

# **Prepaid 529 Plans By the Numbers:**

A Nationwide Analysis of Prepaid College Tuition Programs

September 2009

## **Overview**

College is not getting any cheaper. In the academic year ahead, the average cost for a year's tuition, room, board, books and supplies at a public college is estimated to be \$16,335.<sup>1</sup> For private colleges the projected average is even higher at \$37,297.<sup>1</sup> For today's nine-year old fourth grader who will enter college in ten years, that could mean a four-year college bill of almost \$128,000 for public college and more than \$292,000 for private college.<sup>1</sup>

The stark reality of that cost viewed against the backdrop of the market turmoil over the last 18 months is enough to rattle the nerves of even the most intrepid investors. It should come as little surprise then that state 529 plans have reported steady enrollment in prepaid plans, which allow investors to buy college credits at today's prices for use in the future, compared to a decrease in the rate at which new savings accounts were opened. In fact, prepaid account openings remained steady at approximately 4.6% in 2006 and 4.8% in 2008 while account openings in savings plans have slowed from approximately 15.8% in 2006 to just 6.4% in 2008.

The allure of a 529 prepaid plan is simple: buy college credits now for use later while saving several years' worth of tuition inflation and sheltering your investment from stock market risk. In this light, prepaid plans are an important component of the overall funding for higher education. But, it's also important to understand the full value proposition of prepaid plan – including the risks that may be involved.

As we enter the "back-to-school" prime marketing periods for prepaid plans, it's time for folks who want to save for college to assess their options, particularly if the sting of 2008 market losses is still a fresh memory. Additionally, since most prepaid plans have limited enrollment periods, an investor considering a prepaid plan has limited time to consider his options. With enrollment periods for at least seven plans opening in the next two months, it's not too soon to think about those choices.

The following AKF Market Report surveys the state 529 plan marketplace to assess the nuances of various prepaid options and analyze the financial benefits of investing in a 529 prepaid plan versus a 529 savings plan or even a taxable mutual fund. This report finds a range of factors that differentiate prepaid plans and demonstrates their obvious benefits for families who know their children will attend particular colleges or universities. It also shows that with enough resources, prepaid plans should be one big piece of the college funding pie.

# Method

Data for this AKF Market Report was aggregated through a review of offering documents for more than eighty 529 plans as of July 1, 2009, and an analysis of the performance of a \$10,000 investment over 10 years in a 529 prepaid plan, a 529 savings plan and a taxable mutual fund.

<sup>&</sup>lt;sup>1</sup> College Board, *Trends in College Pricing* (2008) reports 2008-2009 costs of \$15,410 for public colleges and \$35,186 for private colleges. The 2009-2010 and the ten-year projected costs assume an annual tuition inflation rate of 6%.



# **Findings and Observations**

#### Available Prepaid Plans

Of the more than one hundred qualified tuition plans that have been established, 13 plans today offer the benefit of prepaid tuition.<sup>2</sup> The vast majority of these plans require state residency at the time of initial purchase, and some require residency in the 12-months prior to matriculation. Two exceptions are the Massachusetts plan, which does not have a residency restriction, and the Independent 529 Plan, which is offered by a consortium of private colleges and universities.<sup>3</sup>

The following chart provides a snapshot of these plans, including their relative sizes, when the public can enroll, and limits on who is eligible to participate:

Plan (Inception)	AUMs Accounts (3/31/2009)	Most Recent or Upcoming Enrollment Period	Residency Requirements
Florida (1988)	\$7,013,180,151 1,367,346	10/20/08 - 1/31/09 (enrollment continues but prices re-set in early October)	Beneficiary or his parent / guardian must be FL resident for 12 months prior to enrollment
Illinois (1996)	\$751,078,784 60,078	10/29/08 - 4/30/09 (through 8/1/09 for newborns)	Owner or beneficiary must be IL resident for 12 months prior to enrollment
Maryland	\$397,679,720	12/1/09 - 4/5/10	Owner or beneficiary must be a resident of MD or DC at plan enrollment
(1998)	36,015	(year-round for newborns)	
Massachusetts⁴ (1995)	\$88,000,000 37,000	5/1/09 - 7/17/09	No residency requirements
Michigan	\$753,064,157	9/3/08 - 8/31/09⁵	Beneficiary must be MI resident
(1988)	90,009		at plan enrollment
Mississippi	\$151,364,805	9/1/09 - 12/31/09	Owner or beneficiary must be MS resident at plan enrollment
(1997)	26,157	(year-round for newborns)	
Nevada (1998)	\$80,700,252 12,924	1/21/09 - 4/24/09 (through 6/30/09 for newborns)	Owner or beneficiary must be NV resident at plan enrollment or owner is an alum of a NV institution
Pennsylvania	\$950,273,935	Year-round	Owner or beneficiary must be PA resident at plan enrollment
(1993)	134,915	(prices change on 9/1)	
Tennessee	\$70,063,661	Year-round	Owner or beneficiary must be TN resident at plan enrollment
(1996)	9,040	(prices change 1/1 and 8/1)	

<sup>&</sup>lt;sup>2</sup> Since 1988, 19 states or public entities have established and maintained prepaid plans; seven plans have closed permanently or suspended enrollment temporarily.

<sup>&</sup>lt;sup>3</sup> In the 2001 Tax Act, among other improvements to Section 529, Congress allowed for the creation of a private prepaid plan, subject to certain conditions.

<sup>&</sup>lt;sup>4</sup> Tuition payments in the Massachusetts UPIan are made from proceeds of Commonwealth General Obligation Bonds. The UPIan technically is not a qualified tuition plan under Section 529 of the Code.

<sup>&</sup>lt;sup>5</sup> The 2009-2010 enrollment period has not yet been determined.



Plan (Inception)	AUMs Accounts (3/31/2009)	Most Recent or Upcoming Enrollment Period	Residency Requirements
Texas TPF (2008)	\$22,287,613 13,075	9/1/09 - 2/28/10 (through 7/31/10 for newborns)	Beneficiary must be TX resident or parent-owner must be TX resident at plan enrollment
Virginia (1996)	\$1,154,888,390 97,668	12/1/08 - 3/15/09	Owner or beneficiary must be VA resident at plan enrollment or member of military stationed in VA or claiming VA as home
Washington (1998)	\$862,174,102 98,123	9/15/09 - 3/31/10	Owner or beneficiary must be WA resident at plan enrollment
Independent 529 (2003)	\$100,000,000 <sup>6</sup> 7,500	Year-round	No residency requirements

It is interesting to note that the prepaid plans are generally offered in states with strong public education institutions.<sup>7</sup> In these states, prepaid plans offer a great incentive for investors since the in-state institutions present compelling educational opportunities. Presumably this also accounts for the residency requirements that apply to most plans.

#### When College Dreams Change

The underlying appeal of a prepaid plan is the fact that is allows parents to lock-in the future cost of tuition at a lower price. Implicitly, it also shields the investor from market risk and the other variables that influence higher education pricing. For the family with foresight and the good fortune to participate in a prepaid plan in a state with a strong public education system, the rewards can be substantial. But what happens if the beneficiary of a prepaid plan decides not to attend an in-state school?

The most obvious risk for prepaid plan participants is forecasting their children's futures, often before it is fully clear whether they will want to – or be able to – attend an in-state public college. This cuts both ways: In states with highly competitive state schools, the barrier to entry may be too high for some students to be accepted to the very best schools. In others, students may feel like they are passing up attractive opportunities that exist out-of-state. In this respect, the risk associated with prepaid plans could be characterized as high.

From a parent's standpoint (or the view of anyone who is considering making the prepaid choice) perhaps the most important point to consider is the likelihood that the beneficiary will attend an instate school and, if that's not what happens, then what's the value of the prepaid contract?

The value of prepaid plans differs if the payment is not for an in-state public institution. The chart on the following page shows a summary of the different payouts – in doing so it also highlights the risk that the investment **won't be as valuable IF** the beneficiary attends a private or an out-of-state institution.

<sup>&</sup>lt;sup>6</sup> Estimated by the Independent Plan

<sup>&</sup>lt;sup>7</sup> We note that the Texas Tuition Promise Fund is a brand new prepaid, launched to the public in September 2008. The Texas Guaranteed Fund was the prior prepaid plan in Texas and, as of March 31, 2009, it had assets of \$1,248,396,619 in 158,442 accounts.



Plan	Benefits for Beneficiary Attending Private or Out-of-State Institution
	Benefits are paid at the current rates paid to public universities in Florida
FL	Additional requirements apply regarding accreditation and not-for-profit status
IL	Beneficiary receives an amount equal to the mean-weighted average tuition and mandatory fees of Illinois public schools
MD	Beneficiary receives the greater of the Weighted Average Tuition of the Maryland public colleges in the tuition plan purchased or the "Minimum Benefit," which is the payments made to the Plan plus a reasonable rate of return
	Eighty participating public and private institutions in MA are covered by the U.Plan
МА	Use at non-participating institutions provides a return of principal at maturity plus interest compounded annually equal to the Consumer Price Index
	Beneficiary receives weighted average public tuition if benefits are used at in-state private colleges
МІ	He / she receives average public tuition if used out-of-state
MS	Beneficiary receives weighted average tuition and mandatory fees at Mississippi public institutions, not to exceed actual tuition and mandatory fees.
NV	Beneficiary receives weighted average tuition at in-state Nevada public institutions, limited to actual tuition incurred, less \$25 one-time, out-of-state school processing fee.
PA	Beneficiary receives an amount based on the Credit Rate for the designated Tuition Level when the account was established; excess moneys may be used for other Qualified Expenses
TN	Plan will pay institutions 1% of the Weighted Average Tuition at Tennessee four-year public colleges and universities in the year the benefits are used
тх	Beneficiary will receive the lesser of the tuition and fees that would be covered by the type of Tuition Units purchased, or the market value of the Tuition Units (which is the total purchase price of the Units plus the portion of total net earnings on assets of the Fund)
	For in-state private colleges, the beneficiary will receive the lesser of contract payments plus the actual rate of return, or the highest Virginia public university tuition
VA	For out-of-state colleges, the beneficiary will receive the lesser of contract payments plus interest at a reasonable rate of return based on institutional money market rates, or the average Virginia public university tuition
WA	Beneficiary receives resident tuition and mandatory fees at University of Washington or WSU
Indep Plan	Refunds for any reason (including attendance at a non-participating institution) provide a return of contributions adjusted by program fund investment performance not to exceed plus-or-minus 2% annualized



So what this information tells us is that while the funds in the prepaid account can be used anywhere – you don't sacrifice them – the value of what you have to use could change substantially if your beneficiary does not choose the in-state, public education option. That said, in most cases the prepaid plan participant generally receives the benefit of the bargain in that you receive more or less what you would have had your beneficiary attended the in-state institution. The issue is only whether you might have ended up with more money for higher education had you not participated in the prepaid plan but chosen to invest in another option instead.

The discussion above assumes that a change in plans is limited to choosing one higher education institution over another. The other issue that sometimes confronts prepaid plan participants is what happens when a beneficiary decides not to attend college at all or not to do it on a set schedule. In these cases, the person who controls the prepaid plan account (who we refer to as the participant) has several choices, including naming a new beneficiary on the plan (assuming the new beneficiary satisfies Section 529 requirements and any other plan-imposed requirements on age and residency) or cancelling the prepaid contract or account and receiving a refund.

In the case of refunds, the prepaid plans vary but refunds are typically limited to moneys contributed less any applicable termination fees. Also, the treatment of earnings often depends on the reason for the termination (e.g., death or disability versus termination for nonqualified purposes) and also on the actuarial soundness or financial viability of the plan. The bottom line is that in the event a refund is necessary, the participant needs to understand the possible limitations.

#### **Understanding Plan Structure**

A less obvious but important consideration for investors is the underlying structure of the prepaid plan promise itself. Prepaid funds are large institutional investors. They operate much like pension funds, using their large scale buying power to take equity and bond market positions that will grow the overall portfolio to meet funding obligations down the road. Like pensions, many prepaid plans saw their assets drop significantly in the recent market turmoil. Each prepaid plan has some kind of contingency plan in the event that the fund cannot meet its obligations when investors need the money, but the plans differ in terms of the kind of assurance that exists for investors in the event of catastrophic market losses.

Some prepaid plans are backed by the full faith and credit of their states. Others look solely to the assets in the prepaid plan for the future payments. The following table shows how the various plans – including those that are now closed to new investors – stack up in terms of the security for their promise to pay future tuition on behalf of their participants:

Full Faith and Credit	Fund Assets	Legislative Appropriation	Other
Florida	Alabama	Illinois	Kentucky
Massachusetts	Colorado	Maryland	Texas Tuition Promise
Mississippi	Michigan	South Carolina	West Virginia
Ohio	Nevada	Virginia	Independent Plan
Texas Guaranteed	Pennsylvania		
Washington	Tennessee		

Note: Shaded boxes represent prepaid plans not currently offered to the public



As you can see, the plans are evenly split between those that offer a general obligation pledge for future tuition payments (four currently available to the public) and those where the future tuition payments by the plan are secured solely by the assets in the prepaid plan trust fund (also four currently available). This tells us that an investor should assess the strength of the underlying commitment - particularly when the security is limited to future plan assets.

In practice, the security feature should be less important to the participant than it is to the state creating the plan. And that reflects the fact that as long as a plan continues to sell tuition units or contracts to the public, then the current cash flow stream could be used to meet current liabilities. Typically the issues of potential non-payment affect future projections and are based upon a number of actuarial assumptions.

Another important component of the structure of prepaid plans is the pricing of the tuition units or contracts that are offered to the public. We often hear something to the effect that prepaid plans offer the ability to "pay for tomorrow's tuition at today's prices." For the most part, this is the case – the price of today's tuition unit or semester is the basis for the amount of tuition you secure for the future. The only issue is whether the cost to the prepaid participant for today's tuition price is adjusted for things like administrative charges, actuarial assumptions and reserves, and even projected deficits in future funding. And, for the participant, the decision then is whether the "premium" on the current tuition cost makes sense in light of the years before the beneficiary enters college. Essentially the prepaid plan participant who pays a premium price for tuition assumes that the future cost of tuition will more than exceed the current premium plus an assumed rate of return.

#### By-the-Numbers: The Prepaid Pay-Off in 10 Years

In analyzing the investment value of a prepaid plan, we recognize that many prepaid plans and their participants do not view the prepaid decision as an investment per se. Rather, they see the prepaid commitment as a contract or an insurance policy to receive tuition in the future. The prepayment today reduces the higher education bill in the future and hopefully minimizes the need for and burden of student loans. Prepaid plans and their participants also recognize that since most plans only cover tuition and, perhaps, mandatory fees, a financial hole remains for students needing room and board and for any student's books and supplies. This supports the fact that prepaid plans are often just one component of the overall college funding solution.

Even as insurance for future tuition costs, there still is a fundamental value issue for the prepaid participant: is the participant getting more for their money by purchasing college credits now than they would have if they waited or chose another investment option? In most cases, the answer is, yes.

To get at the heart of the matter, we ran a hypothetical scenario in which an investor puts \$10,000 into three different college savings vehicles – a 529 prepaid plan, a taxable mutual fund, and a 529 savings plan – for a period of 10 years. This analysis assumes that \$10,000 today will secure one year of tuition in ten years, and it further assumes that a 6% tuition inflation rate will result in a tuition cost of \$17,908 in ten years. With this in mind, we measured all three options against the projected tuition cost of \$17,908.

In terms of the prepaid plan, we assumed that the prepaid fund itself earns 6% annually but that it has an annual administrative charge of 0.25%. For the taxable mutual fund and the 529 savings plan, we assumed an average return of 6% and investment expenses of 0.15% and 0.40%, respectively. The assumed tax on profits for the mutual fund was 30%. The chart on the top of the next page depicts the dollar value of each investment over the 10-year period. We note that in all three scenarios, the projected cost of college in ten years - \$17,908 - exceeds the values in the accounts.



Value of Account after Fees and Taxes			
Year	529 Prepaid Tuition	Taxable Account	529 Savings Account
1	\$10,574	\$10,409	\$10,558
2	\$11,180	\$10,834	\$11,146
3	\$11,821	\$11,277	\$11,768
4	\$12,499	\$11,739	\$12,424
5	\$13,216	\$12,219	\$13,117
6	\$13,974	\$12,718	\$13,848
7	\$14,775	\$13,238	\$14,620
8	\$15,622	\$13,779	\$15,436
9	\$16,518	\$14,343	\$16,296
10	\$17,466	\$14,929	\$17,205

As the table shows, an investment of \$10,000 today in a prepaid plan, assuming a 6% rate of return (and 0.25% in fees), will be worth \$17,466 in 10 years. That same \$10,000 invested in a traditional taxable mutual fund, earning 6% year with 30% taxes on earnings, will leave the investor with \$14,929 in 10 years. And \$10,000 invested in a 529 savings plan, assuming an average return of 6%, will be worth \$17,205 in 10 years.

This simple analysis shows that the prepaid participant whose beneficiary attends an in-state, public higher education institution comes out ahead because he actually receives tuition worth more than he has to his credit in the prepaid account. In contrast, the owner of the taxable account and the 529 savings account owner do not have enough money on hand to cover one year of tuition at the thencurrent cost.

The analysis between the prepaid and the savings options is necessarily sensitive to tuition inflation and assumed rates of return, so to the extent that market performance exceeds tuition inflation, then the investor would do better investing in a 529 savings plan because he will have more funds to use for college at the end of the investment period. If tuition inflation exceeds market performance, then the prepaid tuition accounts – used at an in-state college – will essentially provide a better yield than the 529 savings account.

Similarly, the analysis between the taxable option and any 529 plan is sensitive to assumed federal tax rates on earnings (and timing of the taxes) as well as the cost of investment overall. As we indicated above, our simple analysis assumed that the taxable fund costs would be the lowest – at just 0.15% annually - whereas the 529 plans, whether savings or prepaid, include additional costs for "program management." A greater differential could accrue to the benefit of the taxable fund, but only to the degree that it exceeds the taxes imposed annually on earnings in the taxable fund.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> We also recognize that if the beneficiary were to own the taxable account, the results would differ due to more advantageous tax treatment of earnings.



The bottom line for the 529 investor choosing between prepaid and savings plans is that *IF* an investor thinks tuition inflation will remain high – or at least unpredictable for the risk averse – and *IF* the investor is relatively sure the beneficiary will choose an in-state higher education option, then the prepaid route is a reasonable bet for future college funding needs. And, for any investor who wishes to balance out the risks of prepaid and savings plans, the combination of both options surely hedges the bet and provides for the broadest coverage of college costs.

#### **Other Prepaid Factors to Consider**

Because an investment in a prepaid plan is a significant commitment, it is critical for investors to weigh a number of other factors, such as limits on use, enrollment period, flexibility and even refund policies in the event that the student's plans change after purchase. The following is a summary of some plan factors not otherwise discussed in this report. These represent a few of the additional points anyone should consider when they evaluate prepaid options.

Factor	General Treatment
Age Limits	Most programs limit participation to 9th grade or lower
on Use	Four programs specify an age of participation (18 is most common) – others do not
	Six programs require benefits to be used within 10 to 15 years; others require that benefits "begin" to be used within 10 years of high school graduation
	Five programs specify "holding periods" before benefits can be applied
	At least one program allows benefits to be used by high school juniors and seniors
Flexibility	Varies widely but many programs include at least three plans that vary according to the semesters or years covered at colleges and universities, community or junior colleges, and some combination of both
	Six plans allow purchases of more than four years or 120 credit hours
	Only a handful of programs allow for a mixture of contract and unit purchases
Affordability	Some programs offer one semester of a community college so the contract cost can be as low as \$1,256
	Most plans include installment and lump sums payment options – monthly installment costs range but average appears to be \$25 per month
	Down payment options are not clear in all plans
	Most plans include premiums on contract or unit costs, plus an interest component on installment payments
	Eight plans have enrollment fees of \$50 or less (including 2 plans that charge \$0)
	Many plans include a broad range of transaction fees



# Conclusion

#### 529s Still the Best Bet for College Savings

None of us has a crystal ball on the financial markets or on life, but our analysis of the prepaid 529 market makes one point very clear: 529 qualified tuition plans – whether prepaid or savings – are simply the most effective vehicles for saving for college. In the case of the prepaid plans at the center of this report, it is critical to note that despite some of the limitations, these plans do provide an extraordinary value for investors in down markets. And, they can be combined with 529 savings plans to cover all the qualified expenses needed for higher education.

As increasing numbers of investors continue to flock to prepaid plans, more states may adopt their own versions of these conservative investment vehicles. Likewise, as financial markets continue to gyrate, issues of fund solvency are likely to surface. We will continue to monitor trends in the prepaid market and report on them in future installments of the AKF Market Report.

## Find out more

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# About the AKF Consulting Group

The AKF Consulting Group is the leading strategic advisor in the 529 College Savings market, currently counting 27 state governments as clients. AKF Consulting provides strategic advice to entities involved in the Section 529 College Savings Market. Specifically, the firm assists in structuring all aspects of Section 529 savings and prepaid programs, including investments, administration and marketing. AKF Consulting also advises on program enhancements such as scholarships and matching grant programs, affinity programs and other loyalty builders. For more information, please visit www.akfconsulting.com.