

BACKGROUNDER

# The High Cost of Pa. K–12 Education Failures

#### Commonwealth Foundation

#### **KEY POINTS**

- The cost and risk of failure in our K–12 system is high. Low academic achievement is a predictor of lower lifetime incomes and higher costs for taxpayers.
  - On average, students without a high school diploma earn \$7,200 less annually than those with one and \$29,100 less than workers with a bachelor's degree.
- For the class of 2032, this year's fourth graders, forecasts by the Education Consumers Foundation (ECF) anticipate 7,100 Pennsylvania kids will drop out of high school and nearly 30,000 will graduate unprepared for college or career entry.
  - For each dropout, the state taxpayer burden will hit an estimated **\$39,000 over the student's lifetime**.
  - Unprepared graduates will also require more state taxpayer resources, an estimated **\$13,500** over the student's lifetime.
- The overall state and local cost for dropouts and unprepared high school graduates in the class of 2032 is \$674 million over their lifetime. Applying the same level of academic performance to all current K–12 students yields nearly \$8.8 billion in taxpayer costs due to failures in the educational system.
  - When factoring in federal spending, the additional tax burden reaches **\$2.1 billion** for one graduating class.
- Educational choice programs across the country have a demonstrated record of improving long-term student outcomes. Pennsylvania lawmakers should expand educational options to deliver more opportunity for students and better the economic outlook for taxpayers.

#### A DECADE OF MISSED OPPORTUNITY

In 2011, the Commonwealth Foundation released "The Cost of Pennsylvania's Education Failures." The report's introduction noted, "While some lawmakers are concerned about the cost of school vouchers, the cost of educational failure for all taxpayers through welfare, corrections, and lost jobs is many times greater."<sup>1</sup>

This year's graduating class was in kindergarten when the report was released. Sadly, most families still lack access to viable educational options beyond their assigned district schools, even if that school district is consistently designated a low-achieving school.

Thankfully, scholarships through the Educational Improvement Tax Credit (EITC) and the Opportunity Scholarship Tax Credit (OSTC) have almost doubled since 2011. There were nearly 41,000 EITC scholarship recipients in the 2010–11 school year, while in 2021–22 (the most recent available data) students received nearly 78,000 EITC and OSTC scholarships.<sup>2</sup> Yet, demand for these scholarships far outweighs supply. Arbitrary state caps on the programs turned away more than 63,000 scholarship applicants in 2021–22.

Pennsylvania's underperforming education system has far-reaching, ripple-out effects that are considerably more costly than even the most robust school choice program.

#### **GRADUATION RATES: AN IMPORTANT BUT IMPERFECT METRIC**

According to the Pennsylvania Department of Education (PDE), around one in eight students who entered ninth grade in 2019—nearly 17,000 students—did not graduate by the end of the four years.<sup>3</sup> The long-term costs for the students, their families, and society are immense.

Meanwhile, many students graduate unprepared for higher education or the workforce. State data shows the graduation rate has increased since the 2011 report, but lackluster results on the Pennsylvania System of School Assessment (PSSA) tests cast doubt on the learning validity of those higher graduation rates.

For example, in 2022–23, the on-time four-year graduation rate in Philadelphia was 72 percent. But considering fewer than 20 percent of Philadelphia students score proficient or better in PSSA math tests and just 35 percent in English Language Arts, it seems likely that graduation rates, while important, are often an overrated, imperfect metric.<sup>4</sup>

#### HIGH COST OF HIGH SCHOOL DROPOUTS AND UNPREPARED GRADUATES

Researchers at ECF see a third-grader's reading ability as pivotal to student success or failure. ECF uses current third-grade reading scores to predict future rates for high school dropouts and unprepared graduates. The organization then calculates the expected future cost to taxpayers from this educational failure.

Based on current reading scores, ECF estimates more than 7,100 Pennsylvania kids from the Class of 2032 will drop out and nearly 30,000 will graduate unprepared for college or career entry.<sup>5</sup>

## Cost of High School Dropouts: Class of 2032

Cost of Dropouts			
Class of 2023	State/Local	Federal	Total
Healthcare	\$21,000	\$40,000	\$61,000
Public Safety	\$18,000	\$14,000	\$32,000
Welfare	\$3,000	\$14,000	\$17,000
Education	(\$13,000)	(\$2,000)	(\$15,000)
Total cost per dropout	\$39,000	\$91,000	\$130,000
Total cost of dropouts	\$277,914,000	\$648,466,000	\$926,380,000

Sources: Education Consumers Foundation, "Cost of Reading Failure: Any US School, Cost Calculator," accessed June 12, 2024, https://educationconsumers.org/efc-cost-calculator/; Federal Reserve Bank of Minneapolis, "Inflation Calculator," accessed June 12, 2024, https://www.minneapolisfed.org/about-us/monetary-policy/inflation-calculator.

### Cost of Unprepared Graduates: Class of 2032

Cost of Unprepared Graduates			
Class of 2032	State/Local	Federal	Total
Healthcare	\$5,000	\$10,000	\$15,000
Public Safety	\$9,000	\$7,000	\$16,000
Welfare	\$1,000	\$3,000	\$3,000
Education	(\$5,000)	(\$1,000)	(\$5,000)
Total cost per Unprepared Grad	\$13,500	\$27,000	\$40,500
Total cost of Unprepared Grads	\$395,982,000	\$791,964,000	\$1,187,946,000

Sources: Education Consumers Foundation, "Cost of Reading Failure: Any US School, Cost Calculator," accessed June 12, 2024, https://education-consumers.org/efccost-calculator/; Federal Reserve Bank of Minneapolis, "Inflation Calculator," accessed June 12, 2024, https://www.minneapolisfed.org/about-us/monetarypolicy/inflation-calculator.

However, this is a very conservative estimate and likely undercounts the actual number. For comparison, test scores led ECF to predict around 1,200 dropouts from the Philadelphia School District's Class of 2021. According to statistics collected by PDE, there were more than 3,000 dropouts in 2021.<sup>6</sup> This means the eventual cost of dropouts may be much higher.

### Total Cost of Dropouts and Unprepared Graduates

Cost to Taxpayers			
Class of 2032	State/Local	Federal	Total
Cost of Dropouts	\$39,000	\$91,000	\$130,000
Cost of Unprepared Graduates	\$13,500	\$27,000	\$40,500
Total Cost	\$673,896,000	\$1,440,430,000	\$2,114,326,000
Total Cost Using Higher Dropout Estimate	\$1,058,982,000	\$2,338,964,000	\$3,397,946,000

Sources: Education Consumers Foundation, "Cost of Reading Failure: Any US School, Cost Calculator," accessed June 12, 2024, https://education-consumers.org/efccost-calculator/; Federal Reserve Bank of Minneapolis, "Inflation Calculator," accessed June 12, 2024, https://www.minneapolisfed.org/about-us/monetarypolicy/inflation-calculator.

Improving educational outcomes would produce widespread economic benefits. Halving the number of dropouts and unprepared graduates in the class of 2032 would greatly improve the lives of thousands of Pennsylvanians and save state taxpayers \$336 million and federal taxpayers \$720 million. These numbers are for a single grade level. Over time, each grade level would experience similar benefits, compounding individual and economic gains.

Pennsylvania policymakers can't let another decade pass while families wait desperately for more educational options. The cost is just too high.

#### **EVEN STUDENTS IN HIGH-PERFORMING DISTRICTS STRUGGLE**

Dropout and underprepared graduate costs exist across Pennsylvania school districts, even in districts with relatively few economically disadvantaged students. For example, in West Chester school district an estimated 152 kids will drop out or be unprepared for the workforce in 2032. That failure will cost taxpayers an additional \$8.7 million in 2023 dollars.<sup>7</sup> The appendix lists more examples of the cost of failure in high-performing schools.

#### HIGH SCHOOL DROPOUTS EARN SIGNIFICANTLY LESS

For 25- to 34-year-olds who work full-time, higher educational attainment consistently correlates with higher median earnings. Using 2021 data, the figure below shows the huge earnings penalty for dropping out of high school. The median earnings of those with a high school degree were 22 percent higher than the median earnings of dropouts.<sup>8</sup> The \$29,000 difference between a four-year college degree and not finishing high school makes it much more likely that someone without a high school diploma will qualify for taxpayer-funded benefits like Medicaid or the Supplemental Nutrition Assistance Program (SNAP).

### Median Annual Full Time Earnings

Earnings for full-time workers between 25-34 with a bacholers degree are nearly double the earnings of a high school drop out in 2021.

All Attainment Levels	\$50,000							
Less than High School Completion	\$32,500							
High School Completion	\$39,700							
Some College	\$41,000							
Associate's Degree	\$45,000							
Bachelor's Degree	\$61,600							
Master's Degree or Higher	\$74,600							
0	\$10,000	\$20,000	\$30,000	\$40,000	\$50,000	\$60,000	\$70,000	\$80,000

Source: National Center for Education Statistics, The Conditional of Education, Annual Earnings by Educational Attainment, Figure 2, https://nces.ed.gov/programs/coe/pdf/2023/cba\_508.pdf

U.S. Census Bureau statistics tell a similar tale. In 2022, 20 percent of Americans aged 25 and older who did not complete high school lived in poverty. A high school degree dropped that rate to 10 percent. People with at least a bachelor's degree had the lowest poverty rate at five percent.<sup>9</sup>

#### MORE GRADUATES REDUCE CORRECTIONS AND WELFARE SPENDING

When we fail to provide students with an adequate education, we also prepare many for incarceration. In fiscal year (FY) 2022–23, the cost for taxpayers hit \$66,800 per inmate.<sup>10</sup>

- According to the Pennsylvania Department of Corrections, 23 percent of male inmates and 19 percent of female inmates have less than a 12th-grade education.<sup>11</sup>
- In the federal prison system, the stats are even worse; nearly 30 percent of inmates have less than a 12th-grade education.<sup>12</sup>

- In 2022, according to the U.S. Bureau of Labor Statistics, "The labor force participation rate for recent dropouts (41.9 percent) continued to be much lower than the rate for recent high school graduates not enrolled in college (69.2 percent)."<sup>13</sup>
- The Institute for College Access and Success estimates that only 15 percent of SNAP users have an associate's degree or higher compared to the general population rate of 48 percent.<sup>14</sup>

#### **TAXPAYERS FUND THE REMEDIATION OF HIGH SCHOOL GRADUATES**

Remediation, in the form of tutoring or additional classes, to help students unprepared for college-level coursework is a significant drain on taxpayer resources.

- According to administrators, the Community College of Philadelphia enrolls about half of its students in remedial or developmental math courses and 30 percent take remedial literacy courses.<sup>15</sup>
- Nationally, 31.4 percent of first-year college students report taking a remedial class in 2019–20.<sup>16</sup>

#### SCHOOL CHOICE HELPS STUDENTS THRIVE

School choice programs that allow education funding to follow children to a variety of educational options improve student success around the country.

Studies show that competition from school choice alternati8ves helps kids who attend public schools.

- EdChoice found that 26 out of 29 empirical studies concluded that school choice programs improve the academic outcomes of public school students.<sup>17</sup>
- A recent study by the University of Arkansas found that the competitive pressure on public schools by school choice programs helped improve National Assessment of Educational Progress (NAEP), or "nation's report card," test scores.<sup>18</sup>

A 2019 study, Private School Choice and Crime: Evidence From Milwaukee, found school choice was linked with lower levels of crime. "Students who used the program through 12th grade, however, were much less likely to have criminal records than their public-school peers. These results are apparent when controlling for a robust set of student demographics, test scores, and parental characteristics."<sup>19</sup>

In a 2019 Urban Institute report, school choice programs in Florida and Milwaukee were associated with higher levels of college attendance and persistence.<sup>20</sup>

- Students in the Florida Tax Credit (FTC) program were more likely to go to and graduate from college than their public-school peers. Moreover, the program's impact on both enrollment and degree attainment increased with the number of years of FTC participation.
- Third- through eighth-grade students who participated in the Milwaukee Parental Choice Program were more likely to enroll in and graduate from college compared to their public school peers.

#### FAMILIES NEED MORE EDUCATION OPTIONS

Pennsylvania families are being left behind. School choice programs are expanding across the nation, with universal or nearly universal eligibility in eleven states. Even two of our neighboring states now have universal choice: West Virginia's Hope Scholarship is an education savings account (ESA), and Ohio's Educational Choice scholarship is a voucher that families can use for private school tuition.

Pennsylvania taxpayers could benefit from more education options too. Taxpayers spent nearly \$37 billion—almost \$22,000 per student—in 2022-23 on K-12 education.

In contrast, the overall charter school payment rate per student for non-special education students across the commonwealth is \$12,989, or only 72 percent of district spending per student. Lifeline Scholarships, which Senate Bill 795 currently codifies as the Pennsylvania Award for Student Success (PASS) Scholarship Program,<sup>21</sup> would spend \$5,000 per elementary or \$10,000 per high school student and could ease pressures for rising local property taxes. Finally, according to Right-to-Know requests from the Department of Economic and Community Development, the Education Improvement Tax Credit and Opportunity Scholarship Tax Credit provide scholarships that average \$2,363.<sup>22</sup>

If a fraction of the \$22,000 followed students to the educational options that worked best for them, we would prevent many of the education failures Pennsylvanians experience each year.

#### **APPENDIX**

### Cost of Failure for Select Districts, Class of 2032

Central Bucks (Bucks)	State/Local	Federal	Total
235 Dropouts & Unprepared Grads	\$3,080,000	\$6,915,000	\$9,995,000
Avg. Added Expense per Enrolled 3rd Grader	\$3,000	\$6,000	\$8,000
Dropouts & Unprepared Grads Inflation Adj	\$4,060,000	\$9,367,047	\$13,539,211
Neshaminy (Bucks)	State/Local	Federal	Total
163 Dropouts & Unprepared Graduates	\$2,201,000	\$4,958,000	\$7,159,000
Avg. Added Expense per Enrolled 3rd Grader	\$3,000	\$8,000	\$11,000
Dropouts & Unprepared Grads Inflation Adj	\$2,981,471	\$6,716,099	\$9,697,569
Methacton (Montgomery)	State/Local	Federal	Total
62 Dropouts & Unprepared Graduates	\$843,000	\$1,900,000	\$2,743,000
Avg. Added Expense per Enrolled 3rd Grader	\$3,000	\$6,000	\$9,000
Dropouts & Unprepared Grads Inflation Adj	\$1,141,926	\$2,573,737	\$3,715,663
Perkiomen Valley (Montgomery)	State/Local	Federal	Total
Perkiomen Valley (Montgomery) 49 Dropouts & Unprepared Graduates	State/Local \$619,000	Federal \$1,384,000	Total \$2,003,000
49 Dropouts & Unprepared Graduates	\$619,000	\$1,384,000	\$2,003,000
49 Dropouts & Unprepared Graduates Avg. Added Expense per Enrolled 3rd Grader	\$619,000 \$2,000	\$1,384,000 <b>\$4,000</b>	\$2,003,000 \$6,000
49 Dropouts & Unprepared Graduates Avg. Added Expense per Enrolled 3rd Grader Dropouts & Unprepared Grads Inflation Adj	\$619,000 \$2,000 \$838,496	\$1,384,000 \$4,000 \$1,874,764	\$2,003,000 \$6,000 \$2,713,261
49 Dropouts & Unprepared Graduates Avg. Added Expense per Enrolled 3rd Grader Dropouts & Unprepared Grads Inflation Adj West Chester (Delaware, Chester)	\$619,000 \$2,000 \$838,496 State/Local	\$1,384,000 \$4,000 \$1,874,764 Federal	\$2,003,000 \$6,000 \$2,713,261 Total
49 Dropouts & Unprepared Graduates Avg. Added Expense per Enrolled 3rd Grader Dropouts & Unprepared Grads Inflation Adj West Chester (Delaware, Chester) 152 Dropouts & Unprepared Graduates	\$619,000 \$2,000 \$838,496 State/Local \$1,998,000	\$1,384,000 \$4,000 \$1,874,764 Federal \$4,486,000	\$2,003,000 \$6,000 \$2,713,261 Total \$6,484,000
49 Dropouts & Unprepared Graduates Avg. Added Expense per Enrolled 3rd Grader Dropouts & Unprepared Grads Inflation Adj West Chester (Delaware, Chester) 152 Dropouts & Unprepared Graduates Avg. Added Expense per Enrolled 3rd Grader	\$619,000 \$2,000 \$838,496 State/Local \$1,998,000 \$2,000	\$1,384,000 \$4,000 \$1,874,764 Federal \$4,486,000 \$5,000	\$2,003,000 \$6,000 \$2,713,261 Total \$6,484,000 \$8,000
49 Dropouts & Unprepared Graduates Avg. Added Expense per Enrolled 3rd Grader Dropouts & Unprepared Grads Inflation Adj West Chester (Delaware, Chester) 152 Dropouts & Unprepared Graduates Avg. Added Expense per Enrolled 3rd Grader Dropouts & Unprepared Grads Inflation Adj	\$619,000 \$2,000 \$838,496 <b>State/Local</b> \$1,998,000 \$2,000 \$2,706,488	\$1,384,000 \$4,000 \$1,874,764 Federal \$4,486,000 \$5,000 \$6,076,728	\$2,003,000 \$6,000 \$2,713,261 Total \$6,484,000 \$8,000 \$8,783,216
49 Dropouts & Unprepared Graduates Avg. Added Expense per Enrolled 3rd Grader Dropouts & Unprepared Grads Inflation Adj West Chester (Delaware, Chester) 152 Dropouts & Unprepared Graduates Avg. Added Expense per Enrolled 3rd Grader Dropouts & Unprepared Grads Inflation Adj Haverford Township (Delaware)	\$619,000 \$2,000 \$838,496 State/Local \$1,998,000 \$2,000 \$2,706,488 State/Local	\$1,384,000 \$4,000 \$1,874,764 Federal \$4,486,000 \$5,000 \$6,076,728 Federal	\$2,003,000 \$6,000 \$2,713,261 Total \$6,484,000 \$8,000 \$8,783,216 Total

Sources: Education Consumers Foundation, "Cost of Reading Failure: Any US School, Cost Calculator," accessed June 12, 2024, https://education-consumers.org/efc-cost-calculator/; Federal Reserve Bank of Minneapolis, "Inflation Calculator," accessed June 12, 2024, https://www.minneapolisfed.org/about-us/monetary-policy/inflation-calculator.

<sup>&</sup>lt;sup>1</sup> Commonwealth Foundation, "The Cost of Pennsylvania's Education Failures," December 13, 2011,

https://www.commonwealthfoundation.org/research/the-cost-of-pennsylvanias-education-failures/.

<sup>&</sup>lt;sup>2</sup> Commonwealth Foundation, "Tax Credit Scholarships: An Investment in Educational Opportunity," December 19, 2023, https://www.commonwealthfoundation.org/research/tax-credit-scholarships-pa/.

<sup>3</sup> Pennsylvania Department of Education, "Cohort Graduation Rate Statistics," accessed June 17, 2024,

https://www.education.pa.gov/DataAndReporting/CohortGradRate/Pages/default.aspx;

School District of Philadelphia, PSSA

<sup>4</sup> School District of Philadelphia, PSSA and Keystone Performance Dashboard, accessed June 17, 2024, .

https://dashboards.philasd.org/extensions/pssa-keystone-public/index.html#/.

<sup>5</sup> Education Consumers Foundation, "Cost of Reading Failure: Any US School, Cost Calculator," accessed June 12, 2024, https://educationconsumers.org/efc-cost-calculator/.

<sup>6</sup> Pennsylvania Department of Education, "Dropout Data." accessed June 12, 2024,

https://www.education.pa.gov/DataAndReporting/Dropouts/Pages/default.aspx.

<sup>7</sup> Education Consumers Foundation, "Cost of Reading Failure: Any US School"; Federal Reserve Bank of Minneapolis, "Inflation Calculator," accessed June 12, 2024, https://www.minneapolisfed.org/about-us/monetary-policy/inflation-calculator.

<sup>8</sup> National Center for Education Statistics, "The Conditional of Education 2023, Annual Earnings by Educational Attainment, Figure 2," August 2023, https://nces.ed.gov/programs/coe/pdf/2023/cba\_508.pdf.

9 National Center for Education Statistics. "Table 504.40, Annual Earnings of Persons 25 Years Old and over, by Highest Level of Educational Attainment and Sex: 2022," October 2023, https://nces.ed.gov/programs/digest/d23/tables/dt23\_502.40.asp.

<sup>10</sup> Pennsylvania Department of Corrections, "FY 2024–25 Budget Testimony," February 2024,

https://www.cor.pa.gov/About%20Us/Statistics/Documents/Budget%20Documents/Budget%20Testimony%202024-25.pdf.

<sup>11</sup> Pennsylvania Department of Corrections, "PA DOC Statistics, December 31, 2023,

https://www.cor.pa.gov/About%20Us/Statistics/Documents/Budget%20Documents/2023-Inmate-Profile.pdf.

<sup>12</sup> Bureau of Justice Statistics, "Federal Prison Statistics Collected under the First Step Act, 2022," U.S. Department of Justice, December 2022, https://bjs.ojp.gov/sites/g/files/xyckuh236/files/media/document/fpscfsa22.pdf.

<sup>13</sup> U.S. Bureau of Labor Statistics, "College Enrollment and Work Activity of High School Graduates," news release, April 23, 2024, https://www.bls.gov/news.release/hsgec.htm.

14 Institute for College Access and Success, "Pennsylvania: How SNAP Could Better Support State Educational Attainment Efforts," October 2023. https://ticas.org/wp-content/uploads/2023/10/PA-SNAP-Attainment-Fact-Sheet.pdf.

<sup>15</sup> Jane M. Von Bergen, "Diploma in Hand, They Are Shocked to Learn They Still Need Remediation," Chalkbeat, May 17, 2019,

https://www.chalkbeat.org/philadelphia/2019/5/17/22186419/diploma-in-hand-they-are-shocked-to-learn-they-still-need-remediation/.

<sup>16</sup> National Center for Education Statistics, "Table 311.40, [CORRECTED] Percentage of First-Year Undergraduate Students Who Reported Taking Remedial Education Courses, by Selected Student and Institution Characteristics: Selected Academic Years, 2003–04 Through 2019– 20," 2022, https://nces.ed.gov/programs/digest/d22/tables/dt22\_311.40.asp.
<sup>17</sup> EdChoice, "The 123s of School Choice," July 2024, https://www.edchoice.org/wp-content/uploads/2024/06/123s-2024.pdf.

<sup>18</sup> Patrick J. Wolf et al., "Education Freedom and Student Achievement: Is More School Choice Associated with Higher State-Level

Performance on the NAEP?" Department of Education Reform, University of Arkansas, March 2021, https://cpb-us-

e1.wpmucdn.com/wordpressua.uark.edu/dist/9/544/files/2018/10/education-freedom-and-naep-scores.pdf.

<sup>19</sup> Corey A. DeAngelis and Patrick J. Wolf, "Private School Choice and Crime: Evidence Frome Milwaukee," Social Science Quarterly 100, No. 6. (October 2019) 2301-15, https://onlinelibrary.wiley.com/doi/abs/10.1111/ssqu.12698.

<sup>20</sup> Matthew Chingos et al., "The Effects of Means-Tested Private School Choice Programs on College Enrollment and Graduation," Urban

Institute, July 19, 2019, https://www.urban.org/research/publication/effects-means-tested-private-school-choice-programs-college-enrollmentand-graduation.

<sup>21</sup> Sen Judy Ward, Senate Bill 795, Pennsylvania General Assembly, Regular Session 2023–24,

https://www.legis.state.pa.us/cfdocs/billInfo/billInfo.cfm?sYear=2023&sInd=0&body=S&type=B&bn=0795.

<sup>22</sup> Pennsylvania Department of Education, "Charter School Funding," accessed June 19, 2024, https://www.education.pa.gov/K-

12/Charter%20Schools/Pages/Charter-School-Funding.aspx; Commonwealth Foundation, "Lifeline and Education Choice Myths and Facts," January 4, 2024, https://www.commonwealthfoundation.org/research/lifeline-education-choice-myths-facts/.