The Taxpayer Benefits of Supporting Student Parents
An Analysis of Three Policy Options for Virginia’s Public Colleges

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Nationally, approximately one in six undergraduates at public colleges are student parents. In Virginia, the figure is one in eight. Being a student parent means pursuing a college degree while caring for a child,\(^1\) and despite earning similar or better average grades than their childless peers (Reichlin Cruse et al. 2019),\(^2\) student parents are about twice as likely to leave college before graduating.\(^3\) Supporting this population can promote college access, boost degree attainment, and enhance state economic competitiveness. This brief considers three options for increasing graduation rates among student parents in Virginia public colleges: establish a comprehensive student-parent support program on each campus, distribute grant aid, and expand on-campus child care. This analysis suggests that all three options have a positive return on investment to taxpayers. The creation of a comprehensive student-parent support program has the highest return on investment: Every dollar invested in this program would yield an estimated $5.36 in tax revenue and public-benefit savings, resulting in an estimated $1.9 billion in public benefit net of costs by 2035. This is only based on estimated growth in federal, state, and local tax revenue and decreases in benefit-program costs; it does not include the many individual, family, and social benefits from degree attainment, which would provide additional returns.
Background

In the traditional model of US higher education, young adults ages 18 to 22 leave high school to become full-time college students. They often rely on their families for financial support, and the majority are white, middle or upper-income, unmarried, and without children. Students from other backgrounds have been historically underrepresented in higher education, even as they become the numerical majority; nonetheless, a harmful stereotype of the “typical” college student persists that excludes the experience of most of today’s collegegoers (Monarrez and Washington 2020).

According to data derived from a nationally representative US Department of Education survey conducted in 2020, at least 16 percent of all undergraduate students at public colleges in the US claimed dependent children, representing more than 2 million student parents in public institutions. In Virginia, the rate was 13 percent, amounting to more than 55,000 student parents attending public colleges in the state.

Nationally, student parents are more likely to be female and more likely to identify as Black or American Indian/Alaska Native than students without children. In Virginia, student parents are older and more likely to come from marginalized groups than their peers: 77 percent are women, 56 percent are people of color, and 82 percent are over age 24. Black female undergraduates are about 26 percent more likely to have a child dependent than white female undergraduates. Figure 1 summarizes the racial, gender, income, and enrollment characteristics of student parents in public colleges nationally compared with student parents and nonparenting students at public colleges in Virginia.

Financial stress can adversely affect student outcomes (Joo et al. 2008; Letkiewicz et al. 2014; Mukherjee et al. 2017). Student parents are more likely to live in households with low incomes than their peers. In Virginia, 49 percent of student parents live in households with an annual income below 150 percent of the federal poverty level, relative to 31 percent of nonparents. Relatedly, over one-quarter (28 percent) of student parents were food insecure in the 30 days before the survey, relative to a food insecurity rate of 18 percent among nonparents. Perhaps unsurprisingly given these figures, students with children reported financial concerns as a recurring struggle in qualitative research (Marandet and Wainwright 2010; Moreau and Kerner 2015; Sallee and Cox 2019).

Child care is a major hurdle for many student parents. Only 20 percent of students in the Virginia Community College System (VCCS) were in colleges that provided child care on campus during the 2019–20 school year—ranking Virginia 40th out of 49 US state community college systems. Child care is repeatedly identified as a barrier and stressor for student parents (Palmer 2024; Reichlin Cruse et al. 2021; Williams et al. 2022).
In addition to financial constraints and child care needs, student parents face other obstacles in college. They have limited time while balancing caring for a child with schoolwork: on average, student parents spend 74 additional hours per week on nondiscretionary tasks relative to nonparents, even after controlling for demographic differences (Wladis et al. 2018). In qualitative interviews, student parents frequently express feelings of isolation on campus (Mahaffey et al. 2015; Moreau and Kerner 2015; Rhijn 2014), which may relate to a history of trauma, basic needs insecurity, guilt, and hesitation to reach out for help (Ascend at the Aspen Institute and The Jed Foundation 2021). They may also have
difficulties participating in campus activities (Peterson 2016) and are more likely to live off campus, where engaging in student life can be more challenging (Mahaffey et al. 2015). A lack of “family friendliness” on college campuses can exacerbate isolation (Ascend at the Aspen Institute and The Jed Foundation 2021; Green and Anderson 2023).^{11}

The intersectionality of marginalized identities, when coupled with time constraints, makes it difficult for student parents to finance education, ensure their families’ basic needs are met, and feel like they belong in college. National survey data show that only 17 percent of student parents complete any degree in six years, compared with 50 percent of nonparenting students.^{12} After accounting for age, gender, race, and type of institution in which they first enrolled, student parents are 55 percent less likely to complete a degree than nonparenting students.^{13}

Although they struggle to graduate, a desire to support their families often increases student parents’ motivation to obtain a degree, therefore improving academic performance (Roy et al. 2018).^{14} Student parents earn equivalent or higher grades compared with other students (Reichlin Cruse et al. 2019).^{15}

In addition to increasing academic attainment among the current student population, better support for student parents could increase college enrollment. In 2019, an estimated 395,000 parents in Virginia ages 15 to 60 with coresident minor children had completed some college but did not hold four-year college degrees and were not enrolled in school. Another 300,000 parents in Virginia had no college experience.^{16} This represents a potentially large market for Virginia’s public colleges to target for recruitment.

Student parents also represent a large pool of workers who could support state economic and social health. On average, bachelor’s degree holders earn 67 to 79 percent more than high school graduates (Baum 2014; Ma, Pender, and Welch 2016). Completing a two-year degree yields average earnings gains of 18 percent for males and 26 percent for females on average (Belfield and Bailey 2017). Analysis of long-term outcomes for student mothers shows that reenrolling in school is associated with earnings gains averaging $2,732 per year (a 9 percent increase),^{17} and the gains reach $8,934 per year for those who complete a college degree (a 28 percent increase),^{18} relative to very similar mothers who do not reenroll in school (Anderson 2022). An estimated increase of 27 percentage points in graduation rates for one class of students would lift 48,000 people out of poverty nationally (Whistle 2019). College graduates also live longer and are more likely to participate in civic activities (American Academy of Family Physicians 2021; Cowan and Tefft 2020; Perrin and Gillis 2019). The children of college graduates have more educational and economic opportunities than those of their peers, experiencing long-term gains in college attendance, completion, and early-career earnings (Anderson 2022). Specifically, children whose mothers reenroll in school and attain a college degree are 38 percent more likely to get a college degree themselves, relative to children of very similar mothers who did not reenroll in school (Anderson 2022). This means that investing in student parents may have lasting intergenerational effects.
Policy Options

We consider three interventions to support student parents in Virginia: a comprehensive student-parent support program on college campuses, grant funding, and on-campus child care. Although not the only possible interventions, they are feasible and have a research base behind them. For each option considered here, we find the public benefit (in dollars) of the additional graduates created under each option and divide that value by the total costs.

We find that all interventions considered in this analysis have higher economic returns to taxpayers than costs, but a comprehensive student-parent support program achieves the highest taxpayer return per dollar spent. This policy would raise graduation rates and support student-parent success, which would likely benefit families and the state at large. The remainder of this brief summarizes the details of these policy options and the analysis findings.

Option 1: Establish a Comprehensive Student-Parent Support Program on Public College Campuses

Under the proposed policy, the state legislature would pass a law creating a comprehensive student-parent support program at all public colleges. These programs would consist of

- an on-campus office for student parents with child-friendly study spaces,
- an average of four benefits navigators focused on student parents in each office, though the office size could be adjusted proportionally to the size of the college’s student parent population,
- early registration and flexible scheduling options,
- tuition waivers covering the financial aid gap for parents, and
- student-parent resource groups.

Offices and events would be available to all students with children; however, student parents with low incomes would receive priority for benefits navigation services. Individual college campuses would administer these programs.

SUPPORTING RESEARCH AND PRACTICE

Many schools have focused on interventions that make preexisting benefits more accessible. Saint Catherine’s University in Minnesota maintains student-parent graduation rates comparable with their general student population. A study by Demeules and Hamer (2013) attributes much of this difference to their Access and Success program, which connects student parents with resources to support their basic needs, advocates for student parents on campus, and helps student parents find child care and babysitter services. A 2013 initiative implemented Single Stop at the Community College of Philadelphia, a program that provides benefits screening, application assistance, and counseling.
An evaluation of the program suggests Single Stop improves retention (Zhu et al. 2018). Across Virginia, this program is provided primarily virtually for students with economic need.

The size of the graduation gap for student parents signals a need for more high-touch, targeted interventions. The structure of this intervention is based on the City University of New York (CUNY) Accelerated Study in Associate Programs (ASAP) model evaluated by the firm MDRC. That evaluation found that the intervention almost doubled graduation rates after three years and allowed students who had developmental education experience to complete degree requirements more quickly (Gupta 2017). In addition, a cost-benefit analysis found an average savings of $9,400 per graduate (Levin and Garcia 2013).

In addition to the comprehensive ASAP model, which showed large positive impacts on college outcomes along with cost savings, the components of this program model have been implemented in other contexts. Various colleges offer student-parent centers (sometimes also called family resource centers), though this is not common practice in Virginia. Some colleges have established student-parent centers that provide child-friendly areas to study and meet other students. For example, the family resource center at the City College of San Francisco describes itself as follows:

The Dr. Betty Shabazz Family Resource Center (FRC) recognizes the unique needs of students who are parenting while in school. The FRC provides CCSF student parents access to free child care during class time, a quiet space to do homework in a child-friendly computer lab, a network of other student parents, and support through resource referrals. The FRC also offers a supervised children’s activity room.

To date, no published evidence is available on the effects of these student-parent centers or family resource centers on enrollment or retention of student parents.

Many colleges have hired benefits navigators to connect students with safety net programs. Oregon passed legislation in 2021 requiring all public universities to have a benefits navigator on staff, and California is exploring similar policies. In 2023, Texas legislated that public institutions of higher education employ liaison officers to assist students who are parents, a role still being developed but will likely have many similarities to a navigator. Most navigators create explicit connections between public administrators and safety net offices, streamlining the assistance process (Gault and Reichlin Cruse 2016). This support is important because prior research has shown that students with low incomes struggle to access public benefits for which they may be eligible. In a survey of over 10,000 community college students in Virginia, researchers found wide gaps between those who qualified for assistance and those who received it: Of the students who experienced basic needs insecurity, only 54 percent received public assistance, most commonly public health insurance (Baker-Smith et al. 2021). In addition, of students who were eligible for VCCS campus support but did not seek it out, 71 percent believed that they were ineligible, 46 percent did not know the program existed, and 46 percent did not know how to apply (Baker-Smith et al. 2021).

Scheduling flexibility is a common challenge for students with children, who may face substantial scheduling constraints due to child care arrangements and other family considerations. California passed legislation in 2022 mandating colleges give student parents priority registration within the
California State University system and each community college district, and Texas passed a similar requirement in 2023. Other states and colleges are considering similar actions. Policymakers have considered various strategies to make class schedules more flexible, including block scheduling and offering classes at irregular hours (Gault and Reichlin Cruse 2016).

In 2018, student parents in Virginia public colleges had remaining tuition after grants averaging about $895 per year. Unmet financial need drives students with family responsibilities into non-work-study employment, straining their focus on academics. This has been a major component of student role overload and dropout (Williams et al. 2022).

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College at this point in 2020 is extremely hard...[and it] doesn’t matter if I eat only one meal a day.... [I need] money to help with day care [and to] put food on the table—[it’s] hoping that you get a grant check from school and then [realizing] that you won’t and you’ve been expecting some kind of money to buy the kids some shoes or a snack.
—VCCS student parent quoted in Baker-Smith et al. (2021)

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Student-parent resource groups can help address social isolation, which research suggests is particularly high among student parents (Moreau and Kerner 2015). Social isolation is associated with various negative effects, such as mental health issues, that could impact graduation rates (Ascend at the Aspen Institute and The Jed Foundation 2021). Support groups may raise graduation rates, just as increased involvement in campus activities is positively correlated with the likelihood of graduation (Mahaffey et al. 2015). Various colleges provide student parents with peer support. At the University of Alabama, administrators provide an online forum for student parents. The University of Minnesota – Twin Cities hosts student parent lunches.

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I was in this room full of all these young people, and I thought, “What am I doing here?” I felt ridiculous...I felt out of place. I felt silly. I started to question myself.
—Student parent quoted in Rhijn (2014)
Option 2: Give Parents College Scholarship Assistance Program Grants

Although Virginia does not control federal Pell Grant allocation, the state provides additional need-based aid through College Scholarship Assistance Program (CSAP). Eligibility for funding is determined by the Free Application for Federal Student Aid (also known as FAFSA). Under this option, parents under the federal poverty level would receive an average of $3,000 annually through the existing CSAP grant structure. Benefits would slowly phase out (i.e., decline) until income rises above 150 percent of the federal poverty level. Funding would flow through preestablished financial aid systems at each institution with colleges first applying the money toward tuition balances. Leftover funding would be awarded to student parents in the form of cash payments. This policy addresses basic needs insecurity and college debt among student parents. It also functions as a financial incentive for student parents to attend public colleges as opposed to private, for-profit universities, where they are overrepresented (Anderson, Reichlin Cruse, and Gault 2017; Institute for Women’s Policy Research 2012).

This option would maintain the preexisting CSAP administration framework and eligibility requirements; however, the state legislature would increase funding for student parents. In line with research that shows grants tied to nonacademic supports are more effective, we include a requirement for student parents to complete the Single Stop module once per year. To reduce the effect on take-up, this requirement would only apply after receipt of the first payment.30

SUPPORTING RESEARCH AND PRACTICE

Evidence suggests that grants are highly effective in boosting student graduation rates (Anderson et al. 2019; Castleman and Long 2016; Denning et al. 2017; Dynarski 2003; Franke 2014; Scott-Clayton 2011). A study by Goldrick-Rab and colleagues (2016) ran a random lottery in Wisconsin to observe the effect of grant funding on low-income students, finding it significantly increased on-time graduation rates by about 5 percentage points from a baseline of 16 percent—an increase of nearly one-third. A regression discontinuity experiment found that eligibility for a $2,400 Florida Student Access Grant increased the likelihood of graduating in six years with a bachelor’s degree by age 22 (Castleman and Long 2016).31 A limit to each of these studies is their generalizability; if students with children respond differently to aid than the general student population, the effect size could change.

Grant aid also increases enrollment in public colleges. An increase in grant or college subsidy funding by $1,000 increases enrollment by 3 to 4 percentage points (Deming and Dynarski 2009; Denning et al. 2017; Dynarski 2003)—though that dollar value should be adjusted for inflation over time. Eligibility for a Florida Student Access Grant led to a 12 percent increase in enrollment relative to a baseline of 26 percent (Castleman and Long 2016).

Higher enrollment of student parents would increase the number of graduates; however, it could also raise the number that leave college before completing a degree. To ensure students who enroll progress to graduation, new grants could have attachments to nonfinancial support. Linking grant programs to academic incentives or support services increased the effect size in past studies (Deming and Dynarski 2009). In a study of the West Virginia PROMISE Program, a need-based grant with a minimum grade-point average requirement, researchers found that academic improvements were most
pronounced around scholarship renewal periods (Scott-Clayton 2011). A 2018 study in North Carolina found the grant program only had positive impacts on student graduation rates after administrators added nonfinancial services (Clotfelter, Hemelt, and Ladd 2018).

Finally, giving grants to student parents is not unprecedented. In Canada, the federal government awards student parents with low incomes who are enrolled in college full time $2,240 per child annually.32

Option 3: On-Campus Child Care

Under this policy, the state government would create an on-campus child care system in all Virginia public colleges. As noted above, only 20 percent of VCCS students have child care available on their campuses. Program funding would be shared between the state government, VCCS, and public universities. Each family would contribute $2,000 annually per child ($200 per month for 10 months of care), though providers would accept Child Care and Development Fund subsidies for students who qualify for public support. Community colleges could also use Child Care Access Means Parents in School (CCAMPIS) grants to further subsidize child care for student parents.

These child care centers would adhere to all licensing requirements under the Virginia Department of Education.33 Each program would enroll an average of 550 children; some would be enrolled part time, which would help maintain a feasible physical center size. Staff would vary depending on location-specific demand; however, schools with early childhood education programs would be encouraged to use students as assistants. In public colleges, all student parents with low income (below 150 percent of the federal poverty level) would be eligible for campus child care, though there might still be capacity constraints based on center size.34 These centers would also include an area for student parents to study.

In addition, all student parents, regardless of enrollment in the child care center, would be able to drop their children off for temporary care. The duration of this care would not exceed two hours, and the parent would be required to remain on the premises. This strategy would provide time for student parents to study, attend class, or meet with faculty or advisors without requiring them to enroll their children in regular care.

SUPPORTING RESEARCH AND PRACTICE

Although child care is necessary for parents in school and work, it is prohibitively expensive for many student parents. Virginia ranks 15th in the nation for highest child care costs, averaging $15,288 per child in 2021 (Cattanach 2024; Workman 2021). The only federal child care assistance program intended for student parents is the CCAMPIS grant; colleges can apply to the federal government to offset the cost of providing care for students’ children and other related supports.35 Experts estimate the fund only serves 1 percent of the parents that qualify, though the size of the grants increased in 2022.36 In recent years, only 11 percent of Virginia’s public child care subsidy caseload received child care support for the parents’ school or training, lower than the national average (Adams et al. 2022).
Even student parents who can afford child care may struggle to find options that align with a college schedule.

A reasonable body of qualitative evidence demonstrates that child care helps student parents (Baskerville 2013). An early study by Fadale and Winter (1991) documented a positive relationship between campus-based child care and student parent enrollment and persistence after distributing surveys to 27 State University of New York child care centers. Studies have since found that those using campus child care have higher retention rates (DeMario 2021; Reichlin Cruse et al. 2021; Willen 2020), though these studies do not always control fully for different student characteristics. An analysis of data from 2006 to 2014 showed that 27.9 percent of student parents that used on-campus child care graduated on time after three years (DeMario 2019, 2021). Among students who did not use the service, only 7.9 percent graduated or transferred. The differences in graduation rates may be partially due to the unobservable differences between the two groups. Observational evidence from three studies supports an estimate that child care boosts graduation rates by an average of 20 percentage points from baseline (Adams et al. 2022). With a baseline graduation rate of 16.5 percent among Virginia parents, an increase of 20 percentage points to 36.5 percent would be a growth rate of 121 percent.

Despite this evidence, the availability of campus child care has declined nationwide.37 Public universities cite budget cuts, the complexities of insurance, and a lack of capacity to justify removing these services.38 In Virginia, the legislature does not allocate resources to colleges for child care, and only seven Virginia public colleges received a CCAMPIS grant in the 2019 through 2022 grant years.39 A notable child care financing model is in New York state, which distributes a share of their federal Child Care Development Fund grants to the State University of New York and the City University of New York systems to support a portion of campus child care costs.40

Assessment of the Options

Based on the literature cited, we calculate the public return per dollar spent for each policy option.

Methodology Overview

To calculate return on investment, we first establish the baseline number of student parent graduates in Virginia under the status quo through 2035. We then use existing impact studies to find the number of additional graduates generated under each policy option (table 1). We calculate the net present value of the intervention costs using these estimates from the literature, adjusted with clearly stated assumptions (see details for each option in the Findings section). To find the net present value of the public benefits (i.e., increased tax revenues and decreased spending on social programs) of a college graduate with an associate’s degree relative to a nongraduate, we use findings on the fiscal impacts of college attainment from a study by Trostel (2010), adjusted for the Virginia context.
<table>
<thead>
<tr>
<th>Policy option</th>
<th>Relevant study</th>
<th>Comparable intervention</th>
<th>Study finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1: Student-parent support program</td>
<td>Strumbos and Kolenovic (2017)</td>
<td>Accelerated Study in Associate Programs</td>
<td>49 percent increase in six-year associate’s and bachelor’s degree attainment</td>
</tr>
<tr>
<td>Option 2: College Scholarship Assistance Program grants</td>
<td>Castleman and Long (2016)</td>
<td>$(2000)1,300 Florida Student Access Grant, or $(2024)2,400</td>
<td>12 percent increase in college enrollment 22 percent increase in six-year bachelor’s degree attainment</td>
</tr>
<tr>
<td>Option 3: On-campus child care</td>
<td>Adams et al. (2022)</td>
<td>Three campus child care studies</td>
<td>20 percentage-point increase in the probability of graduating in six years = 121 percent increase</td>
</tr>
</tbody>
</table>

Source: Authors’ analysis of policy options based on relevant studies.

Notes: The type of graduation rate (i.e., associate’s degree versus bachelor’s degree and six year versus on time) varies between studies. We take the effect sizes as published and do not make adjustments to the estimated effect size for associate’s degrees versus these other measures. In addition, because the state grant was concentrated at four-year public institutions, it has no significant impact on associate’s degree attainment. See Castleman, Benjamin, and Bridget Terry Long. 2016. "Looking beyond Enrollment: The Causal Effect of Need-Based Grants on College Access, Persistence, and Graduation." Journal of Labor Economics 34 (4). https://doi.org/10.1086/686643. We believe it is reasonable to still apply the impact estimate on bachelor’s degree attainment as a conservative, lower-bound estimate of the likely effect of a similar grant available at community colleges, given that associate’s degrees take less time and investment to attain than bachelor’s degrees.

We then divide the public benefits of additional graduates by the cost of inducing those additional graduates to calculate the net present public benefit per dollar spent on each policy option. All costs and benefits used in the calculations are in 2024 USD, assuming an annual inflation rate for projected costs and benefits of 2 percent. We also apply a discount rate of 2 percent, which is recommended by the Office of Management and Budget (2023).

These studies represent the best information available, but a notable lack of research evidence about the effectiveness of interventions to support parents in higher education exists. New evaluation research would substantially strengthen future estimates.

Trends under the Status Quo

In the fall of 2020, 55,113 undergraduates with children enrolled in Virginia public colleges. According to State Council of Higher Education for Virginia student data, college enrollment has been decreasing since 2011. Prior research suggests that student-parent enrollment may have declined faster than the overall student population (Reichlin Cruse et al. 2019), but future enrollment is uncertain, driven by the business cycle and other unforeseeable factors. Due to this uncertainty and to simplify, we chose to hold enrollment constant at 55,113 student parents through 2035.
We find the number of graduates by multiplying the predicted graduation rate each year by the number of student parents enrolled four years prior. (This is twice the expected time to complete an associate’s degree.) In 2020, the six-year graduation rate for student parents who received an associate’s or bachelor’s degree from a public college or university in Virginia was approximately 16.5 percent. Nationally, the average time to completion was 3.3 years for student parents who earned an associate’s degree (Bryan, Cooney, and Elliott 2019). Since future graduation rates are uncertain, we hold the rate constant through 2035. Figure 2 provides a visual of the growth in graduation rates under each option, based on the effect estimates summarized below.

**FIGURE 2**
Projected Student-Parent Graduates under Each Policy Option

Source: Authors’ projections based on previous empirical research.
Notes: CSAP = College Scholarship Assistance Program. For a more detailed explanation of the methodology, see the Findings section.
Public Benefit of a College Graduate

As previously discussed, a host of economic benefits are associated with a college degree for the individual and greater community. To ensure that we do not overstate economic returns, our paper restricts the fiscal impacts to taxpayer returns. A degree can produce a return for taxpayers in two primary ways: (1) increased tax revenue due to higher lifetime earnings and (2) reduced spending on public benefits.

A study by Trostel (2010) used the Annual Social and Economic Supplement of the Current Population Survey combined with existing literature on average tax rates and social spending to estimate the present value of a baccalaureate degree after accounting for public costs to be about $(2005)481,376, after discounting over time. Trostel’s study was based on tax rates in New England in 2005, so we adjust to better reflect Virginia policy by multiplying the author’s state and local tax revenue estimate (which makes up 17 percent of the total estimate of lifetime returns) by 78 percent before adjusting for inflation. This is the difference in state and local tax revenues per person across New England states compared with Virginia in 2005, which is approximately consistent with the differences in tax rates in 2022, the latest year of available data (see table 2). This yields a return to a bachelor’s degree of $(2005)463,631.

| TABLE 2 | Average State and Local Tax Burden of New England States Compared with Virginia |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                | Total Taxes Collected per Capita |
|                | 2005             | 2022             |
| All US states (simple average) | $2,199             | $4,385            |
| Virginia       | $2,104             | $4,235            |
| New England (simple average)  | $2,688             | $5,134            |
| Connecticut    | $3,300             | $6,229            |
| Maine          | $2,432             | $4,635            |
| Massachusetts  | $2,818             | $6,229            |
| New Hampshire  | $1,535             | $2,500            |
| Rhode Island   | $2,443             | $4,385            |
| Vermont        | $3,600             | $6,823            |

Source: Authors’ calculations based on the US Census Bureau’s estimates for total taxes collected per capita in 2005.
Notes: For the present day, the most recent data available is for total taxes collected per state in 2022. We take this total and divide it by US Census Bureau estimates of the average state population from 2020 to 2023 to calculate total taxes collected per capita in 2022.

Given many student parents pursue associate’s degrees, we multiply the total return to taxpayers of a bachelor’s degree—adjusted for Virginia tax rates—by 39 percent (Trostel’s estimate of the proportion of increased tax revenue attributable to associate’s degrees versus bachelor’s degrees) to estimate the public benefit of an additional student-parent associate degree graduate. This results in an estimated lifetime benefit to taxpayers of $(2005)180,808 for each associate’s degree earned,42 which is
$(2024)292,419 after adjusting for inflation. If some student parents go on to earn bachelor's degrees, the returns to taxpayers would be higher than our estimates.

Our findings are sensitive to the monetary value assigned to the payoff to taxpayers (see Sensitivity section). Because we do not consider the individual, family, or social benefits of a college degree, our estimate of economic returns is very conservative. A meta-analysis of credit accumulation at community colleges found that in a sample of nine studies, the lifetime present value earnings gain of an associate’s degree was $128,700 (Belfield and Bailey 2017).\textsuperscript{43} If students went on to attain a bachelor’s degree, the lifetime present value of their earnings gain was $558,800 (Belfield and Bailey 2017).\textsuperscript{44} Further, mothers who completed college degrees earned an average of $8,934 per year when tracked for an average of 16 years after enrollment. And their children earned $5,400 more per year on average in early adulthood (Anderson 2022; Belfield and Bailey 2017). Consequently, we almost certainly underestimate the total return of a college degree, increasing confidence in findings that show a positive economic return.

Findings

OPTION 1: COMPREHENSIVE STUDENT-PARENT SUPPORT PROGRAM

We use effect sizes from studies of the CUNY ASAP program in New York and Ohio to estimate the impact of a comprehensive student-parent support program (Scrivener et al. 2015; Sommo et al. 2018; Strumbos and Kolenovic 2017). The ASAP program resembles option 1 in three ways: it includes a tuition waiver for students with a need gap, provides students with guidance through college advising, and allows for block scheduling of classes. The receipt of the program was randomized, mitigating potential selection bias. After three years, 40 percent of students in the treatment group had received a degree, compared with just 22 percent of the control group—an 82 percent increase (Scrivener et al. 2015). The same effect size occurred in Ohio, suggesting the program doubles graduation rates from baseline (Sommo et al. 2018). Over the long term, these impacts appear to diminish slightly. In a study of six-year associate’s and bachelor’s degree attainment rates, researchers found that ASAP increased graduation rates from 43 percent to 64 percent—a 49 percent increase (Strumbos and Kolenovic 2017).

Notable differences exist between ASAP and our proposed policy. First, the ASAP program focuses on students with low incomes, not student parents. We include child-friendly study spaces and student-parent resource groups in the intervention scope. Second, the ASAP program requires students to attend college full time, whereas our proposed program would allow student parents to attend school part time. Finally, the advisors for students in the CUNY program focuses on academics, not benefit-program access.

We divide the six-year effect size of the ASAP program on graduation (49 percent) by the portion of student parents considered low income because low-income student parents will be the primary beneficiaries. This yields an estimated effect size of 24 percent. We do not estimate any enrollment effects, though they may exist, which would only add to the number of new graduates and therefore further increase benefits. The estimate of the impact on the number of graduates (see figure 2, above)
allows for two years of implementation and a gradual phase-in of the effect. This results in approximately 7,830 more graduates by 2035 compared with the baseline trend. Applying public benefit estimates from the study by Trostel (2010), the net present value of these graduates to Virginia would be about $2.29 billion.\textsuperscript{45}

To calculate the cost of the intervention, we consider the price of office space, the salary of a benefits navigator, the cost of tuition waivers, and administration expenses. We use a high-cost market in Virginia (Alexandria) to be conservative in our assumptions. We assume the program would begin in the year 2026 but would have start-up costs equal to about one-quarter of annual operating costs (without tuition waivers) in 2025. The net present intervention cost would be around $427 million (see table 3)\textsuperscript{46} and the net benefit (benefits minus costs) would be $1.86 billion. Dividing the total cost of the intervention through 2035 by the benefit yields a return of $5.36 per dollar spent.\textsuperscript{47}

**TABLE 3**

**Option 1 Cost Assumptions**

<table>
<thead>
<tr>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Virginia two-year and four-year public colleges</td>
<td>39 SCHEV university data\textsuperscript{a}</td>
</tr>
<tr>
<td>Cost per square foot of office space</td>
<td>$30 Rental pricing in Alexandria, VA</td>
</tr>
<tr>
<td>Average office size (square feet)</td>
<td>650 Authors’ assumption</td>
</tr>
<tr>
<td>Average total compensation of a benefits navigator</td>
<td>$70,000 Glassdoor\textsuperscript{b}</td>
</tr>
<tr>
<td>Number of benefits navigators per college</td>
<td>4 Authors’ assumption</td>
</tr>
<tr>
<td>Administrative costs (as a proportion of total program cost)</td>
<td>20% Authors’ assumption</td>
</tr>
<tr>
<td>Tuition waiver cost (annually per student)</td>
<td>$895 NPSAS 2020</td>
</tr>
<tr>
<td>Proportion of students eligible (&lt; 150% of the FPL)</td>
<td>49% NPSAS 2020</td>
</tr>
</tbody>
</table>

Source: Authors’ compilation of sources and their associated values.

Notes: FPL = federal poverty level; NPSAS = National Postsecondary Student Aid Study; SCHEV = State Council of Higher Education for Virginia. We use the above assumptions to estimate the cost of the program in the first year. We then project this cost through 2035 and calculate the net present value in 2024 dollars. Alexandria rental pricing is based on Class B office spaces.\textsuperscript{48} We use a higher-cost market in Virginia to be conservative about space and salary costs.


**OPTION 2: GIVE PARENTS COLLEGE SCHOLARSHIP ASSISTANCE PROGRAM GRANTS**

Need-based aid can increase the number of graduates in two ways: by incentivize higher enrollment or by removing financial burdens, making graduation easier. To estimate the enrollment and graduation rate effect, we use an estimate in the research by Castleman and Long’s (2016) that eligibility for a $2,400 grant increases college attendance by 12 percent and the likelihood of graduating in six years with a bachelor’s degree by 22 percent from baseline. Assuming diminishing marginal returns to further investment while accounting for inflation, we use the same estimates for all students receiving grants regardless of total value. Given just under half of student parents would qualify for aid, the effect sizes are divided almost in half, resulting in a 12 percent increase in enrollment and a 6 percent increase in
graduation rates. These studies focused on first-time, low-income students. To encourage student parents to benefit from the program at a rate similar to first-time, low-income students, we include the completion of the Single Stop module as a requirement.

**TABLE 4**

<table>
<thead>
<tr>
<th>Option 2 Cost Assumptions</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of student parents below 100% of the FPL</td>
<td>32.9%</td>
<td>NPSAS 2020</td>
</tr>
<tr>
<td>Proportion of student parents between 100 and 150% of the FPL</td>
<td>16.5%</td>
<td>NPSAS 2020</td>
</tr>
<tr>
<td>Average grant cost for student parents below the FPL</td>
<td>$3,000</td>
<td>Authors’ assumption</td>
</tr>
<tr>
<td>Average grant cost for student parents just above the FPL</td>
<td>$1,500</td>
<td>Authors’ assumption</td>
</tr>
</tbody>
</table>

**Source:** Authors’ compilation of sources and their associated values.

**Notes:** FPL = federal poverty level; NPSAS = National Postsecondary Student Aid Study. We use the above assumptions to estimate the cost of the program each year through 2035 given projected enrollment increases. We then calculate the net present cost in 2024 dollars.

Figure 1 shows this option would generate 4,522 additional graduates by the year 2035. This means the public benefits of the policy would be about $1.32 billion. To calculate the cost, we assume that all student parents under the federal poverty level would receive an average of $3,000 and that those between 100 and 150 percent of the federal poverty level would receive an average of $1,500. The net present cost of the policy would be approximately $763 million (see table 4). Given this estimate, the taxpayer benefit per dollar spent on the intervention would be $1.73, and the net benefit would total $559 million.

**OPTION 3: ON-CAMPUS CHILD CARE**

We use figures found in the study by Adams and colleagues (2022) to project the effect size of the intervention. Based on a review of three studies, the researchers found on-campus child care increased the baseline graduation rate of those who used the program by about 20 percentage points across a range of baseline rates (Adams et al. 2022). With the Virginia baseline rate of 16.5 percent, a gain of 20 percentage points translates into an increase of 121 percent. Based on informal conversations with college stakeholders and consideration of likely physical center size constraints, we predict a take-up rate of 45 percent. (Notably, the return-on-investment calculation is constant regardless of the take-up rate because the take-up appears on both sides of the return-on-investment equation. But a different take-up rate would require proportional adjustments in investments and would result in proportional changes in the benefits.)

Assuming about half of student parents would be eligible based on income, we adjust the effect size to yield a 24 percent increase in the baseline graduation rate. We assume the program would begin in the year 2026 but would have start-up costs equal to about one-quarter of annual operating costs in 2025. Given a two-year implementation period, we estimate that providing on-campus child care to 40 percent of eligible students would lead to approximately 8,700 additional graduates through 2035. This would result in a public benefit of $2.54 billion.
Under this option, each family would contribute $2,000 annually per child. We use child care expense estimates from the study by Workman (2021) to calculate the total cost. The author factored in the price of staffing, rooms, supplies, insurance, benefits, and administration. Using these estimates, we find that the net present cost would be around $2.04 billion (see table 5). The net benefit would be $500 million. Dividing the total public benefit by the total costs generates a return of $1.24 for every dollar spent on the program.

Recommendation

We find that a comprehensive student-parent support program has the highest public return on investment. Our findings suggest that this policy would return over five times more than what the program is projected to cost. We summarize the results of our analysis in table 6. Importantly, all three interventions show a positive economic return, demonstrating that all may be viable options to improve graduation rates. Child care has the lowest return per dollar spent under these assumptions, but it would produce the most graduates (and more graduates still if capacity were increased to allow for take-up beyond the 45 percent assumed here).

State policymakers could assess the feasibility of each option—or multiple options—to determine the best approach. Overall, our analysis supports investment in student parents as a sound economic decision that is likely to improve the long-term competitive outlook in the state.
### TABLE 6
Return-on-Investment Calculations

<table>
<thead>
<tr>
<th>Policy option</th>
<th>Number of additional graduates</th>
<th>Total program cost</th>
<th>Total public benefit</th>
<th>Benefits minus costs (net benefits)</th>
<th>Public ROI per dollar spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student-parent support program</td>
<td>7,830</td>
<td>$427,055,918</td>
<td>$2,289,520,115</td>
<td>$1,862,464,197</td>
<td>$5.36</td>
</tr>
<tr>
<td>CSAP grant program</td>
<td>4,522</td>
<td>$763,041,440</td>
<td>$1,322,406,751</td>
<td>$559,365,311</td>
<td>$1.73</td>
</tr>
<tr>
<td>On-campus child care</td>
<td>8,700</td>
<td>$2,043,886,099</td>
<td>$2,544,170,821</td>
<td>$500,284,722</td>
<td>$1.24</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations.

Notes: ROI = return on investment. The public benefit per graduate used in calculations in this table is $292,419. See Trostel, Philip A. 2010. “The Fiscal Impacts of College Attainment.” Research in Higher Education, 51(3), 220–47. [https://www.jstor.org/stable/40606359](https://www.jstor.org/stable/40606359). Monetary benefits only represent those to taxpayers. It is likely that total benefits, which include those to the graduate and their children, would be much higher (see the section titled Public Benefit of a College Graduate).

### Promoting Equity

Interventions to support student parents represent an opportunity to promote equity in Virginia public colleges (Barshay 2020). We offer the below recommendations to promote equity during implementation.

1. **Diverse Hiring Practices:** In line with prior research, it is recommended that policymakers work to promote diverse hiring practices for all policy options, particularly ensuring that benefits navigators and child care staff reflect the diversity of the student body.55

2. **Equitable Distribution of Grants:** Despite the upsides of public, nonprofit schools, student parents are overrepresented at for-profit universities (Anderson, Reichlin Cruse, and Gault 2017; Institute for Women’s Policy Research 2012). Given student parents are also more likely to be people of color, a grant program is an opportunity to promote accessibility to public colleges. To champion equal access, policymakers could target outreach to historically marginalized groups.

3. **Rural Considerations:** Rural institutions and communities face particular challenges to access and succeed in higher education, as well as finding adequate supports and services for children and families (Byun, Meece, and Irvin 2012).56 Policymakers could consider targeting resources for the proposed policy options toward rural communities (e.g., establishing more child care capacity relative to student population size).

### Sensitivity

All estimates are sensitive to changes in the value of the public benefit per graduate. Percentage changes in the estimate found in the research by Trostel (2010) will be reflected in the benefit per dollar spent.
spent on each policy option. All options have a positive return on investment until the benefit per graduate falls below $235,000, at which point the public benefits of a child care no longer outweigh the costs. As stated above, it is likely that overall benefits are underestimated and that the benefits would exceed costs beyond our calculations.

If we extended the time frame of the analysis to look longer into the future, the payoffs would be higher. A two-year extension of the analysis timeline to 2037 would result in a return of $5.65 for the student-parent support program, $1.94 for the grant program, and $1.32 for the child care program.

Conclusion

States would benefit from serving student parents better in higher education. Although a comprehensive student-parent support program offers the highest benefit per dollar spent, all the interventions we consider would be a positive investment for the state. When student parents choose to attend a public college in Virginia, they place their trust in the ability of the state education system to help them realize their goals. Policymakers should reciprocate their trust and effort with resources to ensure student parents have the tools necessary to succeed. This investment would have large and important benefits in the long term—for parents, their children, the state, the colleges, and the greater community.

Notes

1 There are various names for this population, including student parents, parenting students, families pursuing postsecondary pathways, independents with dependents, and students with children (see Autumn Green “Student parents or parenting students? Why Terminology Matters.” Women Change Worlds Blog (blog). https://www.wcwonline.org/WCW-Blog-Women-Change-Worlds/entry/student-parents-or-parenting-students-why-terminology-matters. For consistency we use the term "student parents" throughout this publication.
2 This is also supported by authors’ analysis of the National Postsecondary Student Aid Study (NPSAS) 2020. This dataset is nationally representative, relies on administrative sources and a student survey, and can generate state-level estimates. It does not count student parents who do not claim their children as dependents. National Center for Education Statistics, “National Postsecondary Student Aid Study,” accessed May 2, 2024, https://nces.ed.gov/surveys/npsas/.
3 Based on the authors’ analysis of the Beginning Postsecondary Student Survey 2012/17 (Bryan, Cooney, and Elliott 2019). This analysis is nationally representative of students who first enrolled in higher education in 2012.
6 National Center for Education Statistics, “National Postsecondary Student Aid Study.”
7 The higher rate of household poverty among student parents might be partially explained by differences in their household composition, as they are more likely to reside with children and may be less likely to live in their parent’s household.
8 National Center for Education Statistics, “National Postsecondary Student Aid Study.”
THE TAXPAYER BENEFITS OF SUPPORTING STUDENT PARENTS


10 This difference in discretionary time can be attributed to child care and paid employment, though parents also spend substantially more time than nonparents on housework and child-related activities (Wladis et al. 2018).

11 A valuable resource to assess family-friendliness of college campuses is the Family-Friendly Campus Toolkit (Karp, Osche, and Smith 2020).

12 Based on the authors’ analysis of the Beginning Postsecondary Student Survey 2012/17 (Bryan, Cooney, and Elliott 2019).

13 Beginning Postsecondary Student Survey 2012/17 (Bryan, Cooney, and Elliott 2019). The analysis was run as a logistic regression on the outcome “Highest degree attained anywhere through June 2017,” where receiving an associate or bachelor’s degree was coded as 1 and not receiving a degree was coded as 0. Independent variables included: has dependent children 2011-12 (yes/no), age as of 12/31/2022 (continuous), gender (female or not), control and level of first institution (IPEDS sector) 2011-12, and race/ethnicity with multiple. Having a dependent child was significant at p < 0.001, even after controlling for these other characteristics. Pseudo R2 was 0.18.


15 This is also supported by authors’ analysis of the NPSAS 2020. National Center for Education Statistics, “National Postsecondary Student Aid Study.”

16 Based on the authors’ analysis of 2019 American Community Survey data, downloaded through IPUMS.

17 Unless otherwise noted, all dollar amounts are reported in 2024 US dollars. In many instances, the original reported numbers have been adjusted for inflation using the Consumer Price Index (January to January adjustment). The original reported estimates appear in endnotes.

18 The original analysis reported earnings gains of $2,072 overall and $6,776 for degree completers in 2014 dollars.

19 For a more comprehensive list of opportunities to support parenting students, see Anderson and Green (2022).

20 National Center for Education Statistics, “National Postsecondary Student Aid Study.” We define “low income” as anyone making less than 150 percent of the federal poverty level. Based on our analysis of NPSAS 2020 data, 49.4 percent of student parents in Virginia public two- and four-year colleges have low incomes.

21 Levin and Garcia (2013) report this as $(2010)6,582.


26 Public Postsecondary Education: Students with Dependent Children, California Assembly Bill 2881 (2022).


28 National Center for Education Statistics, “National Postsecondary Student Aid Study.”


30 The Single Stop module requires 30 minutes to complete, then a subsequent 30-minute phone call with a staff member. Though we do not attribute a value to the time burden, the benefits of Single Stop engagement would presumably at least equal students’ time costs.

31 The original grant was $(2000)1,300.


To be realistic, we have capped center size at 500 children on average, but the state could pursue larger or smaller centers. The effectiveness of this option will be proportional to the portion of student parents who can access care.

For more detail about the CCAMPIS program, see Islam, Green, and Anderson (2022).


National Center for Education Statistics, “National Postsecondary Student Aid Study.”

Belfield and Bailey (2017) report this as ($2014)97,640.

Belfield and Bailey (2017) report this as ($2014)423,800.

($292,419 * 7,830 additional graduates) / $427,055,918 total cost


($292,419 * 4,522 graduates) / $763,041,440 total cost

0.49 eligible * 0.45 takeup * 1.21 effect size

Virginia child care costs about $15,288 per child annually. Our price represents a subsidized rate versus the private market. Further aid may be necessary for families with few economic resources.


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