Education and the Economy:

Boosting the Economy in the Denver–Aurora– Broomfield, CO Metropolitan Statistical Area by Improving High School Graduation Rates



April 2011

Building on its previous work examining education and the economy, the Alliance for Excellent Education (the Alliance), with generous support from State Farm®, has analyzed the economies of over two hundred metropolitan statistical areas (MSA) to determine the economic benefits that communities 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 MSA. 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 state and local governments 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 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 twice the rate of those with a diploma¹—communities must view education reform as a key strategy for strengthening the economy. Improving educational outcomes creates a wave of economic benefits throughout communities that include boosting individual earnings, home and auto

sales, job and economic growth, spending and investments, and tax revenues. Investing in turning dropouts into graduates will benefit all residents, 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 the nongraduates from the Class of 2010 in the Denver–Aurora–Broomfield MSA 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).

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In the Denver–Aurora–Broomfield metropolitan statistical area (MSA), an estimated 9,100 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 region. Below are the contributions³ that these 4,550 "new graduates" would likely make to the Denver–Aurora–Broomfield economy:



\$65 Million in Increased Earnings

Collectively, this single class of new graduates would likely earn as much as **\$65 million** more in an average year, compared to their likely earnings without a high school diploma.



\$47 Million in Increased Spending; \$18 Million in Investment

New graduates' increased earnings, combined, would likely allow them to spend up to an additional \$47 million and invest an additional \$18 million during an average year.



\$231 Million in Increased Home Sales; \$3.7 Million in Increased Auto Sales

By the midpoint of their careers, these new graduates, combined, would likely spend as much as \$231 million more on home purchases than they would spend without a diploma. In addition, they would likely spend up to an additional \$3.7 million on vehicle purchases during an average year.



450 New Jobs; \$87 Million in Economic Growth

The additional spending and investments by these new graduates, combined, would likely be enough to support as many as **450** new jobs and increase the gross regional product (GRP) by as much as **\$87 million** by the time they reach their career midpoints.



\$7.1 Million in Increased Tax Revenue

As a result of these new graduates' increased wages and higher levels of spending, state and local tax revenues in the region would likely grow by as much as **\$7.1 million** during an average year.



Increased Human Capital After earning a high school diploma, 56% of these new graduates will likely continue on to pursue some type of postsecondary education, but only **1,510** students, or 33% of the region's 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 in this region to **2,740**.



Every Student Counts in the Denver-Aurora-Broomfield MSA

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

- earn as much as \$14 million in additional earnings in an average year;
- spend an additional \$800,000 each year purchasing vehicles and, by the time they reach the midpoint of their careers, spend up to \$51 million more on homes than they would likely spend without a diploma; and
- support as many as 100 new jobs in the region, increase the gross regional product by up to \$19 million, and pour as much as an additional \$1.5 million annually into state and local coffers, all through their increased spending and investments.

About Education in the Denver-Aurora-Broomfield MSA

- The Denver–Aurora–Broomfield MSA includes ten counties in Colorado (see map above).
- In this MSA, 28% of high school students do not graduate from high school on time with a regular diploma.
- This region is home to 90 high schools;
 7 of these are considered among the nation's lowest-performing high schools (i.e., schools where fewer than 60% of freshmen progress to their senior year on time).

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.