College Planning Essentials

A comprehensive guide to saving and investing

2020 Edition

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Asset Management

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1. Northeastern University Center for the Future of Higher Education and Talent Strategy, December 2018.
2. Sallie Mae, *How America Pays for College*, 2019.
3. Savingforcollege.com, July 23, 2019. For bachelor's degree recipients in the class of 2019. Based on an analysis by Mark Kantrowitz of data from the 1992-93, 1995-96, 1999-00, 2003-04, 2007-08, 2011-12 and 2015-16 National Postsecondary Student Aid Study (NPSAS), with geometric interpolation and projection in between NPSAS years.

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Higher education pays

A college diploma opens the door to a lifetime of higher earnings.

DEGREES OF DIFFERENCE

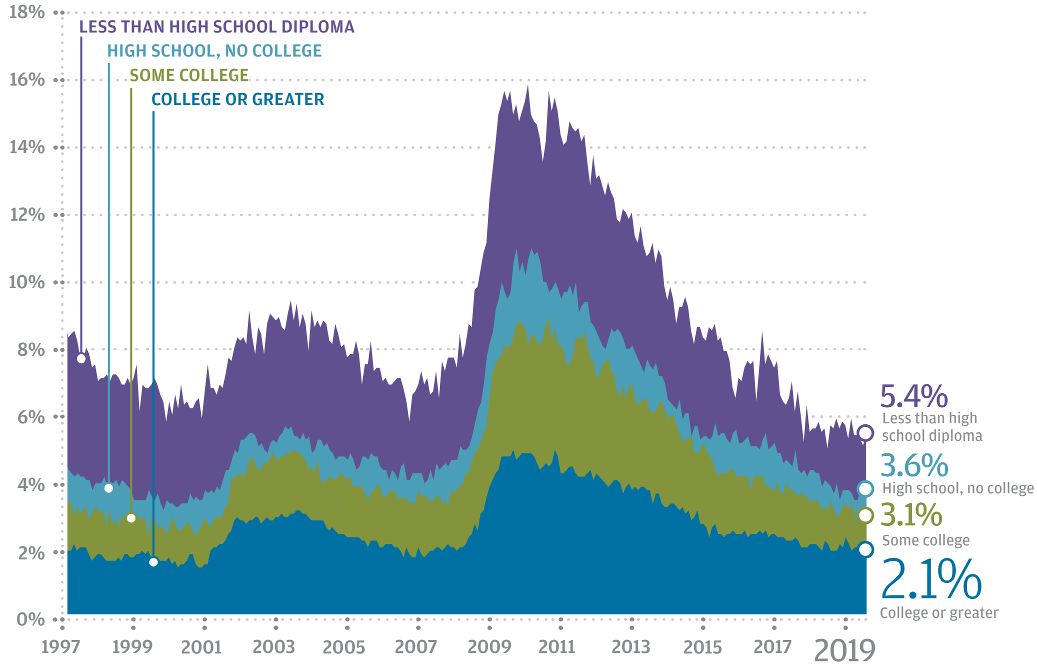
- Bachelor's degree holders earn enough extra in a single year to **recoup nearly three semesters of current public college costs.**[1]
- Bachelor's degree holders could earn about **$1.8 million more** over a lifetime than high school graduates. Those with professional degrees may earn nearly **$2.8 million more.**[2]
- Over the past 50 years, earnings of young adults have **increased only for those with college degrees.**[3]

1. U.S. Census Bureau, J.P. Morgan Asset Management. For workers aged 18 and older, 2018. Data come from the Current Population Survey and are published under historical income tables by person by the U.S. Census Bureau. College costs are based on The College Board's 2019 *Trends in College Pricing* for average tuition, fees and room and board at an in-state four-year university.
2. U.S. Census Bureau, Current Population Survey, 2019 Annual Social and Economic Supplement. Lifetime earnings are based on current mean earnings for workers aged 25 to 29, assuming 3% annual pay raises over 40 years.
3. Pew Research Center, *Millennial life: How young adulthood today compares with prior generations*, February 2019.

More education, less unemployment

College graduates enjoy much better job security and opportunity, especially during economic downturns.

Unemployment rates by education level
as of August 2019[1]



BRIGHT JOB PROSPECTS

- The number of **college-educated Americans with jobs has increased 32%** since the beginning of the Great Recession in December 2007.[2]
- Only **3.8%** of recent college graduates are unemployed, vs. **6.5%** of young workers without college degrees.[3]

1. J.P. Morgan Asset Management, Bureau of Labor Statistics, FactSet. Unemployment rates shown are for civilians aged 25 and older. Data are as of 8/31/19.
2. Bureau of Labor Statistics, *Employment Situation Report*, December 2007 and August 2019.
3. Federal Reserve Bank of New York, June 2019.

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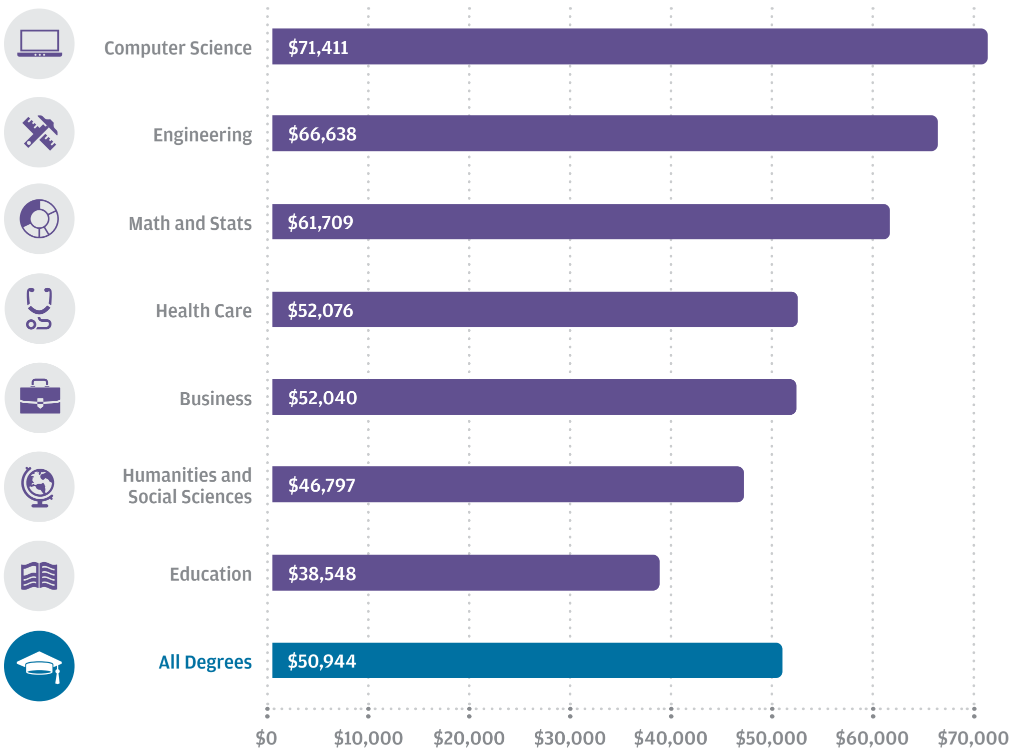
"Major" differences in salaries

Choice of college major has a significant impact on a graduate's starting salary.

Average yearly starting salary
by college major for the class of 2018



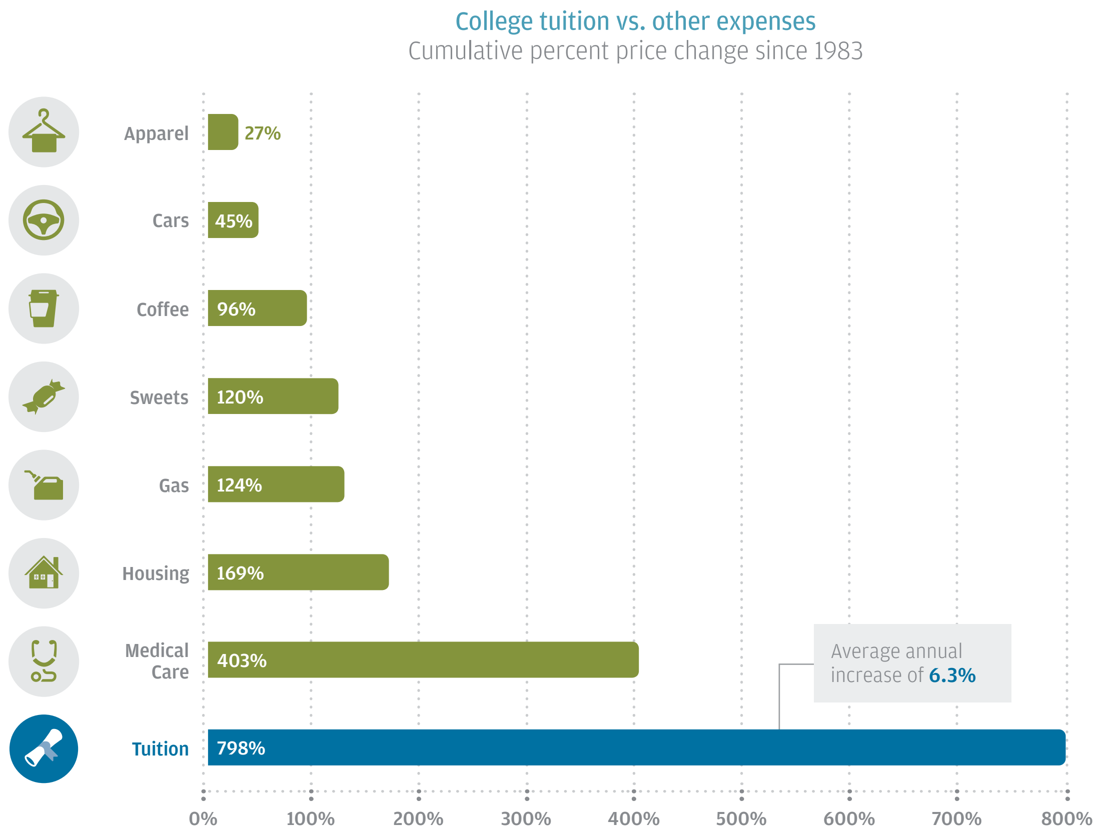
SALARIES ON THE RISE

- Average starting salaries for the class of 2018 are **13.4% higher** than for the class of 2013.
- If salaries continue rising at this pace, **the average child born today would earn roughly $86,445** in the first year after college.

Source: National Association of Colleges and Employers (NACE) *Salary Survey* Executive Summary, Spring 2014 and Summer 2019.

Tuition inflation

College tuition costs have increased more quickly than any other household expense in recent decades.



WHY COSTS ARE RISING

- Colleges **spend more** to attract the best students.
- Colleges **hire more** faculty and administrative staff.
- Colleges **receive less financial support** from states.

Source: BLS, Consumer Price Index, J.P. Morgan Asset Management. Data represent cumulative percentage price change from 12/31/82 to 12/31/18.

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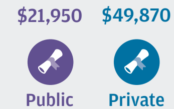
Future four-year college costs

The younger the child, the more college is likely to cost. Add up four years per child, and it equals one of a family's largest expenses.

Projected cost of a four-year college education
based on child's current age

2019-20 average tuition, fees and room and board expenses



IS COLLEGE WORTH IT?

14%

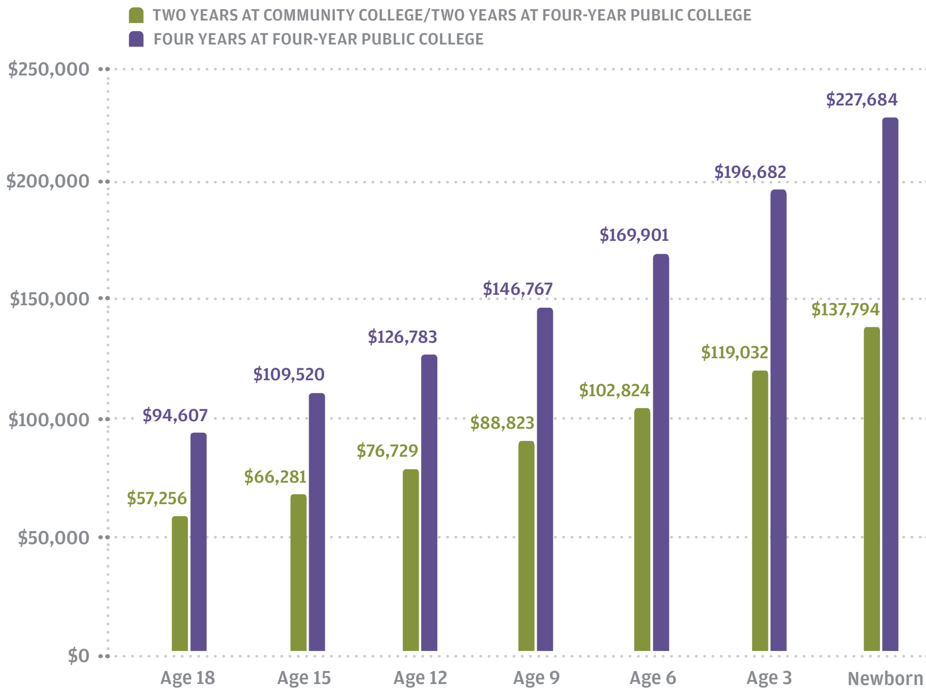
Average annual lifetime return on an investment in college[1]

Source: J.P. Morgan Asset Management, using The College Board, 2019 *Trends in College Pricing*. Future college costs estimated to inflate 5% per year. Average tuition, fees and room and board for public college reflect four-year, in-state charges.

1. Federal Reserve Bank of New York, June 2019.

Some students choose to live at home and attend community college in their freshman and sophomore years.

Four-year costs with and without community college[1]
based on child's current age



Save 39% by attending two years of community college[1]

$3,730 Average annual tuition and fees at community college[1]

AN AFFORDABLE FIRST STEP

Two-thirds of community college students plan to go on to earn a bachelor's degree or higher.[2]

1. J.P. Morgan Asset Management, using The College Board, 2019 *Trends in College Pricing*. Future college costs estimated to inflate 5% per year. Average tuition, fees and room and board for public college reflect four-year, in-state charges. Community college costs are based on tuition and fees for an in-district student.
2. Sallie Mae, *How America Pays for College*, 2019.

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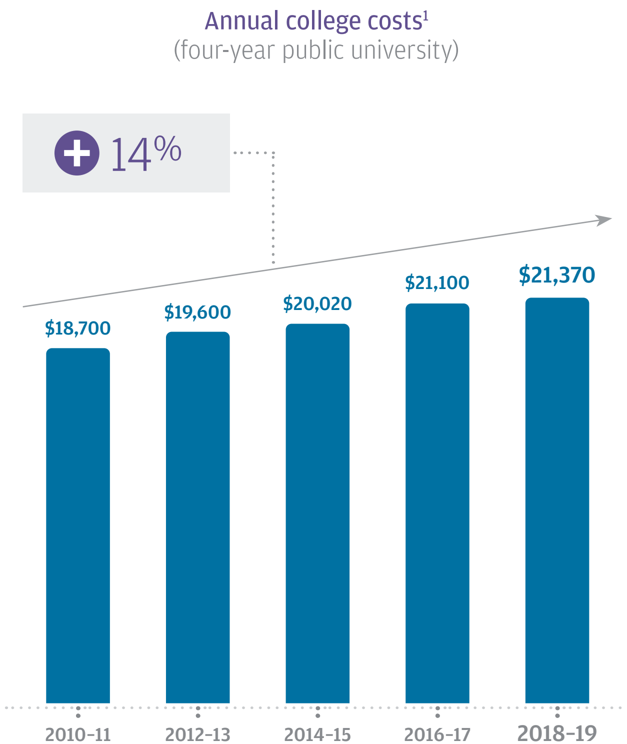
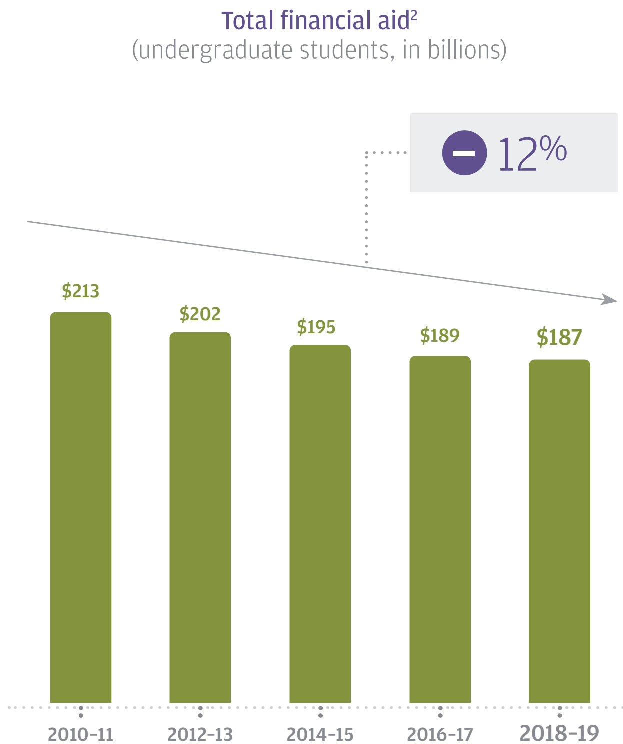
Financial aid overview

College costs continue rising while financial aid has been declining — leaving families to cover more of the expenses.





1. The College Board, 2018 *Trends in College Pricing*. Based on average tuition, fees and room and board at an in-state four-year university.
2. The College Board, 2019 *Trends in Student Aid*. Includes federal, state, institutional and private grants as well as federal work-study, tax benefits, veterans benefits and loans.

Financial aid reality check

Many families expect more free money from grants and scholarships than they are likely to receive.

Grant reality 2018–19 (need-based)[1]

Percent of families receiving

57%

Average amount

$5,732

Total costs covered by grants at:

Private 12%

4-year Public 12%

2-year Public 17%

Scholarship reality 2018–19 (merit-based)[1]

Percent of families receiving

65%

Average amount

$7,562

Total costs covered by scholarships at:

Private 24%

4-year Public 15%

2-year Public 10%

FEW FREE RIDES

0.3%

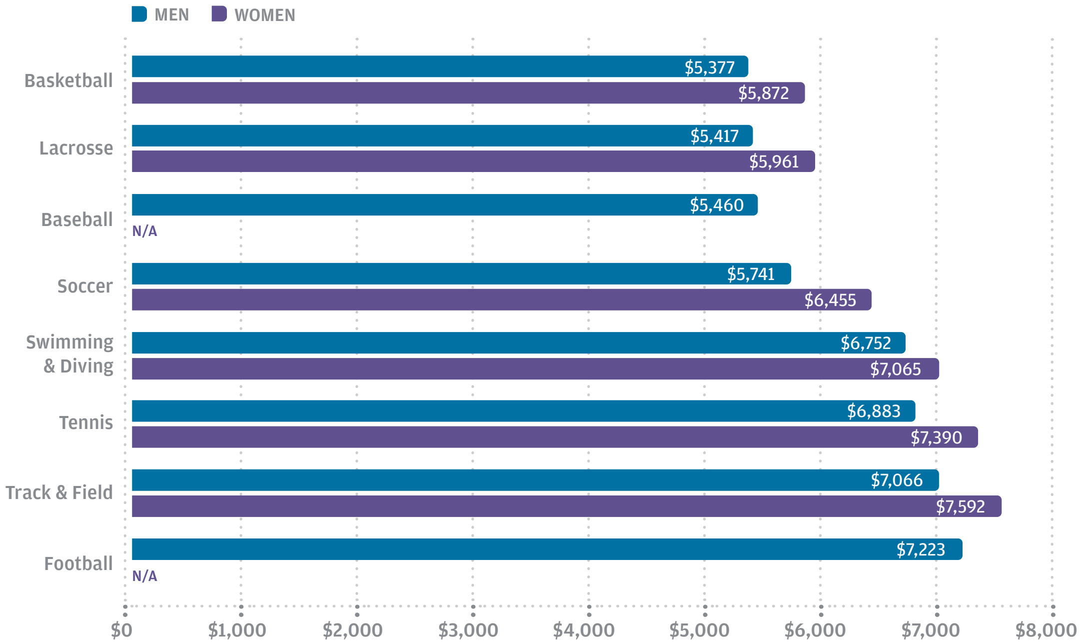
of college students receive enough grants and scholarships to cover costs.[2]

1. Sallie Mae, *How America Pays for College*, 2019.
2. Finaid.org. Based on full-time students at four-year colleges.

The facts about athletic scholarships

Athletic scholarships usually cover only a small portion of college costs ... and only for the select few who receive them.

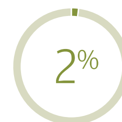
Average scholarship by sport[1]



IMPACT ON 529 PLANS

If students earn scholarships, families can either:

- **Transfer unused 529 plan assets** to another family member;[2] or
- **Withdraw an amount equal to the scholarship** without paying the 10% federal penalty tax.[3]



DON'T COUNT ON IT

Only about 2% of high school athletes receive scholarships to play college sports.[4]

1. ScholarshipStats.com, for National Collegiate Athletic Association (NCAA), National Association of Intercollegiate Athletics (NAIA), junior colleges and community colleges. All data are for 2018-19 school year.
2. Section 529 of the Internal Revenue Code defines a family member as a son, daughter, stepson or stepdaughter, or a descendant of any such person; a brother, sister, stepbrother, or stepsister; a father or mother, or an ancestor of either; a stepfather or stepmother; a son or daughter of a brother or sister; a brother or sister of the father or mother; a son-in-law, daughter-in-law, father-in-law, mother-in-law, brother-in-law, or sister-in-law; the spouse of the beneficiary or the spouse of any individual described above; or a first cousin of the beneficiary. Gift or generation-skipping transfer taxes may apply. Please consult your tax professional for more information.
3. Federal and state income taxes are due on any investment earnings. Consult your tax professional for more information.
4. NCAA, for 2018-19 school year.

Federal financial aid eligibility

The Department of Education calculates the Expected Family Contribution (EFC) used to determine your financial aid eligibility.

TOTAL COLLEGE COSTS EACH YEAR − **EXPECTED FAMILY CONTRIBUTION (EFC)** = **FINANCIAL AID ELIGIBILITY**

WHEN TO APPLY

Apply as early as October 1 of the year before college, using income and tax information from two years before college.

HOW EFC IS CALCULATED[1]

A family's **annual income**, including the student's, **counts far more in the formula than savings and investments**, especially when held in the parents' names.

PARENTS

Income

22–47%
of adjusted gross income above the protected amount[2]

+

Assets

Up to
5.64%
of non-retirement assets above protected amount, including **529 plans, investments and savings**

+

STUDENTS

Income

50%
of income above protected amount of $6,660

+

Assets

20%
of all assets in bank accounts, CDs, UGMAs/UTMAs and any other savings

=

TOTAL EFC

EFC is not the amount your family will pay for college or get in federal aid. It's a number used to calculate how much aid a student is eligible to receive.

Families may be expected to pay more than their EFC.

GRANDPARENTS/OTHERS

0%
of income and assets considered in federal financial aid formulas. However, withdrawals for college by grandparents or others may be considered student income and must be reported on future financial aid forms. Such income can reduce the amount of aid by 50%, two years after distribution.

1. Based on federal methodology for 2019-20 school year. To learn more about how EFC is calculated, see https://ifap.ed.gov/sites/default/files/attachments/efcformulaguide/1920EFCFormulaGuide.pdf.
2. Protected amount for parents is dependent upon a number of factors, including household size and number of students in college.

Use this chart to estimate your Expected Family Contribution, the amount used to determine federal financial aid eligibility.

Annual Expected Family Contribution (EFC)

Examples based on income and assets

Income has a **much bigger impact** than assets.

ASSETS (EXCLUDING PRIMARY RESIDENCE AND RETIREMENT ACCOUNTS)

COMBINED INCOME	$0	$25,000	$50,000	$100,000	$150,000	$200,000	$250,000	$300,000
$50,000	$2,241	$2,740	$3,400	$4,856	$6,684	$8,925	$11,672	$14,492
$75,000	$7,734	$8,197	$9,406	$12,226	$15,046	$17,866	$20,686	$23,506
$100,000	$15,880	$16,946	$18,356	$21,176	$23,996	$26,816	$29,636	$32,456
$125,000	$23,676	$24,742	$26,152	$28,972	$31,792	$34,612	$37,432	$40,252
$150,000	$32,005	$33,071	$34,481	$37,301	$40,121	$42,941	$45,761	$48,581
$175,000	$40,409	$41,475	$42,885	$45,705	$48,525	$51,345	$54,165	$56,985
$200,000	$48,689	$49,755	$51,165	$53,985	$56,805	$59,625	$62,445	$65,265
$225,000	$56,403	$57,469	$58,879	$61,699	$64,519	$67,339	$70,159	$72,979
$250,000	$64,116	$65,182	$66,592	$69,412	$72,232	$75,052	$77,872	$80,692

CALCULATE YOUR PERSONAL EFC

Use the U.S. Dept. of Education's online calculator to get an estimate.

Example: If you earn $150,000 in income and have $200,000 of savings, your estimated EFC is **$42,941**.

Source: J.P. Morgan Asset Management and fafsa.gov. Based on two-parent household with one child attending college, one child living at home, all are residents of New York. Assumes no income or assets for each dependent and age 49 for eldest parent. Protected amounts for assets vary based on age and income. These are estimates provided for illustrative purposes only, and they may not be representative of your personal situation and circumstances.

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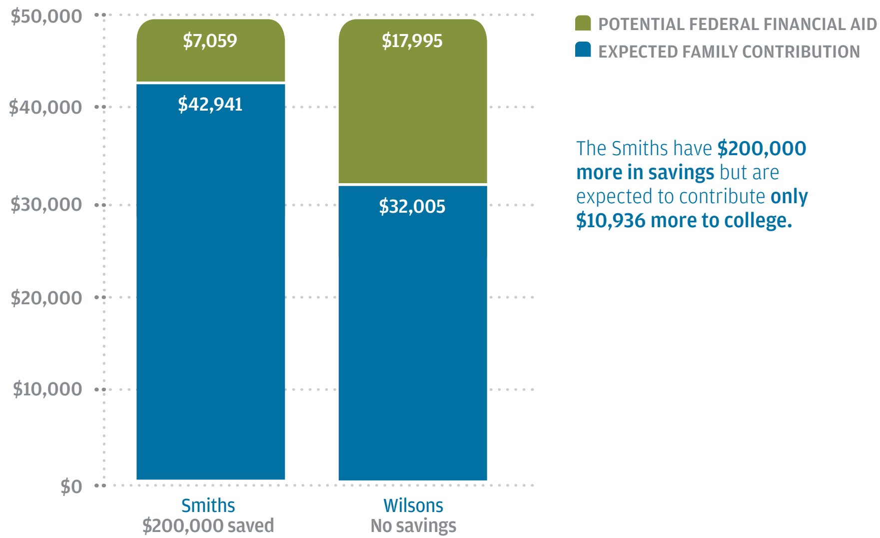
The effect of savings on financial aid

Savings count far less than income when calculating your Expected Family Contribution and financial aid eligibility.

Big difference in college savings, little difference in financial aid

Federal financial aid for two families earning identical income and sending a child to the same college costing $50,000 per year



The Smiths have **$200,000 more in savings** but are expected to contribute **only $10,936 more to college.**

529 PLAN ADVANTAGE

When a 529 account is owned by parents, it has much less impact on federal financial aid eligibility than custodial accounts or other student-owned assets.

Maximum parental savings considered in federal financial aid formulas

Source: J.P. Morgan Asset Management and fafsa.gov. Based on two-parent household with one child attending college, one child living at home, all are residents of New York. Assumes no income or assets for each dependent and annual household income of $150,000 for both families. Also assumes the eldest parent is age 49, and the 529 plan is owned by a parent. Does not include non-federal financial aid opportunities, such as scholarships. These are estimates provided for illustrative purposes only, and they may not be representative of your personal situation and circumstances.

Applying for federal aid

Families can file their Free Application for Federal Student Aid (FAFSA) as early as October 1 of the year before college classes begin, using income and tax information from two years before college.

Example: Student starting college in 2021

	Freshman	Sophomore	Junior	Senior
School year	2021–22	2022–23	2023–24	2024–25
FAFSA filing year	2020	2021	2022	2023
Income tax year	2019	2020	2021	2022

529 plans owned by parents or students
Consider using in any year, as withdrawals are not considered income on FAFSA.

529 plans owned by grandparents or others
Consider using in later years, when withdrawals would not be reported as income on FAFSA until after the student has likely graduated.

DID YOU KNOW?

- For students to be considered for aid, FAFSA must be filed for every year in college, **based on income and tax information from two years prior**.
- Withdrawals from parent-owned 529 plans are **not considered income** on FAFSA.
- Withdrawals from 529 plans owned by grandparents or others are treated as student income.

Source: FAFSA (Free Application for Federal Student Aid).

Families that don't save enough for college often have no other choice than to borrow.

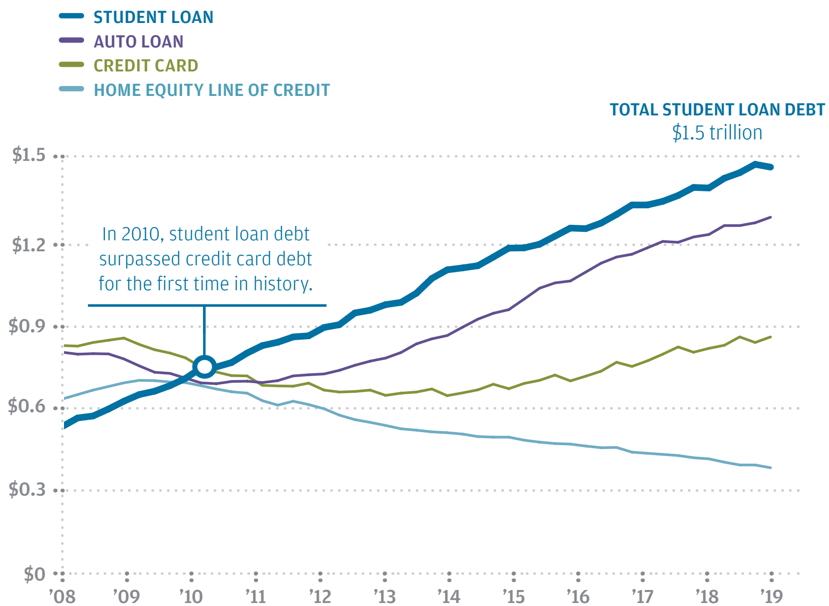
Average debt at graduation[1]

Class of 2019

Parental debt has **increased 38%** since 2015.[2]

Debt balances

by type of consumer loan, excluding mortgages (in trillions)[3]

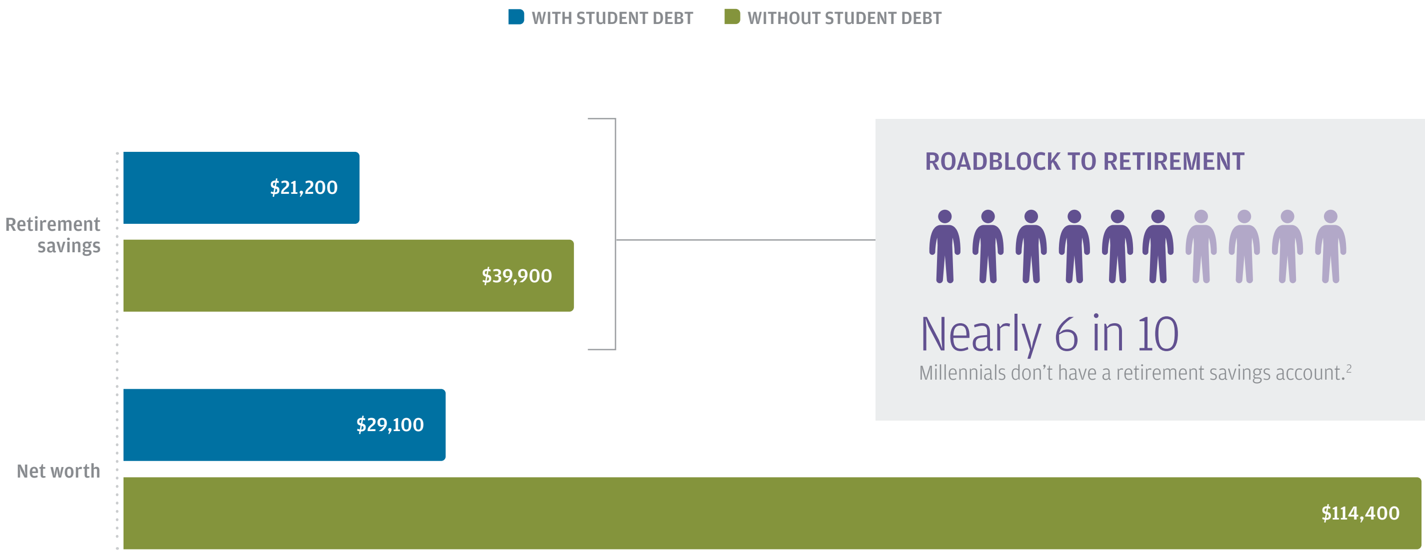


1. Savingforcollege.com, July 23, 2019. For bachelor's degree recipients in the class of 2019. Based on an analysis by Mark Kantrowitz of data from the 1992-93, 1995-96, 1999-00, 2003-04, 2007-08, 2011-12 and 2015-16 National Postsecondary Student Aid Study (NPSAS), with geometric interpolation and projection in between NPSAS years.
2. Experian, based on an analysis of U.S. Department of Education data, July 2019.
3. Federal Reserve Bank of New York, *Household Debt and Credit Report*, Q2 2019.

Student debt and Millennial finances

Paying off student loans can leave young college graduates with less wealth and retirement savings.

Millennials with student debt vs. those without[1]



ROADBLOCK TO RETIREMENT

Nearly 6 in 10

Millennials don't have a retirement savings account.[2]

1. MagnifyMoney, October 2018, based on an analysis of Federal Reserve data. For households under age 35.
2. Morning Consult, National Tracking Poll, March 2019.

Comparing college savings vehicles

Understanding the different college savings vehicles can help you choose the right one for your needs.

529 college savings plan

- **Tax-free investing** and withdrawals for qualified education expenses[1]
- **Account owner control** for the life of the account
- **No income limits** on contributors or age restrictions on beneficiaries
- High contribution maximums, often **$400,000 or more** per beneficiary[2]
- **Low impact** on financial aid eligibility
- **Assets removed** from taxable estate
- **Tax-free gifts** of up to $150,000 per beneficiary in a single year[3]

42% of parents own 529 plans[4]

Custodial account (UGMA/UTMA)

- Some investment earnings may be **taxed at child's rate, the rest at rates for trusts/estates**
- **Child assumes control** at age of majority, usually 18 or 21
- Funds must be used for the child's benefit, **not necessarily for college**
- **High impact** on financial aid eligibility
- **Assets not removed** from taxable estate if donor is also custodian

6% of parents own UGMA/UTMA accounts[4]

Coverdell Education Savings Account

- **Tax-free investing** and withdrawals for qualified expenses at any level of education[5]
- **Must contribute before beneficiary turns 18** and generally must use assets by age 30
- **Income limits** on contributors
- Maximum contribution of **$2,000 annually** per beneficiary
- **Low impact** on financial aid eligibility
- **Assets removed** from taxable estate

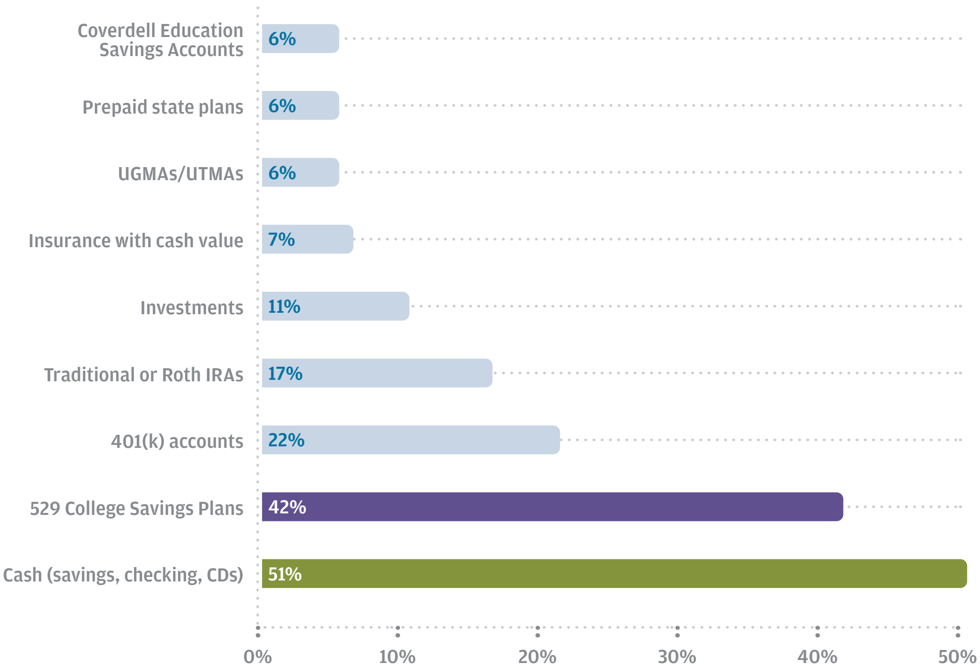
6% of parents own Coverdell accounts[4]

1. Earnings on federal non-qualified withdrawals may be subject to federal income tax and a 10% federal penalty tax, as well as state and local income taxes. New York State tax deductions may be subject to recapture in certain additional circumstances such as rollovers to another state's 529 plan, or withdrawals used to pay elementary or secondary school tuition ("K-12 Tuition Expenses"), registered apprenticeship program expenses ("Apprenticeship Program Expenses"), or qualified education loan repayments ("Qualified Education Loan Expenses") as described in the Disclosure Booklet and Tuition Savings Agreement. State tax benefits for non-resident New York taxpayers may vary. Tax and other benefits are contingent on meeting other requirements. Please consult your tax professional about your particular situation.
2. The maximum aggregate balance of all accounts for the same beneficiary in qualified tuition programs sponsored by the State of New York, as established by the Program Administrators from time to time, which will limit the amount of contributions that may be made to accounts for any one beneficiary, as required by Section 529 of the Internal Revenue Code. The current maximum account balance is $520,000.
3. Maximum gifts are $150,000 per beneficiary from married couples and $75,000 from single tax filers. No additional gifts can be made to the same beneficiary over a five-year period. If the donor does not survive the five years, a portion of the gift is returned to the taxable estate.
4. Strategic Insight, *529 Industry Analysis: 2019*.
5. Earnings on non-qualified withdrawals may be subject to federal income tax and a 10% federal penalty tax, as well as state and local income taxes.

Don’t just save, invest

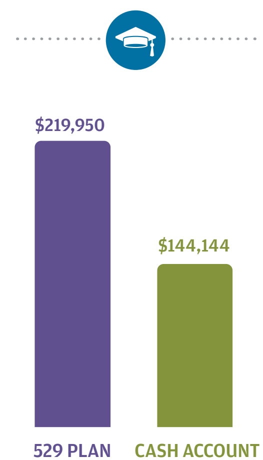
Families often choose vehicles that don’t maximize growth potential, such as savings accounts, CDs and taxable investments.

Percentage of families using[1]



CASH ALONE WON’T GET YOU THERE

Growth over 18 years[2]



1. Strategic Insight, *529 Industry Analysis: 2019*.
2. J.P. Morgan Asset Management. Illustration assumes an initial $10,000 contribution and monthly contributions of $500 for 18 years. Chart also assumes an annual investment return of 6% and an annual cash return of 2%, both compounded monthly. Investment losses could affect the relative tax-deferred investing advantage. This hypothetical illustration is not indicative of any specific investment and does not reflect the impact of fees or expenses. Each investor should consider his or her current and anticipated investment horizon and income tax bracket when making an investment decision, as the illustration may not reflect these factors. These figures do not reflect any management fees or expenses that would be paid by a 529 plan participant. Such costs would lower performance. This chart is shown for illustrative purposes only. Past performance is no guarantee of future results.

Monthly investment to achieve goal (new investors)

College savings goals may be more manageable when you break them down into monthly investments and start early.

Child's current age	PUBLIC COLLEGE[1] Total four-year cost	Monthly investment to pay: 50%	75%	100%	PRIVATE COLLEGE[1] Total four-year cost	Monthly investment to pay: 50%	75%	100%
Newborn	$227,684	$297	$446	$595	$517,293	$676	$1,013	$1,351
3	$196,682	$341	$512	$682	$446,857	$775	$1,162	$1,550
6	$169,901	$407	$610	$813	$386,012	$924	$1,385	$1,847
9	$146,767	$516	$773	$1,031	$333,452	$1,171	$1,757	$2,343
12	$126,783	$734	$1,101	$1,467	$288,048	$1,667	$2,500	$3,334
15	$109,520	$1,389	$2,083	$2,777	$248,827	$3,155	$4,732	$6,310

BIG PLANS

Nearly **nine in 10** parents want to pay **at least 50%** of college costs.[2]

ARE FOUR YEARS ENOUGH?

5.1 years

Average time to complete bachelor's degree[3]

1. J.P. Morgan Asset Management. Based on average tuition, fees and room/board costs for 2019-20 school year, The College Board, 2019 *Trends in College Pricing*. Costs estimated to inflate 5% per year. This hypothetical example illustrates the future values of different regular monthly investments for different time periods and assumes an annual investment return of 6%, compounded monthly. This hypothetical example does not represent the performance of any particular investment. Different assumptions will result in outcomes different from this example. Your results may be more or less than the figures shown. These figures do not reflect the impact of fees or expenses that would be paid by a 529 plan participant. Such costs would lower performance. A plan of regular investment cannot ensure a profit or protect against a loss in a declining market.
2. Savingforcollege.com, 2017 *Annual College Savings Survey*.
3. National Student Clearinghouse Research Center, *Time to Degree*, September 2016.

Tracking progress toward goal (existing investors)

See how much you should have invested today, based on a child's current age and the percent of total college costs you plan to pay.

Child's current age	PUBLIC COLLEGE				PRIVATE COLLEGE			
	Total four-year cost	Current investment to be on track to pay: 50%	75%	100%	Total four-year cost	Current investment to be on track to pay: 50%	75%	100%
3	$196,682	$41,034	$61,551	$82,068	$446,857	$93,229	$139,843	$186,458
6	$169,901	$42,218	$63,327	$84,436	$386,012	$95,918	$143,877	$191,836
9	$146,767	$43,436	$65,153	$86,871	$333,452	$98,685	$148,027	$197,370
12	$126,783	$44,688	$67,033	$89,377	$288,048	$101,531	$152,297	$203,063
15	$109,520	$45,977	$68,966	$91,955	$248,827	$104,460	$156,690	$208,920

Example: If you plan to pay 75% of public college costs for a current 9-year-old, you should have **$65,153** invested today.

BELOW YOUR NUMBER?

- **Start or increase monthly investments** and gifts from family and friends.
- **Invest extra money** from tax refunds, bonuses, raises or paying off debts.
- **Enhance after-tax return potential** with a 529 plan.
- **Consult a financial professional** about your specific situation.

Source: J.P. Morgan Asset Management. Based on average tuition, fees and room/board costs for 2019-20 school year, The College Board, 2019 *Trends in College Pricing*. Costs estimated to inflate 5% per year. This hypothetical example illustrates the future values of lump-sum contributions with no additional contributions for different time periods and assumes an annual investment return of 6%, compounded monthly. This hypothetical example does not represent the performance of any particular investment. Different assumptions will result in outcomes different from this example. Your results may be more or less than the figures shown. These figures do not reflect the impact of fees or expenses that would be paid by a 529 plan participant. Such costs would lower performance. A plan of regular investment cannot ensure a profit or protect against a loss in a declining market.

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The benefits of compounding

The sooner you start saving, the more time you have to grow your college fund through the power of long-term compounding.

Start early, accumulate more

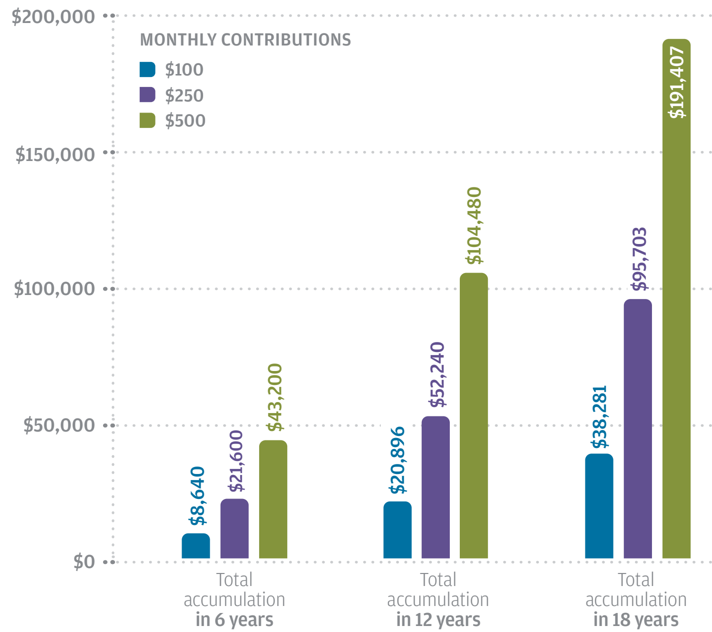
If you start saving $500 per month when a child is born, you'll earn

$86,927 more

than if you start at age 6.

Start early, small savings add up

Total amounts accumulated over 6, 12 and 18 years



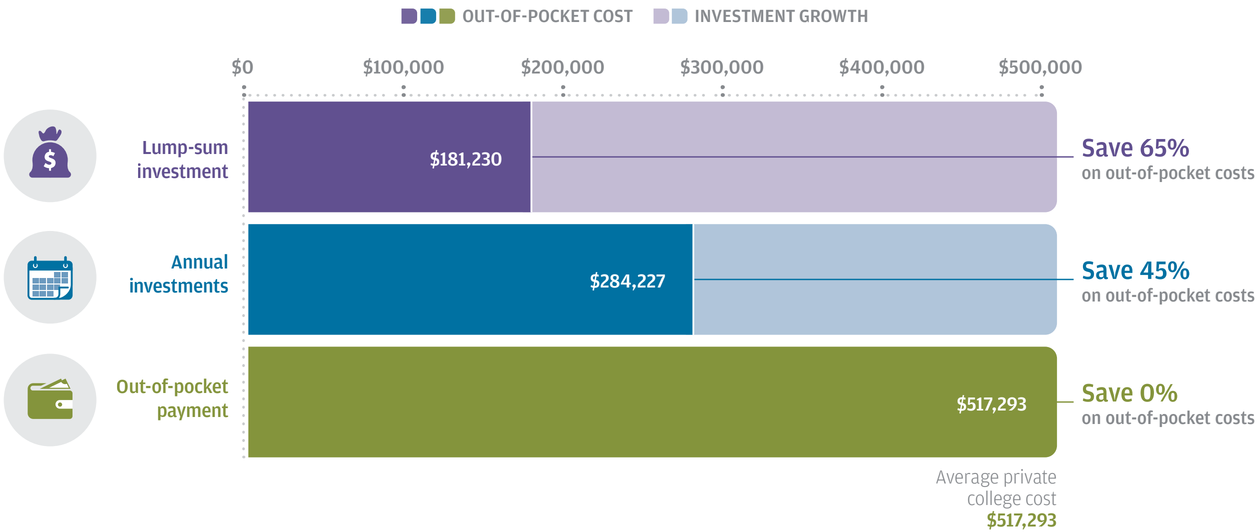
Source: J.P. Morgan Asset Management. This hypothetical example illustrates the future values of different regular monthly investments for different time periods. Chart also assumes an annual investment return of 6%, compounded monthly. Investment losses could affect the relative tax-deferred investing advantage. This hypothetical illustration is not indicative of any specific investment and does not reflect the impact of fees or expenses. Such costs would lower performance. Each investor should consider his or her current and anticipated investment horizon and income tax bracket when making an investment decision, as the illustration may not reflect these factors. A plan of regular investment cannot ensure a profit or protect against a loss in a declining market. This chart is shown for illustrative purposes only. Past performance is no guarantee of future results.

Invest more, pay less

529 plans allow large contributions that can help you pay for much of college from investment earnings instead of your pocket.

Investing vs. paying out-of-pocket

Amounts needed to fund four years of private college for a newborn



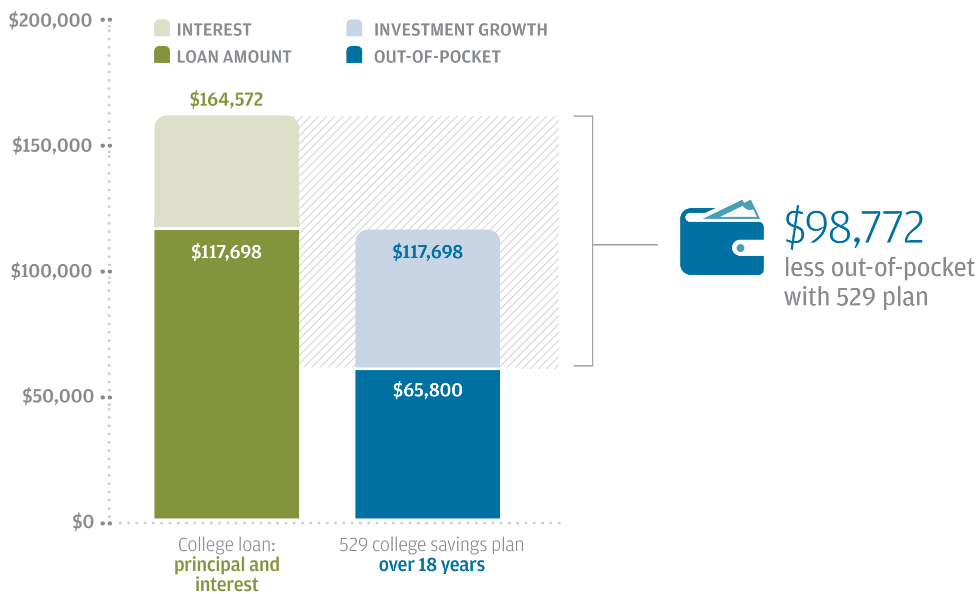
Source: The College Board, 2019 *Trends in College Pricing*. Based on average tuition, fees and room/board costs for 2019-20 school year. Costs estimated to inflate 5% per year. This example is hypothetical and assumes a 6% annual rate of return, compounded monthly and annual contributions of $15,790 over an 18-year period. This example does not represent the performance of any particular investment. Different assumptions will result in outcomes different from this example. Your results may be more or less than the figures shown. Investment losses could affect the relative tax-deferred investing advantage. Each investor should consider his or her current and anticipated investment horizon and income tax bracket when making an investment decision, as the illustration may not reflect these factors. These figures do not reflect any management fees or expenses that would be paid by a 529 plan participant. Such costs would lower performance. Contributors should consider the potential gift tax implications of making large contributions. This chart is shown for illustrative purposes only. Past performance is no guarantee of future results.

J.P.Morgan
Asset Management

Investing vs. borrowing

It costs less to invest than borrow because you're **earning interest** and other investment returns instead of **paying interest.**

529 college savings plan vs. college loan
Initial investment of $1,000 plus monthly investments of $300[1]



IT TAKES A PLAN

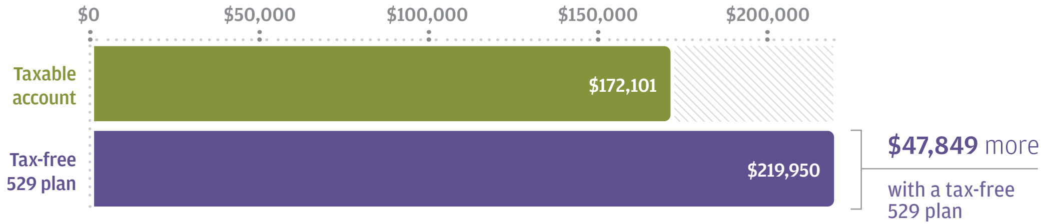
Without a plan, families run the risk of not saving enough and borrowing too much. Yet **57% don't have a plan** to pay for college.[2]

1. J.P. Morgan Asset Management. The investing illustration assumes an initial lump-sum investment of $1,000, subsequent monthly investments of $300 thereafter for 18 years, and assumes an annual investment return of 6%, compounded monthly. Investment losses could affect the relative tax-deferred investing advantage. Each investor should consider his or her current and anticipated investment horizon and income tax bracket when making an investment decision, as the illustration may not reflect these factors. The borrowing illustration assumes an interest rate of 7.08% and a payback period of 10 years. This hypothetical illustration is not indicative of any specific investment and does not reflect the impact of fees or expenses. This chart is shown for illustrative purposes only. Past performance is no guarantee of future results.
2. Sallie Mae, *How America Pays for College*, 2019.

A tax-advantaged 529 plan has the potential to grow more quickly than a taxable investment earning the exact same returns.

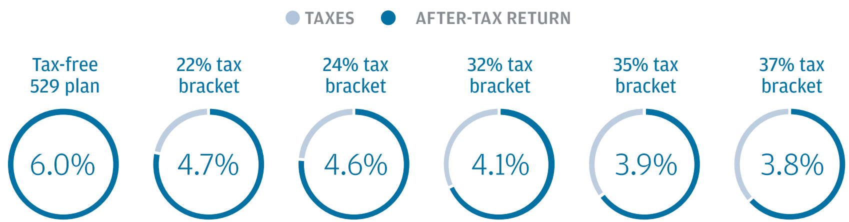
Lower taxes equal a larger college fund

Investment growth over 18 years[1]



How taxes erode investment returns

After-tax returns on a 6% investment gain



STATE TAX BENEFITS

Many 529 plans offer state tax benefits in addition to federal tax-free investing.[2] See the Appendix on **page 43** for more information.

1. J.P. Morgan Asset Management. Illustration assumes an initial $10,000 investment and monthly investments of $500 for 18 years. Chart also assumes an annual investment return of 6%, compounded monthly, and a federal tax rate of 32%. Investment losses could affect the relative tax-deferred investing advantage. This hypothetical illustration is not indicative of any specific investment and does not reflect the impact of fees or expenses. Each investor should consider his or her current and anticipated investment horizon and income tax bracket when making an investment decision, as the illustration may not reflect these factors. These figures do not reflect any management fees or expenses that would be paid by a 529 plan participant. Such costs would lower performance. This chart is shown for illustrative purposes only. Past performance is no guarantee of future results.
2. Earnings on non-qualified withdrawals may be subject to federal income tax and a 10% federal penalty tax, as well as state and local income taxes.

The 529 plan advantage

BENEFIT	WHAT IT MEANS
Tax-advantaged investing	• **Tax-deferred compounding** of contributions and earnings • **Tax-free withdrawals** for qualified higher education expenses[1] • **Tax-deductible contributions** in some states
Estate planning benefits	• Contributions and investment gains **removed from taxable estate** • Option to make **five years of tax-free gifts in a single year** – up to $150,000 per beneficiary from couples and $75,000 from individuals[2] • **Only completed gift that can be revoked** under current laws
Control and flexibility	• Account owner retains **full control over assets** • **Can change beneficiaries** or transfer unused assets to certain other family members • Covers **any qualified expense** at accredited schools throughout the U.S. and overseas, including vocational and trade schools[3] • **Minimal impact on financial aid eligibility** when owned by parents
Accessible	• **No income limits** on contributors • **No age limits** on beneficiaries or contributors
Affordable	• Very **low investment minimums** make it easy to get started • **High contribution limits**, often $400,000 or more per beneficiary

QUALIFIED HIGHER EDUCATION EXPENSES

- Tuition & fees
- Room & board
- Books & supplies
- Special services
- Computers & related equipment

Source: Internal Revenue Service.

1. Earnings on federal non-qualified withdrawals may be subject to federal income tax and a 10% federal penalty tax, as well as state and local income taxes. New York State tax deductions may be subject to recapture in certain additional circumstances such as rollovers to another state's 529 plan, or withdrawals used to pay elementary or secondary school tuition ("K-12 Tuition Expenses"), registered apprenticeship program expenses ("Apprenticeship Program Expenses"), or qualified education loan repayments ("Qualified Education Loan Expenses") as described in the Disclosure Booklet and Tuition Savings Agreement. State tax benefits for non-resident New York taxpayers may vary. Tax and other benefits are contingent on meeting other requirements. Please consult your tax professional about your particular situation.
2. No additional gifts can be made to the same beneficiary over a five-year period. If the donor does not survive the five years, a portion of the gift is returned to the taxable estate.
3. To search for accredited schools, visit https://fafsa.ed.gov/spa/fsc/#/SEARCH.

Making the most of college gifts

Only 529 plans allow five years of tax-free gifts in one year to help families meet college costs and manage estate taxes.

One gift at birth can pay for nearly four years of college

Contributor	2020 annual gift limit		Maximum tax-free 529 gift[1]	Investment growth over 18 years[2]	
Individual	$15,000	x5	$75,000 per child	$214,075	**Pays 94%** of projected four-year **public college** costs
Couple	$30,000	x5	$150,000 per child	$428,151	**Pays 83%** of projected four-year **private college** costs

All 529 plan gifts and investment gains are removed from the contributor's taxable estate – without losing control.

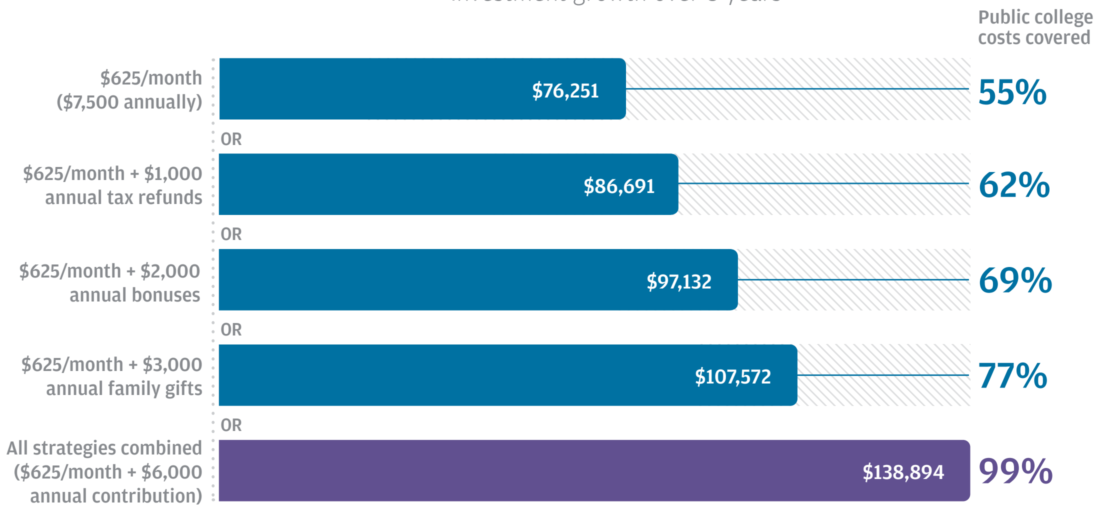
1. No additional gifts can be made to the same beneficiary over a five-year period. If the donor does not survive the five years, a portion of the gift is returned to the taxable estate.
2. J.P. Morgan Asset Management. Illustration assumes an annual investment return of 6%, compounded monthly. This example does not represent the performance of any particular investment. Different assumptions will result in outcomes different from this example. Your results may be more or less than the figures shown. Investment losses could affect the relative tax-deferred investing advantage. Each investor should consider his or her current and anticipated investment horizon and income tax bracket when making an investment decision, as the illustration may not reflect these factors. These figures do not reflect any management fees or expenses that would be paid by a 529 plan participant. Such costs would lower performance. Average projected four-year college costs are based on The College Board's 2019 *Trends in College Pricing*, assuming 5% annual inflation. This chart is shown for illustrative purposes only. Past performance is no guarantee of future results.

Catching up on college savings

By funding 529 plans with manageable amounts from multiple sources, later starters may still have time to achieve their goals.

Combining savings strategies can increase college funds

Investment growth over 8 years



Source: J.P. Morgan Asset Management. This hypothetical illustration assumes an annual investment return of 6%, compounded monthly. Investment losses could affect the relative tax-deferred investing advantage. Each investor should consider his or her current and anticipated investment horizon and income tax bracket when making an investment decision, as the illustration may not reflect these factors. "All strategies combined" reflects $625 monthly investments, plus $6,000 in combined annual tax refunds, bonuses and family gifts. Projected four-year college costs are based on The College Board's 2019 *Trends in College Pricing*, assuming 5% annual inflation. Projected college costs for this example are $139,778, which includes average tuition, fees and room and board at an in-state public college. Different assumptions will result in outcomes different from this example. Your results may be more or less than the figures shown. This example does not represent the performance of any specific investment and does not reflect any management fees or expenses that would be paid by a 529 plan participant. These costs would lower performance. This chart is shown for illustrative purposes only. Past performance is no guarantee of future results.

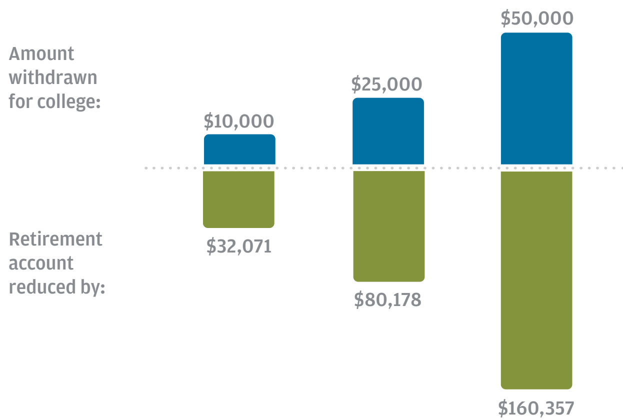
Don't pay for college with retirement funds

Every dollar used for college can mean several less for retirement, due to years of lost investment earnings and compounding.

A DANGEROUS DECISION

Nearly **one in three parents** either plans to use or would consider using retirement funds for college.[1]

How college withdrawals can jeopardize retirement security[2]



THE RELATIONSHIP BETWEEN RETIREMENT SAVINGS AND COLLEGE FINANCIAL AID

0% **of retirement assets are considered** in federal financial aid formulas while in the account.

50% **of withdrawals for college** may count against federal aid as student income.

Retirement accounts may also be reduced by:

Potential taxes
Taxes may be due on amount withdrawn[3]

Potential penalties
May owe 10% penalty if under age 59½[3]

SAVING & INVESTING

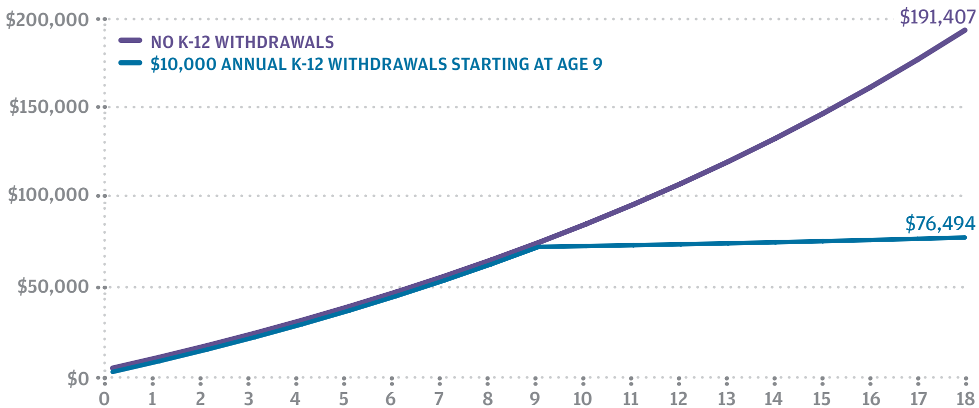
1. Sallie Mae, *How America Saves for College*, 2018.
2. J.P. Morgan Asset Management. This illustration assumes that assets would have remained in a tax-advantaged retirement account instead of being withdrawn for college, earning 6% annual investment returns for 20 years, compounded monthly. This example does not represent the performance of any particular investment. Different assumptions will result in outcomes different from this example. Your results may be more or less than the figures shown. Investment losses could affect the relative tax-deferred investing advantage. Each investor should consider his or her current and anticipated investment horizon and income tax bracket when making an investment decision, as the illustration may not reflect these factors. These figures do not reflect any management fees or expenses. Such costs would lower performance. Shown for illustrative purposes only. Past performance is no guarantee of future results.
3. Distributions from certain retirement accounts, including IRAs, may not be subject to the 10% penalty tax if used for qualified higher education expenses. Income taxes may be due on withdrawals if certain requirements are not met. Refer to IRS Publication 970 or consult your tax professional regarding your personal circumstances.

How K-12 withdrawals impact college savings

Withdrawing money from a 529 plan before college can leave families with less during college.

The price of K-12 withdrawals

Growth of $500 monthly investments over 18 years[1]



$114,913 less

Equals approximately two years of projected four-year public college costs[3]

CHECK YOUR 529 PLAN

Annual withdrawals of up to $10,000 per beneficiary for private K-12 tuition are now free from federal taxes, but state tax consequences still apply with some 529 plans.[2]

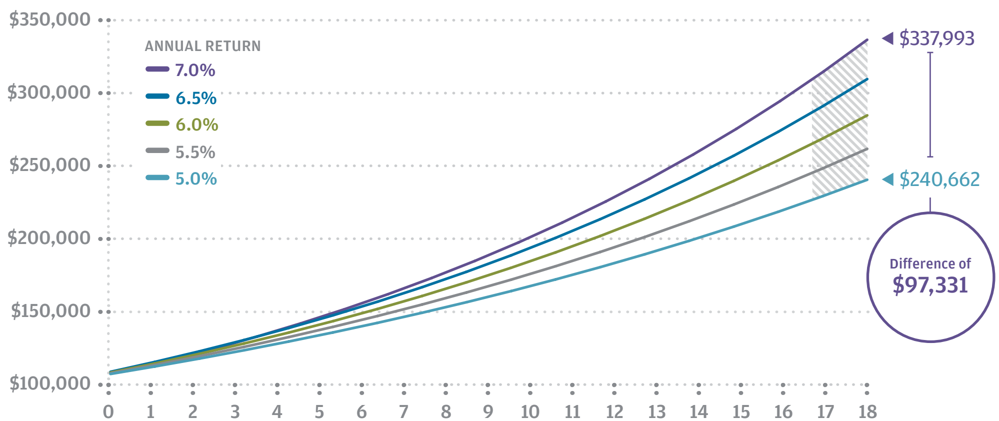
1. J.P. Morgan Asset Management. Illustration assumes an annual investment return of 6%, compounded monthly. It also assumes $10,000 annual K-12 withdrawals between ages 9 and 17. This example does not represent the performance of any particular investment. Different assumptions will result in outcomes different from this example. Your results may be more or less than the figures shown. Investment losses could affect the relative tax-deferred investing advantage. Each investor should consider his or her current and anticipated investment horizon and income tax bracket when making an investment decision, as the illustration may not reflect these factors. These figures do not reflect any management fees or expenses that would be paid by a 529 plan participant. Such costs would lower performance. This chart is shown for illustrative purposes only. Past performance is no guarantee of future results.
2. Under New York State law, a withdrawal used to pay K-12 Tuition Expenses, Apprenticeship Program Expenses and Qualified Education Loan Expenses are considered non-qualified distributions and will require the recapture of any New York State tax benefits that had accrued on contributions.
3. The College Board, 2019 *Trends in College Pricing*, assuming 5% annual inflation. Based on average tuition, fees and room and board at an in-state public college.

Performance pays

Even small increases in investment returns can make a big difference when it comes time to pay for college.

Small increases in returns, big impact on college funds

Growth of $100,000 investment over 18 years



Slightly higher returns can pay for a full year of college

5.0%	5.5%	6.0%	6.5%	7.0%
$240,662	+$21,485	+$44,772	+$70,004	**+$97,331**
initial investment of $100,000	covers a full year's cost at **public college** (in-state)	covers nearly a year's cost at **private college**	covers a full year's cost at **Ivy League college**	covers nearly two full years' cost at **private college**

SEEKING HIGHER RETURNS

- **Be an investor**, not just a saver in low-yielding bank accounts.
- **Stay invested** for the long haul to avoid the risk of being out of markets during upswings.
- **Reduce taxes** to keep more of what you earn.
- **Invest in actively managed funds** with potential to outperform passive indexes.

Source: J.P. Morgan Asset Management, using The College Board, 2019 *Trends in College Pricing*. This hypothetical illustration assumes an investment of $100,000 over an 18-year period, with returns compounded monthly. Different assumptions will result in outcomes different from this example. Investment losses could affect the relative tax-deferred investing advantage. This hypothetical illustration is not indicative of any specific investment and does not reflect the impact of fees or expenses. Such costs would lower performance. Each investor should consider his or her current and anticipated investment horizon and income tax bracket when making an investment decision.

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Asset Management

Staying diversified over 18 years

Compare the best, worst and average annual returns for different investments over rolling 18-year periods.

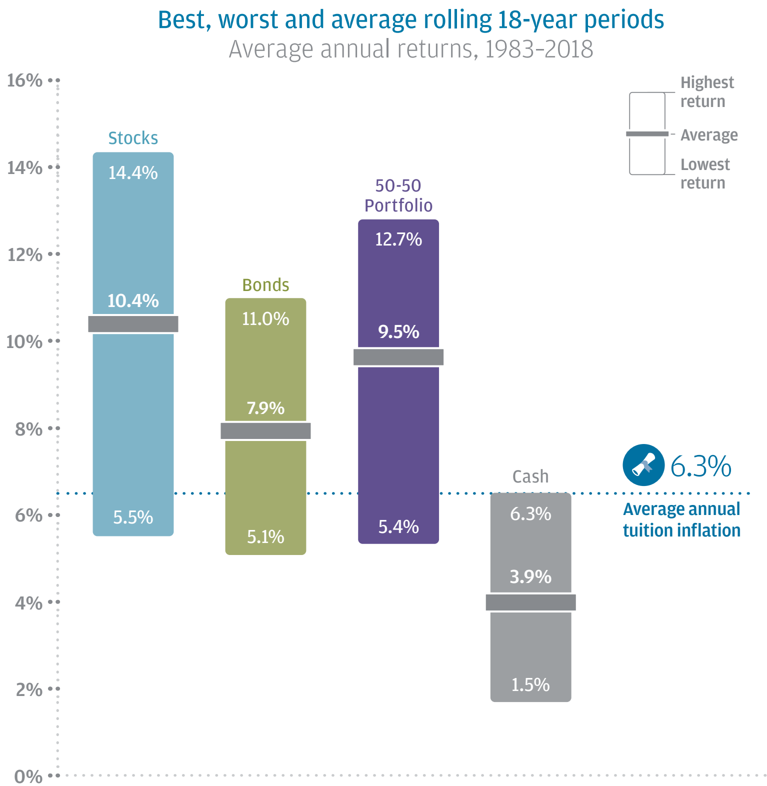


CHART HIGHLIGHTS

- Average returns for both stocks and bonds **outpaced tuition inflation**.
- The diversified portfolio delivered **higher returns** than bonds with **lower volatility** than stocks.
- Average returns for short-term **cash did not keep pace** with tuition inflation.

Source: Barclays Capital, FactSet, Robert Shiller, Strategas/Ibbotson, Federal Reserve, BLS, J.P. Morgan Asset Management. Rolling returns shown are based on calendar-year returns from 1983 through 2018. Stocks are represented by S&P 500 Index, bonds by Bloomberg Barclays U.S. Aggregate Index and cash by Bloomberg Barclays U.S. Treasury Bellwethers 3M Index. Data are as of 12/31/18. Past performance is not indicative of future results. Diversification does not guarantee investment returns and does not eliminate the risk of loss.

Applying to colleges has become easier thanks to the Common Application, but competition is now higher.

More competition to get into college[1]

	2018-19	2003-04
APPLICATIONS ARE UP	11.3 million	5.8 million
ADMISSION RATES ARE DOWN	56%	62%

MAKING THE GRADE

Average test scores for incoming freshmen[1]

SAT – Reading/Writing: **610**

SAT – Math: **598**

ACT Composite: **26**

AVERAGE GPA[2]

3.53

What matters most on college applications?

(Percent of colleges ranking "considerable importance")[3]

More important

Overall GPA	Grades in college prep classes	SAT/ACT scores	Strength of curriculum
81%	71%	52%	51%

Less important

Essay/Writing sample	Class rank	Teacher recommendation	Extracurricular activities
17%	9%	7%	4%

APPENDIX

1. National Center for Education Statistics. Average test scores are for the 75th percentile.
2. Niche.com, *2019 College Admissions Report*.
3. National Association for College Admission Counseling, *2018 State of College Admission*.

Financial aid and college planning websites

Federal financial aid

fafsa.gov

studentaid.ed.gov

irs.gov

(IRS Publication 970, Tax Benefits for Education)

529 college savings plans

collegesavings.org

savingforcollege.com

College preparation

collegeboard.org

collegeconfidential.com

act.org

Grants and scholarships

fastweb.com

cappex.com

petersons.com

finaid.org

College loans

studentloans.gov

Aid for New York residents (including the Excelsior Scholarship)

hesc.ny.gov

Aid for students studying overseas

iefa.org

Sources of financial aid

	TYPES OF FINANCIAL AID	DETAILS
U.S. federal government	Grants and scholarships Loans Work study Tax credits and deductions	In addition to aid from the U.S. Department of Education, scholarships and loan repayment may be available to qualified students through other government entities.
States	Grants and scholarships May be available even if families aren't eligible for federal aid	Example: New York's Tuition Assistance Program offers grants of up to $5,165 per year to eligible residents attending approved New York State schools.
Colleges	Grants and scholarships	Aid may be available for attending a particular college and/or studying specific majors.
Nonprofit or private organizations	Grants and scholarships	Possible sources include charitable foundations, religious and community organizations, local businesses, ethnicity-based organizations, students' and parents' employers, civic groups and professional associations related to a field of study.
Banks, credit unions or other lenders	Private loans	Tend to have higher interest rates and less flexible repayment options than federal loans.

TYPES OF FINANCIAL AID

Grants and **scholarships** are free gifts that generally don't have to be repaid. Grants are typically **need-based** while scholarships are **merit-based**. **Loans** must be paid back with interest.

Source: studentaid.ed.gov (U.S. Department of Education).

Financial aid: Types of applications

Nearly 400 mostly private, specialized or highly selective institutions require students to submit the CSS Profile in addition to the FAFSA.[1] The CSS Profile is an online application used to determine eligibility for need-based institutional scholarships, grants or loans and is a more detailed assessment of a family's finances.

	FAFSA (Federal Methodology)	CSS Profile[2] (Institutional Methodology)
Type of application	Standard, universal application required by every institution	College-specific application required by nearly 400 institutions in addition to the FAFSA
Type of financial aid	Need-based federal and institutional aid	Need-based institutional aid
Income and assets considered when calculating Expected Family Contribution (EFC)	Taxable income Nontaxable income (child support, workers' compensation, disability, etc.) Interest and dividend income Cash and savings Irrevocable family trusts Student trusts Investment and real estate net worth (excluding primary home) Business or farm net worth[3]	**Same as Federal Methodology, plus:** Untaxed Social Security benefits Tax credits and itemized deductions Parents' assets held in all children's names Noncustodial parent information Home equity Business income (losses) Rental income (losses)
Allowances and expenses considered when calculating EFC	Number in household Number of family members enrolled in college at least half-time Federal income tax State tax[4] FICA tax Employment expenses Income protection allowance Education savings and asset protection allowance Child support paid	**Same as Federal Methodology, plus:** Medical and dental expenses Private elementary and secondary school tuition for siblings Emergency reserve allowance

1. The College Board.
2. The CSS Profile may vary by institution. See financial aid office or net price calculator at your desired institution for more information about what is used to calculate awards.
3. Only if more than 100 full-time employees in the Federal Methodology.
4. Sales and property taxes also considered in the Institutional Methodology.

J.P.Morgan Asset Management

Federal student aid: A sample of grant programs

	DETAILS	ANNUAL AWARD LIMIT[1] (2019–20 award year)
Federal Pell Grant	Generally awarded to undergraduate students in financial need	up to $6,195
Federal Supplemental Educational Opportunity Grant (FSEOG)	Awarded to undergraduate students with exceptional financial need Federal Pell Grant recipients receive priority Not all colleges participate Funds depend on availability at the college; apply by college's deadline	up to $4,000
Teacher Education Assistance for College and Higher Education (TEACH) Grant	For undergraduate, post-baccalaureate or graduate students who are taking or will be taking coursework necessary to become elementary or secondary teachers Must attend a participating college and meet certain academic achievement requirements Must agree to serve as a full-time teacher in a high-need field and low-income area for at least four years within the first eight years after college Failure to complete the teaching service commitment results in grant funds being converted to a Federal Direct Unsubsidized Stafford Loan that must be repaid	up to $4,000
Iraq and Afghanistan Service Grant	Non-need-based, this grant is available to any undergraduate student who is not eligible for the Pell Grant and whose parent or guardian died as a result of performing military service in Iraq or Afghanistan after the events of 9/11 Must have been younger than 24 years old or enrolled at least part-time at the time of the parent's or guardian's death	up to $6,195

1. U.S. Department of Education. Awards are subject to availability of funds, and recipients must meet certain eligibility requirements. This is for informational purposes only. To learn more, visit https://studentaid.ed.gov/sa/types/grants-scholarships.

Federal student aid: Loan programs

	LENDER	ELIGIBILITY	INTEREST RATE[1]	ANNUAL LOAN LIMIT[2]
Direct Subsidized Stafford Loans	U.S. Department of Education	Undergraduate students enrolled at least half-time and demonstrating financial need	4.53% Student not charged interest while in school and during deferment periods	$3,500-$5,500 depending on year in school
Direct Unsubsidized Stafford Loans	U.S. Department of Education	Undergraduate and graduate students enrolled at least half-time, regardless of financial need	4.53% for undergraduates 6.08% for graduate students Student responsible for interest during all periods	$5,500-$20,500 (Minus any subsidized amount received for the same period), depending on year in school and dependency status
Direct PLUS Loan for Parents	U.S. Department of Education	Parents of dependent undergraduate students enrolled at least half-time Parents must not have negative credit history	7.08% Parents responsible for interest during all periods	Cost of attendance (determined by the school) minus any other financial aid received
Direct PLUS Loan for Graduate or Professional Students	U.S. Department of Education	Graduate or professional degree students enrolled at least half-time Student must not have negative credit history	7.08% Student responsible for interest during all periods	Cost of attendance (determined by the school) minus any other financial aid received

1. Interest rates apply to loans first disbursed between July 1, 2019, and June 30, 2020.
2. U.S. Department of Education. For more information, visit https://studentaid.ed.gov/sa/types/loans.

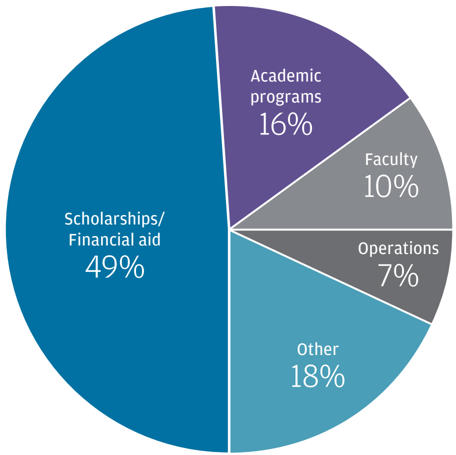
College endowments and financial aid

Endowments fund college scholarships and financial aid, but not enough to cover a typical family's costs.

How endowments get money and where they spend it

Donors make gifts

Endowments invest and spend money



Endowments spent

4.4%

of their total assets last year

WHY NOT SPEND MORE?

Most endowments are meant to last in perpetuity, so they generally **spend only investment earnings** and hold onto principal.

Few college students get the full benefit of endowments

100 biggest endowments
hold 76% of all assets

More student aid, but usually higher tuition costs

Average endowment
$3 million for student aid last year

Enough to fund only about 140 full scholarships

Source: National Association of College and University Business Officers, 2018 study of endowments. Average endowment spending is based on a 4.4% spending rate, with 49% going to student aid. Full scholarship amount is based on The College Board's 2019 *Trends in College Pricing*, using average tuition, fees and room and board for four-year, in-state public college.

Other sources of college funding

Compared to these options, a 529 college savings plan is usually the better choice.

	HOW IT WORKS	PROS	CONS
Roth IRA	Withdraw retirement funds to pay for college	No taxes or penalties when contributions withdrawn[1] No penalty if investment earnings withdrawn for qualified higher education expenses Assets not considered for federal financial aid	Withdrawals treated as student income for federal financial aid Withdrawals for college reduce retirement savings **(see page 30)** Potential taxes on investment earnings withdrawn[2] Annual contributions limited to $6,000 ($7,000 if age 50+) Contributors subject to income limits; no gifts allowed from others No state tax benefits
Life insurance	Withdraw or borrow against the cash value of a policy to pay for college	Cash value grows tax-deferred; withdrawals generally tax-free[3] Cash value not considered an asset for federal financial aid	Withdrawals treated as student income for federal financial aid Subject to fees, commissions and surrender charges Loan interest not tax-deductible No state tax benefits
Home equity loan	Borrow against home equity value to pay for college	Have fixed interest rates often lower than federal college loans Not subject to borrowing limits of federal loans	Interest not tax-deductible when used for college Unspent loan proceeds considered an asset for federal financial aid Less repayment flexibility than federal loans Risk of foreclosure if loan not repaid
Private loan	Borrow from bank, credit union or other lenders outside the U.S. government	Interest may be tax-deductible, subject to income limits Higher borrowing limits than federal loans	Interest rates often variable and higher than federal loans Interest may be due while student is in college Less repayment flexibility than federal loans Often require cosigners

1. Subject to certain requirements. Penalties may be due if contributions from a converted account are withdrawn within five years of the conversion. Please consult a tax professional for additional details.
2. Withdrawals of investment earnings are tax free if the account owner is over age 59½ and the Roth IRA has been open at least five years. Please consult a tax professional for additional details.
3. If withdrawal amounts exceed the premiums paid, taxes may be due on the difference.

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Asset Management

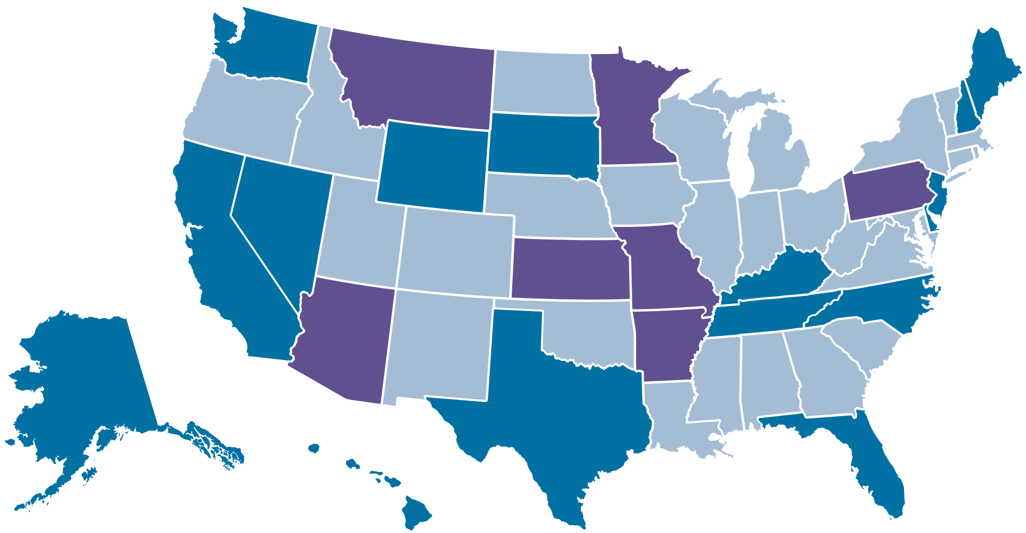
College-related tax breaks[1]

	DETAILS	INCOME LIMITS	TAX BENEFIT
Tax-advantaged college savings plans	**529 plans** for four-year universities, graduate school, vocational-technical schools and community college	None	Contributions not typically deductible from federal taxes; **investments grow tax-deferred**, and **withdrawals are generally tax-free** for qualified expenses[2]
	Coverdell Education Savings Accounts for any level of education, from elementary school through graduate school	Single: $110,000 Married filing jointly: $220,000	
Federal tax credits[3]	**American Opportunity Tax Credit** for qualified expenses in the first four years of college	Single: $90,000 Married filing jointly: $180,000	Reduce taxes by up to **$2,500 per student each year**
	Lifetime Learning Credit for qualified expenses in an unlimited number of years of college	Single: $68,000 Married filing jointly: $136,000	Reduce taxes by up to **$2,000 per tax return each year**
Student loan interest deduction	For interest paid on student loans taken out for yourself, your spouse or dependents; applies to all loans used to pay higher education expenses, not just federal loans	Single: $85,000 Married filing jointly: $170,000	Reduce taxable income by up to **$2,500 each year**
State tax deductions	Some states allow deductible contributions to a 529 college savings plan for state income tax purposes	Varies by state	Varies by state; see **page 43** for more information

APPENDIX

1. Must meet certain eligibility requirements. Information as of September 2019. Please consult a tax professional for additional details.
2. Tax-free withdrawals cannot be taken for the same expenses used to claim tax credits.
3. Taxpayers cannot claim both credits for the same student in the same year.

529 plans: State tax benefits[1]



Tax parity states
These states offer a tax deduction for contributing to **any 529 plan,** including out-of-state plans that may be more attractive than the in-state option: Arizona, Arkansas,[2] Kansas, Minnesota, Missouri, Montana, Pennsylvania.

Tax neutral states
These states offer no state tax deduction for 529 plan contributions: Alaska, California, Delaware, Florida, Hawaii, Kentucky, Maine, Nevada, New Hampshire, New Jersey, North Carolina, South Dakota, Tennessee, Texas, Washington, Wyoming.

All other states
These states offer potential tax breaks on contributions made only to in-state 529 plans.

1. As of September 2019.
2. Arkansas also offers a state income tax deduction for contributions to 529 plans from other states; however, this deduction is less than the deduction for contributions made to Arkansas-based 529 plans. Consult the Arkansas plan for plan-specific information.

Indices are unmanaged, and an individual cannot invest directly in an index. Index returns do not include fees or expenses.

The **Bloomberg Barclays U.S. Treasury Bellwethers 3M Index** tracks the performance and attributes of the on-the-run (most recently auctioned) U.S. Treasury bill with 3 months' maturity. The index follows Bloomberg Barclays Capital's index monthly rebalancing conventions. It contains index history starting January 1, 1981.

The **Bloomberg Barclays Capital U.S. Aggregate Index** represents securities that are SEC-registered, taxable and dollar denominated. The index covers the U.S. investment-grade fixed-rate bond market, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis.

The **S&P 500 Index** is widely regarded as the best single gauge of the U.S. equities market. This world-renowned index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the S&P 500 Index focuses on the large cap segment of the market, with approximately 75% coverage of U.S. equities, it is also an ideal proxy for the total market. An investor cannot invest directly in an index.

Past performance is no guarantee of comparable future results.

Diversification does not guarantee investment returns and does not eliminate the risk of loss.

Bonds are subject to interest rate risks. Bond prices generally fall when interest rates rise.

The price of **equity** securities may rise or fall because of changes in the broad market or changes in a company's financial condition, sometimes rapidly or unpredictably. These price movements may result from factors affecting individual companies, sectors or industries, or the securities market as a whole, such as changes in economic or political conditions. Equity securities are subject to "stock market risk," meaning that stock prices in general may decline over short or extended periods of time.

NOT FDIC INSURED | NO BANK GUARANTEE | MAY LOSE VALUE

Before you invest, consider whether your or the Beneficiary's home state offers any state tax or other state benefits such as financial aid, scholarship funds, and protection from creditors that are only available for investments in that state's qualified tuition program.

The Comptroller of the State of New York and the New York State Higher Education Services Corporation are the Program Administrators and are responsible for implementing and administering New York's 529 Advisor-Guided College Savings Program (the "Advisor-Guided Plan"). Ascensus Broker Dealer Services, LLC serves as Program Manager for the Advisor-Guided Plan. Ascensus Broker Dealer Services, LLC and its affiliates have overall responsibility for the day-to-day operations of the Advisor-Guided Plan, including recordkeeping and administrative services. J.P. Morgan Investment Management Inc. serves as the Investment Manager. J.P. Morgan Asset Management is the marketing name for the asset management business of JPMorgan Chase & Co. JPMorgan Distribution Services, Inc. markets and distributes the Advisor-Guided Plan. JPMorgan Distribution Services, Inc. is a member of FINRA.

No guarantee: None of the State of New York, its agencies, the Federal Deposit Insurance Corporation, J.P. Morgan Investment Management Inc., Ascensus Broker Dealer Services, LLC, JPMorgan Distribution Services, Inc., nor any of their applicable affiliates insures accounts or guarantees the principal deposited therein or any investment returns on any account or investment portfolio.

New York's 529 College Savings Program currently includes two separate 529 plans. The Advisor-Guided Plan is sold exclusively through financial advisory firms who have entered into Advisor-Guided Plan selling agreements with JPMorgan Distribution Services, Inc. You may also participate in the *Direct Plan*, which is sold directly by the Program and offers lower fees. However, the investment options available under the Advisor-Guided Plan are not available under the *Direct Plan*. The fees and expenses of the Advisor-Guided Plan include compensation to the financial advisory firm. Be sure to understand the options available before making an investment decision.

For more information about New York's 529 Advisor-Guided College Savings Program, you may contact your financial advisor or obtain an Advisor-Guided Plan Disclosure Booklet and Tuition Savings Agreement at www.ny529advisor.com or by calling 1-800-774-2108. This document includes investment objectives, risks, charges, expenses, and other information. You should read and consider it carefully before investing.

The Program Administrators, the Program Manager and JPMorgan Distribution Services, Inc., and their respective affiliates do not provide legal or tax advice. This information is provided for general educational purposes only. This is not to be considered legal or tax advice. Investors should consult with their legal or tax advisors for personalized assistance, including information regarding any specific state law requirements.

June 2020

529-CPE

J.P.Morgan
Asset Management

New York's 529 Advisor-Guided College Savings Program®

Entrust your college fund to one of the world's largest, most respected financial institutions. The Advisor-Guided Plan is the only 529 plan offering you full access to the insights and investments of J.P. Morgan.

- **Investment expertise** from J.P. Morgan Asset Management
- **State tax deductions** for account owners living or working in New York[1]
- **High contribution limit** of $520,000 per beneficiary
- **Upromise® rewards program** turns everyday purchases into funds for college

Expert management

Oversight by J.P. Morgan's Multi-Asset Solutions Group

- Dedicated team of more than 80 investment professionals[2]
- More than $255 billion in global assets under management[2]
- Builds Plan portfolios, selects investments and makes adjustments as market conditions change over time

Investment choices

- **One age-based option,** automatically shifting to nine different portfolios between newborn and college age
- **Six asset allocation portfolios,** each pursuing different risk/return objectives
- **16 individual single-asset portfolios** for creating your own customized investment mix

Broad diversification

- Access to asset classes and investment strategies not often found in 529 plans
- Potential for higher returns and lower risk than less diversified portfolios

1. Deductions may be subject to recapture in certain circumstances, such as rollovers to another state's plan; distributions for tuition expenses in connection with enrollment or attendance at an elementary or secondary public, private or religious school; or non-qualified withdrawals.
2. As of 9/30/19.

To learn more,

please consult a financial professional, visit ny529advisor.com or call 1-800-774-2108.

New York's 529 Advisor Guided® College Savings Program