Harold Alfond College Challenge (HACC) 2017 Savings Report for Households Who Opted-In to the Program from 2008 to 2013

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Introduction

This report provides a preliminary descriptive examination of aspects of Maine's Harold Alfond College Challenge (HACC) Children's Savings Account (CSA) Program.[1] Specifically, the Center on Assets, Education, and Inclusion (AEDI) uses data provided by the Finance Authority of Maine (FAME) for the NextGen College Investing Plan, Maine's 529 college savings plan. The accounts examined here were opened as part of the HACC pilot in 2008 and the statewide opt-in CSA program in 2009-2013. This analysis considers how account opening and family contribution differ by family income and across time, as well as how family saving and HACC features contribute to asset accumulation by these households.

This report is the first product of a research partnership between the Alfond Scholarship Foundation and AEDI. Future research will center on more rigorous analysis of the savings data described here, as well as examination of outcomes for children enrolled after the Harold Alfond College Challenge shifted in March 2014 to automatically award the $500 Alfond Grant to all children born Maine residents, rather than requiring families to first open a NextGen account. Additional research will also include qualitative consideration of families' experiences with the HACC and planned surveys to assess effects on academic achievement, college-saver identity development, and educational expectations of both the opt-in and current, opt-out, iterations of the HACC. This consideration of how Maine's CSA is affecting financial and other preparation for college, as well as how those effects may transform children's outcomes, may have important policy implications, particularly given the prominence of the Harold Alfond College Challenge in the CSA field.

Children's Savings Accounts (CSAs)

The HACC is the nation's first statewide, universal Children's Savings Account program, now automatically awarding assets at birth ($500 in a seed deposit to the state's 529 college savings plan) to all children born Maine residents. To date, more than 70,000 children have been awarded HACC assets, making the HACC a substantial part of the overall CSA field, where approximately 313,000 children in 29 states have a CSA (CFED, 2016). The HACC incorporates CSA design principles (Cramer & Newville, 2009) and builds on evidence from a broader field. CSAs are interventions that build assets for children to use as long-term investments (Elliott, Choi, Destin, & Kim, 2011), particularly, as in Maine's HACC, for postsecondary education (Elliott & Lewis, 2014). Provided through financial institutions including state 529 college saving plans such as Maine's NextGen and also banks and credit unions, CSAs generally include progressive features such as initial deposits, savings matches, and/or other incentives (Goldberg, 2005; Sherraden, 1991). Distinct among financial aid approaches for their cultivation of improved

[1] As described in a growing body of theoretical and empirical literature, Children's Savings Account programs provide facilitated access to a long-term savings or investment account, features that incentivize and reward saving (including initial seed deposits and savings matches), and interventions that encourage development of college-saver identities, including account statements that document asset accumulation, information about child development, and/or exposure to early college planning (see Goldberg, 2005; Sherraden, 1991; also, preface to Lewis et al., 2016 re: distinction between CSA program interventions and the accounts that are part of them.)

outcomes throughout children's lives, CSAs aim to equip children, particularly those who are disadvantaged, with assets that research has found may be associated with improved academic achievement (Elliott et al., 2016) and educational attainment (Elliott, 2013b; Elliott & Beverly, 2011). CSAs also connect households to mainstream financial institutions, activating families to save for their children's futures and later financial well-being (Friedline, 2014).

Children's Savings Accounts (CSAs) Are Not Just about Saving

While this report focuses on saving, savings outcomes represent only one metric of CSA "success." Importantly, rigorous research suggests that the positive effects of CSAs on such outcomes as educational expectations (Kim, Sherraden, Huang, & Clancy, 2015) and children's well-being (Huang, Sherraden, Kim, & Clancy, 2014) can be realized even if families are not contributing to the account (Sherraden et al., 2015). Therefore, the potential value of a Children's Savings Account should not be viewed only in terms of the dollars in the account. Similarly, deposit activity should not be considered the only worthwhile interaction with the CSA. Simply having a CSA can catalyze other positive outcomes for children and families, including by reinforcing children's sense of a college-saver identity (Elliott, 2013a). Indeed, recognition of these potential CSA effects was part of the Alfond Scholarship Foundation's interest in shifting to automatically investing $500 for each Mainer, at birth, beginning with babies born in 2013, as described below.

Program Description: Maine's Harold Alfond College Challenge (HACC)

Harold Alfond was an entrepreneur who founded the Dexter Shoe Company and then became a prominent philanthropist. When he died in 2007, Mr. Alfond bequeathed $500 million to the foundation that bears his name (Powell, 2014). In 2008, the Foundation charged the Alfond Scholarship Foundation with initiating the Harold Alfond College Challenge, initially as a pilot program in two hospitals (Huang et al., 2013) and, then, in 2009, with statewide expansion. The HACC was designed to signal to children what their futures could hold, demonstrate to families that external entities were willing to invest in their children's educations, and leverage the power of financial markets to build assets (Quint, 2015).

At its inception, the HACC offered a $500 grant to every Maine resident infant for whom a NextGen account was opened by the baby's first birthday. As Clancy and Lassar (2010) explained, enrollment involved a two-step process, including an addendum to the NextGen application, required in order to accept the Alfond Grant. The Alfond Scholarship Foundation also invested heavily in outreach to make Mainers aware of the initiative, targeting parents in hospitals and birth classes (Harold Alfond Foundation, 2011; 2012) and working with pediatricians' offices, educational institutions, businesses, and nonprofit organizations (Clancy & Sherraden, 2014). Despite these efforts, research by the Center for Social Development revealed that, while the incentive was attractive to parents, gaps in awareness of the HACC persisted, with less financially-sophisticated parents less likely to complete the required account opening (Huang et al., 2013). These findings, along with a desire to increase efficiency by reducing expenditures for marketing, contributed to the Alfond Scholarship Foundation's shift to universal, opt-out enrollment (Powell, 2014).

Under this opt-out design, FAME uses state birth records to trigger automatic establishment of $500 HACC grants for all babies born Maine residents. These funds are deposited into an omnibus account and belong to the Alfond Scholarship Foundation until disbursement to a postsecondary educational institution (Clancy & Sherraden, 2014). This ensures that the HACC grant does not affect families' eligibility for means-tested safety net programs.

The use of the omnibus account structure also means that if a family wants to make its own contributions in order to save alongside the Alfond Grant, they must open their own account.[2] Today, Maine families receive notice of the HACC award around one month after their child's birth and receive information on opening their own NextGen account at their child's first birthday (Clancy & Sherraden, 2014). Recipients of the HACC may open a NextGen account without making the initial contribution otherwise required. Each family receives quarterly summaries that detail market growth and any family contributions if families have elected to open a NextGen account. They also receive age-appropriate information about child development, educational support, and financial management, as well as coupons with which to submit deposits to a NextGen account or, if families have not started to save, reminders about the enrollment process.[3] To further encourage families to save for their children's postsecondary educations, FAME recruits employers to offer automatic payroll deduction for contributions and incentives and is experimenting with partnerships with other foundations and community entities such as HeadStart programs.

While the money for the $500 HACC grants comes entirely from the Harold Alfond Foundation (a private family foundation) and is granted initially to the Alfond Scholarship Foundation (a 501(c)3 nonprofit) before being invested for eligible Maine babies, the Finance Authority of Maine (FAME) is an important partner. FAME acts as the administrator of the 529 plan (NextGen), offering generous matching grants including an incentive grant for auto funding, and facilitating data sharing. NextStep matches provided by FAME are available for NextGen accounts opened on or after January 1, 2011 that have received at least $50 in contributions in the calendar year. Maine families can get a 50% match on their contributions, automatically deposited for qualifying contributions, up to a maximum annual match of $300, with no lifetime limit (Finance Authority of Maine, 2015) or income threshold (Clancy & Sherraden, 2014). In addition, NextGen accounts set up with automatic deposits are eligible for a one-time additional $100 match from FAME. Families who make contributions to NextGen accounts may also benefit from tax advantages associated with 529s.

Methods

Data Sources and Variable Definitions

The initial wave of data used for this study was provided by the Finance Authority of Maine (FAME), pursuant to a data-sharing agreement with AEDI.[4] It contains transactions

[2] It is important to note that there is no requirement that the NextGen account owner be related to the beneficiary, nor is there a requirement that contributions be provided by family members.
[3] See Clancy and Sherraden (2014) for a sample statement.
[4] FAME provided data from NextGen account holders with permission of the account holders.

by date for each of 18,577 unique participant IDs (189,396 records total). Variables include participant zip code and NextGen account information, such as account open date, account asset value, account status code (if closed), Harold Alfond College Challenge grant value, other grant value, household income range at NextGen account opening, date for each contribution to the NextGen account, and contribution amount. The dataset includes NextGen accounts opened from January 2009 through March 2013, during the period of statewide opt-in enrollment. For these accounts, transactions through June 9, 2017 are included. NextGen accounts opened during the pilot program in 2008 are analyzed and presented separately.

After discussion with FAME, AEDI removed all cases where the NextGen account status was closed and the HACC Grant Value = $0 (n = 67) or where the HACC Grant value was $0 (n = 64). Accounts with a HACC grant value of $0 may occur when a single beneficiary has more than one NextGen account. After removing those, the final N = 18,432.

- *Total Harold Alfond College Challenge Grant Value:* The $500 award from the Alfond Scholarship Foundation is invested, so values may be less than $500 if the original shares have lost value or higher if the shares have gained value. The HACC value is a single value for each account as of 6/9/17.
- *Total Other Grant Value:* Other Grants are any NextStep Matching Grants, Auto Funding Grants, and/or other scholarships FAME has awarded to the account. For example, FAME is currently offering a sweepstakes where the winners receive a $1000 scholarship. If a HACC recipient won, the funds would be added to their NextGen account in the Other Grants portfolio. Grant funds are also invested, so there could be increases or decreases depending on share performance. The 'other grant' value is a single value for each account as of 6/9/17.
- *Total Asset Value:* Asset value is the total value of all money added to the account plus earnings, minus any withdrawals[5] and/or investment loss. The asset value is a single value for each account as of 6/9/17.
- *Contributions:* Contributions are any type of deposit from a source such as the family, friends, or a third-party (e.g. philanthropy groups provided contributions to certain accountholders whose children were enrolled in Headstart), excluding any grants or scholarship awards. Contributions and withdrawals are listed by date of each transaction for each account; however, it is not possible to know who made the transaction. From these records, accountholders are designed as 'savers' if total contributions are greater than $0.

Analysis Plan

Savings data and characteristics of accountholders were summarized with frequencies (counts and percent) and descriptive statistics (mean, median, mode, and range) using SPSS software version 23.0, first for the overall sample and then by sub-groups of savers and non-savers (families that opened an account but made no contributions). Findings

[5] The Harold Alfond College Challenge grant cannot be withdrawn except to pay for the qualified higher education expenses of the recipient at a qualified institution of higher education, but participants may withdraw their own funds, pursuant to the penalties spelled out in 529 state college savings plan regulations, if applicable.

presented here are preliminary and descriptive in nature and should not be used to draw firm conclusions about the reach or impact of the program. Future analyses will examine the distribution of each variable and address issues such as outliers, normality, and missing values in preparation for inferential testing (e.g., means comparison, regression).

Results

Account Opening

Analyzing NextGen account opening by month illustrates the growth in uptake of the Harold Alfond College Challenge grant over time and patterns of account opening within a single year. In the first case, total account opening increased from 2,106 in 2009 to 5,002 in 2012, the last full year included in this dataset. Since award of the HACC follows the birth or adoption of a child, either in Maine or to Maine-resident parents anywhere, considering the number of NextGen accounts opened by accepting the HACC grant award in comparison to the total number of live births in Maine that year provides a rate of uptake by eligible families. Table 1 displays these figures for the complete years included in this dataset, from 2009 to 2012.

Table 1. Uptake of the Harold Alfond College Challenge, 2009-2012

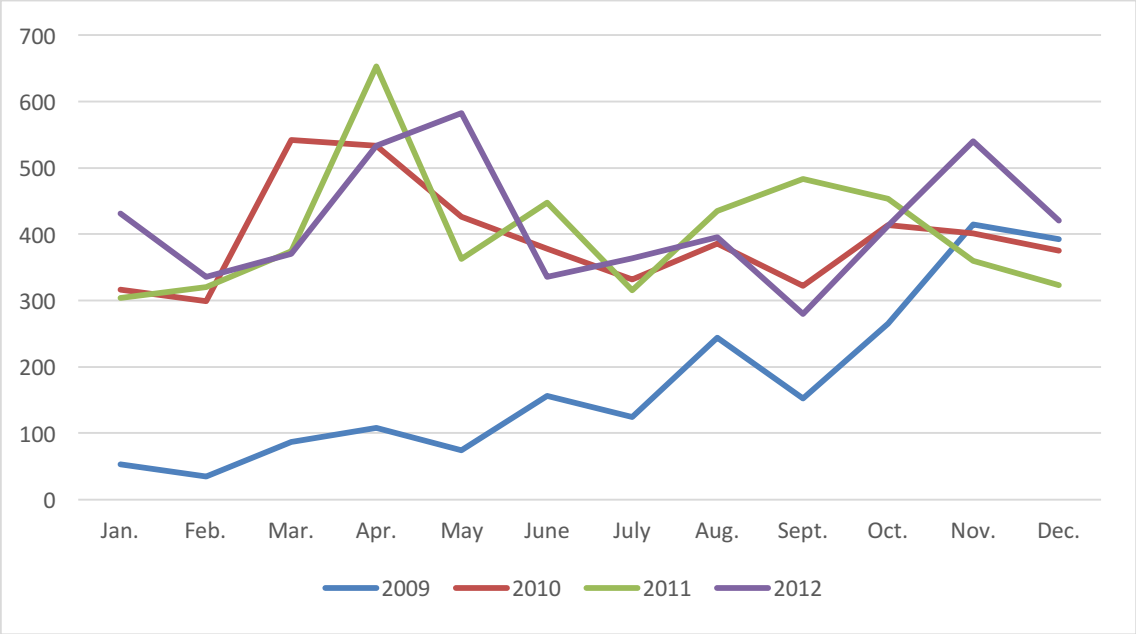
Year	Total Live Births[6]	Total NextGen Accounts Opened	HACC Uptake
2009	13,605	2,106	15.5%
2010	12,951	4,724	36.5%
2011	12,694	4,831	38.1%
2012	12,687	5,002	39.4%

The year 2009 marks the first year when all Mainers with newborns were given the opportunity to enroll in HACC. However, it is not until 2010 that HACC began a major marketing campaign with FAME in order to increase awareness of the HACC. Between 2009 and 2010, we observe a substantial increase in NextGen accounts opened. The marketing campaign produced an immediate increase in enrollments but plateaued. Beginning in 2010, enrollment is consistently between 36-39% of eligible births, with around 4,000 to 5,000 families enrolling their babies each year. In 2013, the marketing campaign was temporarily stopped, as the Harold Alfond Foundation prepared to announce the shift to automatic award of the Alfond grant. Then, when automatic enrollment officially started in March 2014, all children born in 2013 who had not already received a grant by opening a NextGen account were retroactively awarded a HACC grant.

Figure 1 displays patterns in account opening by month each year in which a full year of data was included in this dataset (2009 through 2012). In 2010, 2011, and 2012, a spike in account opening appears in the spring (March-May), followed by fewer account openings in the summer and some rise in the fall (September-November).

[6] Total live births from Maine Department of Health and Human Services, 2005-2014 Resident Data.

Figure 1. HACC Account Opening by Month, 2009-2012



Some variability in NextGen account opening is to be expected. American households' incomes fluctuate over the year (Pew Research Center, 2017), and recruitment activities, conducted by FAME and supported by the Alfond Scholarship Foundation, ebb and flow, as well. For example, uptake may increase surrounding distribution of a mailing or a well-publicized event where families could open accounts while having their baby's photo taken by a professional photographer. Also visible here is the steady increase in enrollment in 2009, the first year that the HACC was available to all children born in Maine.

In order to examine the income distribution of HACC participants, AEDI first used the self-reported, unconfirmed income data provided by accountholders at the time of account opening (2009-2013, excluding the 2008 pilot year), then collapsed the 19 income ranges provided into five categories, as displayed in Table 2, below. Because the income information collected by FAME is for the accountholder and the dataset does not include the relationship of the accountholder to the beneficiary child, it cannot be certain that income ranges reflect the socioeconomic status of children receiving the HACC during this period. To place the income figures in Table 2 in context, the American Community Survey five-year estimate for median household income in Maine (2009-2013) was $48,453 (U.S. Census Bureau, 2013).

Table 2. HACC Accountholders' Household Income at Account Opening[7] (N = 13,108)

Income Range	Frequency	Percent	Cumulative Percent
Less than $25,000	1,333	10.2	10.2
$25,000-$49,999	2,754	21.0	31.2
$50,000-$74,999	3,396	25.9	57.1
$75,000-$149,999	4,590	35.0	92.1
$150,000+	1,035	7.9	100.0

[7] This table does not include data for the 4,934 accountholders for whom income data was not available.

Importantly, 57% of those who opened a NextGen College Investing Plan account in order to receive the Harold Alfond College Challenge grant had household incomes less than $75,000 per year. While median household income in Maine is lower than the national average ($46,974 in 2013, compared to $52,250 for the U.S.), analysis by the Pew Research Center identifies this group of HACC participants as solidly within the range of 'middle-class' Mainers (Pew Research Center, 2016). Specifically, Pew's analysis finds that the median household income of middle-class Maine families was $71,454 in 2014 (Pew Research Center, 2016). Understood within this context, these findings suggest greater 529 account holding among HACC participants with relatively modest-income households than what might be expected in NextGen, absent the CSA intervention, considering national statistics of 529 college savings plan ownership.

According to Sallie Mae (2015), only 27% of college savers report having a 529 account, with utilization more than twice as likely (49%) among high-income as middle-income (20%) or low-income (17%) families. While recent years have seen growth in 529 plans (CSPN, 2016), in 2013, only 0.3% of households in the bottom half of the wealth distribution had 529 accounts, compared to more than 11% of those in the top 5% of wealth (Hannon et al., 2016). There is some evidence that utilization of 529 college savings plans may be hindered by relatively limited awareness of these vehicles, which may suggest that building awareness of the investment incentive created by HACC and additional marketing of NextGen by FAME to Alfond Grant recipients make a difference in account opening. In Sallie Mae's 2015 college savings survey, among those not utilizing 529s, only 39% were aware they even existed. Other survey research has underscored these gaps in understanding of 529 college savings accounts. Specifically, those earning more than $100,000 per year were more than twice as likely to correctly identify 529s as those earning less than $35,000 (Edward Jones, 2016).

Family Contributions

While, as explained above, saving is not the only way that children and families participate in and benefit from Children's Savings Account programs, families' contributions can be important indicators of their financial preparation for their children's higher education. This may, in turn, cultivate greater expectations of college and make it seem like a more urgent goal that demands immediate attention and effort.[8] Additionally, particularly when combined with the initial seed deposits and incentives available through CSAs and delivered through investment vehicles with the potential for positive returns, family contributions may also support substantial asset accumulation, resulting in less student debt (Elliott, Lewis, Nam, & Grinstein-Weiss, 2014). Moreover, family contributions serve to cultivate connections to financial institutions and establish a stronger financial foundation for the future (Friedline, Johnson, & Hughes, 2014). For more detail about contribution rates and patterns in other Children's Savings Account programs that use different designs to catalyze college saving among different target populations, see a review of CSA research in earlier work by AEDI (Lewis, O'Brien, & Elliott, 2017; Lewis et al., 2016). This

[8] For discussion of the college-saver identity dimension of salience, which is informed by the concept of Identity-Based Motivation (Oyserman, 2013; Oyserman & Destin, 2010), see Elliott, 2015.

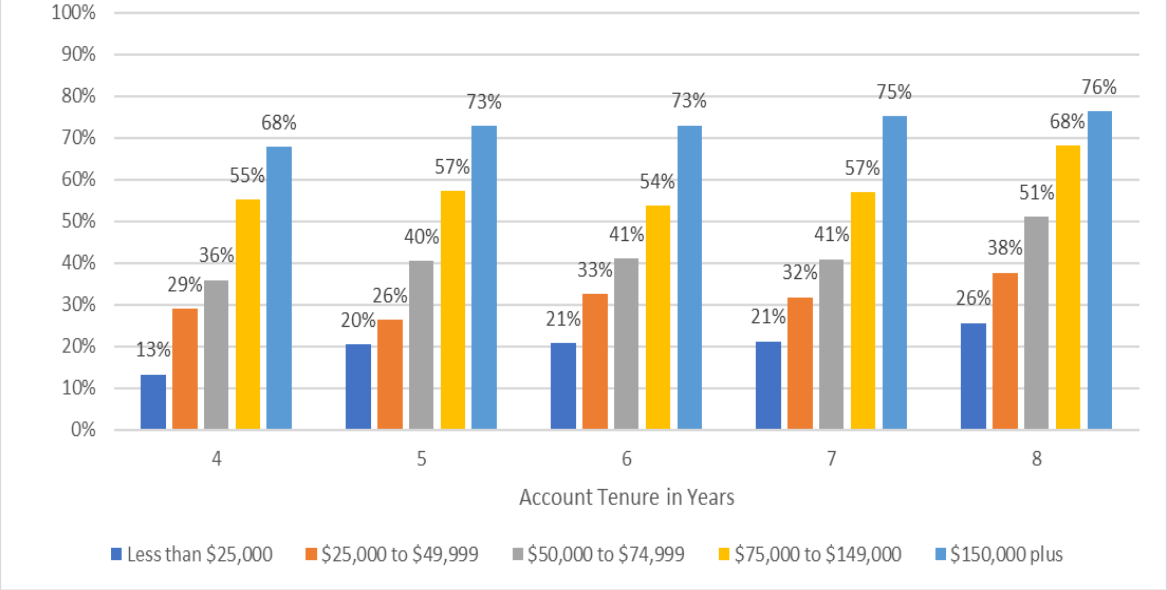
research can provide valuable context for understanding family contributions to a NextGen account associated with an HACC grant and asset accumulation in that account, although differences in CSA features and population circumstances make direct comparisons unfeasible and maybe even unwise.

What Percent of Families Contribute?

Although families are not required to make contributions in order to claim the $500 HACC grant, approximately 40% of HACC grant recipients have made at least some family contribution to their NextGen accounts. Further, the percentage of HACC grant recipients who have become 'savers' is virtually the same for those whose NextGen accounts were opened in 2010, 2011, 2012, or 2013. This suggests that, while contributions accumulate over time, activation as a saver may occur relatively shortly after account initiation, if it does.

In each year of the Harold Alfond College Challenge, the proportion of HACC grant recipients who are savers rises with household income (see Figure 2). For example, 26% of the lowest-income HACC grant recipients whose NextGen accounts were opened in 2009 have made at least one contribution, compared to 76% of their peers who have household incomes of at least $150,000. Additionally, in all household income groups, the proportion of HACC grant recipients who are savers increases slightly with length of account ownership. For example, among NextGen accounts opened by HACC grant recipients approximately 8 years ago (in 2009), more than two-thirds of households in the $75,000 to $149,000 household income category contributed at least once, compared to just over one-half of households in the same income category with accounts opened in 2013.

Figure 2. Percent of Participants who are Savers, by Account Tenure and Household Income



How Much Families Contribute

Not only does the likelihood of saving increase with account tenure, so do family contribution totals grow with time. Among savers, total contributions are greatest for those

who opened their NextGen College Investing Plan accounts in 2009 (average=$4,755) and smallest among those whose accounts were opened in 2012 and 2013 ($3,270 and $3,673, respectively, on average). This pattern underscores the importance of activating saving early so that the amount of contributions families can muster has longer to build. While contributions were not evenly distributed over all of the years of account ownership, annualizing contributions reveals that they range from $594.38 per year (for accounts opened in 2009) to $918.25 for those opened in 2013.

Table 3. HACC Participants' Family Contributions

	2008 Pilot Year		**2009 - 2013**	
	All N = 390	**Savers Only n = 130**	**All N = 18042**	**Savers Only n = 7220**
Mean	$779.56	$2,338.69	$1,499.52	$3,747.15
Median	$0	$788.00	$0	$1,400.00
Mode	$0	$400.00	$0	$50.00
Minimum	$0	$5.00	$0	$0.87
Maximum	$60,625.00	$60,625.00	$270,000.00	$270,000.00

Table 3, above, displays total contributions to the NextGen account, here analyzed separately for all accountholders (including those who have never made a deposit) and for savers (those whose contributions have been greater than $0).

As revealed by the ranges, there were some outliers among the savers in both the 2008 pilot and the statewide program. For example, one of the accountholders in the statewide HACC deposited $270,000 in the account. While these outliers skew the mean, they also reflect the universality of the HACC, which, unlike interventions targeted specifically at those who are low income, aims to include all families of babies born in Maine in a system of early educational asset-building. At the same time, most HACC grant recipients are making smaller contributions to their NextGen accounts, as illustrated by the mode family contribution 2009-2013 ($50).

Savings research, including that conducted within Children's Savings Account programs specifically, has emphasized that income is not the only factor influencing outcomes. However, as saving is, at least in part, a function of the money available to dedicate to deferred consumption, contributions by HACC grant recipients should be considered within the context of household income.

Figure 3 shows average total contributions by household income. As illustrated above, there is relatively little difference between average total contributions of households earning less than $75,000 per year. The widest gaps do not open until households earn at least $150,000 per year. This suggests that Children's Savings Accounts may play a role in reducing wealth inequality among households whose outcomes may otherwise be more divergent.

Figure 3. Average Total Contribution by Income Group, Savers Only

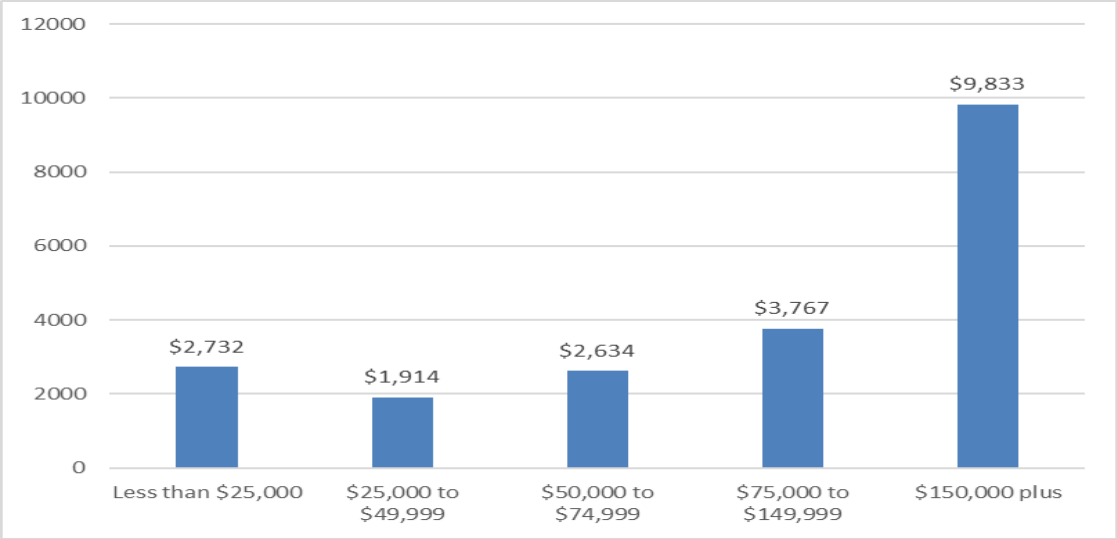


Table 4 provides greater detail regarding family contributions by household income level. As the table summarizes, for the 7,220 savers for whom income information was available, average family contributions are higher for those with higher household incomes; however, family contributions do not rise at equal intervals.

Table 4. Family Contributions by Income, for Savers, 2009-2013

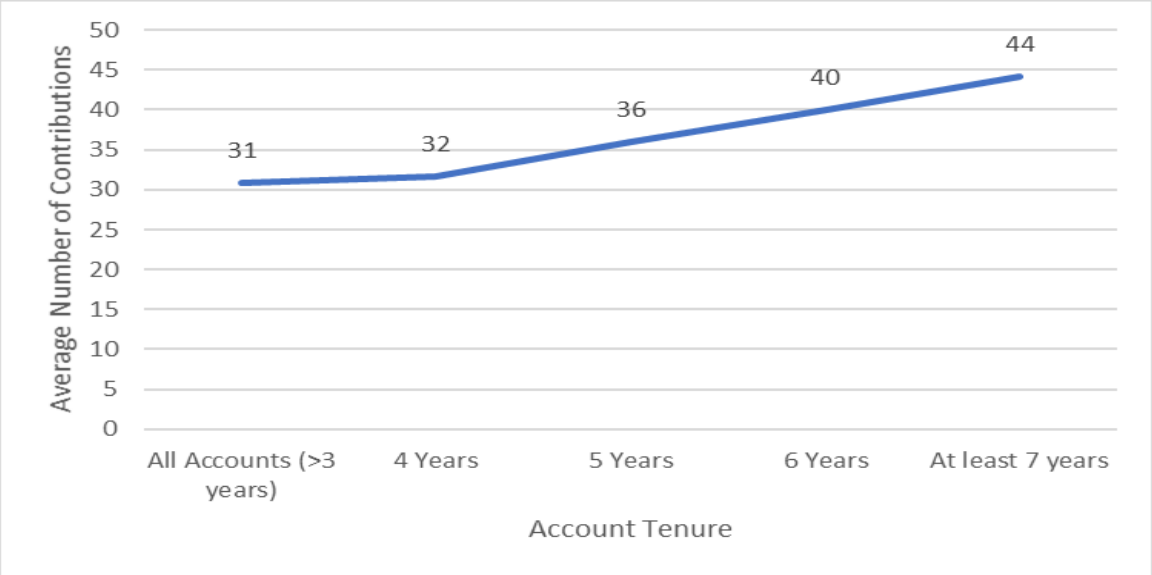
Income Range (n)	Mean	Median	Standard Deviation	Range (Min-Max)
Less than $25,000 (268)	$2,734.00	$790.00	6876.91	$15.00--$65,571.43
$25,000-$49,999 (836)	$1,914.11	$725.00	3779.08	$0.87--$56,200.00
$50,000-$74,999 (1406)	$2,624.02	$1,050.00	7252.15	$10.00--$122,200.00
$75,000-$149,999 (2626)	$3,767.36	$1,837.50	7171.26	$10--$113,300.00
$150,000+ (760)	$9,833.10	$3,600.00	20259.34	$20--$270,000.00

While some have critiqued state 529 college savings plans as doing relatively little to cultivate 'new' savings, but instead serving to shelter assets already accumulated (see, for example, Reeves & Joo, 2017), this initial look at family contribution patterns in the HACC suggests different interactions with the associated accounts. After the first quarter of the HACC, in 2009, between 29-53% of accounts saw at least one contribution in that quarter. While it is not clear from this analysis how this translates to a given family's contribution history over time, when more than 1/3 of accounts are seeing contributions in every quarter, it appears that at least some HACC savers are making fairly regular contributions to the account. Also pointing to some ongoing family contribution activity is the consistency in these contribution patterns between March 2013 and June 2017. This finding suggests that the accounts seeing family contributions in a given quarter are not comprised solely of those newly-opened.

How Frequently Families Contribute

Figure 4 indicates that family contributions increase over time. That is, families who have been in the program longer have a higher number of deposits on average.

Figure 4. Average Number of Deposits, by Age of CSA-Savers only



Asset Accumulation

In addition to family contributions, the value of the educational assets held in the NextGen accounts of HACC grant recipients includes other grants—including the NextStep matching grant for families' contributions—some scholarships, and investment earnings from the Next College Investing Plan. The HACC initial $500 grant and its associated earnings are particularly prominent in the total holdings of many participants, especially those who have not yet made a family contribution or have contributed little. Such features help to distinguish Children's Savings Accounts from the financial instruments through which they operate.

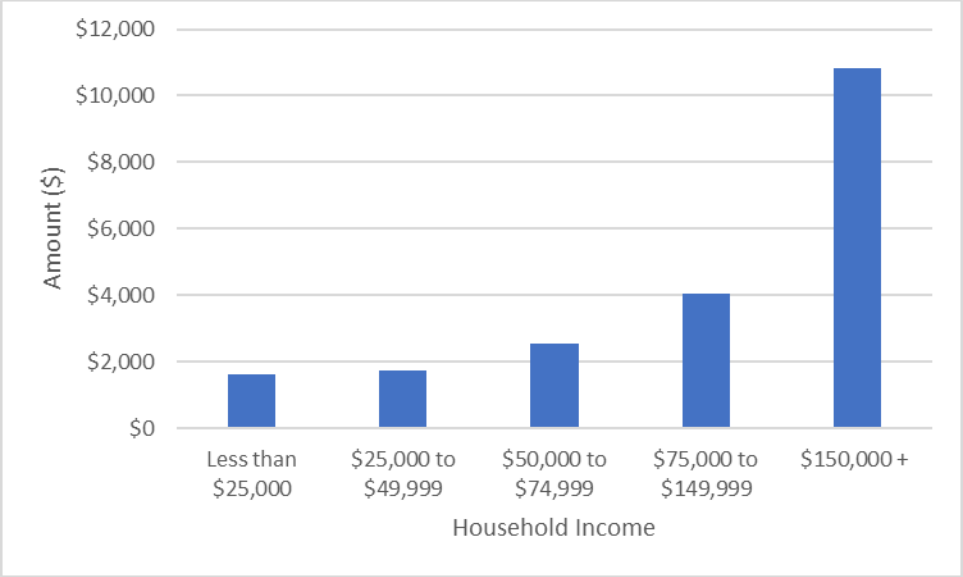
Table 5, below, presents total asset accumulation in the NextGen accounts associated with the HACC. Data are segregated for the 2008 pilot year and by saver status.

Table 5. Total Account Balances of HACC Participants

	2008 Pilot Year		**2009 – 2013**	
	All N = 390	**Savers Only n = 130**	**All N = 18042**	**Savers Only n = 7220**
Mean	$2,393.75	$4,907.64	$3,063.52	$6,329.55
Median	$1,318.32	$2,524.30	$979.68	$3,080.97
Mode	$937.15	$1,415.49	$820.79	$853.67
Minimum	$929.54	$1,007.53	$692.88	$740.94
Maximum	$80,249.73	$80,249.73	$35,9892.49	$35,9892.49

Figure 4 illustrates average asset value by household income. Households earning less than $25,000 per year have an average asset value of $1,614, households earning $25,000 to $49,999 have $1,731, households earning $50,000 to $74,999 have $2,541, households earning $75,000 to $149,999 have $4,069, and households earning $150,000 or more have $10,815. What we notice here is that there is little difference in average asset value among the bottom three income groups.

Figure 4. Average Asset Value by Household Income



Break Down of Total Asset Accumulation

In Figure 5, we analyze average family contributions and total CSA value by age of the account. First, we see that both average total contributions and total CSA values grow over time. These trends also illustrate the potential power of saving for postsecondary education in an investment account like a 529. For example, seven years after receiving a CSA, the average family has contributed $4,294 dollars. Due to the power of investment, on average, this $4,294 has turned into $7,569 in asset holdings in the account, over the course of seven years. This means the average family in the program received $3,275 (or about 57%) more than they would have if they were just given $4,294.

Figure 5. Average Total Contribution Value and Total CSA Value, by Age of CSA—Savers only

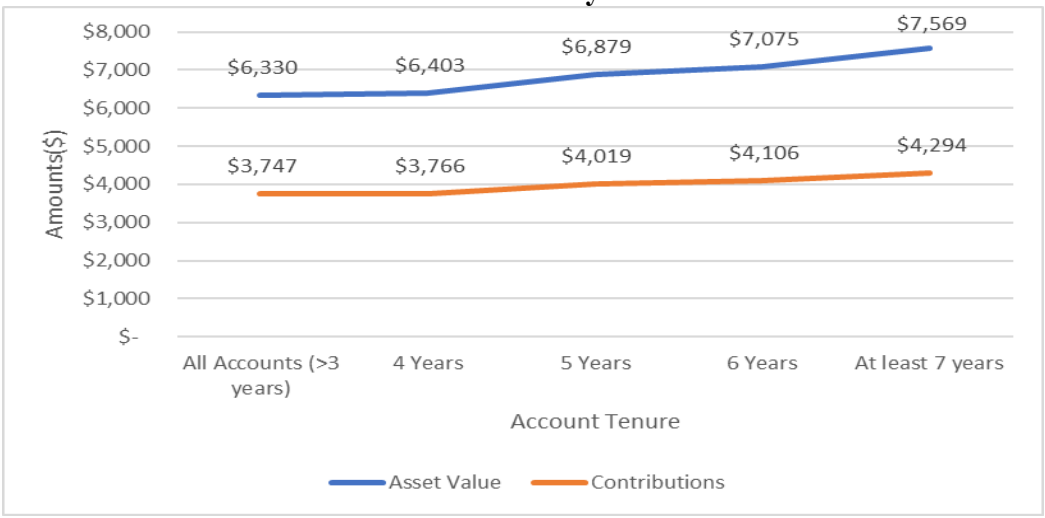
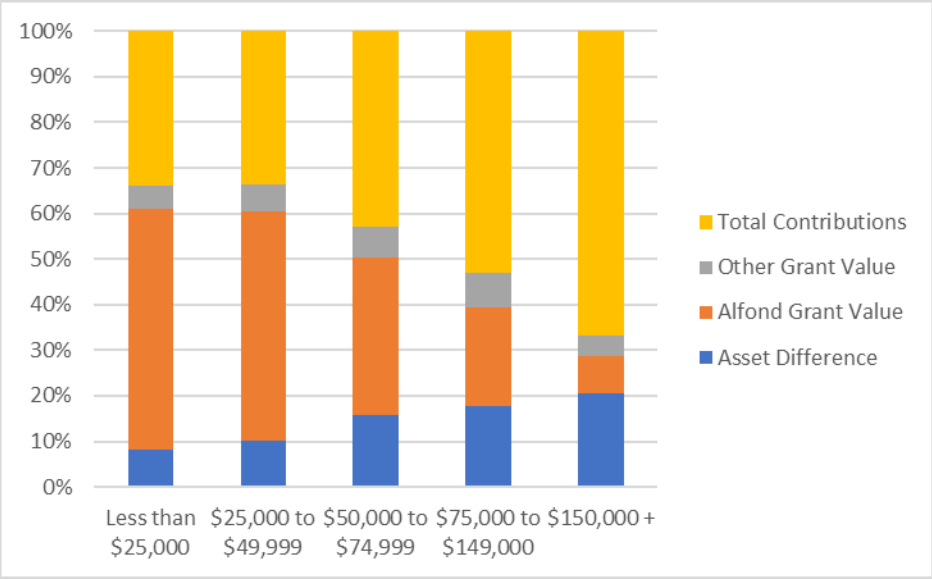


Figure 6, below, illustrates the differential asset accumulation dynamics of HACC participants, by household income. Particularly notable is the greater return on investment realized by the highest-earning households. Denoted in blue as the 'Asset Difference', this amount is the difference between the sum of the component parts of the HACC grant (Total Contributions + Other Grant + Alfond Grant) and the total value of the account.

Figure 6. Proportion of the Total Account Value that Contributions, Other Grants, the Alfond Grant, and the Asset Difference[9]



These returns are most evident in the case of the highest-income group—those earning more than $150,000 annually—and smaller for lower-income families. This suggests that the wealth of higher-income families—who are able to save more and thus earn more from their accounts—is more generously augmented within this college-saving structure than that of lower-income families. Some of the components of the asset value—such as the NextStep matching grants—further amplify these effects, since they require family contributions in order to be awarded. Also visible in this figure is the outsized importance of the $500 HACC grant to the total asset holdings of lower-income households, detailed in Table 6, below.

Table 6 shows that the $500 HACC initial grant and its earnings represent almost 75% of the average total NextGen account value of HACC participants in the statewide CSA. This high percentage is not surprising given that there are more non-savers than savers among this population. As a result, for the majority of participants, the HACC initial grant and earnings make up the total account balance. This is brought into sharper focus when we consider the median level of asset accumulation. When considering all participants, the HACC initial grant and earnings make up 100% of the median account value, while, for the

[9] Here, Total Contributions is the total family contributions made over the life of the NextGen account. Other Grant Value is the value, over the life of the account, of any non-HACC grants deposited into the account, such as the NextStep matching grant. Alfond Grant is the current value of the $500 initial Alfond Grant award. As described above, Asset Difference is the difference between the total asset value of the account and the sum of the component parts—family contributions, HACC grant, and any other grants.

population of only savers, it is much smaller, about 29%.

Table 6. Percentage of the Total Asset Value from the Alfond Grant Value

	2008 Pilot Year All N = 390	Savers Only n = 130	2009 - 2013 All N = 18042	Savers Only n = 7220
Mean	78.0%	44.3%	74.8%	37.1%
Median	93.9%	41.7%	100%	28.7%
Mode	94%	9%	100%	100%
Minimum	2%	2%	0	0
Maximum	96%	96%	100%	100%

As illustrated in Table 7, while the HACC initial grant and the value of other grants vary little across years of account opening, from 2009 to 2012, both family contributions and total asset accumulation are greater among those participants who opened their NextGen accounts earlier in the HACC grant program. This table therefore provides a summary of NextGen account activity and accumulation outcomes among participants during Maine's years of the opt-in Harold Alfond College Challenge CSA program, for the years for which a full year is included in this dataset, 2009-2012.

Table 7. Average Total Account Values by Year of Account Opening

Year Open	Account Value
2009	$4,294
2010	$4,005
2011	$3,892
2012	$3,184

Limitations and Future Research

The dataset analyzed here does not include some variables that could have provided important insights into families' experiences within the Harold Alfond College Challenge. For example, clarity about the relationship between the accountholder and the beneficiary, which is believed to often be parent-child but may be a grandparent or other guardian, would allow understanding of the extent to which accountholder demographics (such as zip code and annual income) represent the child's circumstances. The child's date of birth could have revealed how quickly the account was opened following eligibility, and, further, whether the speed of this initiation is related to differences in likelihood of saving or amount of contributions. Additionally, because other research has found that the experience of having educational assets set aside for one's child—as in the HACC—can exert powerful effects even when families are not themselves saving (Gray et al., 2012), it is important to probe what these dynamics might look like in Maine's CSA. In order to round out understanding of saving and asset accumulation by families in the HACC, future research should include surveys that can explore evidence of college-saver identity development, complementary asset holdings, non-financial preparation for postsecondary education, and families' overall financial positions. Finally, data from families whose children received the HACC during the automatic award (opt-out) period may reveal whether CSA design leads to differences in families' contribution and asset accumulation

patterns.

Discussion and Implications

This report analyzes account opening, family contributions, and asset accumulation among participants during the years of statewide opt-in eligibility for Maine's Harold Alfond College Challenge (HACC) Children's Savings Account (CSA) program (2009-2013). The HACC was and continues to be a trailblazer in the CSA field, as the first statewide CSA with universal eligibility, among those with the largest initial seed investment ($500), and, today, the largest CSA providing an initial seed award automatically at birth. The prominence of the HACC makes research regarding this CSA's outcomes of particular interest to program administrators and advocates, as well as to policymakers and educators who are increasingly turning to CSAs as a valuable strategy for improving children's academic achievement and increasing educational attainment. Here, we discuss some of the most instructive findings from this analysis and their implications for the CSA field and for policy.

Participation was robust, but findings affirm shift to opt-out, automatic enrollment: During this period of opt-in operation, total uptake of the HACC never surpassed 39% of eligible births. Research conducted around the time of the shift to the opt-out design found that parents were attracted by the $500 HACC grant (Huang et al., 2013); however, the process of navigating the 529 college savings plan system and taking the step to open an account still separated many families from this valuable investment in their children's futures. Our analysis also reveals that participation in the HACC clustered geographically. While the geographic distribution of HACC participants likely largely reflects population density, this clustering provides additional evidence of the need for other approaches to deliver the HACC to all children who could benefit from it. These findings are augmented by earlier research that found that parents with higher educational attainment and more financial sophistication were more likely to opt in to the HACC (Huang et al., 2013).

CSAs can cultivate saving without requiring it: Approximately 40% of HACC participants have made at least some deposit to their child's NextGen account. This is greater than the rate of 529 participation reported in other surveys (Sallie Mae, 2015). It is also higher than in some other CSA programs, including Michigan's SEED demonstration (Loke, Clancy, & Zager, 2009), New Mexico's Prosperity Kids (Lewis, O'Brien, & Elliott, 2017), and the SEED OK social experiment (Clancy, Beverly, & Sherraden, 2016). It is particularly noteworthy given that family contributions are not required in order to receive the $500 Alfond grant. This finding then suggests that CSA structures may catalyze saving even without explicitly requiring it. Instead, the initial deposit, encouragement to open the account, availability of financial incentives, and regular reminders to save may activate college saving to a greater degree than would be likely otherwise (Beverly et al., 2012). There is also some evidence here of regular deposit activity; more than 1/3 of savers made at least one contribution per quarter. Among savers, the median amount saved was $1,390, a relatively modest figure that nonetheless displays a commitment to dedicating household resources to long-term saving, particularly since NextGen rules mean that families will pay a penalty for withdrawing their funds to use for expenses not associated with postsecondary education. Finally, the fact that median contributions by savers are greater than the amount

of the HACC grant suggests that the Alfond Scholarship Foundation's original aim of encouraging families to save so that they would have 'skin in the game' was achieved, at least for the substantial portion of participants who made contributions at all.

Low- and moderate-income families may share college-saving challenges: While some of the families participating in the Harold Alfond College Challenge are high-income households, 31.3% of those for whom income data are available (and 22.6% of all participants) have annual incomes below $50,000, which is approximately equal to Maine's median household income during this period (U.S. Census Bureau, 2013). Some of the findings related to saving and asset accumulation suggest some convergence in the outcomes of low- and moderate-income households, distinct from those of higher-earning families. For example, the differences in family contributions by income are not neatly linear, and differences do not widen until families reach approximately $75,000 per year in income. Similarly, there is little difference in the total asset holdings of HACC participants earning less than $75,000. Finally, while the total assets of households earning more than $75,000 per year are greater than their family contributions—suggesting a greater return on their investments—this is not the case for lower-income households, who may need other policy supports if they are to reap rewards commensurate with their savings efforts. This may include larger initial seed deposits, progressive matches, and/or incentives for making non-financial investments in their children's educations.

The universal HACC grant plays a substantial role in families' asset accumulation, particularly for those not saving: Distinct from the financial instruments through which they are delivered, Children's Savings Accounts include incentives and supports designed to make long-term asset accumulation a more rewarding proposition, particularly for those economically-disadvantaged. This is one of the functions of the $500 HACC grant. These findings reveal that these funds and their associated earnings are a substantial part of the asset holdings of participating families, bolstering the asset accumulation of those who are making contributions and looming particularly large for those whose families have not yet contributed. Specifically, the HACC grant makes up 75% of the asset value of all HACC participants and 37% of the balance of savers.

Furthermore, there is evidence that the fact that all families receive the same amount of Alfond Grant investment and are subject to the same market forces may have some equalizing effect on the college saving positions of these families. Specifically, while their overall financial situations and even the balances in their NextGen accounts diverge considerably, there is little difference between the HACC value of those earning less than $25,000 per year (average=$865) and those earning more than $150,000 (average=$882).

However, if reducing wealth inequality is a goal of Children's Savings Account programs, it might not be enough that low-income and high-income families accumulate about the same amount in these accounts. In order to reduce wealth inequality, because higher-income families have more wealth to start out with, low-income families may actually need to accumulate more in these accounts than their higher income counterparts. For example, Sullivan, Meschede, Shapiro, Asante-Muhammed, and Nieves (2016) found that a universal, *progressive* (i.e., initial deposits incrementally decline for higher-wealth households) CSA could close the Latino/White wealth gap by 28% and the Black/White

wealth gap by 23%.

Nonetheless, evidence indicates that the HACC initial grant is valuable, particularly given evidence that early assets for education (from any source) may have positive effects on children's expectations (Kim, Sherraden, Huang, & Clancy, 2015), social/emotional well-being (Huang, Sherraden, Kim, & Clancy, 2014), and orientation to college (Elliott, 2013a). Qualitative research in some CSA programs has found that having money set aside by someone, for one's child's education (as in the HACC) can have a powerful effect on how families think about their children's futures (Gray et al., 2012).

Time is an important variable that can work in families' favor: Michael Sherraden's original vision for children's asset policy was to begin accounts universally at birth (Sherraden, 1991), both to leverage assets' effects on children's expectations and behavior throughout the entire lifespan and to capitalize on the time value of money. HACC operates according to this principle, today investing $500 at birth automatically for all Maine children. Here, families' asset growth over time provides evidence of the importance of helping families get an early start on saving for their children's educations. The family contributions and total asset holdings of those whose accounts were opened in earlier years are greater than those whose accounts were opened later. Importantly, HACC savers whose NextGen accounts were opened in 2009-2013 are saving, on average, approximately the annual amount that earlier analysis has found could result in NextGen account asset accumulation of up to $31,483 by the time a child turns 18 ($600/year; see Elliott, Lewis, Poore, & Clarke, 2015). This finding illustrates how the CSA's design, particularly its early initiation, works in the favor of all children, increasing their asset holdings at the point of college enrollment. At the same time, this timeline may be especially valuable to children from lower-income households whose families particularly need investment growth to build their balances.

Conclusion

Maine's Harold Alfond College Challenge seeks to "raise aspirations for and improve access to higher education for Maine's young people" (Powell, 2014, p. 4). Crucially, the HACC is designed not only to benefit the thousands of Maine children who begin their lives with a tangible investment in their futures, but also as a model for other philanthropists and policymakers, to "show Harold {Alfond} and the nation that every child deserves a chance in life" (Powell, 2014, p. 8). This report is a look at how families respond to and experience the opportunities the HACC extends, and how their asset accumulation outcomes unfold. This analysis provides evidence that the HACC is cultivating savings behavior among a sizable portion of Maine families with young children, contributing to educational asset accumulation, and offering valuable lessons in the design, operation, and evaluation of Children's Savings Account initiatives.

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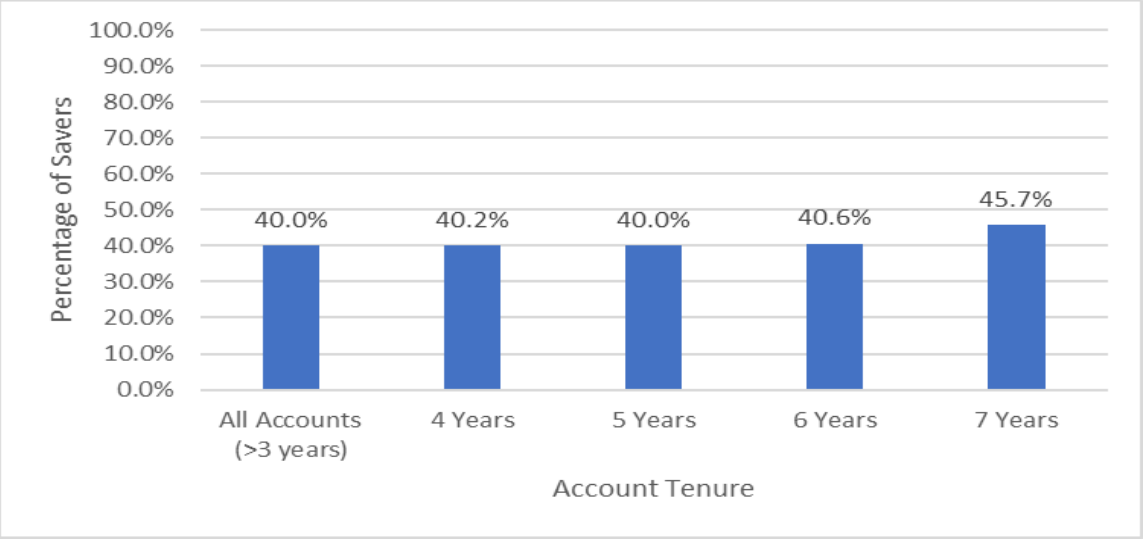
Appendix A. Additional Tables and Figures

Table A1. Total Number of Students with Active CSAs

Age of CSA	Number of Active CSAs	Number of Savers
> 3 years to 4 years	1379	529
> 4 years to 5 years	5002	2027
> 5 years to 6 years	4831	1891
> 6 years to 7 years	4724	1810
> 7 years to 8 years	2106	963
Total	**18042**	**7220**

Note. The age of the account is the difference between the CSA open date and 6/09/2017 (the date the data were acquired). All accounts are at least 3 years old because data were not available after 2013.

Figure A1. Percentage of Savers by Account Tenure, Cumulative



Note. Of all 18,042 accounts, 7,220 (40.0%) of accounts are savers. Of the 16,663 accounts that have been open at least 4 years, 6,691 (40.2% are savers). Of the 11,661 accounts that have been opened at least 5 years, 4,664 (40.0%) are savers. Of the 6,830 accounts that have been opened at least 6 years, 2,773 (40.6%) are savers. Of the 2,106 accounts that have been opened at least 7 years, 963 (45.7%) are savers.

Figure A2. Average Total CSA Value by Age of CSA—All CSAs

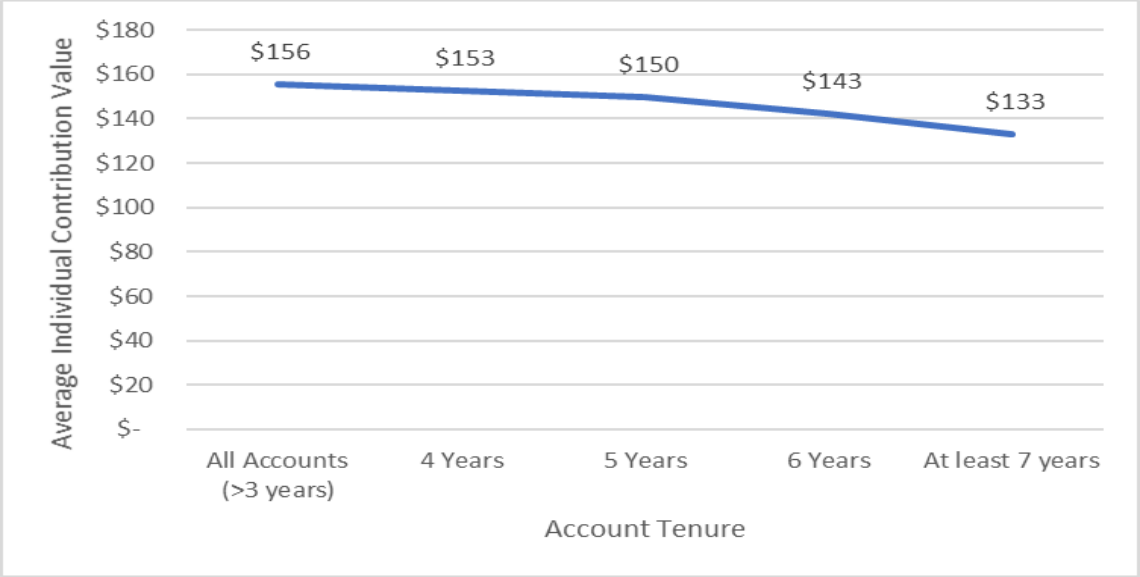
Note. All 18,042 accounts are at least 3 years old. 16,663 are at least 4 years old, and 11,661 are at least 5 years old. 6,830 CSAs are at least 6 years old, and 2,106 are at least 7 years old.

Figure A3. Average Total CSA Value by Age of CSA—Savers only

Note. Of all 18,042 accounts, 7,220 (40.0%) of accounts are savers. Of the 16,663 accounts that have been open at least 4 years, 6,691 (40.2% are savers). Of the 11,661 accounts that have been opened at least 5 years, 4,664 (40.0%) are savers. Of the 6,830 accounts that have been opened at least 6 years, 2,773 (40.6%) are savers. Of the 2,106 accounts that have been opened at least 7 years, 963 (45.7%) are savers.

Figure A4. Average Value of Total Contributions Made, by Age of CSA- Savers only

Figure A5. Average Value of an Individual Contribution Made, by Age of CSA



Note. Values by account tenure no within each year of the account.