth $10 per week or 7% of base benefit payment (whichever is greater) for up to five dependents.

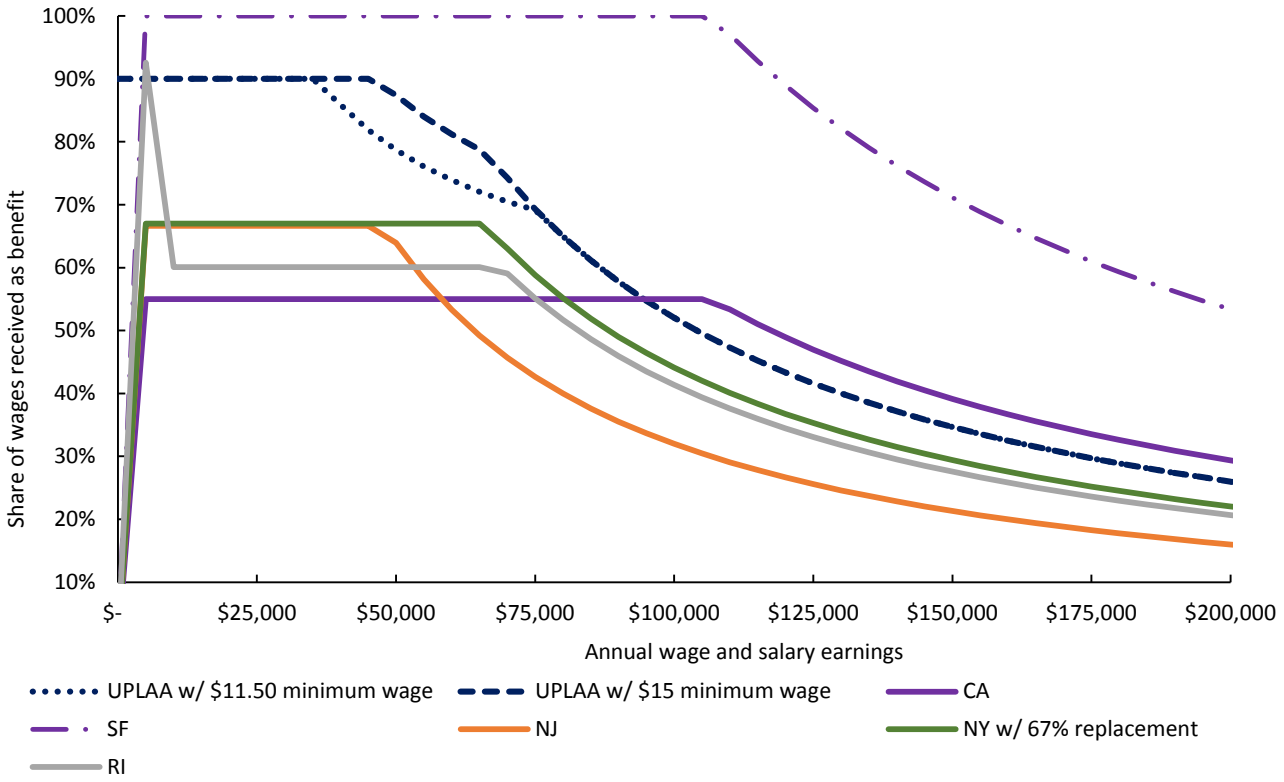
2.1.1 Wage Replacement Rate and Base Period

This term defines the percentage of an eligible individual's average wages that they can receive in paid leave benefits. The higher the wage replacement rate, the more a program will cost. For example, under California's 55 percent wage replacement rate, someone whose usual salary is $1,000 per week can qualify for a weekly benefit of $550. Jurisdictions' wage replacement rates range from a low of 50 percent in New York to a high of 100 percent in San Francisco.[9] Rhode Island is the only state or territory to provide a higher wage replacement to claimants with dependents. California workers ranked the wage replacement rate as their most important consideration when deciding to take leave for a qualifying event (CA Employment Development Department, 2015b).

All state programs have a flat wage replacement rate, meaning that low- and high-income workers receive the same share of their salary and wages in benefits up to the replacement ceiling, as seen in Figure 5. In contrast, the District's proposed legislation would replace a greater share of low- and

medium-income workers' lost earnings. Under the UPLAA, 90 percent of workers' salaries and wages would be replaced up to 150 percent of the minimum wage, while 50 percent of earnings above this level would be replaced.[10] California is also moving toward a tiered wage replacement system. Beginning in 2018, the state will scale claimants' wage replacement rate to their income. Workers in the Golden State who earn less than a third of the statewide average quarterly wage will qualify for 70 percent wage replacement. Those with earnings above that threshold will qualify for 60 percent wage replacement or 23.3 percent of the state's average weekly wage, whichever amount is greater, up to a maximum of $1,129 (CA State Legislature, 2016). New York is also planning to institute a tiered wage replacement system for its paid family leave program.

Figure 5: Family Leave Benefits, Wage Replacement Rate



California's policy change comes in the wake of a legislative report showing that low wage earners file disability insurance and paid family leave claims at a far lower rate than high wage earners (Sherriff, 2007). The legislature asserted that low-income workers find it especially challenging to absorb the pay cut imposed by the current 55 percent wage replacement rate, especially when coupled with the increased financial burden of welcoming a new child or recuperating from a serious medical problem (California State Assembly, 2016). The Board of Supervisors in San Francisco cited similar concerns as justification for creating its own paid parental leave ordinance (City and County of San Francisco, 2016).

The vast majority (91 percent) of private industry workers in the U.S. with employer-provided short-term disability insurance also have plans that pay a set share of their salary in benefits. Workers with such plans receive an average wage replacement of 60 percent (Bureau of Labor Statistics, 2015a).

Determining how much of a claimants' wages and salary should be replaced by a paid leave program also depends on how the program calculates the claimants' normal wages and salary. The UPLAA would define the base wage as the average weekly wage subject to the contribution during the highest earning four of the five quarters immediately preceding the qualifying event, as do California and Hawaii. In effect, this means that claimants who have worked in the jurisdiction for less than a year would qualify for a lower benefit payment than those who had worked longer. Table 3 summarizes how each state defines its base period.

Table 3: State Plans' Definitions of Base Period

	UPLAA	CA	HI	NJ	PR	RI
Average weekly wage subject to the contribution during 4 of the 5 highest earning quarters immediately preceding the qualifying event	✓	✓	✓			
Average weekly wage subject to the contribution during first 4 of the last 5 completed calendar quarters before the claim					✓	✓
Earnings in the 8 calendar weeks before the claim				✓		

2.1.2 Maximum and Minimum Weekly Benefit Amount

All state and local benefit programs set a maximum weekly benefit payment. This means that the plan does not replace wages above a certain threshold, as shown in Figure 5 and Table 4. Wage replacement caps help bring program costs down, because they put a valve on how much any one claimant can receive. For example, New Jersey's program replaces two-thirds of an applicant's weekly wages up to $615. Consequently, the applicant's average weekly wages that exceed $992.50 are not insured. The UPLAA sets a maximum weekly benefit at $1,000. A benefit ceiling allows low-income workers to qualify for a proportionately higher payment relative to their regular wage or salary than high-income workers.

Three-quarters of private-industry workers with disability insurance coverage also face a maximum weekly benefit, which was an average of $595 in 2015. People with a plan that has among the lowest 10 percent of benefit ceilings face an average weekly cap of $170, compared to $2,500 for people with the highest 10 percent of benefit ceilings (Bureau of Labor Statistics, 2015a). Appendix B and Figure 6 show how states have adjusted their maximum weekly benefit levels over time.

California, Rhode Island, New York, Hawaii, and Puerto Rico also set minimum weekly benefit payments. This program feature guarantees that all eligible claimants will receive benefit payments at or above the plan's floor. Establishing a minimum weekly benefit means that extremely low income workers can qualify for a higher wage replacement rate than they otherwise would. For example, if Rhode Island did not have a minimum weekly benefit of $89, a worker in the state whose annual income is $6,000 would receive a weekly paid leave benefit of $69. With the floor in place, the same worker's weekly payment rises to $89, and their wage replacement rate increases from 60 to 77 percent. The UPLAA does not specify a minimum weekly benefit.

California, Hawaii, New Jersey, and Rhode Island determine their maximum and minimum weekly benefit level annually, often basing it on their statewide average wage. Since 2003, California has increased its nominal maximum weekly benefit by 47 percent, while Rhode Island has increased its benefit by 34 percent and New Jersey by 27 percent (*see* Figure 6 and Appendix B). Over this time period, the Consumer Price Index, a national measure of inflation, rose 31 percent (Bureau of Labor

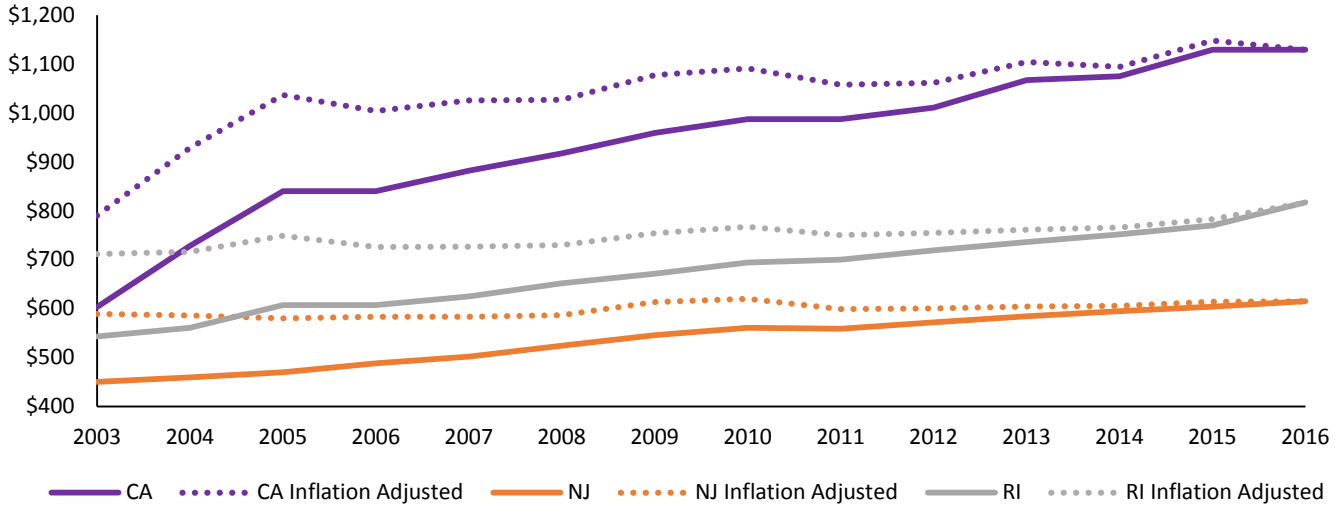
Statistics, 2016). San Francisco's benefit cap is pegged to the state's maximum weekly benefit. The UPLAA automatically increases benefits of low- and medium-income workers by tying it to the minimum wage, which DC law stipulates is to be raised annually, but it does not have any provision for adjusting the maximum weekly benefit.

Table 4: Weekly Benefit Amount and Wage Replacement Rate by Annual Salary

Annual Salary	UPLAA *$11.50 minimum wage*	UPLAA *$15 minimum wage*	CA	SF *Base CA benefit in gray, total benefit in bold*	NJ	NY	RI
$25k	$433	$433	$264	$264 + $217 = **$481**	$321	$322	$289
$50k	$757	$841	$529	$529 + $433 = **$962**	$615	$644	$578
$75k	$997	$1,000	$793	$793 + $649 = **$1,442**	$615	$848	$795
$100k	$1,000	$1,000	$1,058	$1,058 + $865 =**$1,923**	$615	$848	$795
$125k	$1,000	$1,000	$1,129	$1,129 + $924 = **$2,053**	$615	$848	$795
$150k	$1,000	$1,000	$1,129	$1,129 + $924 = **$2,053**	$615	$848	$795
$175k	$1,000	$1,000	$1,129	$1,129 + $924 = **$2,053**	$615	$848	$795

$25k	90%	90%	55%	55% + 45% =**100%**	67%	67%	60%
$50k	79%	87%	55%	55% + 45% =**100%**	64%	67%	60%
$75k	69%	69%	55%	55% + 45% =**100%**	43%	59%	55%
$100k	52%	52%	55%	55% + 45% =**100%**	32%	44%	41%
$125k	42%	42%	47%	47% + 38% = **85%**	26%	35%	33%
$150k	35%	35%	39%	39% + 32% =**71%**	21%	29%	28%
$175k	30%	30%	34%	34% + 27% = **61%**	18%	25%	24%
$200k	26%	26%	29%	29% + 24% = **53%**	16%	22%	21%

Figure 6: Maximum Weekly Benefit Payment (2003-16)



In contrast, New York and Puerto Rico do not regularly update their benefit payment maximums and minimums. The difference in maximum benefit payments between states that do and do not set their weekly benefit levels annually is stark. While applicants to California's leave program can receive up to $1,129 per week, Puerto Rico caps non-farm workers' benefits at $133 and farm workers at $55. New York's current statutory maximum benefit per week for medical leave is low at $170. Empire State employers have the option to provide benefits above this level by purchasing Enriched Disability Benefits Insurance.[11] When its family leave program goes into effect, the plan's weekly maximum benefit will be pegged to New York's average weekly wages.

Some states place additional restrictions on benefit payments. For example, New Jersey prohibits an individual's total benefits from exceeding one-third of their total wages during the base period. California does not pay paid family and medical leave benefits to claimants that are currently using employer-paid sick days.

2.1.3 Duration of Paid Leave Benefit

All jurisdictions with paid family leave and short-term disability plans limit the amount of leave that workers can qualify for each year, as shown in Table 2. Placing limits on the number of weeks that a claimant can receive benefits helps control program costs.

California and New Jersey allow for up to 6 weeks of paid family leave, and Rhode Island insures wages for up to 4 weeks. New York's family leave program will provide eight weeks of paid family leave, although state law specifies that the benefit period will increase to 10 weeks in 2019 and 12 weeks in 2021, as its fund balance permits. The UPLAA would allow eligible claimants to receive up to 11 weeks of paid parental leave and 8 weeks of paid family caregiving leave.

California, Rhode Island, and New Jersey's benefit period for medical leave claims is greater than their period for family leave. Workers can claim up to 52 weeks of paid short-term disability leave in California; 30 weeks in Rhode Island; and 26 weeks in Hawaii, New Jersey, New York, and Puerto Rico. Among employer-provided short-term disability plans nationally, on average they provide 26 weeks of coverage. Only 10 percent of private sector workers' plans offer less than 12 weeks of coverage (Bureau of Labor Statistics, 2015a).

Sometimes a claimant is able to return to work on a reduced schedule during their recovery period, or perhaps their treatment only requires them to be absent every third week. All states with paid leave programs build flexibility into their programs, allowing participants to receive the benefit on an intermittent basis. California and New York compensate for leave in full-day increments, whereas in Rhode Island the minimum length is one week. The UPLAA allows for intermittent leave for an unspecified minimum period, as does New Jersey.

Benefit waiting periods are one tool that states use to limit paid leave eligibility to serious events that require an extended absence from work. Waiting periods require claimants to be on leave for a qualifying event for a set period of time before they can start accruing benefits. New Jersey has a seven day unpaid waiting period before paid leave begins, as does California and the UPLAA. New Jersey and California allow applicants to use employer-paid sick or vacation days during the waiting period, so long as they are unable to work during this time. New Jersey will pay benefits for the waiting period if the qualifying event lasts longer than three weeks. California is eliminating its waiting period for paid family leave benefits beginning in 2018, although its waiting period for disability benefits remains in place.

New Jersey and California also give employers the option of requiring employees to use up to two weeks of their paid time off (e.g. sick or vacation days) before claiming the public benefit.[12] Such measures might help employers limit their unused sick and vacation day liability. They may also be a cost savings measure for the state's insurance program. New Jersey estimated that employers who exercised this option reduced the state's total number of family leave benefit weeks by 15.4 percent in 2014 (NJ Department of Labor and Workforce Development, 2016).

San Francisco's parental leave program also provides that if an employee voluntarily leaves their job within 90 days of the end of their paid leave period, the employer can choose to ask the employee for benefit reimbursement.

States effectively cap multi-year leave taking by setting a minimum period of employment or income in the year preceding the qualifying event.

2.1.4 Stacking Paid and Family Leave

In California, New Jersey, and Rhode Island, short-term disability and family leave benefits can be stacked. This means that an eligible person can qualify to use both types of paid leave over the course of a year. Leave stacking can increase program costs by expanding the potential benefit period. As an analogy, a workplace that provides employees 10 paid sick days and 10 paid vacation days per year allows its leave to be stacked, and workers can receive pay on 20 days in which they are absent. In contrast, a workplace that prohibits stacking offers a total of 10 paid days off per year that employees can use as either sick or vacation days.

Leave stacking is particularly relevant for expectant mothers. In California, New Jersey, and Rhode Island, pregnant women can qualify for both paid family and medical leave. A new mother can use paid medical leave if her pregnancy and delivery interferes with her ability to work. After the baby is born and the woman has physically recovered, she can qualify for paid family leave benefits to stay home and bond with her new child.[13] For example, a California woman with a normal pregnancy and delivery is usually entitled to 16 to 18 weeks of paid leave benefits, comprised of 4 weeks of pre-natal medical leave, 6 to 8 weeks of postnatal medical leave, and 6 weeks of child bonding family leave. On the other hand, a non-childbearing parent in the state would only be eligible for 6 weeks of child bonding leave (CA Employment Development Department, 2016b). The UPLAA would not allow claimants to stack parental and family caregiving leave.

2.2 Funding Structure

Levying a payroll tax is the most common way that states fund their paid leave programs. California, Rhode Island, New Jersey, and Puerto Rico all use this method. However, each state uses a different formula for determining which party is statutorily obligated to pay the tax. Further, California and New Jersey allow employers to self-insure or acquire private insurance and opt out of the disability insurance tax. Table 5 summarizes these differences.

Employees in California and Rhode Island bear the statutory tax obligation at the 2016 rate of 0.9 and 1.2 percent, respectively. New York's family leave program will also be funded by a payroll tax levied on employees, although the state has yet to set its rate. A similar employee-levied tax on District workers' income might not be legally allowable, given the Home Rule Act's prohibition on taxing commuters' income (DC Official Code § 1-206.02). Under the proposed legislation, private sector employers in the District would be statutorily responsible for a 0.62 percent payroll tax.

In contrast, New Jersey and Puerto Rico divide the tax obligation between employers and employees. In 2016, New Jersey levied a 0.5 percent payroll tax on employers for the state's disability insurance plan, while levying on employees a 0.2 percent payroll tax for disability insurance and a 0.08 percent payroll tax for family leave. Puerto Rico equally divides its 0.6 percent tax obligation between employers and employees. Appendix C shows how states have adjusted these tax rates over time.

Table 5: State Plans' Funding Structure

	Employer-Obligated Tax Rate	Employee-Obligated Tax Rate	Taxable Wage Ceiling	Max. Employer Annual	Max. Employee Annual
UPLAA	0.62%	--	--	--	--
CA	--	SDI & PFL: 0.9%	SDI & FL: $106,742	--	SDI & PFL: $961
SF	PFL: Benefit paid out-of-pocket	--	PFL: $106,742	$5,544	--
HI	SDI: Plan balance	SDI: 0.5%	$49,464	--	SDI: $255
NJ	SDI: 0.5%	SDI: 0.5% PFL: 0.08%	$32,600	SDI: $163	SDI: $65 PFL: $26
NY	SDI: Plan balance	SDI: 0.5% PFL: TBD	SDI: $6,200	--	SDI: $31
PR	SDI: 0.3%	SDI: 0.3%	SDI: $9,000	SDI: $27	SDI: $27
RI	--	SDI & PFL: 1.2%	SDI & PFL: $66,300	--	SDI & PFL: $796

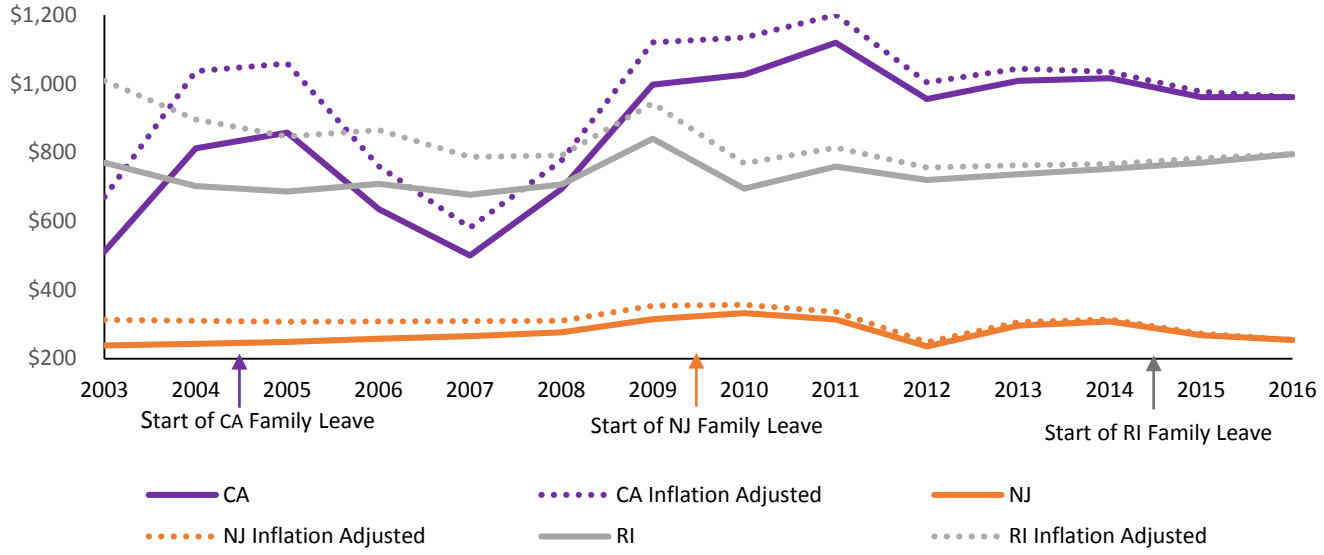
All of the states using the payroll tax funding mechanism place a ceiling on taxable wages. In other words, only earnings up to the threshold can be taxed to fund the state's paid leave insurance program. In 2016, the taxable wage ceiling is $106,742 in California; $66,300 in Rhode Island; $32,600 in New Jersey; and $9,000 in Puerto Rico. Therefore, the amount of taxes collected for paid leave programs per covered worker in 2016 cannot exceed $961 in California, $796 in Rhode Island, $254 in New Jersey, or $54 in Puerto Rico. In contrast, the UPLAA does not create a ceiling on taxable wages. Other social insurance programs including Medicare, Medicaid, and Social Security apply a taxable wage ceiling. Taxable wage ceilings are considered regressive, since the effective tax rate of low-income workers is greater than that of high-income workers.

States' paid leave tax rates and maximum tax bill per employee tend to fluctuate over time while their taxable wage ceilings steadily grow. Tax rates and tax bills do not appear to be closely tied with changes in a state program's eligibility requirements or its definition of a qualifying event. In fact, in the years after California, New Jersey, and Rhode Island expanded their disability insurance programs to include family leave, their paid leave tax rates fell. Further, each state's current paid leave tax rate is lower than before its program expanded (*see* Appendices C and D).

Part of the reason for this phenomenon may be that states tend to overestimate the amount of tax revenue that they will need to support a new family leave program. For example, New Jersey's Office of Legislative Services anticipated that the state's family leave program would cost about one-third of its temporary disability plan. The Office relied on demographic and survey data to arrive at this estimate. In actuality, family leave usage rates in the Garden State were far lower than what was projected, with usage rates consistent with those observed in California. In 2014, New Jersey's family leave plan cost one-fifth of its short-term disability plan. Revenues for the Garden State's family leave program greatly

exceeded benefits. The legislature responded by creating an adjustable tax rate that set revenues equal to 120 percent of benefit payments and 100 percent of administrative costs (NJ Legislature, 2016).

Figure 7: Maximum Tax Bill per Employee, (2003-2016)



States can also supplement their short-term disability insurance plan through their unemployment insurance fund. Federal law interprets temporary disability insurance as a complement to unemployment insurance, as the former provides benefits to individuals who are unable to fulfill the latter's "ability to work" requirement. A 1946 amendment to FUTA authorized states to use employees' contributions to their unemployment insurance fund to pay for short-term disability benefits. The unemployment fund may only be used to cover short-term disability benefit payments, not its administrative expenses (U.S. Department of Labor, 2016; Social Security Administration, 2015). It is unclear whether the District can exercise this section of the FUTA. First, the District's unemployment insurance fund does not currently accept contributions from employees. Second, the Home Rule Act's prohibition on taxing commuters' income may supersede the FUTA's disability insurance provision.

California, New Jersey, and Rhode Island each had solvent disability and paid family leave funds from 2006 to 2015.[14] California's and New Jersey's paid leave funds' net income exceeded their net benefits paid in 2015, while Rhode Island's fund expenditures exceeded revenue by $3.7 million. California considers that maintaining a disability insurance fund balance ranging from 25 to 50 percent of the prior 12 month disbursement is adequate (CA Employment Development Department, 2016c). The three states had fund balances ranging from 55 to 84 percent of disbursements. Over the last ten years, Rhode Island has consistently had a higher fund balance-to-expenditure ratio than New Jersey or California (*see* Appendix C).

Without adequate controls in place, officials may be tempted to divert money from their disability and family leave funds for other purposes, as happened in New Jersey and California. New Jersey's elected leaders initially borrowed $100 million from the temporary disability fund in 1994, when its balance nearly exceeded the total benefits paid out that year, and the general fund faced sharp budgetary pressure. This loan was followed by a series of nine more diversions out of the state's temporary disability fund over a ten year period, totaling $773 million. From 1992 through 2010 the legislature also swept $5.5 billion from the state's unemployment insurance and workers' compensation funds. To put

an end to this practice, New Jersey voters amended the state's constitution in 2010 to require that all payroll taxes be dedicated to worker benefits and ban any future diversions (NJ Legislature, 2016). Similarly, elected officials in California transferred two "loans" totaling $611.7 million from the paid leave trust fund in FY 2011 and 2012 to the state's general fund. Neither of these loans has been repaid (CA Employment Development Department, 2016a).

Table 6: State Family and Medical Leave Fund Solvency

	Fund Balance	Net Revenue	Net Benefits Paid	Fund Balance as Percent of Disbursements
CA (2015)	$3,169 M	$5,649 M	$5,419.7 M	58%
NJ (2014)	$278.5 M	$616.9 M	$506.6 M	55%
RI (2015)	$151.6 M	$172.2 M	$173.4 M	87%

Rather than maintain a state short-term disability insurance fund or create a payroll tax, New York and Hawaii require that employers either purchase short-term disability insurance for their employees through the private market or self-insure. Both of these states set insurance plan standards and require that self-insurance funds are solvent. Employers in these states have the option to share the costs of purchasing insurance with their employees. Employers in Hawaii and New York can require that workers contribute up to 0.5 percent of their wages up to a weekly cap of $4.91 and $0.60, respectively.

San Francisco's plan is an outlier, functioning as an employer mandate rather than a social insurance program. Benefits under the city's parental leave ordinance will be paid by employers, and the city will not be responsible for establishing an insurance fund. When an employee takes leave for a qualifying event, the employer will have to pay out-of-pocket the difference between the California Family Leave benefit and the employee's usual salary up to the ceiling. By increasing the cost of employing parents, San Francisco's new employer mandate may inadvertently lead to discriminatory hiring practices (OECD, 2007).

2.3 Uptake Rates

The rate at which an insurance plan's members file eligible benefits claims, also known as the uptake rate, helps determine how much the plan has to collect in revenues. When insurance plans have high uptake rates, participants have to pay higher premiums. State family and medical leave plans cover tens of millions of workers in California, New Jersey, and Rhode Island, but administrative records show that a small sliver of these workers file benefit claims each year. Uptake rates for short-term disability benefits are consistently higher than family leave (*see* Table 7). California and New Jersey had nearly three times as many eligible medical as family leave claims. In 2015, Rhode Island's medical leave insurance received seven times as many claimants as its family leave insurance. These three states' short-term disability programs have existed for decades while the family leave benefit is relatively new, perhaps explaining some of the difference in their uptake rates.

Table 7: Uptake of State Paid Family and Medical Leave Plans (2015)

	California	New Jersey	Rhode Island
Workers Covered	17,282,000	Medical: 2,651.326 Family: 3,831,200	415,000
Medical Leave			
Claims paid	633,532	91,163	34,015
Uptake rate	3.7%	3.4%	8.2%
Gross benefit payments	$4,760.1 M	$419.6 M	$164.2 M
Average weekly benefit	$493	$445	$482
Average total benefit per claimant	$7,514	$4,475	$4,826
Average weeks	16.1	10.3	10.0
Family Leave			
Claims paid	225,163	32,033	4,941
Uptake rate	1.5%	0.8%	1.2%
Gross benefit payments	$659.6 M	$85.8 M	$9.24 M
Average weekly benefit	$551	$516	$519
Average total benefit per claimant	$2,929	$2,678	$1,871
Average weeks	5.4	5.1	3.6
TOTAL			
Claims paid	888,695	123,196	38,956
Uptake rate	5.1%	--	9.4%
Gross benefit payments	$5,419.7 M	$505.4 M	$173.4 M
Average weekly benefit	$508	$463	$487
Average total benefit per claimant	$6,312	$3,990	$4,452
Average weeks	13.3	8.9	9.2

Table 8: Family Leave Uptake Rates, by Bonding and Caregiving Claims

	California (2014)	New Jersey (2015)	Rhode Island (2015)
Child bonding claims	208,509*	26,778	3,803
Percent of family leave claims	87.9%	83.6%	77.0%
Percent of claimants women	65.7%	87.0%	65.7%
Percent of claimants men	34.0%	13.0%	34.3%
Bond with biological child	94.2%	99.6%	98.6%
Bond with foster/adopted child	0.65%	0.4%	1.3%
Caregiving claims	28,736*	5,245	1,138
Percent of family leave claims	12.1%	16.4%	25.5%
Percent of claimants women	65.8%	75.0%	68.4%
Percent of claimants men	33.7%	25.0%	31.6%
Caring for spouse	33.5%	32.7%	50.7%
Caring for domestic partner	1.0%	--	0.8%
Caring for child	21.4%	24.1%	17.6%
Caring for parent	32.9%	--	29.4%
Claim for parent-in-law	--	--	1.1%
Claim for grandparent	--	--	0.4%
Caring for all others	11.3%	43.2%	--

* Number of claims filed, not eligible claims.

In 2015 California paid out $4.7 billion in medical leave benefits, New Jersey's claims totaled $419.6 million, and Rhode Island disbursed $164.2 million. The average benefit period for short-term disability was 10 weeks in New Jersey and Rhode Island and 16 weeks in California. On average, weekly benefit payments ranged from $445 in New Jersey to $493 in California. Disability claims represented about 85 percent of California and New Jersey's net benefit payments. District residents are on the whole healthier than residents in California, New Jersey, and Rhode Island. Adults in DC are less likely to rate their health as fair or poor compared to residents of these three other states (*see* Appendix E).

Approximately 4 percent of covered employees in California and New Jersey and 8 percent in Rhode Island received disability benefits in a 12 month period. According to New Jersey's administrative records, pregnancy and childbirth complications are the primary reasons that claimants received short-term disability benefits, accounting for 26.2 percent of all eligible claims filed in 2015. Other common causes of disability claims include illnesses and conditions affecting bones and organs of movement (18.7 percent); accidents, poisoning, or violence (13.1 percent); cancer (7.7 percent); and problems with the digestive system (6.5 percent). Mental illness represented 5.8 percent of New Jersey's short-term disability eligible claims.

About 1 percent of workers insured by California, New Jersey, and Rhode Island's paid family leave plan used the benefit in 2015. California's program disbursed $659.6 million in family leave benefit payments in 2015, while New Jersey's payments totaled $85.8 million and Rhode Island paid out $9.24 million. Eligible claimants drew an average of 5 weeks of benefit payments in California and New Jersey, and 4 weeks in Rhode Island. Paid family leave beneficiaries in California received an average weekly benefit payment of $551, while the average payment was $516 in New Jersey and $519 in Rhode Island.

The vast majority of family leave claims in California, New Jersey, and Rhode Island were for bonding with a new child. Bonding constituted 87.9 percent of California's family leave claims, and they represented 83.6 percent of New Jersey's claims and 77.0 percent of Rhode Island's claims. Practically all claimants taking bonding leaves in these three states did so for their biological child, while using this benefit for adoptive or fostered children was rare.

Childbearing trends are an important factor in paid family and medical leave uptake rates. More births in a region could also mean that a program would need to collect greater tax revenues. As shown in Figure 7, the District's birth rate surpassed those of California, New Jersey, and Rhode Island between 2008 and 2014. Maryland and Virginia both had birth rates of 12.4 in 2014. In total, 9,509 babies were born to DC residents in 2014. For every 1,000 DC residents, 14.4 babies were born in 2014. The District is tied with South Dakota as having the fourth highest birth rate of any state. In comparison, that year 12.5 babies were born for every 1,000 people in the U.S. population. Since 2004, DC's birth rate has surpassed the national average. The District's relatively high birth rate is the result of having a population that is skewed towards people of childbearing age.[15] Nevertheless, Figure 8 shows that DC has a low fertility rate. Women in DC of childbearing age are less likely than women in California and New Jersey to have children, but DC's fertility rate slightly outpaces Rhode Island (Hamilton, et al., 2015). Mothers are more likely to use child bonding leave than fathers, and biological mothers also qualify for pregnancy-related medical leave. Maternity leaves also tend to be longer (refer to Section 1.5).

Figure 7: Birth Rate, Annual Births per 1,000 Residents (2002-14)

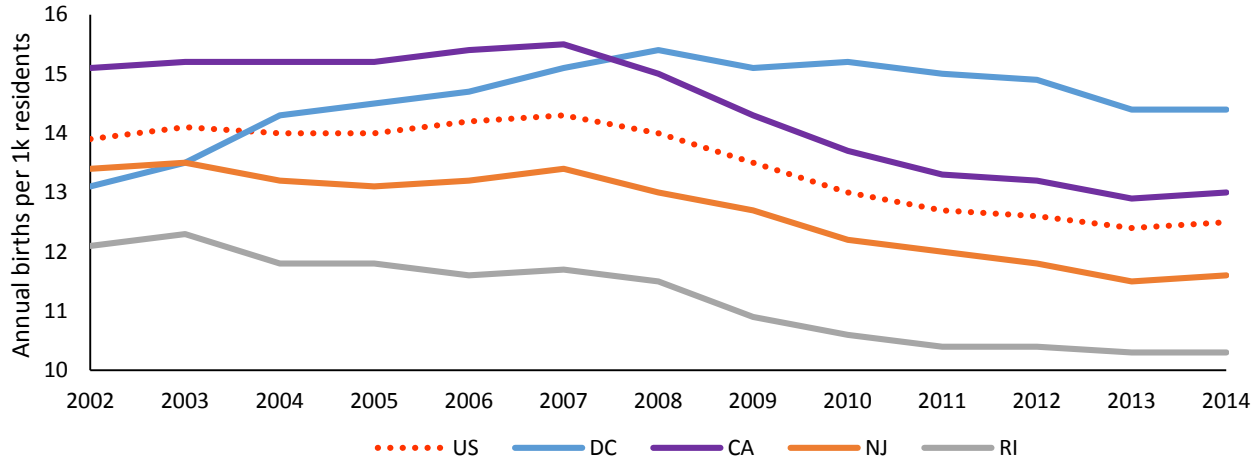
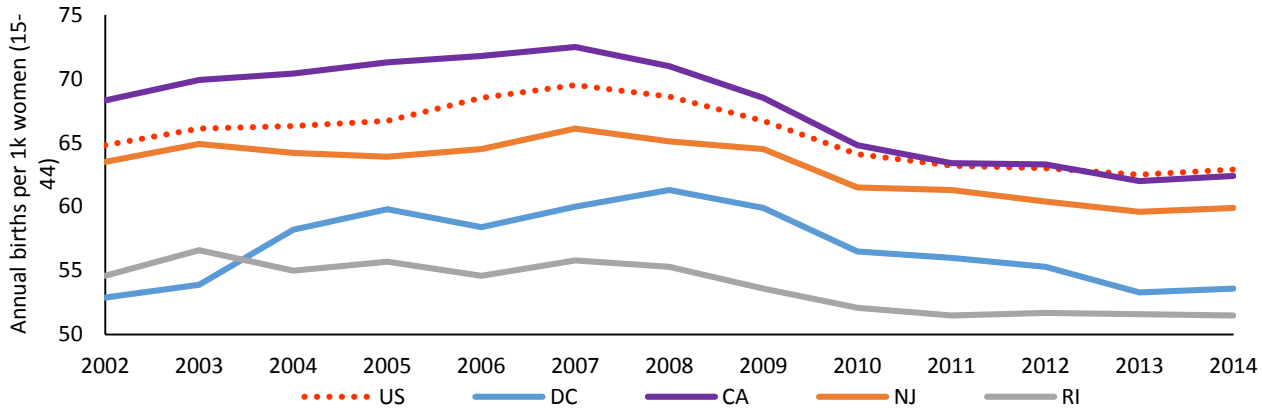


Figure 8: Fertility Rate, Births per 1,000 Women Aged 15-44 (2002-14)

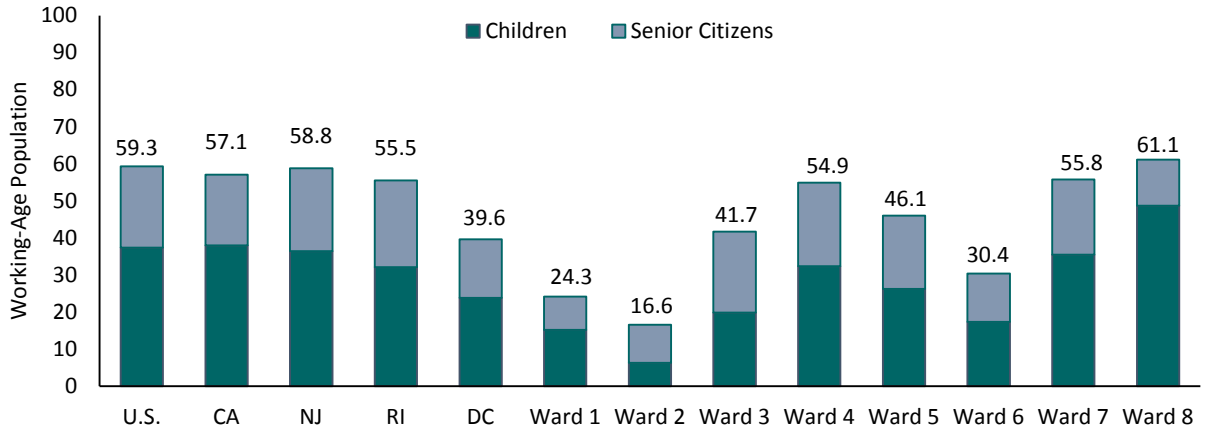


Family caregiving leave, which provides paid leave to care for an ailing relative, is not a major cost driver in paid leave programs. Few people use California, New Jersey, and Rhode Island's family caregiving benefit. Less than 30,000 individuals took caregiving leave in California in 2014, and fewer than 5,500 did so in New Jersey in 2015. Barely 1,000 people took advantage of Rhode Island's paid caregiving insurance in 2015. Across the three states, paid family caregiving leave was most often taken for a seriously ill spouse (RI Department of Labor and Training, 2016a; CA Employment Development Department, 2015a; 2016c; NJ Department of Labor and Workforce Development, 2016; 2016a).[16] Children and the elderly tend to have the greatest healthcare needs, and they are more likely to require caregiving supports from family. California, New Jersey, and Rhode Island each had significantly more children and senior citizens per working-age adult than the District. As seen in Figure 9, DC's age dependency ratio was 33 percent lower than the national average between 2010 and 2014. However, caregiving responsibilities may vary greatly across all eight wards (U.S. Census Bureau, 2015b).

Differing usage rates between family and medical leave benefits may reflect gaps in public awareness. While California, New Jersey, and Rhode Island each have had state short-term disability programs for decades, their family leave programs are fairly new. Over a decade after the California family leave

program started, general program awareness is low. Researchers reported that misinformation and confusion about its eligibility requirements and the application process are widespread. A large majority of human resource professionals in the state reported that they need further education and clarification about the paid leave program (Andrew Chang & Co, LLC, 2015). Meanwhile, a poll conducted in 2015 found that only 36 percent of California's registered voters were aware of the state's paid family leave program. Knowledge of the plan was especially limited among low income households, those with a high school degree or less, Latinos, and African Americans (DiCamillo & Field, 2015). In FY 2016, California continued to budget $3 million to raise awareness and usage (CA Employment Development Department, 2015c). Lack of public awareness has also been shown to impede uptake in New Jersey and Rhode Island (Setty, et al., 2016; Houser & White, 2012; Silver, et al., 2015). One report hypothesized that there may be a greater need for public education campaigns when state and federal provisions concerning leave differ (Gomby & Pei, 2009).

Figure 9: Age Dependency Ratio, Children & Senior Citizens per 100 Working-Age Residents (2010-14)



2.4 Administrative Expenses

States' paid leave programs tend to be self-sustaining, meaning that program revenues are sufficient to pay for qualifying claims and administrative expenses. The programs therefore do not impose an ongoing burden on states' general funds. However, beginning a new program may require an initial government investment to get it off the ground. The start-up capital expenses may include building an IT system, and the one-time operating expenses might be for purchasing office equipment or conducting public education campaigns. Unanticipated and costly administrative hurdles may also arise. When California began its paid family leave plan, it faced challenges including difficulty reaching an adequate staffing level in the midst of a state government hiring freeze, insufficient technology to process benefits online, and unanticipated regulatory hurdles concerning the taxability of paid family leave benefits at the state and federal level (Firestein, et al., 2011).

The legislatures of Maryland, Colorado, Connecticut, Washington, and Nebraska issued fiscal notes projecting the start-up costs of their proposed paid family and medical leave programs. Maryland estimated that its implementation costs would be between $5 and $15 million. Colorado predicted that its costs would total $33 million over two years; Connecticut expected to spend $13.6 million over one year; Washington's estimated its costs to be $16.7 million over two years; and Nebraska believed that it

would need to budget $14.9 million over one year (Glynn, et al., 2016; Connecticut General Assembly, 2016; Maryland General Assembly, 2016). The District's Office of Revenue Analysis estimated that the proposed legislation would have a $40 million start-up cost. The start-up costs in California, New Jersey, and Rhode Island are not comparable, as they began providing paid medical leave decades ago and simply extended their existing systems when incorporating paid family leave.

Table 9: Administering Family and Medical Leave (2015)

	California	New Jersey	Rhode Island
Gross Benefit Payments	$5,419.7 M	$505.4 M	$173.4 M
Ongoing Administrative Expenses	$238.6 M	$32.5 M	$7.5 M
Administrative Expenses as Percent of Disbursements	4.4%	6.4%	4.3%
Number of Claims Filed	932,428	143,689	48,387
Full-Time Employees (FTEs)**	1,300	--	207*
Per-Employee Case Load	717	--	N/A
Family Leave Claim Ineligibility Rate	5.2%	9.2%	7.9%
Medical Claim Ineligibility Rate	8.9%	15.9%	14.4%
Combined Ineligibility Rate	7.9%	14.3%	19.5%

*Includes all workers in the Income Support division, such as the unemployment insurance program and police and fire relief benefits.

Administrative expenses in California, New Jersey, and Rhode Island represent between 4 and 6 percent of their net benefits paid (*see* Table 9 and Appendix D). California spends $238.6 million and employs 1,300 people to operate its paid family and medical leave plan. In contrast, New Jersey and Rhode Island's programs are far smaller, and their administrative costs are also comparatively low. New Jersey has a staff of 135 employees to monitor family and medical leave claims, a 21 percent decline from 2008. The state appropriated $32.46 million to administer its family and medical leave program in 2016. Rhode Island's plan costs $7.5 million to manage, and its staff of 207 includes those working for the unemployment insurance plan and other programs within the Income Support division (CA Employment Development Department, 2016c; CA Department of Finance, 2016; State of Rhode Island and Providence Plantations, 2015; 2016; NJ Legislature, 2016; State of New Jersey, 2015).

The Maryland General Assembly recently estimated that the annual administrative costs for its proposed paid family and medical leave insurance plan would be $17.4 million, including salaries and fringe benefits for approximately 234 employees (Maryland General Assembly, 2016). For its part, Connecticut's legislature projected that administering a paid family and medical leave program would cost $18.9 million annually (Connecticut General Assembly, 2016).

Determining the eligibility of each filed claim is among a paid leave program's most significant administrative responsibilities. California's plan employs about one full-time employee for every 717 claims filed annually, and paid 93.4 percent of initial disability insurance benefit claims and 84.5 percent of paid family leave claims within 14 days. In contrast, New Jersey made initial eligibility determinations within 14 days on 44.6 percent of family leave claims and 48.0 percent of medical leave claims.

Administrators in California, New Jersey, and Rhode Island determined that 5 to 16 percent of claims filed are ineligible for benefits. New Jersey reported that its two most common reasons for denying a temporary disability insurance claim were: 1) that the applicant was covered by another program, such as workers' compensation or a private insurance plan; and 2) that the claimant failed to submit sufficient medical evidence (NJ Department of Labor and Workforce Development, 2016a; CA Employment Development Department, 2015d; 2015a; 2016d; RI Department of Labor and Training, 2016a; NJ Legislature, 2016).

Nevertheless, fraud and abuse in state family and medical leave programs is thought to be minimal. In FY 2014, California filed 25 criminal complaints representing potential fraudulent benefits of $3.2 million. Most of the cases that the state's fraud monitoring staff investigated pertained to identity theft, altered or forged documents, or medical practitioner fraud (CA Employment Development Department, 2015). Surveys of employers in California and New Jersey also found that plan abuse was rare (Appelbaum & Milkman, 2011; Lerner & Appelbaum, 2014). However, a task force examining Rhode Island temporary disability claims noted that their plan faced "pockets of abuse," and plan usage spiked around the December holidays and in the late summer (RI Department of Labor and Training, 2005).

2.5 Employer and Employee Eligibility

Not all residents or workers in the benchmarking states are covered by paid family and medical leave plans, nor do all leave events qualify for the cash benefit. In California and Rhode Island approximately 40 percent of the state population participates in their government's family and medical leave program. In New Jersey, fewer workers are covered by the state's medical leave program than its family leave program. The robust private short-term disability insurance market empowers employers to opt-out of the New Jersey state plan, whereas there is no evidence of a private market for family leave insurance.

Table 10: Coverage Rates (2015)

	Total Resident Population	State Family Leave Covered Employees	% Covered by State Family Leave	State Medical Leave Covered Employees	% Covered by State Medical Leave
CA	39,144,818	17,282,000	44.1%	17,282,000	44.1%
NJ	8,958,013	3,831,200	42.8%	2,651,326	29.6%
RI	1,056,298	415,000	39.3%	415,000	39.3%

Existing state family and medical leave plans limit eligibility to employees who have performed work within their borders. Further, they generally require individuals to meet or surpass period of employment and earnings thresholds to be eligible for paid leave benefits. For example, to meet California's eligibility requirement, one must be employed or looking for work and have earned at least $300 in wages subject to the disability insurance tax during the four preceding quarters. Some states allow both employed and unemployed workers who recently paid into the system to receive benefits.

States with a paid medical or disability leave program cover all private industry worksites, regardless of the number of people that they employ. In contrast, San Francisco's paid parental leave ordinance has a partially phased-out employer exclusions based on firm size. When the ordinance takes effect, it will only apply to employers with 50 or more workers. The following year the cutoff point will be lowered to firms with 35 or more workers, and by 2018 all employers in San Francisco with 20 or more employees will be required to comply with the ordinance.[17]

Paid family or medical programs tend to exempt certain other types of employers or employees. Federal government workers are excluded from all of these programs, and it is common for them to also exempt state or municipal employees, self-employed persons, those working for religious organizations, salespeople paid only by commission, university students, and other select groups. California and New York allow self-employed individuals and some public employees to opt in to their state's paid leave plan.

Table 11: Employee Eligibility Criteria

	Minimum Earnings/Period of Employment
UPLAA	Spends more than 50% of work time working for a covered employer in DC. Worked in such a capacity during the 52 calendar weeks preceding the qualifying event.
CA	Employed or looking for work and earned at least $300 in payroll tax wages during base period.
SF	Worked for the covered employer for at least 180 days, performs at least 8 hours of work per week in San Francisco, and spends at least 40 percent of weekly work hours employed by a firm located in San Francisco. Must also be eligible for California Paid Family Leave.
HI	Minimum of 14 weeks of 20-hours per week of paid employment in Hawaii in the 52 weeks preceding the event and earnings of at least $400.
NJ	Minimum of 20 weeks with earnings of $168 or more or have earned $8,400 or more in covered New Jersey employment during the 52 weeks preceding the event.
NY	Minimum of four consecutive weeks of employment with a covered employer.
PR	Minimum earnings of $150 during the year preceding the qualifying event.
RI	Minimum earnings of $11,520 in base period; or $1,920 in base period quarter and total base period wages of at least 1.5 times highest earning quarter, and at least $3,840 in base period.

An employee who is eligible for paid leave benefits might not be eligible for job-protected leave. Thus, in some circumstances, it is legally allowable for an employee to receive paid leave benefits from the state's plan and be fired from their job for taking the leave. Jurisdictions can avoid this pitfall by passing legislation that expands the FMLA's guarantee to job-protected leave to all of the same classes of workers that are eligible for its state paid leave benefit.

2.6 Qualifying Events

A "qualifying event" is the set of circumstances that must be present for an eligible employee's absence to qualify for paid family or medical leave benefits. In general, states require applicants to provide supporting documents related to their family or medical leave event, such as forms completed by a medical provider or proof of a relationship with the family member for whom one is taking caregiving leave, in order to receive the benefit. The definition of a qualifying event differs across the benchmark jurisdictions. The proposed legislation considers qualifying events to be the birth or legal placement of a child and a serious health condition befalling a family member.

2.6.1 Medical Leave

To receive paid medical leave for self-care, states generally require that an applicant's physical or mental condition prevents them from performing their regular or customary work. All states with paid medical leave exclude from coverage any work related illnesses or injuries and those acquired while perpetrating an illegal act. Hawaii, New Jersey, New York, and Puerto Rico bar medical leave payments for intentional, self-inflicted injuries. California and Puerto Rico's benefits cannot be used for leave taken for in-patient addiction treatment, whereas this is allowed in the other states. California is unique for

prohibiting payments due to incarceration, and Puerto Rico stands alone for excluding absences related to abortion.

2.6.2 Family Leave for Child Bonding

Parents of newborns or newly adopted children in California, New Jersey, and Rhode Island can use paid family leave to bond with their new child. When their laws go into effect, New York and San Francisco will also consider bonding with a new child as a qualifying event. All of these jurisdictions allow parents to take child bonding leave for the son or daughter of their domestic partner or a child for whom they stand in *loco parentis*. The child bonding benefit can also be used when an eligible individual welcomes a new foster child into their home. Parents can only take child bonding leave during the first 12 months after their child was born, adopted, or legally placed in their home.

2.6.3 Family Leave for Caregiving

California, New Jersey, and Rhode Island provide benefits for leave taken to care for a seriously ill family member. Once paid family leave is instituted in New York, the state will also consider family caregiving a qualifying event.

California, New Jersey, Rhode Island, and New York adopted similar definitions of a serious illness, injury, or condition that would trigger the paid family leave benefit for caregiving. California and Rhode Island's paid family leave programs consider serious health conditions to be a physical or mental illness, injury, or condition that requires inpatient care in a hospital, hospice, or residential facility and are similar to what the UPLAA outlines. The four states also allow for time off when a family member's condition requires continuing treatment or supervision by a healthcare provider. New Jersey specifies that this treatment must involve a period of incapacity of three days or longer and treatments by a healthcare provider or a regimen of continuing treatment under a healthcare provider's supervision, as does the proposed legislation. Rhode Island requires that the ill family member needs the employee's care.[18] Each jurisdiction limits the set of family members for whom caregiving leave may be taken, as set forth in Table 12 [19]

No other state besides New York specifies that its paid family leave program may be used for events related to military service. Under the Empire State's program, applicants will be able to take leave to relieve family pressures when they, their spouse, domestic partner, child, or parent is called to active duty.[20]

Table 12: Qualifying Family Members for Caregiving Leave

	Child (minor)	Child (adult)	Spouse	Domestic Partner	Parent	Parent-in-Law	Stepparent or adoptive parent	Grandparent	Grandchild	Sibling
UPLAA	✓	✓	✓	✓	✓	✓	✓	✓		
CA	✓	✓	✓	✓	✓	✓		✓	✓	✓
SF	✓									
NJ	✓		✓	✓	✓		✓			
NY	✓	✓	✓	✓	✓	✓		✓	✓	
RI	✓	✓	✓	✓	✓	✓		✓		

3 Policy Context: District Workers' Access to Unpaid and Paid, Job-Protected Leave

Local and federal laws guarantee many workers in the District access to unpaid, job-protected family and medical leave.[21] Under the "District of Columbia Family and Medical Leave Act of 1990" (DCFMLA), eligible workers can qualify for up to 12 weeks of unpaid family leave and 12 weeks of unpaid medical leave in any 12-month period, or 16 weeks of either type of leave in any 24-month period (DC Official Code § 32.501-517). Access to DCFMLA leave is triggered by a serious health condition that the employee suffers; following the birth of a child; when caring for a spouse, child, or parent with a serious health condition; or due to a qualifying exigency for a family member in the military. The District's "Parental Leave Act of 1994" also requires all employers to provide up to 24 hours of unpaid leave during any 12 month period for their employees to attend or participate in a school-related event for their child (DC Official Code § 32.1201-1206). A dozen other states have also passed unpaid, job-protected family and medical leave laws, but neither Virginia nor Maryland have done so.[22]

The federal "Family and Medical Leave Act of 1993" (FMLA) guarantees eligible workers the right to up to 12 weeks of unpaid, job-protected family and medical leave in any 12-month period (U.S. Code 29 § 2601-2654). It also allows 26 weeks of unpaid, job-protected leave to family members of deployed service members and wounded warriors for qualifying events arising from their relative's active duty military service. Qualifying events include short-notice deployments or needing to alter financial, legal, or caregiving arrangements due to military service (U.S. Department of Labor, 2008).[23] DCFMLA and FMLA leave is taken simultaneously, and both laws allow leave to be taken intermittently.

It is not uncommon for workers in the District to face DCFMLA/FMLA-qualifying life events. In 2012, 13.1 percent of U.S. workers reported having taken time off because of a qualifying FMLA reason during the past year. The majority of leave takers (55 percent) did so because of their own illness, compared to 21 percent who used it to welcome a new child, and 18 percent who cared for an ailing parent, spouse, or child (Abt Associates Inc., 2014).[24]

However, not all workers qualify for job-protected DCFMLA/FMLA leave. The right is circumscribed by the employer's size and the worker's tenure and number of hours worked in the previous year. The DCFMLA has a lower qualifying standard than the FMLA, but even so, approximately 30 percent of the District's private industry workers – or 147,400 people – are not protected under the DCFMLA because of their firm's size and job tenure. An unknown number of additional District workers are excluded because of the laws' minimum-hours-worked requirements and other restrictive clauses (Bureau of Labor Statistics, 2014; U.S. Census Bureau, 2016).[25] Under the proposed legislation, these workers would qualify for paid leave benefits but their employer would still have the right to fire them over the leave or refuse to reinstate them.

Studies have consistently shown that FMLA rights primarily benefit high-income, white, older, married couples. These workers are most likely to be covered by the law and either receive pay during their absence or can afford to take unpaid leave (Han, et al., 2007; Ruhm, 2011; Rossin, 2013; Phillips, 2004; Abt Associates Inc., 2014).

Consequently, many people cannot afford to exercise their rights under the DCFMLA/FMLA. During 2012, 4.6 percent of U.S. workers needed but could not take FMLA leave. Financial strain was the leading reason why employees forewent leave, accounting for 46 percent of unmet leave.[26] U.S. employees who needed but did not take FMLA leave in 2012 were more likely to be low income, racial minorities, women, less educated, unmarried, parents, or in the "sandwich generation."[27] More than 8 percent of low-income employees (annual earnings below $35,000) that needed family or medical leave in the prior year did not take it or took less time than they required, a rate two and a half times greater than for high-income workers (annual earnings above $75,000). Non-white workers were 76 percent more likely than white workers to have not taken leave. Female employees were twice as likely as their male colleagues to have faced a leave deficit. And those who started but did not complete college were 80 percent more likely to have an unmet need for leave than those that graduated. Hispanic and non-Hispanic black women were less likely to take maternity leave than non-Hispanic white mothers (59.5, 68.7, and 73.0 percent, respectively).

Family structure and age were also found to be linked to unmet FMLA leave. Workers that lived with a child were 85 percent more likely than those who did not to have experienced a leave deficit within the last year, and unmarried employees' odds were 57 percent greater than those who were married. Employees between ages 34 and 49 may simultaneously care for small children and aging parents, and people in this age group had a higher than average rate of unmet need for FMLA leave (Abt Associates Inc., 2014).[28] For example, only 71 percent of U.S. women who were employed during their last pregnancy reported taking maternity leave (U.S. Department of Health and Human Services, 2011a). Women with the least resources—including those who are unmarried, have low levels of educational attainment, or are younger—are more likely to return to work within two months of childbirth than more resourced women (Han, et al., 2008).

Forgoing DCFMLA/FMLA leave often forces individuals into decisions that may be damaging to their health and their community. A study examining unused FMLA leave found that two of the most common coping strategies were doing without or postponing medical treatment. When workers took FMLA leave with partial or no pay, two-thirds said that they found it somewhat to very difficult to make ends meet. Thirty percent of unpaid and partially paid leave takers had to borrow money, and 15 percent went on public assistance. A second study found that unpaid leave increased New Jersey mothers' likelihood of receiving food stamps by 40 percent in the year following their child's birth and increased their chances of relying on other forms of government assistance. Nearly all U.S. workers who took unpaid or partially paid FMLA leave (85 percent) said that they limited their spending, and a third reported that they took fewer days off than they needed (Abt Associates Inc., 2014; Houser & Vartanian, 2012; U.S. Department of Health and Human Services, 2011a).

3.1 Paid Family Leave

Few employees have access to paid family leave. About 14 percent of private-sector employees in the South Atlantic had some form of paid family leave as of 2015, according to the Bureau of Labor Statistic's National Compensation Survey (NCS). [29] Compared to U.S. private sector workers overall, those in the South Atlantic were slightly more likely to have employer-provided paid family leave benefits.

Across the U.S., worker salaries are closely and positively associated with access to paid family leave. While a quarter of the highest 10 percent of wage earners had this benefit, only 3 percent of the lowest

10 percent of wage earners received it. Full-time workers in the South Atlantic were also three times more likely than part-time workers to have paid family leave benefits. Nationally, paid leave benefits were relatively more common at larger than smaller firms (Bureau of Labor Statistics, 2016e; 2015a). Refer to Table 13 for more detailed information about the distribution of paid family leave benefits across the workforce.

Workers in the District may be, on average, more likely to have family leave benefits than other U.S. workers. This is because managerial, professional, financial, and information occupational groups have some of the highest rates of paid family leave and are also overrepresented in DC's workforce (U.S. Census Bureau, 2016). In addition, full-time District government employees are eligible for up to eight weeks of paid family leave per year (DC Law 20-155 § 1051-1053).[30] Many federal government workers can use up to six weeks of advanced sick leave during a qualifying FMLA leave (The White House, 2015). Further, access to paid parental leave may be more widespread than caregiving leave. One survey found that 35.1 percent of employees' workplaces offered paid maternity leave to most or all female employees, compared to 20.0 percent with paid paternity leave (Abt Associates Inc., 2014). Likewise two other studies reported that maternity leave is a more common workplace benefit than paternity leave (Ross, 2004; Society for Human Resource Management, 2016). When U.S. mothers took maternity leave from 2006 to 2008, they stayed out for an average of 10.3 weeks, and two-thirds received some pay during a portion of their absence (U.S. Department of Health and Human Services, 2011a).

3.2 Paid Medical Leave

Approximately 38 percent of private-sector workers in the South Atlantic region have short-term disability insurance through their employer as of 2015. Nationally, short-term disability insurance access rates were over five times greater for the highest than the lowest paid employees.

In the South Atlantic, workers' access to short-term disability insurance also varied widely by full-time versus part time work schedules, firm size, and unionization. Full-time workers in the region were nearly four times as likely to have short-term disability insurance through their employer as those working part time (48 versus 10 percent). Seventy-one percent of workers at companies with 500 or more employees having this benefit versus 20 percent of workers at companies with fewer than 50 employees. Short-term disability insurance was also far more common among unionized than nonunionized private-sector workers, at rates of 78 compared to 36 percent. Table 13 provides a more detailed description of access to paid medical leave benefits across the workforce.

Should national and regional trends on differing rates of short-term disability access by occupational group hold true in the District, its workforce may be more likely to have short-term disability benefits. Managerial and professional occupational groups have among the highest rates of short-term disability insurance participation, and both of these occupational groups are overrepresented in the District (Bureau of Labor Statistics, 2016e).

3.3 Paid Sick Days, Vacation Days, and Other Forms of Paid Time Off

Workers without access to paid family or medical leave often use other forms of accrued paid leave when they have to take time off for a medical emergency or to welcome a new child. However, it might be difficult, if not impossible, for an employee to cobble together paid time off during an extended medical or family leave (Abt Associates Inc., 2014). Overall, 77 percent of private industry workers in the South Atlantic region earned paid vacation days in 2015, and nationally these workers qualified for a

median of 10 paid vacation days per year (Bureau of Labor Statistics, 2016e). District law guarantees workers some paid sick days, which for full-time workers means three to seven days per year.

There also seems to be a mismatch between workers' need for and access to paid time off. Parents of infants and preschool children and single parents have relatively less access to paid leave (Phillips, 2004).[31] Further, higher income working parents are more likely to have childcare and paid sick leave benefits. Fifty-two percent of mothers in households below 200 percent of the federal poverty line must miss work when their child is sick, but only 36 percent have paid sick days. By contrast, 31 percent of working mothers in households above this income threshold must miss work when their child is ill, yet 71 percent have paid sick benefits (Ranji & Salganicoff, 2014).

Access to paid time off is not evenly distributed across the U.S. workforce. Low-wage workers have the least access to paid leave benefits. Nationally, 52 percent of the lowest quarter of wage earners had neither paid vacation days nor paid holidays in 2015. In contrast, paid holidays and vacation days are commonplace among high-wage workers. Ninety-three percent of the highest 25 percent of wage earners are entitled to paid holidays and 91 percent receive paid vacation days.

Work schedules and unionization also seem to be factors in access to paid leave. Part-time workers in the South Atlantic had particularly low levels of access to paid vacation days in 2015, at a rate of 36 percent and compared to 92 percent of full-time workers. Union members in the region were 11 percentage points more likely than non-union members to have paid vacation days at a rate of 88 to 77 percent. Those in unions were also 17 percentage points more likely to have paid holidays (Bureau of Labor Statistics, 2016e; 2015a).

Workers with fewer years of schooling also seem to be less likely to have paid sick leave benefits. One survey found a strong positive relationship between educational attainment and paid leave, finding that workers with college degrees were nearly three times as likely to have this benefit as workers with less than a high school diploma, at rates of 80.8 versus 28.0 percent. Younger workers also tend to have less access to paid leave than older workers. Upon examining these disparities, the Congressional Research Service concluded that uneven access to paid time off "appears to exacerbate wage inequality" (White, 2015; Casselman, 2015; Bureau of Labor Statistics, 2014; 2015; Levine, 2008).[32]

Most working parents that receive public cash assistance do not receive paid time off (58.6 percent) (Bureau of Labor Statistics, 2015a). The Urban Institute described this situation as "troubling," explaining that working parents trying to move off of public assistance "may be unable to keep their ties to the labor market in the event of a family crisis, or even just a sick kid" (Phillips, 2004). For more information about access to paid sick days and paid vacation days in the South Atlantic region and across the country, refer to Table 13.

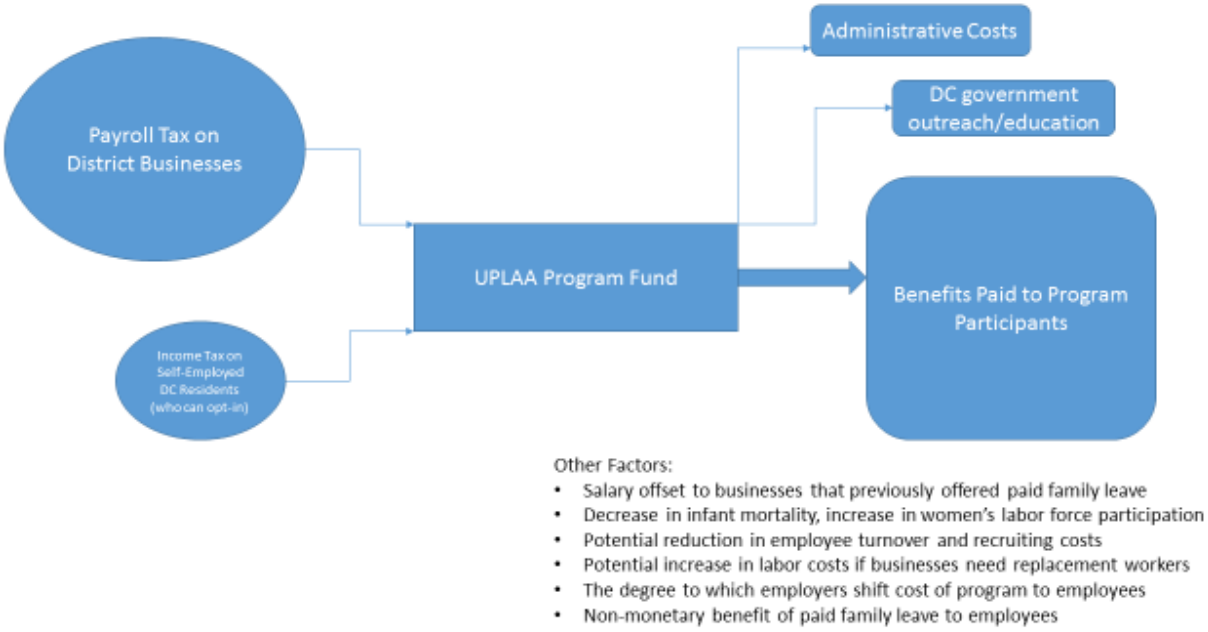
Table 13: Access to Select Paid Leave Benefits, by Percent of Private Industry Workers (2015)

	Family Leave		Short-Term Disability		Sick Leave		Vacation	
	S. Atlantic	U.S.	S. Atlantic	U.S.	S. Atlantic	U.S.	S. Atlantic	U.S.
All Workers	14%	12%	38%	40%	62%	61%	78%	76%
Occupational Groups								
Management, professional, related	25	22	55	54	84	81	91	88
Management, business, financial	28	28	70	66	85	88	96	96
Professional & related	23	19	46	48	83	78	87	83
Sales & office	14	13	33	38	65	65	80	79
Sales & related	9	8	25	29	54	53	71	70
Office & administrative support	18	16	40	45	74	73	88	85
Service	6	6	19	20	38	39	54	53
Natural resource, construction, maintenance	10	8	37	39	53	53	76	78
Production, transportation, material moving	8	6	50	47	29	56	84	83
Worker Characteristics								
Part-time	4	5	10	14	23	24	36	34
Full-time	17	15	48	49	75	74	92	91
Non-union	14	11	36	37	62	60	77	75
Union	13	12	78	67	65	73	88	89
Average wage								
Lowest 25% of wage earners	-	5	-	17	-	31	-	78
Lowest 10% of wage earners	-	3	-	13	-	22	-	40
Second 25% of wage earners	-	10	-	37	-	66	-	84
Third 25% of wage earners	-	14	-	50	-	73	-	89
Highest 25% of wage earners	-	23	-	63	-	84	-	91
Highest 10% of wage earners	-	25	-	67	-	86	-	92
Industry								
Construction	11	7	21	30	41	41	68	68
Wholesale trade	6	9	51	50	75	77	98	92
Retail trade	-	7	23	27	51	50	95	70
Transportation & warehousing	29	5	52	51	79	74	69	88
Information	42	30	84	80	92	92	87	96
Finance and insurance	-	36	74	72	93	86	96	94
Real estate, rental, & leasing	22	13	-	38	88	72	98	83
Professional, scientific, & technical services	-	24	63	55	78	65	90	77
Administrative & waste services	16	8	26	24	42	44	92	58
Educational services	18	16	36	45	88	72	67	53
Junior colleges, colleges, universities	-	17	-	48	-	80		73
Health care & social assistance	-	15	24	34	73	72	51	83
Accommodation & food services	-	4	-	16	27	25	72	42
Firm Size								
1 to 99 workers	-	8	20	29	-	52		68
1 to 49 workers	-	8	39	26	-	49		65
50 to 99 workers	-	10	47	36	-	58		76
100 or more workers	-	17	71	53	-	72		86
100 to 499 workers	-	14	20	47	-	67		83
500 workers or more	-	22	39	63	-	80		90

4 Economic Model

This study projects the economic consequences of providing paid family leave benefits to private sector workers in the District of Columbia, and reflects proposed legislation that is scheduled to be marked up by the Committee of the Whole on December 6, 2016. The study compares the projected economic conditions under the "baseline" economic forecast, in which the District continues to have no requirement for paid family leave, to the projected economic conditions under the "policy" forecast, which captures the impact of the legislation if implemented. The analysis assumes that the paid family leave fund would begin collecting payroll taxes in 2019 and start paying benefits in 2020. The forecasts are calculated using a 70-sector model of the economy of the Washington Metropolitan Statistical Area developed by REMI, Inc. The model incorporates U.S. Bureau of Economic Analysis input-output tables that reflect the region's unique inter-jurisdictional and inter-industry patterns, which Appendix F discusses in greater detail. The study estimates the differences between the baseline and policy forecasts over a ten-year time horizon, beginning in 2017.

Figure 10: UPLAA Program Structure



4.1 Methodology

The economic forecast begins with an accounting of the paid leave program's projected flows of costs, benefits, and savings (*see* Figure 10). The Budget Office mapped these projected flows on to economic variables in the model and quantified their magnitude. Identifying the most appropriate variable to represent an element of the paid leave program at times required a process of trial and error. The Budget Office grappled with questions such as: Which economic actors would ultimately bear the cost of contributing to a new paid leave program funded by a payroll tax, and how would the cost be distributed? Should the cost of the program be treated as a change to wages, taxes, or production costs? The Office managed these and other challenges by adhering to empirical evidence, testing a wide range of assumptions, and consulting outside experts.

The study includes variables for economic or behavioral responses to the program that are well supported in the academic literature. Not all impacts identified in the literature review could be included in the model. In some cases the literature was inconclusive, and in other cases comparable data points for the District were unavailable or the impact could not be assigned an economic value. A more detailed discussion of the methodology underpinning the economic forecast can be found in Appendix F.

4.2 Behavioral Response Scenarios

Since uncertainty is inherent to any forecasting exercise, the study evaluates the impact of the proposed legislation under three different behavioral response scenarios. Each of these three scenarios project slightly different economic impacts, illustrating the range of possible effects.

4.2.1 Employees Absorb Tax

This behavioral response scenario assumes that businesses would manage the cost of the payroll tax by shifting it on to their employees in the form of eliminated or delayed salary and benefit increases. Under this scenario individual firms would choose to lower their per employee labor costs by the amount of the tax, but the number of employees they hire would be the same as under the baseline forecast. Empirical evidence supports this theory, finding that over the long run wage earners bear the majority of the economic incidence of payroll taxes and social security taxes, even when the employer is statutorily obligated to pay the tax (Melguizo & González-Páramo, 2013; Brittain, 1971). Further, there is some evidence that work-life initiatives increase worker satisfaction with their salaries and may make them willing to accept lower pay in exchange for these benefits, as discussed in Section 1.1. Since this scenario assumes that business operations will not be affected by the payroll tax, among the three scenarios it has virtually no impact on the economy and employment. While it allows for employees' wages to be reduced by the amount of the payroll tax, most of this lost income is returned to workers in the form of paid family leave wage replacement benefits.

4.2.2 Firms Absorb Tax

This behavioral response scenario assumes that businesses would absorb the payroll tax into their bottom line primarily by reducing their labor cost. Firms would also react by raising the prices they charge for their goods and services. Per employee labor costs would be the same as they would be under the baseline forecast, but some businesses would shrink the size of their workforce relative to the baseline economic forecast. Additionally, the scenario assumes that firms do not have the opportunity to recoup the cost of the payroll tax, except in the form of shifting privately-provided benefit costs to the public program as described in Section 4.3.4. Businesses that pay workers at or slightly above the minimum wage are most likely to react as this scenario predicts since they have limited ability to offset the cost of the tax by lowering wages. Since this scenario predicts an increased cost burden on businesses, it projects the most negative impact on the economy and employment in the District of the three scenarios modeled.

4.2.3 Hybrid Tax Absorption

This policy response postulates that firms would respond to the new tax by shifting approximately half of it on to employees and absorbing the rest. Firms could also react by raising their prices. This scenario blends the two response scenarios described above, although in the hybrid tax absorption scenario—unlike the scenario in which firms absorb 100 percent of the tax—businesses experience the increase in payroll tax as an increase to production costs. In the hybrid tax absorption scenario, the model forecasts

an economic impact on the District that is more pronounced than the first scenario but less than the second scenario.

4.3 Technical Assumptions

The study's three behavioral response scenarios rest upon a core set of technical assumptions on the incidence of the tax, government and consumer spending, and labor market responses. The set of assumptions detailed below is consistent across the three behavioral response scenarios. The Budget Office also considered estimates of the proposed legislation's potential impact on firms' efficiency, employee turnover rates, and the nonmonetary value of being insured in the model. Ultimately, however, the Office determined that the evidence base for these additional variables was not sufficiently robust to justify including them in the forecast.

Table 14: Summary of Variables and Assumptions (2020)

	Cost of Doing Business, Private Sector	Government Spending	Policy Outcome Estimate
Payroll tax	$254.3 M		
Administration		$12.7 M	
Start-up costs*		$40 M	
Benefit payments		$241.6 M	
Shifting from private to public provision of paid family leave	($33.2 M)		
Higher women's labor force participation			0.5% or 720 more women/year
Lower infant mortality			(3%) or 2 fewer deaths per year

* $20M spent in 2017 and $20M in 2018

4.3.1 Payroll Tax Incidence

The proposed legislation would levy a 0.62 percent payroll tax on all private sector employers in the District. The federal government and the District government would be exempt from the tax, and self-employed people would be exempt unless they choose to opt in to the program. The study relies on REMI baseline economic forecast data to generate an estimate of future payroll tax revenue associated with the 0.62 percent payroll tax in the District. The model estimates that the payroll tax would generate $250.7 million in revenue in 2019. This compares well with the Office of Revenue Analysis' estimate that the paid leave fund would raise $245.6 million in tax revenue in the first full year of tax collection, and grow by 2 percent in each subsequent year. Each of the three behavioral response scenarios takes a different approach at modeling the incidence of the payroll tax, as described in Section 4.2.

4.3.2 Consumer Spending

The three policy scenarios represent the flow of paid leave benefits into the economy as an increase in consumer spending among covered workers. The benefits would flow to private sector workers employed in the District who reside in the District and other jurisdictions, primarily Maryland and Virginia. To account for place of residence, the model increases consumer spending in all three jurisdictions, based on the number of District workers residing in each jurisdiction as well as their effective wage replacement rate. The REMI model treats increases in consumer spending as a raise in

after-tax income, which it does not offset with decreases in other forms of spending. This approach accounts for evidence that spending patterns for paid leave benefits differ from wage and salary income. While wage earners set aside an average of 5.7 percent of their income for personal savings, the report assumes that claimants will spend all of their paid leave benefit (Bureau of Economic Analysis, 2016). First, the circumstances necessitating family leave, such as welcoming a new child or caring for an ill family member, often coincide with a financial shock to the household (Abt Associates Inc., 2014). Second, even if leave takers do not alter their usual spending habits, their household income would be lower because the paid leave benefit does not replace 100 percent of lost wages, and thus they are less likely to use benefits to bolster savings.

4.3.3 Government Spending

This study assumes that the proposed legislation would have a startup cost of $40 million over 36 months, as estimated by the Chief Financial Officer. These startup costs would pay for capital expenditures such as IT systems and financial management software needed to administer the benefits through the program fund as well as staff training and hiring and public educational campaigns. The proposed legislation also authorizes the District government to dedicate up to 5 percent of the new payroll tax's revenue to the program's ongoing administrative expenses, which the Chief Financial Officer takes as a reasonable cost projection. The study estimates an increase of $12.5 million in local government spending for ongoing administrative costs beginning in 2019, increasing by 1.5 percent to 1.8 percent in every subsequent year. The Budget Office considered using the Unemployment Insurance Fund's administrative expenses to taxes collected ratio as a basis for projecting the paid family leave fund's administrative costs, but determined that this would not be an adequate reference point since the Unemployment Insurance Fund uses an inefficient legacy IT system that is being replaced.

4.3.4 Employer-Provided Family Leave Benefits

The study assumes that the proposed legislation would reduce businesses' need to include paid family leave in their compensation packages. Firms that already provide paid family leave benefits could offset the cost of the payroll tax with a reduction in salary payments, since the bill would reduce or eliminate these firms' need to pay the salaries of workers that are on leave. Instead, during a paid family leave event workers would be compensated through the insurance fund. Regional data from the BLS indicates that only 14 percent of private sector workers have this benefit, and the DOL survey indicates that workers are 50 percent more likely to receive partial pay than full pay when on leave, as discussed in Section 3.1. Based on these BLS figures and data from other federal sources on the availability of paid family leave by industry sector and average length of leaves taken for family or medical reasons, the Budget Office estimated the total offset to District businesses to be $33.2 million in 2020, or approximately 0.08 percent of total wages and salaries.[33] The economic model adjusts business operating expenses by that amount as well as workers' take-home wages. The model does not, however, make adjustments for any businesses that decide to supplement or otherwise provide a more generous paid family leave benefit than provided under the bill.

4.3.5 Labor Market Participation

The study assumes that the proposed legislation would help workers with significant family responsibilities stay in the labor force. Data from the Bureau of Labor Statistics, the Census Bureau, and others indicates that women, particularly mothers of small children, are vulnerable to prematurely exiting the labor market, as discussed in Section 1.2. Substantial research on public paid family leave

programs shows an association with increased women's labor force participation, as described in Section 1.2. The economic model estimates that women of childbearing age's labor force participation in the District would increase by 0.5 percent beginning in the first year the program starts paying benefits. Based on the REMI baseline data, in 2027 there will be 144,410 female residents of the District in the labor force ages 16-54 (in contrast the REMI baseline data indicates that in 2027 there will be 139,420 male residents of the District in the labor force ages 16-54). Using these numbers, and our assumption that the legislation would result in a 0.5% increase in women's labor force participation (for women aged 16-50 years), there would be approximately 720 additional women in the labor force in 2027.

A higher labor supply would benefit businesses by increasing the number of people competing for their jobs, potentially expanding the pool of qualified applicants while lowering labor costs. With more women in the labor force, household income would eventually rise and consequently stimulate economic growth. While some reports suggest that the proposed legislation could increase labor force participation among other family caregivers and raise women's earnings, there is not sufficient evidence to predict the magnitude of these possible impacts in the economic model.

4.3.6 Infant Mortality

Relying on empirical studies of the effects of paid family leave on child health that are discussed in Section 1.3, this study estimates that the proposed legislation would produce a 3 percent decrease in infant mortality. Lacking evidence on the pace at which the infant mortality rate would likely decline under the proposed legislation, the study assumes that the decrease in infant mortality would take effect immediately after the paid leave program begins paying benefits. The study models this decline by raising the survivorship rate of infants. While other reports indicate that paid leave programs are associated with additional positive developments in child health, such as higher vaccination rates and lower rates of infection and disease, the economic model does not account for them. There is no straightforward way to represent these other potential benefits in the economic model, and there are no other indicators, with the exception of breastfeeding rates, that are as well correlated with paid family leave as reductions in infant mortality.

From an economic perspective, a program that improves infant survival would lead to marginal increases in consumption in the near term—parents must purchase goods and services for the child until they reach adulthood. Over the long term, if the child continues to reside in the District as an adult, an additional worker would enter the local labor market. The magnitude of the economic impact is small, however, because the near-term demographic implications of a 3 percent decrease in infant mortality are small. To put these percentage reductions in perspective, a 3 percent decrease in infant mortality corresponds to a drop in the infant death rate from 7.6 to 7.4 deaths per thousand live births. Any drop in the infant mortality rate is cause for celebration, and in absolute terms, this would correspond to about two fewer infant deaths per year in the District.

4.4 Results

The study's economic forecast predicts that the proposed legislation would not have a significant impact on the District's employment growth or GDP. The analysis indicates that implementing the legislation is unlikely to alter the path of the District's economy or affect its predicted upward employment trajectory relative to the baseline, as shown in Figure 11. The forecasting analysis indicates that the proposed legislation—regardless of the behavioral response scenario—will not materially affect cumulative employment growth (*see* Figure 12). By 2027, the model forecasts that the District's private sector

employment levels would be between 99.79 percent and 99.99 percent of levels under the baseline scenario, and the GDP would range from 100.01 percent to 99.92 percent of the baseline forecast.

The model distributes the benefits of the paid family leave program—in terms of wages and salaries paid to employees during the time they take paid family leave—according to an employee's place of residence (District, Maryland, or Virginia), with adjustment for the percentage of employees in each of the three jurisdictions that fall into specific income groups. Since the replacement wage depends on income (with higher wage replacement for lower income workers), the amount of benefits that would flow to each jurisdiction would depend on the number of workers residing in each jurisdiction as well as their effective wage replacement rate. Based on these estimates, approximately 33 percent of the program's leave benefits in 2020 would be paid to District residents, while 38 percent would be collected by Maryland residents and 29 percent by Virginia residents. This follows a similar geographic distribution pattern as benefits paid out under the District's unemployment insurance program. In FY 2016, District residents received 44 percent of the unemployment fund's benefits, 38 percent went to Maryland residents, 12 percent went to Virginia residents, and 5 percent went to people living in other states.

The model predicts that the paid family leave program would pay out $242 million in benefits during its first 12 months, which the Budget Office assumes would occur in 2020. The model assumes that total benefits would grow in proportion to the baseline economic forecast, and that therefore total benefits from the paid family leave program would grow at an average annual rate of 1.6 percent. With this rate of growth, total benefits paid out in 2027 are approximately $270 million. The proposed legislation's expected benefit payments outweigh any impact it has on the District's economy. The model predicts that the bill could influence the District's GDP in 2027 in the range of a $15 million increase to a $122 million reduction.

Firms that already offer paid family leave benefits stand to fare better under the newly imposed payroll tax, because they would be able to shift a portion of the cost of their existing paid family benefits to the paid family leave fund. However, firms that do not already offer paid family leave benefits would be assessed the payroll tax but have no existing paid family leave costs that they can shift over to the newly established fund. Figures 13 and 14 and Table 15 show with greater precision how the behavioral response scenarios vary from the baseline economic forecast. If businesses absorb the payroll tax, the model forecasts that the District's economy would support approximately 1,300 fewer jobs by 2027 compared to the baseline economic forecast. In contrast, if the payroll tax incidence falls on employees, the model predicts that the District economy would support approximately 90 fewer jobs by 2027 than the baseline economic forecast. To put this into perspective, the Office of the Chief Financial Officer reported that employment in the District increased by an average of 11,039 jobs per year between 2013 and 2015. Thus, a loss of 1,300 jobs is about the number of jobs that the District typically adds in 6 weeks, whereas a loss of 90 jobs is equal to about three days of average job growth.

Figure 11: Predicted Impact on Private Sector Employment in DC (2014-27)

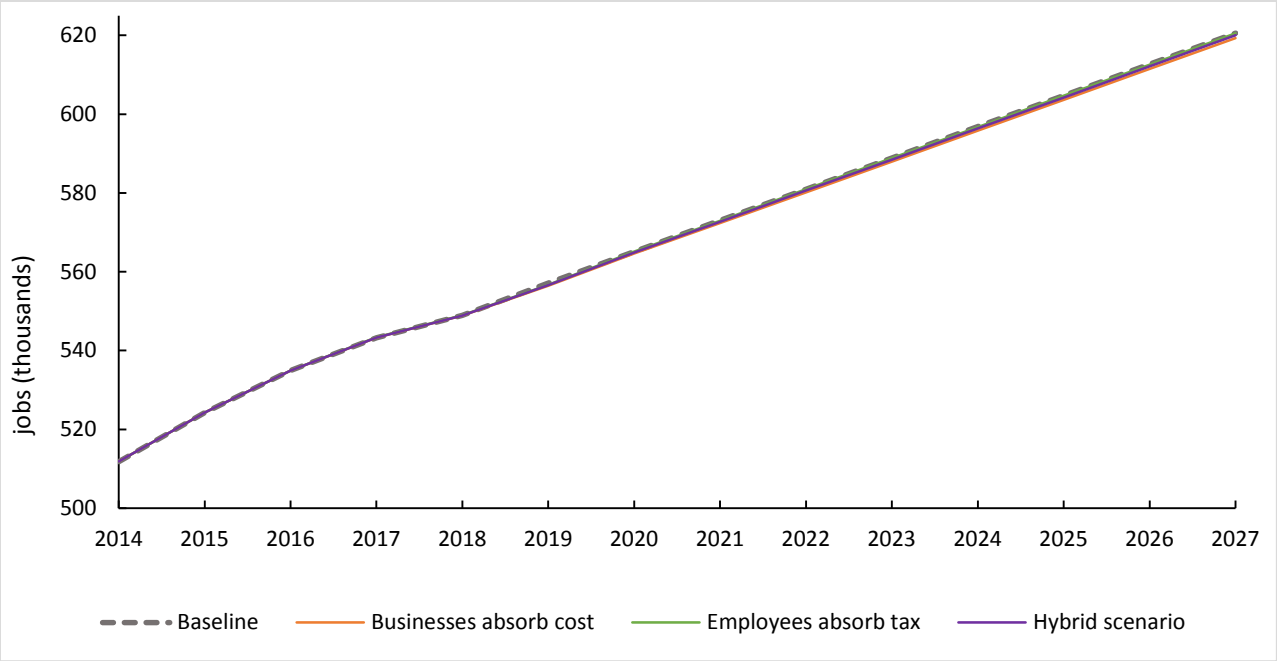


Figure 12: Predicted Impact on DC Private-Sector Employment's Cumulative Percent Growth (2016-27)

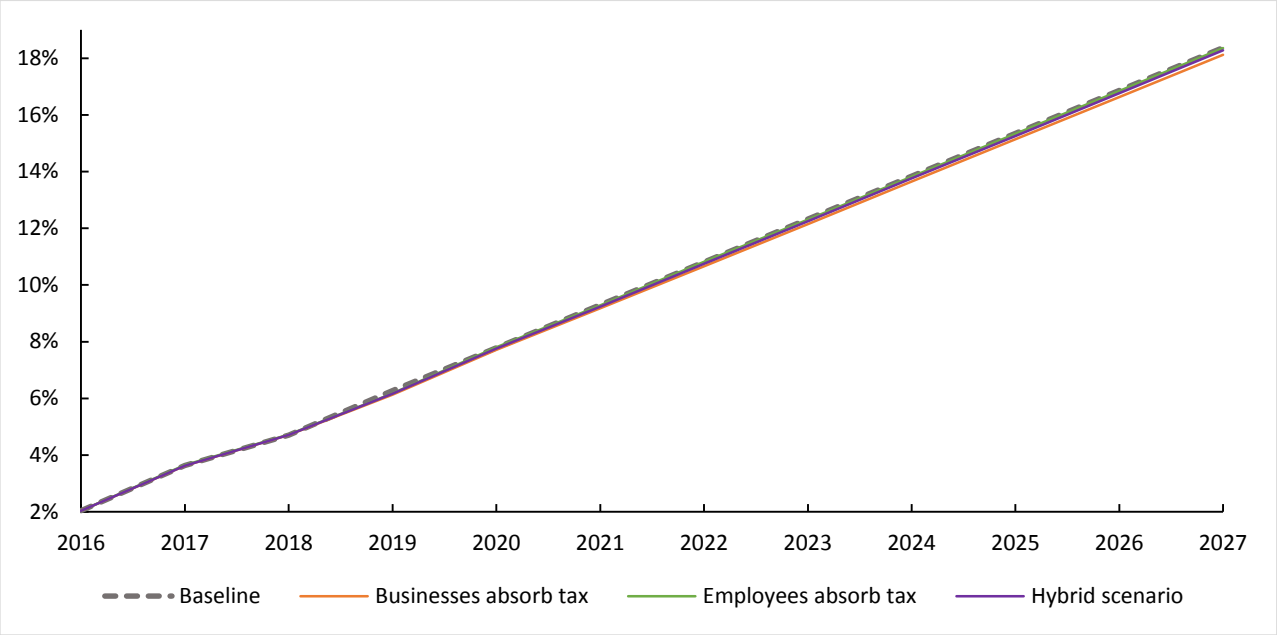


Table 15: Summary of UPLAA's Forecasted Cumulative Impacts on DC's Economy (2027)

	Baseline Forecast (No paid leave)	Employees Absorb Tax	Businesses Absorb Tax	Hybrid Scenario
GDP, District of Columbia, 2027	$152.1 billion	GDP increases by $15 million	GDP decreases by $122 million	GDP decreases by $46 million
Private Sector Employment, 2027	621,000 jobs	Employment decreases by 90 jobs	Employment decreases by 1,300 jobs	Employment decreases by 500 jobs

Similarly, the results show that the impact on the District's GDP will be minimal, as shown in Figure 14. In 2027 these predictions differ by a range of $137 million. If the payroll tax incidence falls on employees, the proposed legislation is expected to increase the area's GDP by $15 million relative to the baseline. However, should firms absorb the cost of the tax, GDP would decrease by $122 million compared to the baseline in 2027. As context, under the baseline scenario the model expects the District's GDP to be $152 billion in 2027 (in fixed 2015 dollars). The model predicts that few jobs would migrate out the District to neighboring counties. If the payroll tax's incidence only falls on firms, as shown in Figure 15, by 2027 the District would sacrifice 0.21 percent of its baseline private sector employment. In contrast, in the scenario in which employees absorb the tax as shown in Figure 16, the model forecasts practically no job migration.

To interpret these results it may be helpful to consider several characteristics of the economic model. First, economic theory suggests that when business costs increase in one region but not in neighboring regions, over time firms will gravitate toward the less expensive regions. The model assumes that the proposed legislation's payroll tax would begin to be collected in 2019, but benefits would not be paid until the following year. Consequently, the model predicts that employment and GDP in the District would decline in 2019 and rebound in 2020 as the stimulating effect of introducing the spending of benefits counteracts the negative impact of the payroll tax.[34] Thus, over a five to ten-year time horizon, the major costs and benefits of the program act to cancel each other out. Consequently, the model predicts that the proposed legislation would have a relatively small impact on the District's economy.

Second, some of these assumptions have a greater influence over the model's predictions about the proposed legislation's economic impact than others. These four variables are the most influential: payroll tax incidence, consumer spending, government spending, and employer-provided family leave benefits. In contrast, predicted changes to the labor force participation rate and the infant mortality rate have a smaller impact on the District's economy and private sector job market.

Third, as with any attempt to predict future economic conditions, there is uncertainty.[35] To mitigate these uncertainties, the study is limited to examining the DC-MD-VA regional economy over ten years.

Figure 13: Predicted Impact on DC's Private Sector Employment, Relative to Baseline Job Growth (thousands of jobs, 2016-27)

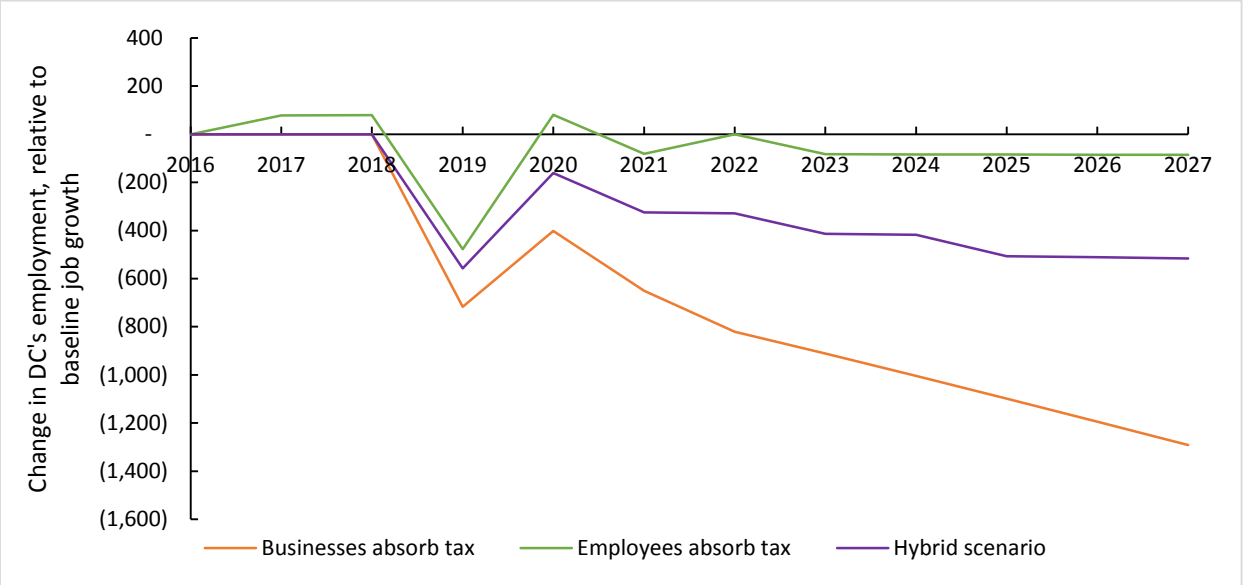


Figure 14: Predicted Impact on DC's GDP, Relative to Baseline Economic Growth (percent change, 2016-27)

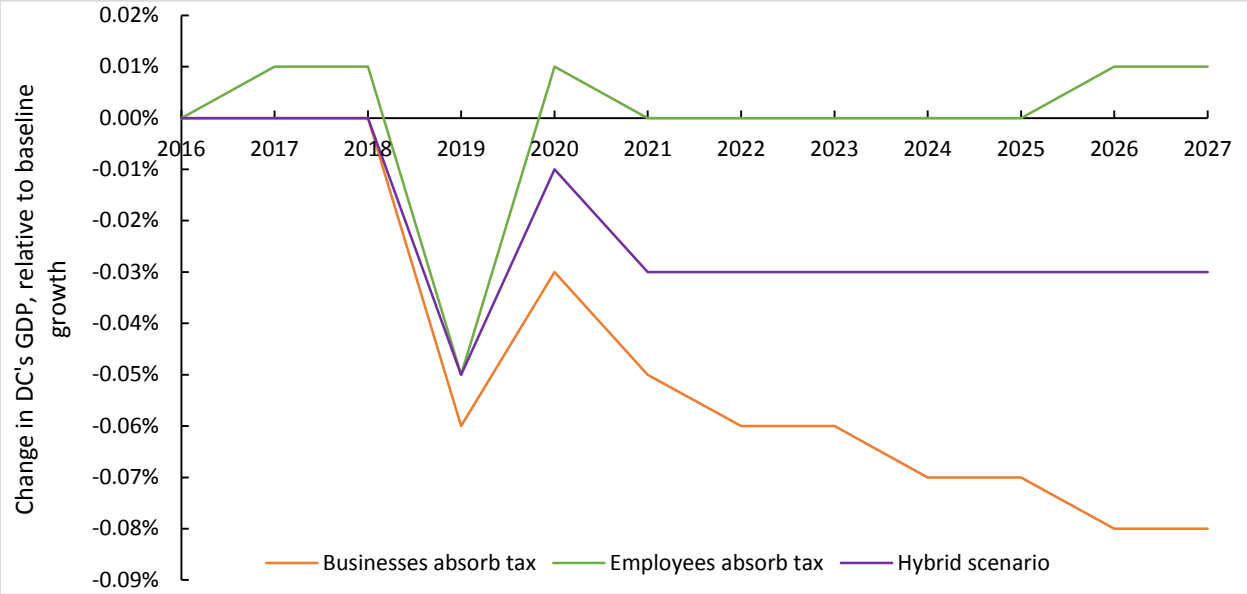


Figure 15: Job Migration if Firms Absorb Payroll Tax (Percent Change in Employment, 2016-27)

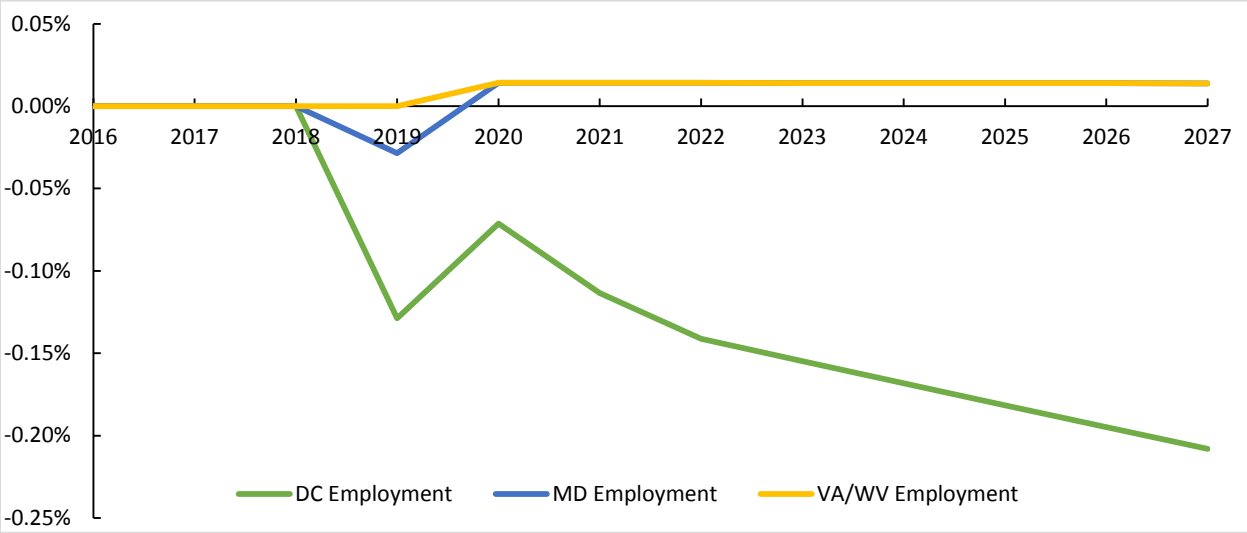
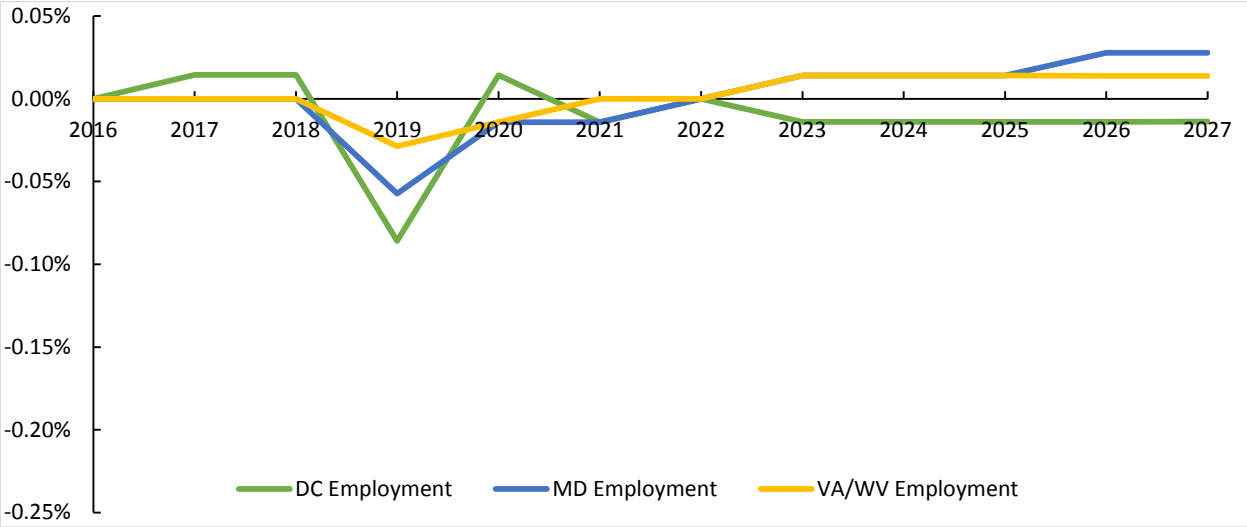


Figure 16: Job Migration if Employees Absorb Payroll Tax (Percent Change in Employment, 2016-27)



Conclusion

The "Universal Paid Leave Amendment Act of 2016" would levy a 0.62 percent payroll tax on private-sector employers in the District of Columbia and generate about $250.7 million in revenue starting in 2019 in order to provide a paid family and parental leave to benefit to private-sector employees. The Council's Budget Office conducted a policy and economic analysis of this legislation in order to offer Councilmembers an independent, data- and evidence-based resource for weighing the policy implications and economic costs and benefits of the legislation. Empirical evidence of the impact of paid leave programs was used to select and quantify variables used in the economic model. Assuming that businesses would react to the legislation in different ways, three behavioral response scenarios were modeled – one in which businesses absorb the payroll tax, another in which businesses shift the entire cost of the tax to employees, and a third in which half the cost is absorbed by businesses and half is shifted to employees.

In all three scenarios the economic model predicts that employment and GDP in the District would decline in 2019 and rebound in 2020 as the stimulating effect of introducing the spending of benefits counteracts the negative impact of the payroll tax. Over a 10-year period, the proposed legislation would not have a significant impact on the District's employment growth or GDP.

- The proposed legislation would lower total private sector employment in the District by an estimated 90 to 1,300 jobs over ten years. As a result, employment would increase at an average annual rate of between 1.358 and 1.340 percent, rather than 1.359 percent.

- The impact on the District's GDP is estimated to range from a gain of $15 million to a loss of $122 million over ten years. The projected GDP would consequently grow at an average annual rate of 1.921 to 1.913 percent, rather than 1.920 percent.

In addition, the empirical research suggests that access to paid family leave would reduce infant mortality in the District. It would also increase women's labor force participation.

Appendix A. Summary of the "Universal Paid Leave Amendment Act of 2016" (B21-415)

The "Universal Paid Leave Amendment Act of 2016" (UPLAA), as scheduled to be marked up by the Committee of the Whole on December 6, 2016, would establish a paid family leave program for eligible individuals employed in the District of Columbia. The program would provide partial wage replacement when employees take time off for the birth of a child, bonding with a child, or care of a family member who has a serious health condition.

Under the bill, eligible individuals would receive up to 11 weeks of parental leave or 8 weeks of intermittent family leave benefits within a 52-week period. Benefit levels would be set at 90 percent of the eligible individual's average weekly wage rate up to 150 percent of the District's minimum wage plus 50 percent of the amount by which the individual's average weekly wage rate exceeds 150 percent of the District's minimum wage, provided that the total benefit amount does not exceed $1,000 per week. The proposed legislation defines average weekly wages as the total wages subject to contribution that the individual earned during their four highest paid quarters out of the five quarters immediately preceding the qualifying event divided by 52 weeks. Eligible individuals would not receive wage replacement for the first week of each qualifying event. The paid leave granted by the proposed legislation would run concurrently with leave taken under the federal and District of Columbia Family Medical Leave Acts (DCFMLA and FMLA).

Coverage would be available to workers that spend more than 50 percent of their time working for a covered employer in the District of Columbia during some or all of the 52 calendar weeks preceding the qualifying event. The bill excludes DC government workers, federal employees, and those working for employers that the District is not authorized to tax. Self-employed individuals who earned self-employment income for work performed primarily in DC would have the right to opt in to the program.

The legislation would task the Mayor with administering the program and establishing procedures and forms for filing claims for benefits. The benefit would be funded through a new employer-paid payroll tax capped at 0.62 percent. Claims would not be administered for at least one year after the effective date and not until the Chief Financial Officer certifies that funds are sufficient to pay claims for one year. An online portal would be created for the submission and management of forms and documents. Workers would not be eligible to receive unemployment insurance and family or parental leave benefits at the same time. If an individual concurrently earns self-employment income and is a covered employee employed by a covered employer, the individual would not be entitled to receive double payments. However, claimants can simultaneously receive employer-provided short-term disability or paid family leave benefits. An individual would be disqualified from family and parental leave benefits for three years if they make a false statement or misrepresentation or willfully fail to report information in order to obtain benefits. Employers would also be prohibited from retaliating against individuals who exercise their rights under the statute. The Mayor would be authorized to spend no more than five percent of the funds generated by the payroll tax for family and parental paid leave program administrative expenses.

Appendix B. Summary of State Paid Family and Medical Leave Programs

	Employee Eligibility	Administration	Benefit Payments	Benefit Period	Family Definition	Funding
UPLAA	Private sector employees who spend more than 50% of their worktime employed by a covered employer in DC during some of the 52 weeks before qualifying event. Excludes federal and DC gvt and employers that the DC gvt is not allowed to tax. Self-employed can opt in.	Would be determined by the Mayor	90% of average weekly wages up to 150% of minimum wage, 50% of average weekly wages above threshold **Max weekly:** $1,000 **Max annual:** Parental: $11,000; Family: $8,000 Also receive employer-provided benefits	**Parental:** 11 weeks **Family:** 8 weeks Waiting period: 1 week Intermittent No leave stacking	Child, spouse, domestic partner, parent, parent-in-law, stepparent, grandparent	0.62% employer-paid payroll tax
Jurisdictions with Paid Family and Medical/Short-Term Disability Leave						
CA	Employed or looking for work and earned at least $300 in payroll tax wages during base period. Generally excludes federal and state gvt, self-employed, religious organizations, certain domestic workers, consultants, salespeople, and students. Those excluded may opt in through the Disability Insurance Elective Program.	State government administered Option to opt-out if employer provides voluntary plan that exceeds state plan's benefits	55% of average weekly wages, going up to 60-70% in January 2018 **Min/Max weekly:** $50; $1,129 **Max annual:** Medical: $58,708; Family: $6,774 Also receive disability benefits & paid leave if total less than 100% of base wages	**Medical:** 52 weeks **Family:** 6 weeks Waiting period: 1 week Intermittent: 1 hour plus Leave stacking permissible Employers can require using 2 weeks of vacation leave	Child, spouse, domestic partner, parent, parent-in-law, grandparent, grandchild, sibling	0.9% employee-paid payroll tax Taxable wage ceiling: $106,742 Maximum ind'vl withholding: $961
NJ	Minimum of 20 weeks with earnings of $168 or more or have earned $8,400 or more in covered New Jersey employment during the 52 weeks preceding the event. Generally excludes federal government and New Jersey county and municipal government employees. Unemployed individuals who would normally be excluded may qualify for benefits under alternative program.	State government administered Option to opt-out if employer provide voluntary plan that is equivalent to or exceeds state plan's benefits	66.67% of average weekly wages **Max weekly:** $615 **Max annual:** Medical: $15,990; Family: $3,960 Cannot simultaneously receive full salary from employer	**Medical:** 26 weeks **Family:** 6 weeks Waiting period: 1 week Intermittent: 1 day plus Leave stacking permissible Employer notice: 14-30 days Employers can require using 2 weeks of vacation/sick leave	Child (under age 19 unless permanently disabled), spouse, domestic partner, parent	<u>Medical</u> *Employee*: 0.2% tax; $65.20 max *Employer*: 0.5% tax; $163 max <u>Family</u> *Employee*: 0.08% payroll tax; maximum $26.08 Taxable wage ceiling: $32,600 Max ind'vl withholding: $254.28
RI	Minimum earnings of $11,520 in base period; or $1,920 in base period quarter and total base period wages of at least 1.5 times highest earning quarter, and at least $3,840 in base period. Can qualify for disability by employment and a certified disability.	State government administered	4.62% of wages in highest 4 of 5 quarters **Min/Max weekly:** $89; $795 **Max annual:** Medical: $23,850; Family: $3,180	**Medical :** 30 weeks **Family:** 4 weeks Intermittent leave: 1 week Waiting period: none Leave stacking permissible Employer notice: 30 days	Child, spouse, domestic partner, parent, parent-in-law, grandparent	1.2% employee-paid payroll tax Taxable wage ceiling: $66,300 Maximum ind'vl withholding: $796

	Generally excludes gvt; sole proprietors; religious organizations; salespeople; certain domestic workers; interns		Plus dependent benefit of $10/week or 7% for up to 5 dependents Also collect salary, sick, vacation pay			
NY	Minimum of four consecutive weeks of employment with a covered employer. Generally excludes gvt; self-employed; religious leaders; corporate officers; and domestic workers. May opt in to coverage.	Employers required to purchase private insurance plan that meets or exceeds standards or self-insure.	50% of average weekly wages, phased in increase to 67% by 2021 Medical **Min/Max weekly:** $20; $170 **Min annual:** $4,420 Family **Max weekly:** 50-67% of state average weekly wage, phased in	**Medical:** 26 weeks **Family:** 8-12 weeks, phased in Waiting period: 1 week	Child, spouse, domestic partner, parent, parent-in-law, grandparent, grandchild	Medical *Employee*: No more than 0.5% of average weekly wages up to $0.60 per week *Employer:* Balance of plan's cost not covered by employee Family *Employee:* Pays tax (TBD)
Jurisdictions with Paid Parental Leave						
SF	Eligible for California Paid Family Leave for bonding, works for a firm with >20 employees (phased in from 50), worked for the covered employer for at least 180 days, performs at least 8 hrs of work/wk in SF, spends at least 40 percent of weekly works hours working for an employer located in SF.	Enforcement by Office of Labor Standards Enforcement	45% of average weekly wages (100% minus state program's replacement wage of 55%) **Max weekly:** State average weekly wage	**Parental:** 6 weeks Runs concurrently with California Paid Family Leave	Parents or legal guardians who have welcomed a new child in to their home within the past twelve months	Benefit paid out-of-pocket by employers
Jurisdictions with Paid Medical Leave/Short-Term Disability						
HI	Minimum of 14 weeks of 20-hours per week of paid employment in HI in the 52 weeks preceding the event and earnings of at least $400. Generally excludes federal gvt, most unemployed individuals, domestic workers, insurance and commission-only real estate agents, and interns.	Employers required to purchase private insurance plan that meets specified standards or self-insure.	58% of average weekly wages **Min/Max weekly:** $14; $570 **Max annual:** $14,820	**Medical:** 26 weeks Waiting period: 1 week	*Employee:* Up to 50% of plan's cost up to 0.5% of average weekly earnings but no more than $4.91 per week *Employer:* At least 50% of plan cost Taxable wage ceiling: $49,464	
PR	Minimum earnings of $150 during the year proceeding the qualifying event. Generally excludes gvt workers; individuals employed by nonprofits; and drivers.	State government administered	65% of average weekly wages **Min/Max weekly:** $12; $133 ($55 for farm workers) **Max annual:** $3,458 ($1,430 for farm workers)	**Medical:** 26 weeks Waiting period: 1 week	*Employee:* 0.3% of earnings up to $27 per year *Employer:* 0.3% of earnings up to $27 per year Taxable wage ceiling: $9,000	

Appendix C. State Paid Leave Funds' Benefits and Tax Rates (2003-16)

Maximum Weekly Benefit

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
CA	$603	$728	$840	$840	$882	$917	$959	$987	$987	$1,011	$1,067	$1,075	$1,129	$1,129
NJ	$450	$459	$470	$488	$502	$524	$546	$561	$559	$572	$584	$595	$604	$615
RI	$543	$561	$607	$607	$625	$652	$671	$694	$700	$719	$736	$752	$770	$817

Tax Rate

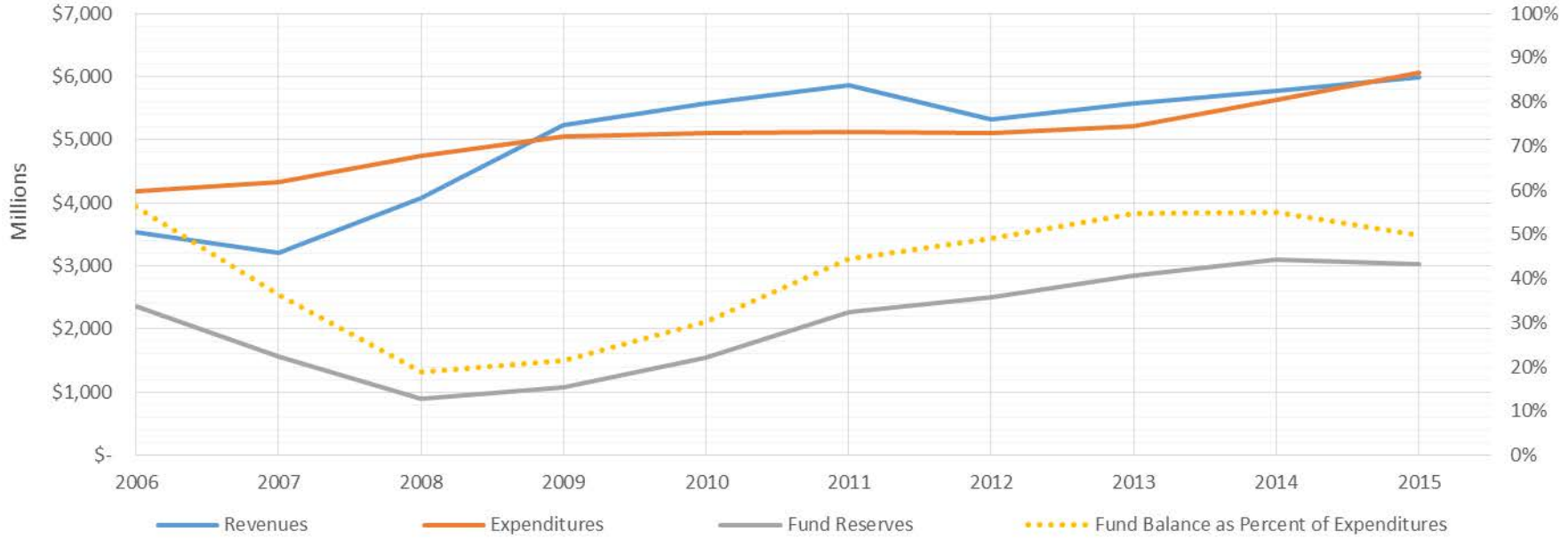
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
CA	0.90%	1.18%	1.08%	0.80%	0.60%	0.80%	1.10%	1.10%	1.20%	1.00%	1.00%	1.00%	0.90%	0.90%
NJ	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.09%	1.12%	1.06%	0.78%	0.96%	0.98%	0.84%	0.78%
Disability (employer)	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Disability (employee)	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.20%	0.36%	0.38%	0.25%	0.20%
Family	--	--	--	--	--	--	0.09%	0.12%	0.06%	0.08%	0.10%	0.10%	0.09%	0.08%
RI	1.70%	1.50%	1.40%	1.40%	1.30%	1.30%	1.50%	1.20%	1.30%	1.20%	1.20%	1.20%	1.20%	1.20%

Taxable Wage Ceiling

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
CA	$56,916	$68,829	$79,418	$79,418	$83,389	$86,698	$90,669	$93,316	$93,316	$95,585	$100,880	$101,636	$106,742	$106,742
NJ	$23,900	$24,300	$24,900	$25,800	$26,600	$27,700	$28,900	$29,700	$29,600	$30,300	$30,900	$31,500	$32,000	$32,600
RI	$45,300	$46,800	$49,000	$50,600	$52,100	$54,400	$56,000	$57,900	$58,400	$60,000	$61,400	$62,700	$64,200	$66,300

Appendix D. Family and Medical Leave Fund Balance (2006–15)

California

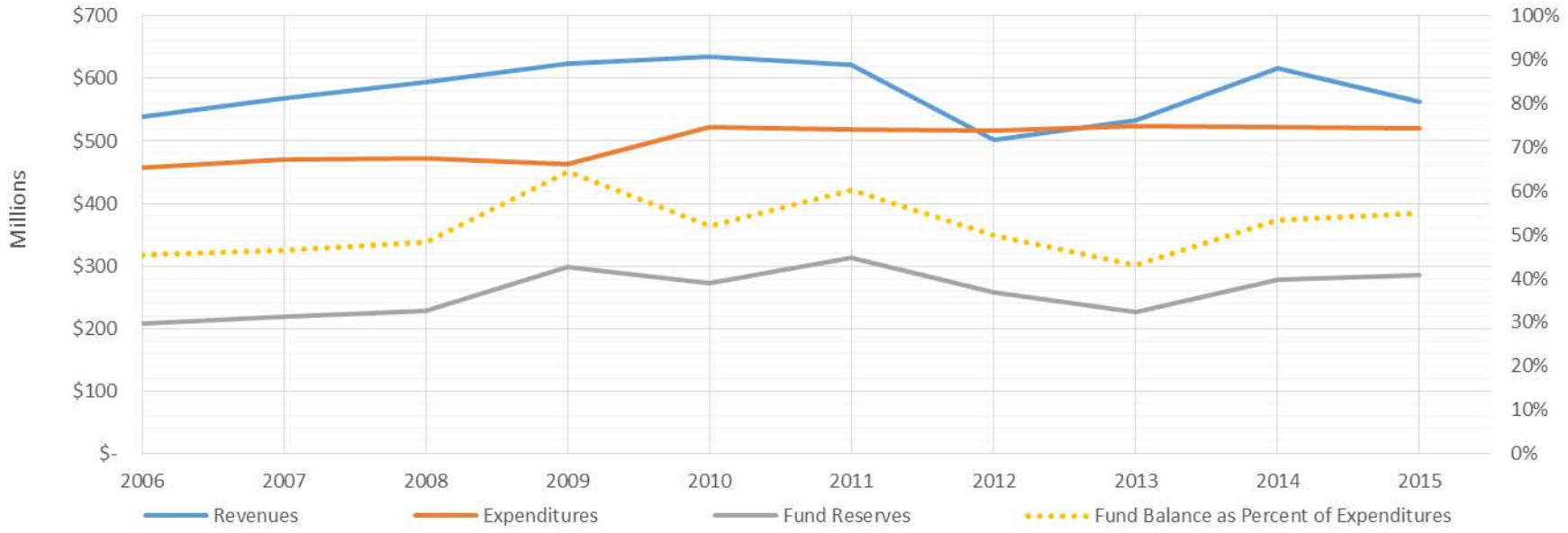


	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Revenue	$3,537.96	$3,212.90	$4,068.90	$5,233.10	$5,566.50	$5,859.00	$5,328.70	$5,565.80	$5,769.23	$5,993.22
Expenditure	$4,173.16	$4,320.10	$4,745.20	$5,051.60	$5,101.50	$5,129.10	$5,100.90	$5,212.40	$5,628.73	$6,066.05
Fund Reserve	$2,350.08	$1,570.60	$894.30	$1,075.90	$1,540.90	$2,270.90	$2,498.80	$2,852.20	$3,094.77	$3,021.94
Fund Reserve as Percent of Expenditure	56%	36%	19%	21%	30%	44%	49%	55%	55%	50%

(millions)

Source: Disability Insurance Fund Forecast (2009-2012) http://www.edd.ca.gov/About_EDD/Archived_EDD_Legislative_Reports.htm

New Jersey

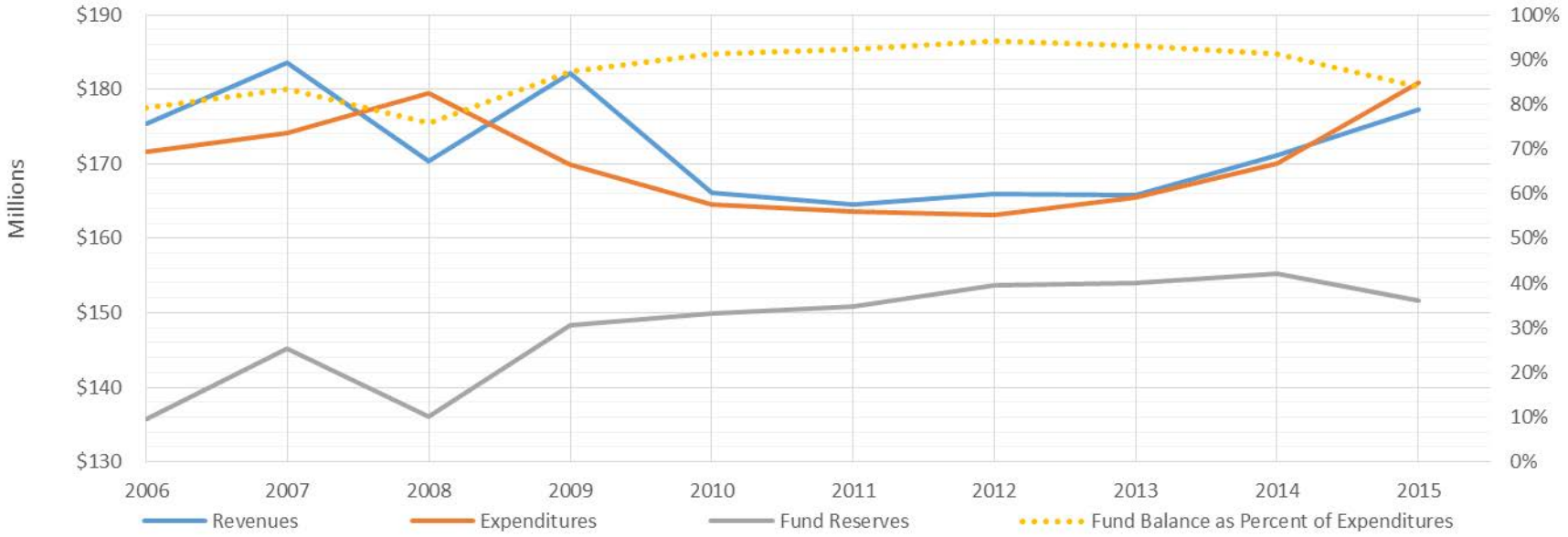


	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Revenue	$538.14	$568.39	$594.48	$623.78	$635.30	$621.41	$501.20	$532.66	$616.89	$562.31
Expenditure	$456.96	$470.40	$472.82	$463.77	$522.14	$517.77	$516.57	$523.60	$522.14	$520.74
Fund Reserve	$207.97	$218.89	$227.89	$298.69	$271.96	$312.36	$257.34	$225.71	$278.45	$285.76
Fund Reserve as Percent of Expenditure	46%	47%	48%	64%	52%	60%	50%	43%	53%	55%

(millions)

Source: New Jersey Budget (2008-2016) http://www.nj.gov/treasury/omb/publications/17budget/index.shtml

Rhode Island



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Revenue	$175.34	$183.58	$170.41	$182.15	$166.06	$164.58	$165.94	$165.73	$171.19	$177.22
Expenditure	$171.61	$174.16	$179.44	$169.93	$164.54	$163.56	$163.16	$165.42	$169.96	$180.88
Fund Reserve	$135.76	$145.18	$136.15	$148.36	$149.89	$150.91	$153.70	$154.00	$155.23	$151.57
Fund Reserve as Percent of Expenditure	79%	83%	76%	87%	91%	92%	94%	93%	91%	84%

(millions)

Source: Rhode Island and Providence Plantations Comprehensive Annual Financial Report (2006-2015)
http://controller.admin.ri.gov/Financial%20Reports/index.php

Appendix E. Adults' Self-Reported Health Status (2014)

	Fair or Poor Health Status	Diagnosed with Diabetes	Diagnosed with Asthma	Diagnosed with Cardiovascular Disease	Cancer Incidence per 100,000 (age adjusted)	Tobacco Smoker	Overweight or Obese
U.S.	17.8%	10.5%	13.5%	6.7%	440.3	17.4%	64.1%
DC	12.9%	8.4%	17.2%	4.2%	474.9	16.4%	54.9%
CA	18.1%	10.3%	12.7%	5.4%	410.1	12.9%	59.7%
HI	14.5%	9.8%	13.5%	5.0%	415.6	14.1%	58.1%
NJ	16.9%	9.7%	12.4%	6.6%	477.7	15.1%	63.1%
NY	17.2%	10.0%	15.0%	5.9%	475.8	14.4%	61.1%
RI	15.2%	9.4%	15.2%	6.4%	484.0	16.3%	62.4%
PR	35.4%	15.7%	17.1%	11.2%	--	11.3%	65.9%

Source: The Henry J. Kaiser Family Foundation, *State Health Facts* (compiled from the Behavioral Risk Factor Surveillance System and the National Cancer Institute) http://kff.org/state-category/health-status/

Appendix F. REMI Model Description

Economic forecasting models help governments, institutions, and private sector firms make informed predictions about how a policy change would affect the regional labor market and economy. Regional economic models are generally founded on one or more of four principles: 1) regional economic activity is governed by input/output multipliers that account for the interrelationships of inputs and outputs between industries; 2) the regional economy can be described by computable general equilibrium model equations that reflect how industries respond to changes in price and demand over time; 3) econometric analysis using observed economic data can improve the accuracy of the model's predictions about regional economic activity in response to stimuli; and 4) clustering of firms that require specific skill sets and expertise can affect a region's relative productivity and competitiveness.

After a comprehensive review of forecasting tools, the Budget Office selected the PI+ and Tax-PI software packages developed by Regional Economic Models, Inc. (REMI). The Budget Director chose REMI because it incorporates all four of the elements described above; it is a flexible and customizable tool that can forecast the impact of a wide range of policy changes; and the software is widely accepted as the industry standard.

The Budget Office's forecasting model is tailored to the District's unique economic and demographic characteristics, commuting and inter-jurisdictional trade patterns, and tax rates. It includes 70 industry sectors in DC and neighboring counties in Maryland, Virginia, and West Virginia. The jurisdictions and counties incorporated in to the Budget Office's version of REMI are: 1) District of Columbia; 2) Montgomery, Frederick, Prince George's, Charles, and Calvert Counties in Maryland; 3) Fairfax, Alexandria, Arlington, Fauquier, Loudoun, Prince William, Stafford, Culpeper, Spotsylvania, Rappahannock, Warren, and Clarke Counties in Virginia; and 4) Jefferson County in West Virginia.

The equations underpinning the model have been vetted in peer-reviewed academic literature, and the data sources and model assumptions are transparent and thoroughly documented. As a validation of the model's predictive power, REMI predicted with a high degree of accuracy ($R^2 = 0.9939$) actual state-level total employment in 2011 using 2004 data. PI+ and Tax-PI are proprietary software programs that the Budget Office uses public funds to lease. The model builds on historical economic and demographic data and projects future economic performance. It incorporates national, state, and county-level trends with forecasts from the Bureau of Economic Analysis (BEA), the Bureau of Labor Statistics (BLS), and the University of Michigan's Research Seminar in Quantitative Economics (RSQE) modeling unit. Economic equations, demographic projections, and certain assumptions such as future federal government spending are also built in to its baseline projection. Many jurisdictions and private sector clients use REMI, including the District government's Office of Revenue Analysis.

Works Cited

AARP and the National Alliance for Caregiving, 2015. *Caregiving in the United States, 2015,* Washington, DC: AARP and the National Alliance for Caregiving.

Abt Associates Inc., 2014. *Family and Medical Leave in 2012: Technical Report,* Cambridge, MA: Abt Associates for the U.S. Department of Labor.

Adda, J., Dustmann, C. & Stevens, K., 2011. *The Career Costs of Children,* Bonn, Germany: Institute of the Study of Labor.

Addati, L., Cassirer, N. & Gilchrist, K., 2014. *Maternity and Paternity at Work: Law and Practice Across the World,* Geneva: International Labor Organization.

Aitken, Z. et al., 2015. The Maternal Health Outcomes of Paid Maternity Leave: A Systematic Review. *Social Science and Medicine,* Volume 130, pp. 32-41.

American Academy of Pediatrics, 2016. *Breastfeeding Initiatives, FAQs.* [Online]
Available at: https://www2.aap.org/breastfeeding/faqsBreastfeeding.html

Anderson, D., Binder, M. & Krause, K., 2002. The Motherhood Wage Penalty: Which Mothers Pay It and Why?. *The American Economic Review,* 92(2), pp. 354-358.

Andrew Chang & Co, LLC, 2015. *Paid Family Leave Market Research,* Sacramento: CA Employment Development Department.

Appelbaum, E. & Milkman, R., 2006. *Achieving a Workable Balance: New Jersey Employers' Experiences Managing Employee Leaves and Turnovers,* New Brunswick, NJ: Center for Women and Work, Rutgers, The State University of New Jersey.

Appelbaum, E. & Milkman, R., 2011. *Leaves that Pay: Employer and Worker Experiences with Paid Family Leave in California,* Washington, DC: Center for Economic and Policy Research.

Armenia, A. & Gerstel, N., 2006. Family Leaves, the FMLA, and Gender Neutrality: The Intersection of Race and Gender. *Social Science Research,* 35(4), pp. 871-891.

Arthur, C., Saenz, R. & Rephlogle, W., 2004. The Employment-Related Breastfeeding Decisions of Physician Mothers. *Journal of Mississippi State Medical Association,* 44(12), pp. 383-387.

Arthur, M., 2003. Share Price Reactions to Work-Family Initiatives: An Institutional Perspective. *Academy of Management Journal,* 46(4), pp. 497-505.

Arthur, M. & Cook, A., 2004. Taking Stock of Work-Family Initiatives: How Announcements of 'Family-Friendly' Human Resource Decisions Affect Shareholder Value. *Industrial and Labor Relations Review,* 57(4), pp. 599-613.

Avellar, S. & Smock, P., 2003. Has the Price of Motherhood Declined Over Time? A Cross-Cohort Comparison of the Motherhood Wage Penalty. *Journal of Marriage and Family,* 65(3), pp. 597-607.

Avendano, M., Berkman, L., Brugiavini, A. & Pasini, G., 2015. The Long-Run Effect of Maternity Leave Benefits on Mental Health: Evidence from European Countries. *Social Science and Medicine,* Volume 132, pp. 45-53.

Averett, S. & Whittington, L., 2001. Does Maternity Leave Induce Births?. *Southern Economic Journal,* 68(2), pp. 403-417.

Baker, M. & Milligan, K., 2005. *How Does Job-Protected Maternity Leave Affect Mothers' Employment and Infant Health?,* Cambridge, MA: National Bureau of Economic Research.

Baker, M. & Milligan, K., 2007. *Maternal Employment, Breastfeeding, and Health: Evidence from Maternity Leave Mandates,* Cambridge, MA: National Bureau of Economic Research.

Bartel, A. et al., 2015. *Paid Family Leave, Fathers' Leave-Taking, and Leave-Sharing in Dual-Earner Households,* Cambridge, MA: National Bureau of Economic Research.

Bartel, A., Rossin-Slater, M., Ruhm, C. & Waldfogel, J., 2016. *Assessing Rhode Island's Temporary Caregiver Insurance Act: Insights from a Survey of Employers,* New York: Columbia University, U.S. Department of Labor, and the Ford Foundation.

Bartick, M., 2011. Breastfeeding and the U.S. Economy. *Breastfeeding Medicine,* 6(5), pp. 313-318.

Bartick, M. & Reinhod, A., 2010. The Burden of Suboptimal Breastfeeding in the United States: A Pediatric Cost Analysis. *Pediatrics,* 125(5), pp. 1048-1056.

Baughman, R., DiNardi, D. & Holtz-Eakin, D., 2003. Productivity and Wage Effects of 'Family-Friendly' Fringe Benefits. *International Journal of Manpower,* 24(3), pp. 247-259.

Baum, C. & Ruhm, C., 2014. *The Effects of Paid Family Leave in California on Labor Market Outcomes,* Bonn, Germany: Institute of Labor Study.

Berger, L., Hill, J. & Waldfogel, J., 2005. Maternity Leave, Early Maternal Employment and Child Health Outcomes and Development in the US. *Economic Journal,* 115(501), pp. F29-F47.

Bittman, M., Hill, T. & Thomson, C., 2007. The Impact of Caring on Informal Carers' Employment, Income and Earnings: a Longitudinal Approach. *Australian Journal of Social Issues,* 42(2), pp. 255-272.

Björklund, A., 2006. Does Family Policy Affect Fertility?. *Journal of Population Economics,* 19(1).

Blau, F. & Kahn, L., 2013. *Female Labor Supply: Why is the U.S. Falling Behind?,* Bonn, Germany: Institute for the Study of Labor.

Boushey, H. & Glynn, S. J., 2012. *There Are Significant Business Costs to Replacing Employees,* Washington, DC: Center for American Progress.

Bratberg, E. & Naz, G., 2014. Does Paternity Leave Affect Mothers' Sickness Absence?. *European Sociological Review,* 30(4), pp. 500-511.

Brittain, J. A., 1971. The Incidence of Social Security Payroll Taxes. *The American Economic Review,* 61(1), pp. 110-125.

Brooks-Gunn, J., Han, W. & Waldfogel, J., 2002. Maternal Employment and Child Cognitive Outcomes in the First Three Years of Life: The National Institute of Child Health and Development Study of Early Child Care. *Child Development,* 73(4), pp. 1052-1072.

Brugiavani, A., Paini, G. & Trevisan, E., 2013. The Direct Impact of Maternity Benefits on Leave Taking: Evidence from Complete Fertility Histories. *Advances in Life Course Research,* 18(1), pp. 46-67.

Budig, M. & England, P., 2001. The Wage Penalty for Motherhood. *American Sociological Review,* 66(2), pp. 204-225.

Bureau of Economic Analysis, 2016. *Personal Income and Outlays: September 2016.* Washington, DC: U.S. Department of Commerce.

Bureau of Labor Statistics, 2014. *Employee Tenure Summary,* Washington, DC: U.S. Department of Labor.

Bureau of Labor Statistics, 2015a. *National Compensation Survey: Employee Benefits in the United States, March 2015,* Washington, DC: U.S. Department of Labor.

Bureau of Labor Statistics, 2015b. *Unpaid Eldercare in the United States: 2013-14 Summary,* Washington, DC: U.S. Department of Labor.

Bureau of Labor Statistics, 2015c. *Women in the Labor Force: A Databook,* Washington, DC: U.S. Department of Labor.

Bureau of Labor Statistics, 2015. *Employment Characteristics of Families Summary,* Washington, DC: U.S. Department of Labor.

Bureau of Labor Statistics, 2016a. *Employment Status of Mothers with Own Children Under 3 Years Old by Single Year of Age of Youngest Child and Marital Status, 2014-2015 Annual Averages,* Washington, DC: U.S. Department of Labor.

Bureau of Labor Statistics, 2016b. *Employment Status of the Civilian Noninstutional Population in States by Sex, Race, Hispanic or Latino Ethnicity, and Detailed Age (2015 Annual Averages),* Washington, DC: U.S. Department of Labor.

Bureau of Labor Statistics, 2016c. *Household Data Not Seasonally Adjusted, Table A-38. Persons Not in the Labor Force by Desire and Availability for Work, Age, and Sex,* Washington, DC: U.S. Department of Labor.

Bureau of Labor Statistics, 2016. *CPI Inflation Calculator.* [Online]
Available at: http://data.bls.gov/cgi-bin/cpicalc.pl?cost1=1&year1=2003&year2=2016
[Accessed 12 July 2016].

Bureau of Labor Statistics, 2016d. *Household Data Table A-12. Unemployed Persons by Duration of Unemployment,* Washington, DC: U.S. Department of Labor.

Bureau of Labor Statistics, 2016e. *National Compensation Survey, March 2015,* Washington, DC: U.S. Department of Labor.

Bureau of Labor Statistics, 2016f. *State and Metro Area Employment, Hours, & Earnings, Table 5. Employees on Nonfarm Payrolls by State and Selected Industry Sector, Seasonally Adjusted,* Washington, DC: U.S. Department of Labor.

Bureau of Labor Statistics, 2016g. *Table A-16. Persons not in the labor force and multiple jobholders by sex, not seasonally adjusted,* Washington, DC: U.S. Department of Labor.

Burgess, S., Gregg, P., Propper, C. & Washbrook, E., 2008. Maternity Rights and Mothers' Return to Work. *Labor Economics,* 15(2), pp. 168-201.

Butts, M., Casper, W. & Yang, T. S., 2013. How Important Are Work-Family Support Policies? A Meta-Analytical Investigation of Their Effects on Employee Outcomes. *Journal of Applied Psychology,* 98(1), pp. 1-25.

CA Department of Finance, 2016. *3-Year Expenditures and Positions: Employment Development Department,* Sacramento: State of California.

CA Employment Development Department, 2015a. *Paid Family Leave (PFL) Program Statistics,* Sacramento: State of California.

CA Employment Development Department, 2015b. *Paid Family Leave Market Research,* Sacramento: State of California.

CA Employment Development Department, 2015c. *Paid Family Leave Outreach Funding,* Sacramento: State of California.

CA Employment Development Department, 2015d. *State Disability Insurance (SDI) Statistical Information,* Sacramento: State of California.

CA Employment Development Department, 2015. *Fraud Deterrence and Detection Activities Annual Report,* Sacramento: State of California.

CA Employment Development Department, 2016a. *Fact Sheet: State Disability Insurance Program,* Sacramento: State of California.

CA Employment Development Department, 2016b. *FAQs - Pregnancy.* [Online]
Available at: http://www.edd.ca.gov/pdf_pub_ctr/de2511.pdf

CA Employment Development Department, 2016c. *May 2016 Disability Insurance (DI) Fund Forecast,* Sacramento: State of California.

CA Employment Development Department, 2016c. *UI, ETT, and SDI Rates - Historical.* [Online]
Available at: http://www.edd.ca.gov/payroll_taxes/Rates_-_Historical.htm
[Accessed 11 July 2016].

CA Employment Development Department, 2016d. *EDD Update to the Legislature,* Sacramento: State of California.

CA State Legislature, 2016. *AB-908 Disability Compensation: Disability Insurance,* Sacramento: California Legislative Information.

Cai, X., Wardlaw, T. & Brown, D., 2012. Global Trends in Exclusive Breastfeeding. *Journal of International Breastfeeding,* 7(1), pp. 1-5.

California State Assembly, 2016. *03/02/16 Assembly Floor Analysis of AB-908,* Sacramento: California Legislative Information.

California Unemployment Insurance Code, 1953. *Disability Benefits.* § 1.2.2501-2778: State of California.

California Unemployment Insurance Code, 2014. *Paid Family Leave Act.* § 1.2.3300-3306: State of California.

Canen, G., 2007. Paid Maternity Leave and Its Impact on Breastfeeding in the United States: An Historical, Economic, Political, and Social Perspective. *Breastfeeding Medicine,* 2(1), pp. 34-44.

Cannonier, C., 2014. Does the Family and Medical Leave Act (FMLA) Increase Fertility Behavior?. *Journal of Labor Research,* 35(2), pp. 105-132.

Carniero, P., Loken, K. & Salvanes, K., 2010. *"Flying Start: Long Term Consequences of Maternal Time Investments in Children During their First Year of Life,* Bonn, Germany: Institute for the Study of Labor.

Casselman, B., 2015. Enough Already about the Job-Hopping Millennials. *FiveThirtyEight*, 5 May.

Centers for Disease Control and Prevention, 2007a. Breastfeeding Trends and Updated National Health Objectives for Exclusive Breastfeeding, United States, Birth Years 2000-2004. *MMWR Weekly,* 56(30), pp. 760-763.

Centers for Disease Control and Prevention, 2007b. *Does Breastfeeding Reduce the Risk of Pediatric Overweight?,* Atlanta: U.S. Department of Health and Human Services.

Centers for Disease Control and Prevention, 2013. *Breastfeeding Report Card: United States 2013,* Atlanta: U.S. Department of Health and Human Services.

Centers for Disease Control and Prevention, 2013. Progress in Increasing Breastfeeding and Reducing Racial/Ethnic Differences – United States, 2000-2008 Births. *Morbidity and Mortality Weekly Report,* 62(5), pp. 77-80.

Chatterji, P. & Markowitz, S., 2005. Does the Length of Maternity Leave Affect Maternal Health. *Southern Economic Association,* 72(1), pp. 16-41.

Chatterji, P. & Markowitz, S., 2012. Family Leave After Childbirth and the Mental Health of New Mothers. *Journal of Mental Health Policy Economics,* 15(2), pp. 61-76.

City and County of San Francisco, 2016. *Legislative Digest: Paid Parental Leave Ordinance,* San Francisco: Office of Labor Standards Enforcement.

Clifton, T. & Shepard, E. M., 2004. Work and Family Programs and Productivity: Estimates Applying a Production Function Model. *International Journal of Manpower,* 25(8), pp. 714-728.

Cohany, S. & Sok, E., 2007. Married Mothers in the Labor Force: Trends in Labor Force Participation of Married Mothers of Infants. *Monthly Labor Review,* pp. 9-16.

Cohen, R. & Kirzinger, W., 2014. Financial Burden of Medical Care: A Family Perspective. *NCHS Data Brief,* pp. 1-7.

Collaborative Group on Hormonal Factors in Breast Cancer, 2002. Breast Cancer and Breastfeeding: Collaborative Reanalysis of Individual Data from 47 Epidemiological Studies in 30 Countries, Including 50302 Women with Breast Cancer and 96973 Women without the Disease. *Lancet,* 360(9328), pp. 187-195.

Coltrane, S., Miller, E., DeHaan, T. & Stewart, L., 2013. Fathers and the Flexibility Stigma. *Journal of Social Issues,* 69(2), pp. 279-302.

Congressional Budget Office, 2009. *H.R. 626 Federal Employees Paid Parental Leave Act of 2009,* Washington, DC: U.S. Congress.

Connecticut General Assembly, 2016. *Fiscal Note: SB-221 An Act Concerning Paid Family and Medical Leave,* Hartford: Office of Fiscal Analysis.

Cooper, P., Murray, L. & Stein, A., 1993. Psychosocial Factors Associated with the Early Termination of Breast-Feeding. *Journal of Psychosomatic Research,* 37(2), pp. 171-176.

Council of Economic Advisers, 2015. *Gender Pay Gap: Recent Trends and Explanations,* Washington, DC: The White House.

Council on Contemporary Families, 2016. *Parents' Happiness Deficit: Must Parents Sacrifice Happiness for Meaning?,* Austin: s.n.

Dagher, R., McGovern, P. & Dowd, B., 2014. Maternity Leave Duration and Postpartum Mental and Physical Health: Implications for Leave Policies. *Journal of Health Politics, Policy and Law,* 39(2), pp. 369-416.

Dahl, G., Løken, K., Magne, M. & Vea Salvanes, K., 2013. *What is the Case for Paid Maternity Leave?,* Cambridge, MA: National Bureau of Economic Research.

Das, T. & Polachek, S., 2015. Unanticipated Effects of California's Paid Family Leave Program. *Contemporary Economic Policy,* 33(4), pp. 610-635.

DC Department of Health, 2015a. *Annual Health Report: Behavioral Risk Factor Surveillance System,* Washington, DC: Government of the District of Columbia.

DC Department of Health, 2016. *2015 Infant Mortality Rate for the District of Columbia,* Washington, DC: Government of the District of Columbia.

DC Department of Human Resources, 2015. Paid Family Leave. *District Personnel Bulletin,* Issue 12-302, pp. 1-28.

DC Department of Human Resources, 2016. *Employee Leave.* [Online]
Available at: http://dchr.dc.gov/page/employee-leave

DC Law, 2014. *Fiscal Year 2015 Budget Support Act of 2014.* 20-155 § 1051-1053: Government of the District of Columbia.

DC Law, 2016. *Fair Shot Minimum Wage Amendment Act of 2016.* 21-144: Government of the District of Columbia.

DC Official Code, 1935. *Unemployment Compensation.* § 51.101-178: Government of the District of Columbia.

DC Official Code, 1973. *District of Columbia Home Rule Act of 1973.* § 1-206.02: Government of the District of Columbia.

DC Official Code, 1990. *Family and Medical Leave Act of 1990.* § 32.501-517: Government of the District of Columbia.

DC Official Code, 1994. *Parental Leave Act of 1994.* § 32.1201-1206: Government of the District of Columbia.

DC Official Code, 2008. *Accrued Sick and Safe Leave Act of 2008.* § 32.1301-1311: Government of the District of Columbia.

DC Official Code, 2013. *Breastmilk Bank and Lactation Support Act.* § 7-881.01-11: Government of the District of Columbia.

DC Official Code, 2014. *Protecting Pregnant Workers Fairness Act of 2014.* § 32-1231.01-15: Government of the District of Columbia.

Democratic National Committee, 2016. *2016 Democratic Party Platform,* Philadelphia: s.n.

Dex, S. & Smith, C., 2002. *The Nature and Pattern of Family-Friendly Employment Policies in Britain.* Bristol, UK: The Policy Press.

DiCamillo, M. & Field, M., 2015. *A Survey of California's Registered Voters about the State's Paid Family Leave Program,* San Francisco: Field Research Corporation and California Center for Research on Women and Families.

District of Columbia, 2014. *Government Family Leave Program Amendment Act of 2014.* D.C. Act 20-377: s.n.

Donald J. Trump for President, Inc., 2016. *Positions: Child Care Reforms that Will Make America Great Again.* [Online] Available at: https://www.donaldjtrump.com/positions/child-care-reforms-that-will-make-america-great-again [Accessed 14 September 2016].

Dube, A., Freeman, E. & Reich, M., 2010. *Employee Replacement Costs,* Berkeley, CA: Institute for Research on Labor and Employment, University of California.

Earle, A. & Heymann, J., 2011. Protecting the Health of Employees Caring for Family Members with Special Health Care Needs. *Social Science and Medicine,* 73(1), pp. 68-78.

Elborgh-Woytek, K. et al., 2013. *Women, Work, and the Economy: Macroeconomic Gains from Gender Equity,* Washington, DC: International Monetary Fund.

Fein, S. & Roe, B., 1998. The Effect of Work Status on Initiation and Duration of Breast-Feeding. *American Journal of Public Health,* 88(7), pp. 1042-1046.

Felix, Alison & Watkins, K., 2013. The Impact of an Aging U.S. Population on State Tax Revenues. *Economic Review - Federal Reserve Bank of Kansas City,* 98(4), pp. 95-127.

Firestein, N., O'Leary, A. & Savitsky, Z., 2011. *A Guide to Implementing Paid Family Leave: Lessons from California,* Berkeley, CA: Labor Project for Working Families.

Fredlund, P., Hallqvist, J. & Magnusson, C., 2010. Who Takes Paternity Leave? A Cohort Study on Prior Social and Health Characteristics among Fathers in Stockholm. *Journal of Public Health Policy,* 31(3), pp. 324-341.

General Assembly of Maryland, 2013. *Report of the Task Force to Study Temporary Disability Insurance Programs and the Process for Assisting Individuals with Disabilities at Local Departments of Social Services,* Annapolis: State of Maryland.

General Assembly of Maryland, 2016. *Task Force to Study Family and Medical Leave Insurance.* State of Maryland: House Bill 740.

Georgetown University School of Nursing, 2016. *The Health of the African American Community in the District of Columbia: Disparities and Recommendations,* Washington, DC: Georgetown University School of Nursing.

Giarratani, F. & Houston, D., 2010. Simulating Sources of Uncertainty in Policy Forecasting with a Large-Scale Regional Economic Model. *Geographical Analysis,* 24(3), pp. 257-267.

Glynn, S. J. et al., 2016. *Implementing Paid Family and Medical Leave Insurance Connecticut,* Washington, DC: Institute for Women's Policy Research.

Goldin, C., 2014. A Grand Gender Convergence: Its Last Chapter. *American Economic Review,* 104(4), pp. 1091-1119.

Goldin, C. & Katz, L., 2008. Gender Differences in Careers, Education, and Games. *American Economic Review: Papers and Proceedings,* 98(2), pp. 363-369.

Gomby, D. & Pei, D.-J., 2009. *Newborn Family Leave: Effects on Children, Parents, and Business,* Los Altos, CA: David and Lucile Packard Foundation.

Goodman, J. M., 2012. *Did California's Paid Family Leave Law Affect Mothers' Time Spent on Work and Childcare?.* San Francisco, Population Association of America.

Gornick, J., Meyers, M. & Ross, K., 1998. Public Policies and the Employment of Mothers: A Cross-National Study. *Social Science Quarterly,* 79(1).

Gray, H., 2002. *Family-Friendly Working: What a Performance! An Analysis of the Relationship Between the Availability of Family-Friendly Policies and Establishment Performance,* London: Centre for Economic Performance, London School of Economics and Political Science.

Gregg, P., Gutiérrez-Doménech, M. & Waldfogel, J., 2007. The Employment of Married Mothers in Great Britain, 1974-2000. *Economica,* 74(296), pp. 842-864.

Grover, S. & Crooker, K., 1995. Who Appreciates Family-Responsive Human Resource Policies: The Impact of Family-Friendly Policies on the Organizational Attachment of Parents and Non-Parents. *Personnel Psychology,* 48(2), p. 271–288.

Gruber, J., 1994. The Incidence of Mandated Maternity Benefits. *The American Economic Review,* 84(3), pp. 662-641.

Guendelman, S. et al., 2009. Juggling Work and Breastfeeding: Effects of Maternity Leave and Occupational Characteristics. *Pediatrics,* 123(1), pp. e38-e47.

Guendelman, S. et al., 2009. Maternity Leave in the Ninth Month of Pregnancy and Birth Outcomes Among Working Women. *Women's Health Issues,* 19(1), pp. 30-37.

Gupta, N. D., Smith, N. & Verner, M., 2008. The Impact of Nordic Countries' Policies on Employment, Wages, and Children. *Review of Economics of the Household,* 6(1), pp. 65-89.

Haas, L. & Hwang, C. P., 2008. The Impact of Taking Parental Leave on Fathers' Participation in Childcare and Relationships with Children: Lessons from Sweden. *Community, Work and Family,* 11(1), pp. 85-104.

Hamilton, B. et al., 2015. Births: Final Data for 2014. *National Vital Statistics Reports,* 64(12), pp. 1-63.

Han, W.-J., Ruhm, C. & Waldfogel, J., 2007. *Parental Leave Policies and Parents' Employment and Leave-Taking.* s.l.:National Bureau of Economic Research Working Paper 13697.

Han, W.-J., Ruhm, C., Waldfogel, J. & Washbrook, E., 2008. The Timing of Mothers' Employment After Childbirth. *Monthly Labor Review,* 131(6), pp. 15-27.

Han, W.-J. & Waldfogel, J., 2003. Parental Leave: The Impact of Recent Legislation on Parents' Leave Taking. *Demography,* 40(1), pp. 191-200.

Harrington, B. et al., 2014. *The New Dad: Take Your Leave,* Boston: Boston College, Center for Work and Family.

Harrington, B., Van Deusen, F. & Humberd, B., 2011. *The New Dad: Caring, Committed, and Conflicted,* Boston: Boston College, Center for Work and Family.

Hawai'i Revised Statutes, 2016. *Temporary Disability Insurance.* § 7.346-398: State of Hawai'i.

Heiland, F. & Macpherson, D., 2005. *Do Family-Friendly Firms Perform Better?,* Tallahassee: Florida State University.

Heintz, J., 2006. *Globalization, Economic Policy and Employment: Poverty and Gender Implications,* Geneva, Switzerland: International Labor Organization.

Henderson, J. et al., 2003. Impact of Postnatal Depression on Breastfeeding Duration. *Birth,* 30(3), pp. 175-180.

Hernández, A., 2015. Paid Sick Leave Fails in Prince George's; Council Wants to Wait for State to Act. *Washington Post*, 13 October.

Heymann, J., Raum, A. & Earle, A., 2011. Creating and Using New Data Sources to Analyze the Relationship Between Social Policy and Global Health: The Case of Maternal Leave. *Public Health Reports,* 126(3), pp. 127-134.

Heywood, J., Siebert, W. S. & Wei, X., 2007. The Implicit Wage Costs of Family Friendly Work Practices. *Oxford Economic Papers,* 59(2), pp. 275-300.

Hillary for America, 2016. *Issues: Paid Family and Medical Leave.* [Online]
Available at: https://www.hillaryclinton.com/issues/paid-leave/
[Accessed 20 July 2016].

Himmelstein, D., Thorne, D., Warren, E. & Woolhandler, S., 2009. Medical Bankruptcy in the United States, 2007: Results of a National Study. *The American Journal of Medicine,* 122(10), pp. 741-746.

Ho, A., Collins, S., Davis, K. & Doty, M., 2005. *A Look at Working-AGe Caregivers' Roles, Health Concerns, and Need for Support,* New York: The Commonwealth Fund.

Hofferth, S. & Curtin, S., 2006. The Impact of Parental Leave on Maternal Return to Work after Childbirth in the United States. *Work and Occupations,* 33(1), pp. 73-105.

Hollinger, K., 2015. *Testimony of Kathy E. Hollinger, President and CEO of the Restaurant Association Metropolitan Washington".* Washington, DC: s.n.

Houser, L. & Vartanian, T., 2012. *Pay Matters: The Positive Economic Impacts of Paid Family Leave for Families, Businesses, and the Public,* New Brunswick, NJ: The State University of New Jersey, Center for Women and Work.

Houser, L. & White, K., 2012. *Awareness of New Jersey's Family Leave Insurance Program is Low, Even as Public Support Remains High and Need Persists,* Trenton: Rutgers University.

Howden, L. & Meyer, J., 2011. *Age and Sex Composition: 2010,* Washington, D.C.: U.S. Census Bureau.

Huang, R. & Yang, M., 2015. Paid Maternity Leave and Breastfeeding Practice Before and After California's Implementation of the Nation's First Paid Family Leave Program. *Economics of Human Biology,* Volume 16, pp. 45-49.

Huerta, M. d. C. et al., 2013. *Fathers' Leave, Fathers' Involvement and Child Development: Are They Related? Evidence from Four OECD Countries,* Paris: OECD Publishing.

International Monetary Fund, 2016. *Article IV Consultation with the United States of America: Concluding Statement of the IMF Mission,* Washington, DC: s.n.

Ip, S. et al., 2007. *Breastfeeding and Maternal and Infant Health Outcomes in Developed Countries,* Rockville, MD: Agency for Healthcare and Quality Research.

Johansson, E.-A., 2010. *The Effect of Own and Spousal Parental Leave on Earnings,* Uppsala, Sweden: Institute for Labor Market Evaluation.

Judiesch, M. & Lyness, K., 1999. Left Behind? The Impact of Leaves of Absence on Managers' Career Success. *Academy of Management Journal,* 42(6), pp. 641-651.

Keene, J. R., 2005. The Job Costs of Family Demands: Gender Differences in Negative Family-to-Work Spillover. *Journal of Family Issues,* 26(3), pp. 275-299.

Kelly, E. et al., 2010. Getting There from Here: Research on the Effects of Work-Family Initiatives on Work-Family Conflict and Business Outcomes. *Academy of Management Annals,* Volume 2, pp. 305-349.

Kenjo, E., 2005. New Mothers' Employment and Public Policy in the UK, Germany, the Netherlands, Sweden, and Japan. *Labour,* 19(1), pp. 5-49.

Kimmel, J. & Amuedo-Dorantes, C., 2004. The Effects of Family Leave on Wages, Employment, and the Family Wage Gap: Distributional Implications. *Journal of Law and Policy,* Volume 15, pp. 115-142.

Kluve, J. & Schmitz, S., 2014. *Social Norms and Mothers' Labor Market Attachment: The Medium-Run Effects of Parental Benefits,* Bonn, Germany: Institute for the Study of Labor.

Kluve, J. & Tamm, M., 2009. *New Daddy's Changing Diapers and Mommy's Making Her Career: Evaluating a Generous Parental Leave Regulation Using a Natural Experiment,* Bonn, Germany: Institute for the Study of Labor.

Kluve, J. & Tamm, M., 2012. Parental Leave Regulations, Mothers, Mothers' Labor Force Attachment and Fathers' Childcare Involvement: Evidence from a Natural Experiment. *Journal of Population Economics,* 26(3), pp. 983-1005.

Kochanek, K., Arias, E. & Anderson, R., 2015. Leading Causes of Death Contributing to Decrease in Life Expectancy Gap Between Black and White Populations: United States, 1999–2013. *NCHS Data Brief,* Issue 218, pp. 1-7.

Kochanek, K., Murphy, S., Xu, J. & Tejada-Vera, B., 2016. Deaths: Final Data for 2014. *National Vital Statistics Reports,* 65(4), pp. 1-222.

Konrad, A. & Mangel, R., 2000. The Impact of Work-Life Programs on Firm Productivity. *Strategic Management Journal,* 21(12), pp. 1225-1237.

Kozhimannil, K. B., Law, M. & Virnig, B., 2013. Cesarean Delivery Rates Vary 10-Fold Among US Hospitals; Reducing Variation May Address Quality, Cost Issues. *Health Affairs,* 32(3), pp. 527-535.

Krantz-Kent, R., 2009. Measuring Time Spent in Unpaid Household Work: Results from the American Time Use Survey. *Monthly Labor Review,* pp. 46-59.

Lalive, R. & Zweimüller, J., 2009. How Does Parental Leave Affect Fertility and Return to Work? Evidence from Two Natural Experiments. *The Quarterly Journal of Economics,* Issue 124, pp. 1363-1402.

Laughlin, L., 2011. *Maternity Leave and Employment Patterns of First-Time Mothers, 1961-2008,* Washington, DC: U.S. Census Bureau.

Lau, R., 2000. Quality of Work Life and Performance - An Ad Hoc Investigation of Two Key Elements in the Service Profit Chain Model. *International Journal of Service Industry Management,* 11(5), pp. 422-437.

Lau, R. & May, B., 1998. A Win-Win Paradigm for Quality of Work Life and Business Performance. *Human Resource Development Quarterly,* 9(3), pp. 211-226.

Lee, Y. & Tang, F., 2015. More Caregiving, Less Working: Caregiving Roles and Gender Differences. *Journal of Applied Gerontology,* 34(4), pp. 465-483.

Lerner, S. & Appelbaum, E., 2014. *Business as Usual: New Jersey Employers' Experience with Family Leave Insurance,* Washington, DC: Center for Economic and Policy Research.

Levine, L., 2008. *Leave Benefits in the United States,* Washington, DC: Congressional Research Services.

Liu, Q. & Nodström Skans, O., 2009. The Duration of Paid Parental Leave and Children's Scholastic Performance. *Journal of Economic Analysis and Policy,* 10(1).

Lowenstein, A., 2011. Early Care and Education as Educational Panacea: What Do We Really Know About Its Effectiveness?. *Educational Policy,* 25(1), pp. 92-114.

Lyness, K., Thompson, C., Francesco, A. M. & Judiesch, M., 1999. Work and Pregnancy: Individual and Organizational Factors Influencing Organizational Commitment, Timing of Maternity Leave, and Return to Work. *Sex Roles,* 41(7), pp. 485-508.

MacDorman, M., Matthews, T., Mohangoo, A. & Zeitlin, J., 2014. International Comparisons of Infant Mortality and Related Factors: United States and Europe, 2010. *National Vital Statistics Report,* 63(5), pp. 1-6.

Malin, M., 1998. Fathers and Parental Leave Revisited. *Northern Illinois University Law Review,* Volume 19, pp. 25-56.

Mammen, K. & Paxson, C., 2000. Women's Work and Economic Development. *Journal of Economic Perspectives,* 14(4), pp. 141-164.

Månsdotter, A., Lindholm, L. & Winkvist, A., 2007. Paternity Leave in Sweden - Costs, Savings and Health Gains. *Health Policy,* 82(1), pp. 102-115.

Ma, P., Brewer-Asling, M. & Magnus, J., 2013. A Case Study on the Economic Impact of Optimal Breastfeeding. *Maternal and Child Health Journal,* 17(1), pp. 9-13.

Margolis, J. & Walsh, J., 2003. Misery Loves Companies: Rethinking Social Initiatives by Business. *Administrative Science Quarterly,* 48(2), pp. 268-305.

Martin, J. et al., 2003. Births: Final Data for 2002. *National Vital Statistics Reports,* 52(10), pp. 1-114.

Maryland General Assembly, 2016. *Fiscal and Policy Note: House Bill 740,* Annapolis: State of Maryland.

Matthews, T. & Hamilton, B., 2016. Mean Age of Mothers is on the Rise: United States, 2000–2014. *NCHS Data Brief,* Issue 232, pp. 1-6.

Matthews, T., MacDorman, M. & Thoma, M., 2015. Infant Mortality Statistics from the 2013 Period Linked Birth/Infant Death Data Set. *National Vital Statistics Report,* 64(9), pp. 1-30.

Matysiak, A. & Ivett, S., 2014. Effects of Parental Leave Policies on Second Birth Risks and Women's Employment Entry. *Population,* 69(4), pp. 599-636.

Melguizo, Á. & González-Páramo, J. M., 2013. Who Bears Labor Taxes and Social Contributions? A Meta-Analysis Approach. *SERIEs,* 4(3), pp. 247-271.

MetLife and the New York Medical College, 2011. *The MetLife Study of Caregiving Costs to Working Caregivers: Double Jeopardy for Baby Boomers Caring for their Parents,* Westport, CT: s.n.

Miller, C. C. & Alderman, L., 2014. Why U.S. Women Are Leaving Jobs Behind. *New York Times*, 12 December, p. BU1.

Mohammad, H. et al., 2015. Paid Maternity Leave and Childhood Vaccination Uptake: Longitudinal Evidence from 20 Low-and-Middle-Income Countries. *Social Science and Medicine,* Volume 140, pp. 104-117.

Montgomery County Code, 2015. *Earned Sick and Safe Leave Act of 2015.* § 27.7-8: s.n.

Moored, G. & Metcalf, L., 2016. *D.C. Parenthood: Who Stays and Who Leaves?,* Washington, DC: Office of the Chief Financial Officer, District of Columbia Government.

National Conference of State Legislatures, 2014. *State Family and Medical Leave Laws,* Denver: s.n.

National Partnership for Women and Families, 2016. *Work and Family Policy Database.* [Online]
Available at: http://www.nationalpartnership.org/issues/work-family/work-family-policy-database
[Accessed 20 July 2016].

Neighmond, P., 2016. *Overworked Americans Aren't Taking the Vacation They've Earned,* Washington, DC: National Public Radio.

Nepomnyaschy, L. & Waldfogel, J., 2007. Paternity Leave and Fathers' Involvement with their Young Children: Evidence from the ECLS–B. *Community, Work, and Family,* 10(4), p. 425–451.

New Jersey Administrative Code, 2016. *Family Leave Insurance Benefits.* § 12:21: State of New Jersey.

New Jersey Revised Statutes, 2016. *Temporary Disability Benefits Law.* § 43.21: State of New Jersey.

New York State Consolidated Laws, 2016. *Disability Benefits Law and the Paid Family Leave Benefits Law.* Workers' Compensation § 9.200-242: State of New York.

New York State Insurance Fund, 2016. *Enriched Disability Benefits.* [Online]
Available at: http://ww3.nysif.com/DisabilityBenefits/PolicyholderServices/EnrichedDisabilityBenefits.aspx

NJ Department of Labor and Workforce Development, 2016a. *Temporary Disability Insurance Workload in 2015 Summary Report,* Trenton: State of New Jersey.

NJ Department of Labor and Workforce Development, 2016. *Family Leave Insurance Workload in 2015: Summary Report,* Trenton: State of New Jersey.

NJ Department of Labor and Workplace Development, 2016. *Family Leave Insurance - Frequently Asked Questions,* Trenton: State of New Jersey.

NJ Legislature, 2016. *Department of Labor and Workforce Development,* Trenton: Office of Legislative Services.

Northouse, L., Williams, A.-I., Given, B. & McCorkle, R., 2012. Psychosocial Care for Family Caregivers of Patients with Cancer. *Journal of Clinical Oncology,* Issue 11, pp. 1227-1234.

O'Brien, M., 2009. Fathers, Parental Leave Policies, and Infant Quality of Life: International Perspectives and Policy Impact. *The ANNALS of the American Academy of Political and Social Science,* 624(1), pp. 190-213.

OECD, 2007. *OECD Employment Outlook 2007,* Paris: Organisation for Economic Co-Operation and Development.

Ogbuanu, C. et al., 2011. The Effect of Maternity Leave Length and Time of Return to Work on Breastfeeding. *Pediatrics,* 127(6), p. e1414–e1427.

Pack, A., 2014. *How the Shrinking of the Labor Force Might Impact Your Community,* St. Louis, MO: Federal Reserve Bank of St. Louis.

Parker, K. & Wang, W., 2013. *Modern Parenthood: Roles of Moms and Dads Converge as They Balance Work and Family,* Washington, DC: Pew Research Center.

Patnaik, A., 2016. *Reserving Time for Daddy: The Short- and Long-Run Consequences of Fathers' Quotas,* Ithaca, NY: Cornell University.

Pavalko, E. & Henderson, K., 2006. Combining Care Work and Paid Work: Do Workplace Policies Make a Difference. *Research on Aging,* 28(3), pp. 359-374.

Perry-Smith, J. & Blum, T., 2007. A Win-Win Paradigm for Quality of Work Life and Business Performance. *Human Resource Development Quarterly,* 9(3), pp. 211-226.

Pew Research Center, 2012. *Women, Work and Motherhood: A Sampler of Recent Pew Research Survey Findings,* Washington, DC: The Pew Charitable Trusts.

Philips, J., 2013. *DC's Population Change: Role of Births and Deaths,* Washington, DC: DC Office of Planning.

Phillips, K. R., 2004. *Getting Time Off: Access to Leave Among Working Parents,* Washington, DC: The Urban Institute.

Preece, D. & Filbeck, G., 1999. Family Friendly Firms: Does It Pay to Care?. *Financial Services Review,* 8(1), pp. 47-60.

Ranji, U. & Salganicoff, A., 2014. *Balancing on Shaky Ground: Women, Work and Family Health,* Menlo Park, CA: Kaiser Family Foundation.

Rasmussen, A. W., 2010. Increasing the Length of Parents' Birth-Related Leave: The Effect on Children's Long-Term Educational Outcomes. *Labor Economics,* 17(1), pp. 91-100.

Redshaw, M. & Henderson, J., 2013. Fathers' Engagement in Pregnancy and Childbirth: Evidence from a National Survey. *BMC Pregnancy and Childbirth,* 13(70).

Reitman, F. & Schneer, J., 2005. The Long-Term Negative Impacts of Managerial Career Interruptions: A Longitudinal Study of Men and Women MBAs. *Group & Organization Management,* 30(3), pp. 243-262.

Republican National Committee, 2016. *Republican Platform 2016,* Cleveland: s.n.

Rhode Island General Laws, 2013. *Temporary Disability Insurance.* § 28.39-42: s.n.

Rhode Island Public Expenditure Council, 2015. *Rhode Island Temporary Disability Insurance (TDI) and Temporary Caregiver Insurance,* Providence: s.n.

RI Department of Labor and Training, 2005. *Temporary Disability Insurance Task Force Report,* Providence: State of Rhode Island and Providence Plantations.

RI Department of Labor and Training, 2014. *Unemployment Insurance and TDI Tax Rates for 2015 Announced,* Providence: State of Rhode Island and Providence Plantations.

RI Department of Labor and Training, 2016a. *TDI Annual Update: January - December 2015,* Providence: State of Rhode Island and Providence Plantations.

RI Department of Labor and Training, 2016b. *Temporary Disability Insurance/Temporary Caregiver Insurance Frequently Asked Questions,* Providence: State of Rhode Island and Providence Plantations.

RI Department of Labor and Training, 2016. *Statistical and Fiscal Digest 2015,* Providence: State of Rhode Island and Providence Plantations.

Rodriguez, M., 2012. *The Impact of Paid Family Leave on New Jersey Businesses,* New Brunswick, NJ: Bloustein School of Planning and Public Policy, Rutgers.

Roe, B., Whittington, L., Fein, S. B. & Teisl, M., 1999. Is there Competition Between Breast-Feeding and Maternal Employment?. *Demography,* 36(2), pp. 157-171.

Rossin, M., 2013. The Effects of Maternity Leave on Children's Birth and Infant Health Outcomes in the United States. *Journal of Health Economics,* 30(2), pp. 221-239.

Rossin-Slater, M., Ruhm, C. & Waldfogel, J., 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), pp. 224-245.

Ross, K. P., 2004. *Getting Time Off: Access to Leave Among Working Parents,* Washington, DC: The Urban Institute.

Ruhm, C., 1998. The Economic Consequences of Parental Leave Mandates: Lessons from Europe. *The Quarterly Journal of Economics,* 113(1), pp. 285-317.

Ruhm, C., 2000. Parental Leave and Child Health. *Journal of Health Economics,* 19(6), pp. 931-960.

Ruhm, C., 2011. Policies to Assist Parents with Young Children. *The Future of Children,* 21(2), pp. 37-68.

Ruhm, C. & Waldfogel, J., 2012. Long-Term Effects of Early Childhood Care and Education. *Nordic Economic Policy Review,* 1(1), pp. 23-51.

Sakiko, T. & Waldfogel, J., 2007. Effects of Parental leave and Work Hours on Fathers' Involvement with their Babies: Evidence from the Millennium Cohort Study. *Community, Work, and Family,* 10(4), pp. 409-426.

Sarkadi, A., Kristiansson, R., Oberklaid, F. & Bremberg, S., 2008. Fathers' Involvement and Children's Developmental Outcomes: a Systematic Review of Longitudinal Studies. *Acta Paediatrica,* 97(2), pp. 153-158.

Sauers, E., 2015. Maryland Paid Sick-Leave Bill to Return in 2016. *Capital Gazette*, 13 October.

Save the Children, 2015. *State of the World's Mothers 2015: The Urban Disadvantage,* Fairfield, CT: s.n.

Schönberg, U. & Nudsteck, J., 2007. *Maternity Leave Legislation, Female Labor Supply, and the Family Wage Gap,* Bonn, Germany: Institute for the Study of Labor.

Schott, W., 2012. Going Back Part-Time: Family Leave Legislation and Women's Return to Work. *Population Research and Policy Review,* 31(1), pp. 1-30.

Schuster, M. et al., 2009. Perceived Effects of Leave From Work and the Role of Paid Leave Among Parents of Children with Special Health Needs. *American Journal of Public Health,* 99(4), pp. 698-705.

Séjourné, H., Beaumé, M., Vaslot, V. & Chabrol, H., 2012. Effect of Paternity Leave on Maternal Postpartum Depression. *Gynecologie, Obstetrique et Fertilite,* 40(6), pp. 360-364.

Setty, S., Skinner, C. & Wilson-Simmons, R., 2016. *Building an Inclusive Family Leave Insurance Program: Findings and Recommendations from the New Jersey Parenting Project,* New York: National Center for Children in Poverty, Columbia University.

Sherriff, R. L., 2007. *Balancing Work and Family,* Sacremento: California State Senate, Senate Office of Research.

Shim, J., 2015. Family Leave Policy and Child Mortality: Evidence from 19 OECD Countries from 1969 to 2010. *International Journal of Social Welfare,* p. doi: 10.1111/ijsw.12186.

Silver, B., Mederer, H. & Djurdjevic, E., 2015. *Launching the Rhode Island Temporary Caregiver Insurance Program (TCI): Employee Experiences One Year Later,* Providence: RI Department of Labor and Training.

Social Security Administration, 2015. *Annual Statistical Supplement,* Washington, DC: Office of Retirement and Disability Policy.

Society for Human Resource Management, 2016. *SHRM Survey Findings: Paid Leave in the Workplace,* Alexandria, VA: Society for Human Resource Management.

State of New Jersey, 2009. *Family Leave Insurance Regulations,* Trenton: Department of Labor and Workforce Development.

State of New Jersey, 2015. *2014 Comprehensive Annual Financial Report: Supplementary Information,* Trenton: s.n.

State of New Jersey, 2015. *Appropriations Handbook Fiscal Year 2015-2016,* Trenton: Department of the Treasury.

State of Rhode Island and Providence Plantations, 2015. *Comprehensive Annual Financial Report,* Providence: s.n.

State of Rhode Island and Providence Plantations, 2016. *Budget Fiscal Year 2017,* Providence: s.n.

Tanaka, S., 2005. Parental Leave and Child Health Across OECD Countries. *Economic Journal,* 115(501), pp. F7-F28.

Tanaka, S. & Waldfogel, J., 2007. Effects of Parental Leave and Work Hours on Fathers' Involvement with Their Babies. *Community Work and Family,* 10(4), pp. 409-426.

Taris, T. & Schreurs, P., 2009. Well-Being and Organizational Performance: An Organizational-Level Test of the Happy-Productive Worker Hypothesis. *Work and Stress,* 23(2), pp. 120-136.

ten Cate, A., 2003. *The Impact of Provincial Maternity and Parental Leave Policies on Employment Rates of Women with Young Children in Canada.* Ontario, Canada: McMaster University.

The White House, 2015. *Modernizing Federal Leave Policies for Childbirth, Adoption and Foster Care to Recruit and Retain Talent and Improve Productivity,* Washington, DC: The White House, Office of the Press Secretary.

Thomas, L. T. & Ganster, D., 1995. Impact of Family-Supportive Work Variables on Work-Family Conflict and Strain: A Control Perspective. *Journal of Applied Psychology,* 80(1), pp. 6-15.

Toledo, E. D. l. C., Gundanna, A. & Pal, I., 2015. *The Effect of Changes in Maternity Leave Legislation in the 1990s on Women's Labor Market Outcomes in the U.K..* Princeton, NJ, Population Association of America.

Tracey, J. & Hinkin, T., 2006. The Costs of Employee Turnover: When the Devil is in the Details. *Cornell Hospitality Report,* 6(15), pp. 6-13.

Trzcinski, E. & Finn-Stevenson, M., 1991. A Response to Arguments Against Mandated Parental Leave: Findings from the Connecticut Survey of Parental Leave Policies. *Journal of Marriage and Family,* 53(2), pp. 445-460.

Tzannatos, Z., 1998. *Women and Labor Market Changes in the Global Economy: Growth Helps, Inequalities Hurt and Public Policy Matters,* Washington, DC: The World Bank.

U.S. Census Bureau, 2015a. *B17001 Poverty Status in the Past 12 Months by Sex by Age, Universe: Population for Whom Poverty Status is Determined,* Washington, DC: U.S. Census Bureau, American FactFinder.

U.S. Census Bureau, 2015. *B12006 Marital Status by Sex by Labor Force Participation,* Washington, DC: American FactFinder.

U.S. Census Bureau, 2015b. *S0101: Age and Sex,* Washington, DC: American FactFinder.

U.S. Census Bureau, 2015c. *S4202: Occupation by Sex and Median Earnings in the Past 12 Months (in 2014 Inflation-Adjusted Dollars) for Full-Time, year Round civilian Employed Population 16 Years and Over,* Washington, DC: American FactFinder.

U.S. Census Bureau, 2015d. *S1301: Fertility,* Washington, DC: American FactFinder.

U.S. Census Bureau, 2016b. *S2303 Work Status in the Past 12 Months,* Washington, DC: American FactFinder.

U.S. Census Bureau, 2016c. *Table B12007: Median Age at First Marriage, Universe: Population 15 to 54 years,* Washington, DC: American FactFinder.

U.S. Census Bureau, 2016. *Number of Firms, Number of Establishments, Employment, and Annual Payroll by Enterprise Employment Size for the United States and States, Totals: 2013,* Washington, DC: Statistics of Small Businesses.

U.S. Census Bureau, 2016. *S2405: Industry by Occupation for the Civilian Employed Population 15 Years and Over,* Washington, DC: American FactFinder.

U.S. Code, 1946. *Federal Unemployment Tax Act of 1946.* 26 § 3304: LexisNexis.

U.S. Code, 1993. *The Family and Medical Leave Act of 1993.* 29 § 2601-2654: LexisNexis.

U.S. Department of Defense, 2016a. *Carter Announces 12 Weeks Paid Military Maternity Leave, Other Benefits,* Washington, DC: s.n.

U.S. Department of Defense, 2016. *Leave and Liberty Policy Procedures,* Washington, DC: s.n.

U.S. Department of Health and Human Services, 2011a. *Women's Health USA 2011,* Washington, DC: Health Resources and Services Administration.

U.S. Department of Health and Human Services, 2011. *The Surgeon General's Call to Action to Support Breastfeeding,* Washington, DC: Office of the Surgeon General.

U.S. Department of Health and Human Services, 2013. *Missed School Days: Number of School Days that Children Missed in the Past 12 Months Due to Injury or Illness,* Rockville, MD: Agency for Healthcare Research and Quality.

U.S. Department of Health and Human Services, 2016. Annual Update of the HHS Poverty Guidelines. *Federal Register*, 25 January.

U.S. Department of Labor, 2008. *29 CFR Part 825 The Family and Medical Leave Act of 1993.* Washington, D.C.: U.S. Government Publishing Office.

U.S. Department of Labor, 2015a. *News Release: Department Awards $1.55M to Study Paid Family, Medical Leave Implementation.* [Online]
Available at: http://www.dol.gov/opa/media/press/wb/WB20151927.htm

U.S. Department of Labor, 2015. *Older Women Workers and Economic Security,* Washington, DC: U.S. Department of Labor.

U.S. Department of Labor, 2016. *Comparison of State Unemployment Laws,* Washington, DC: s.n.

U.S. Government Accountability Office, 2007. *Women and Low-Skilled Workers: Other Countries' Policies and Practices That May Help These Workers Enter and Remain in the Labor Force,* Washington, DC: U.S. Government Accountability Office.

Virginia General Assembly, 2015. *HB 2008 Paid Sick Leave for Employees; Civil Penalties.* Richmond, VA: Virginia General Assembly.

Waldfogel, J., 1997. The Effect of Children on Women's Wages. *American Sociological,* 62(2), pp. 209-217.

Waldfogel, J., 1998. Understanding the 'Family Gap' in Pay for Women with Children. *The Journal of Economic Perspectives,* 12(1), pp. 137-156.

Waldfogel, J., 1999. The Impact of the Family and Medical Leave Act. *Journal of Policy Analysis and Management,* 18(2), pp. 281-302.

Waldfogel, J. & Berger, L., 2004. Maternity Leave and the Employment of New Mothers in the United States. *Journal of Population Economics,* 17(2), pp. 331-349.

Waldfogel, J., Higuchi, Y. & Abe, M., 1999. Family Leave Policies and Women's Retention after Childbirth: Evidence from the United States, Britain, and Japan. *Journal of Population Economics,* 12(4), pp. 523-545.

Ward, B., Schiller, J. & Goodman, R., 2014. Multiple Chronic Conditions Among US Adults: A 2012 Update. *Preventing Chronic Diseases,* Volume 11.

Warner, R., Appleby, L., Whitton, A. & Faragher, B., 1996. Demographic and Obstetric Risk Factors for Postnatal Psychiatric Morbidity. *The British Journal of Psychiatry,* 168(5), pp. 607-611.

White, G., 2015. Millennials in Search of a Different Kind of Career. *The Atlantic*, 12 June.

Wilde, E. T., Batchelder, L. & Ellwood, D., 2010. *The Mommy Track Divides: The Impact of Childbearing on Wages of Women of Differing Skill Levels,* Cambridge, MA: National Bureau of Economic Research.

Williamson, M. W., 2016. *A Better Balance* [Interview] (23 May 2016).

Winegarden, C. & Bracy, P., 1995. Demographic Consequences of Maternal-Leave Programs in Industrial Countries: Evidence from Fixed-Effects Models. *Southern Economic Journal,* 61(4), pp. 1020-1035.

Winston, P., 2014. *Work-Family Supports for Low-Income Families: Key Research Findings and Policy Trends,* Washington, DC: U.S. Department of Health and Human Services.

World Bank, 2012. *The Effect of Women's Economic Power in Latin America and the Caribbean,* Washington, DC: World Bank.

World Bank, 2016. *Mortality Rate, Infant (Per 1,000 Live Births),* Washington, DC: The World Bank.

World Health Organization, 2002. *Infant and Young Child Nutrition: Global Strategy on Infant and Young Child Feeding.* Geneva, World Health Organization.

Notes

[1] As of 2013, the District was home to over 17,300 private sector businesses and organizations that employed about 491,000 people. Together, their gross revenues totaled $213.46 billion in 2012, and their payrolls totaled $35.13 billion in 2013. While the majority of firms in DC (73 percent) had less than 20 employees, larger enterprises controlled a greater share of the District's economy. These organizations accounted for 94 percent of DC's gross receipts in 2012. Further, larger enterprises provided approximately 89 percent of DC's private-sector jobs (U.S. Census Bureau, 2016). Two industries dominated private sector employment in the District: professional and business services (at 31 percent) and educational and health services (at 25 percent). In comparison, the leisure and hospitality industry made up 14 percent of private sector jobs; and trade, transportation, and utilities and financial services each constituted 6 percent as of May 2016 (Bureau of Labor Statistics, 2016f).

[2] It should be noted that these studies are not randomized controlled trials, and companies that choose to provide greater family friendly employment benefits may differ in fundamental but unmeasured ways than companies that did not.

[3] It should be noted that these surveys were based on relatively small sample sizes and relied upon managers' perceptions of the impact of the state programs; therefore, their findings may not accurately reflect the policies' true impacts or be generalizable.

[4] The infant mortality rate measures the number of deaths of children one year old and younger for every 1,000 live births. The infant mortality is an important indicator of a community's overall health, as it is associated with maternal health, quality and access to medical care, and socioeconomic conditions (MacDorman, et al., 2014).

[5] Breastfed babies are at lower risk of contracting a range of common childhood illnesses; serious medical conditions such as type II diabetes, asthma, and childhood obesity; and rare but severe diseases including sudden infant death syndrome and leukemia (U.S. Department of Health and Human Services, 2011; Ip, et al., 2007; Centers for Disease Control and Prevention, 2007b). Studies have found that breastfeeding boosts an infant's immune system and response to vaccination, and some evidence suggests that it enhances cognitive development (Cai, et al., 2012). Empirical research also suggests that mothers may benefit from lactation. Mothers who did not breastfeed or stopped breastfeeding early were more likely to suffer from postpartum depression (Warner, et al., 1996; Cooper, et al., 1993; Henderson, et al., 2003). Breastfeeding has been linked to lower risks of type II diabetes and breast and ovarian cancer in women (Ip, et al., 2007; Collaborative Group on Hormonal Factors in Breast Cancer, 2002).

[6] While District law gives women the right to breastfeed in any location, employers are not required to provide break-time for expression of milk if it would create an undue hardship on the operations of the employer. The law encourages employers to provide a sanitary room to express breast milk in private (DC Official Code § 32-1231.01-15). The Council unanimously passed, yet has not funded, legislation in 2014 to establish a public breastmilk bank and lactation support center (DC Official Code § 7-881.01-11).

[7] Washington State passed paid family leave legislation in 2007 with $6.2 million in start-up funding but without an ongoing funding mechanism. To date, the state has not implemented its program and so will not be considered for benchmarking purposes (Social Security Administration, 2015).

[8] Some of the District's neighboring jurisdictions have considered—and in some cases enacted—paid sick day mandates. Such mandates generally require employers to pay wages to an employee when they take a few days off of work to recover from routine health issues (such as a cold or the flu). In April 2016, the Maryland House of Delegates passed a paid sick leave bill, but it still has to clear the Senate and win the Governor's support before it can become law. Paid sick leave legislation introduced to the Virginia state legislature died in 2015 without a vote, as did a similar bill before the Prince George's County Council (Sauers, 2015; Hernández, 2015; Virginia General Assembly, 2015). In contrast, Montgomery County passed a law in June 2015 requiring that businesses with five or more employees provide full-time staff with up to two weeks of paid sick leave per year. Further, the county received a U.S. Department of Labor grant in September 2015 to study the feasibility of implementing paid family and medical leave (U.S. Department of Labor, 2015a).

[9] New York is phasing in a 67 percent wage replacement rate for paid family leave benefits.

[10] On July 1, 2016 the District raised its minimum wage to $11.50 per hour. The "Fair Shot Minimum Wage Amendment Act of 2016" will progressively increase DC's minimum wage to $15 an hour by 2020 (DC Law 21-144).

[11] Since 2010, employers in New York have had the option to provide their employees with greater disability benefits than the statutory requirement. Employers can choose to enroll in the state's Enriched Disability Insurance plan, which offers a maximum weekly benefit payment that is up to five times greater than the statutory maximum, or $850 (New York State Insurance Fund, 2016).

[12] Employers in California may only require employees to use accrued and unused paid vacation days.

[13] Pregnant women in New York, Hawaii, and Puerto Rico may also qualify for paid short-term disability leave if pregnancy or childbirth renders them unable to perform their normal job functions, but, unlike women in states that mandate paid family leave, they are not guaranteed paid time off to bond with their newborn baby.

[14] California, New Jersey, and Rhode Island each maintain a single fund covering both their paid disability and family leave benefit programs.

[15] People ages 15 to 44 years make up 51.4 percent of the District's population, as compared to 40.0 percent of the U.S. population.

[16] The age patterns among bonding leave and caregiving leave claimants differed. In New Jersey, 99.0 percent of eligible bonding claimants were under the age of 45. The majority of leave takers were between the ages of 25 and 34 (64.4 percent), and 29.5 percent were ages 35 to 44. In contrast, family caregivers skewed older. New Jersey reported that 62.6 percent of eligible caregiving claimants were age 45 and older. Women were more likely than men to use California, New Jersey, and Rhode Island's state family leave benefit plan. Women made up 65.7 percent of eligible bonding leave beneficiaries in California and Rhode Island, and 87.1 percent in New Jersey. Women also made up the majority of eligible family caregiving claimants. They accounted for 65.8 percent of California's caregiving leave takers, 74.5 percent of New Jersey's, and 68.4 percent of Rhode Island's.

[17] Workers excluded from San Francisco's parental leave ordinance due to their firm's size would still be covered by the state's paid leave program.

[18] The Ocean State's temporary disability insurance law defines a caregiver's role as "providing psychological comfort, arranging third-party care for the family member as well as directly providing, or participating in the medical and physical care of the patient."

[19] California widened its family definition in 2014 in the wake of a study published by the California Senate Office of Research in 2007. The report found that the state had rejected 10 percent of family care claims filed in FY 2005 and 2006 because they were to support a relative outside of the program's family member definition. Most of California's denied claims were filed for siblings (35 percent), followed by grandparents (19 percent), and parents-in-law (10 percent) (Sherriff, 2007).

[20] The U.S. Department of Defense offers paid medical and parental leave benefits to service members across the joint forces, but this benefit is not available to their family members. This paid time off includes 30 days of medical leave, 12 weeks of maternity leave, 10 days of parental leave, and 21 days of adoption leave. Secretary Ashton Carter has also requested Congress to expand the Department's paternity leave benefit to 14 days (U.S. Department of Defense, 2016; 2016a).

[21] The FMLA requires continuation of group health insurance coverage under the same terms and conditions as if the employee had not taken leave. After returning from leave, the FMLA and DCFMLA give employees the right to return to the same or an equivalent job with the same pay, benefits, and working conditions. Both laws prohibit employers from retaliating against workers for taking leave.

[22] Other states with job-protected unpaid family or medical leave laws include California, Connecticut, Hawaii, Maine, Massachusetts, Minnesota, New Jersey, Oregon, Rhode Island, Vermont, Washington, and Wisconsin (National Conference of State Legislatures, 2014).

[23] There are three key differences between the DCFMLA and the FMLA. First, the DCFMLA applies to a broader set of employers and workers. The District's law covers employers with 20 or more employees, whereas the FMLA only applies to employers with 50 or more employees. The DCFMLA extends rights to workers who have served at least 1,000 hours with their current employer during the previous year, in contrast to the FMLA which requires 1,250 hours. Second, the laws take different approaches to leave takers who use both family and medical leave. DCFMLA allows 12 weeks of family leave and 12 weeks of medical leave in any 12-month period, while the FMLA allows for a total of 12 weeks of leave for family and medical leave. Third, the DCFMLA has a more expansive

definition of family. The District's law includes those related by blood, legal custody, marriage, or sharing a mutual residence and in a committed relationship. In contrast, the FMLA is limited to spouses, children, and parents. In the case of military-related leave, the FMLA's family definition also includes next of kin.

[24] Four in every ten leave takers were out of work for 10 days or less, and only 17 percent of them took leave for more than 60 days. Most workers (60 percent) who took leave for an FMLA-qualifying reason in 2012 received some pay while out of work, usually they did so by applying their paid vacation leave, sick days, or other forms of paid time off. Forty-eight percent of FMLA leave takers reported receiving full pay and another 17 percent received partial pay, but rates of full pay dropped off significantly for leaves of more than 10 days. Full pay was provided for 60 percent of leaves lasting 10 days or less, compared to 40 percent of leaves that were longer than 10 days. The data show that after 10 days of leave, it was common for workers to have run through their accumulated bank of paid vacation and sick days while on FMLA leave (Abt Associates Inc., 2014).

[25] Among those excluded are the approximately 56,00 workers employed by firms with less than 20 workers and an estimated 91,400 employees who have worked for their current employer for less than a year. The latter figure was calculated by multiplying the number of those at enterprises with more than twenty employees (435,129 workers) by the Bureau of Labor Statistic's estimate of the percent of U.S. wage and salary workers that have less than a year tenure with their current employer (21.3 percent). Nationally, 41 percent of employees are ineligible for FMLA leave (Abt Associates Inc., 2014).

[26] Among those workers surveyed who went on family or medical leave during the prior 18 months, 46 percent said that they returned to work when they did because their financial strains were too great to stay out any longer. The financial pressure of FMLA leave may be felt by low and high income families alike. Higher income families were more likely to report being unable to afford taking additional unpaid leave than lower income families (53 versus 37 percent) (Abt Associates Inc., 2014).

[27] Access to FMLA rights is unevenly distributed across the labor force. Younger workers, black and Latino people, women, and those with part-time jobs are less likely to qualify for DCFMLA/FMLA leave than other workers. One in every four workers (27 percent) ages 25 to 34 years old had been with their current employer for less than a year, compared to just one in every ten (9 percent) workers ages 55 to 64. If the District's tenure trends mirror national trends, this means that a quarter of working women and men in prime childbearing age in the city could be ineligible for job-protected FMLA leave based on its tenure requirements alone. Workers who are black or Latino were also more likely than white or Asian workers to fail to meet the law's time-in-job test. While 79 percent of white and 82 percent of Asian workers had tenures of one year or more, this was true of 75 percent of black workers, and 76 percent of Latino workers in the U.S. Across all races, women were 4 percent more likely than men to have been with their current employer for fewer than 12 months (Bureau of Labor Statistics, 2014). Workers of color and workers in low-paying jobs may be more likely to work in smaller firms that are excluded from DCFMLA and FMLA (Levine, 2008). Fewer women than men in the workforce may fulfill the DCFMLA and the FMLA's threshold for hours worked in the previous 12 months. Women in the District on average work fewer hours per week than men, and nationally women are more likely to balance multiple part-time jobs. Data from the Bureau of Labor Statistics shows that U.S. women are more likely than men to hold multiple jobs, so while their total hours worked might seem to qualify them for job-protected leave they might not be able to clock an average of 20 hours per week with each of their employers to meet the law's threshold. Working women in DC also tend to clock fewer hours on the job than men. Employed women in the District were also 50 percent more likely than employed men to work part time (14 versus 9 percent) (U.S. Census Bureau, 2016b).

[28] The odds that employees in the so-called "sandwich generation" needed more days of leave than they were able to take was 69 percent higher than employees over age 50 and 42 percent greater than those age 33 and younger (Abt Associates Inc., 2014).

[29] The South Atlantic Region, as defined by the NCS, includes the District of Columbia, Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia. Due to the limited sample size of the underlying survey, NCS estimates are unavailable for DC or its metropolitan area.

[30] The Government Family Leave Program Amendment Act of 2014 applies to all District employees, including those that work for independent agencies, such as the University of the District of Columbia (DC Department of Human Resources, 2015).

[31] Among U.S. working parents, those whose youngest child was 13 years of age or older were 7.9 percentage points more likely to have any paid leave than parents whose youngest child was an infant (84.2 versus 76.3 percent). Employed parents of older children had paid leave benefits at a rate 6.3 percentage points higher than parents whose youngest child was 1 to 3 years old. Further, across the board single working parents were 7.7 percentage points less likely to receive employer-provided paid leave than working parents that were married (73.8 versus 81.5 percent). The Urban Institute reported that working mothers have lower access to any paid leave days than working fathers, at rates of 76.2 versus 83.5 percent. Those working mothers that did receive paid time off also tended to receive fewer weeks of leave than working fathers. For example, 12.9 percent of working mothers had a week or less of paid leave compared with 9.6 percent of working men (Phillips, 2004).

[32] National data reveals that the number of paid vacation days provided to private sector employees is positively correlated with length of service. In other words, the longer that an employee has worked for their current employer the more vacation days they are likely to receive. Younger workers who have had less time in the workforce and may be more prone to moving jobs receive fewer days of paid vacation than older workers.

[33] The Budget Office estimated salary offsets as a percentage of total annual wages and salaries in each industry sector, based on the following formula and using data from various sources about access to paid leave, likelihood of taking paid leave, average length of paid leave. These sources include the National Compensation Survey and the U.S, Department of Labor's FMLA Survey. *Salary spent on workers taking paid leave = [(Probability of worker being on FMLA leave)*(Average length of FMLA leave)*(Probability of workers receiving full pay)] + [(Probability of worker being on FMLA leave)*(Average length of FMLA leave)*0.5*(Probability of receiving partial pay)]*

[34] The REMI results showing an immediate loss of jobs in the first year of the program (during which the payroll tax is collected but no benefits are paid out) are not significant, because the strength of the model relates to predictions in the five-year and ten-year timeframes.

[35] The sources of uncertainty fall in to three general categories: 1) uncertainty and potential error with respect to the structure of the model, and its ability to accurately simulate the dynamics of the regional economy; 2) uncertainty in estimates of structural economic parameters; and 3) uncertainty in the forecasts of economic variables needed to drive the model (Giarratani & Houston, 2010).