Education and the Economy:

Boosting Pennsylvania's Economy by Improving High School Graduation Rates



March 2011

Building on its previous work examining education and the economy, the Alliance for Excellent Education (the Alliance), with generous support from State Farm®, analyzed the economies of all fifty states and the District of Columbia to determine the economic benefits that states could see by improving high school graduation rates. Using a sophisticated economic model developed by Economic Modeling Specialists Inc., an economics firm specializing in socioeconomic impact tools, the Alliance calculated economic projections for each state. The findings presented in this document clearly demonstrate that the best economic stimulus package is a high school diploma.

he recent economic downturn gripping the nation has been incredibly far reaching and hard hitting. It has forced individuals and governments alike to look differently at the status quo, especially spending priorities and short- and long-term budget plans. As states struggle to maintain financial solvency, they are increasingly looking for creative economic improvement strategies and deficit-cutting tools.

Addressing the high school dropout crisis is a key strategy for economic growth. Years of research repeatedly highlights the link between education and the economy. Indeed, raising educational outcomes not only boosts incomes for individuals who earn degrees, but these individual gains also compound to improve local, state, and national economies.

In a time of shrinking state revenues and in the wake of a national economic crisis that most profoundly affected those with the least education—in January, 2011 the unemployment rate among individuals without a high school diploma was more than three times the rate of those with a bachelor's degree or higher¹—states must view education reform as a key strategy for strengthening the economy. Improving educational outcomes creates a wave of economic benefits that include boosting individual earnings, home and auto

sales, job and economic growth, spending and investment, and tax revenue in the state. Investing in turning dropouts into graduates will benefit *all* citizens, including bankers, auto dealers, realtors, and storeowners, not simply students or parents with children in school.

Nationally, more than seven thousand students become dropouts every school day, adding up to over one million students annually who will not graduate from high school with their peers.² In addition to the moral imperative to provide every student with an equal opportunity to pursue the American dream, our nation's economic security now requires many more students to graduate from high school. In this knowledge-based economy of the twenty-first century, all students need additional education after high school if they are to secure good-paying jobs that can support themselves and a family.

To demonstrate the connection between improved educational outcomes and economic gains, the Alliance presents on the following page the economic benefits that would likely occur if half of Pennsylvania's nongraduates from the Class of 2010 had graduated with their high school class.

² Alliance for Excellent Education analysis of Editorial Projects in Education, "Diplomas Count 2010: Graduation by the Numbers: Putting Data to Work for Student Success," special issue, Education Week 29, no. 34 (2010).





¹ U.S. Department of Labor, Bureau of Labor Statistics "Table A-4: Employment Status of the Civilian Population 25 Years and Over by Educational Attainment," (Washington, DC; Author, February 2011), http://www.bls.gov/news.release/empsit.t04.htm (accessed March 7, 2011).

Education and the Economy:

Boosting Pennsylvania's Economy by Improving High School Graduation Rates

In Pennsylvania, an estimated 34,300 students dropped out from the Class of 2010 at great costs to themselves and to their communities. Cutting that number of dropouts in half for this single high school class could result in tremendous economic benefits to the state. Below are the contributions³ that these 17,150 "new graduates" would likely make to Pennsylvania's economy:



\$173 Million in Increased Earnings

Collectively, this single class of new graduates would likely earn as much as \$173 million more in an average year compared to their likely earnings without a high school diploma.



\$128 Million in Increased Spending; \$45 Million in Increased Investments

New graduates' increased earnings, combined, would likely allow them to spend an additional **\$128 million** and invest an additional **\$45 million** during an average year.



\$383 Million in Increased Home Sales; \$19 Million in Increased Auto Sales

By the midpoint of their careers, these new graduates, combined, would likely purchase homes totaling in value of as much as \$383 million more than what they otherwise would have spent without a diploma. In addition, they would likely spend up to an additional \$19 million in vehicle purchases during an average year.



1,400 New Jobs; \$217 Million in Economic Growth

The additional spending and investments by these new graduates, combined, would be enough to support as many as 1,400 new jobs and increase the gross state product by as much as \$217 million by the time they reach their career midpoints.



\$18 Million in Increased Tax Revenue

As a result of increased wages and higher levels of spending, state tax revenues would likely grow by as much as \$18 million during an average year.



Increased Human Capital After earning a high school diploma, 33% of these new graduates would likely continue on to pursue some type of postsecondary education, but only **3,700** students, or 21% of all new graduates, are expected to complete their studies. Boosting the share of new high school graduates who complete postsecondary programs to 60%—President Obama's goal for the nation4—would increase the number of postsecondary graduates to **10,300**.



Every Student Counts in Pennsylvania

Moving even one student from dropout status to graduate status will contribute to a state's economic growth. This box offers a scaled-down look at the figures presented on the left by projecting the likely benefits if just 1,000 dropouts in the state had graduated from high school. These 1,000 new graduates, combined, would likely

- earn \$10 million in additional earnings in an average year;
- spend an additional \$1.1 million each year purchasing vehicles and, by the time they reach the midpoint of their careers, buy homes worth \$22 million more than what they would likely have spent without a diploma; and
- support 80 new jobs in the state, increase the gross state product by \$13 million, and pour an additional \$1 million annually into state coffers, all through their increased spending and investments.

About Education in Pennsylvania

- Pennsylvania is home to 598 high schools;
 54 of these are considered among the nation's lowest-performing high schools (i.e., schools where fewer than 60 percent of freshmen progress to their senior year on time).
- In Pennsylvania, 22 percent of high school students do not graduate from high school on time with a regular diploma.
- Similar information will be available in spring 2011 for the following metropolitan statistical areas in Pennsylvania: Allentown–Bethlehem–Easton, Altoona, Erie, Harrisburg–Carlisle, Johnstown, Lancaster, Philadelphia–Camden– Wilmington, Pittsburgh, Reading, Scranton—Wilkes–Barre, State College, and York–Hanover.

⁴ President Obama's goal to increase the postsecondary attainment rate among young Americans to 60 percent in order to lead the world in the share of the population with a higher education degree has been stated in numerous instances, including the U.S. Department of Education's National Technology Plan and U.S. Secretary of Education Arne Duncan's remarks on June 3, 2010 at North Carolina Central University.





³ These figures represent rounded estimates of gross benefits to the state economy and are not intended to reflect the net impact of additional graduates