A SIZEABLE RETURN ON INVESTMENT

COSTS AND BENEFITS OF COLORADO'S ASSET BILL

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Summary

Additional tax revenue, a better educated population, higher productivity jobs, more overall spending in the economy, and increased tuition revenue for state college and universities are what Colorado stands to gain from granting in-state college tuition to its undocumented high school graduates through the Advancing Students for a Stronger Economy Tomorrow (ASSET) Bill. Other reports have highlighted the social benefits of providing in-state tuition to undocumented students and hinted that the ASSET Bill will produce higher-income earners and additional tuition revenue for Colorado universities, but none have put discrete numbers to those benefits. This report does just that by calculating the fiscal costs and the qualitative fiscal and economic benefits of Colorado's ASSET Bill.

Description of ASSSET Bill (SB13-033)

Senate Bill 13-033 establishes that any student meeting the following criteria can pay resident tuition rates at institutions of higher education.

- the student has attended a Colorado high school for at least three years preceding graduation
- has graduated from a Colorado high school or obtained a G.E.D.
- applies for and is admitted to a Colorado institution of higher education within a year of high school graduation.

Many students are already working their way through the immigration system and are able to be employed. The remaining students will be required to seek lawful presence as soon as they are eligible. Once classified as an in-state student, each is eligible for College Opportunity Fund stipend (COF).[1] The COF, which allows students to pay the standard in-state rate, goes to the institution rather than the student. Essentially the bill gives Colorado high school graduates, applying for college within 12-months of receiving their high school diploma, the opportunity to pay in-state college tuition, without regard to their status.

"Colorado thrives because it has an extremely high proportion of college graduates. Colorado currently has the second highest percentage of college graduates in the U.S., but ranks 32nd in sending its own high school graduates to college."

[1] In-state tuition is subsidized by the College Opportunity Fund which is currently $62 per credit hour. For an

Key Findings

- **If SB13-033 passes, more high-school-graduating Coloradans will go to college.** An estimated 375 undocumented high school graduates would take advantage of in-state tuition in Colorado annually. With college graduation rates, the ASSET bill would produce 150 college-degree holding immigrants annually.

- **Colorado experiences strong fiscal and economic benefits from a better educated labor force.** The median income for a Colorado worker with a bachelor's degree is $20,300 higher per year than a worker with a high school diploma.[2] The additional taxes paid by a bachelor's degree holder compared to a high school graduate amounts to $1600 per year in taxes to state and local governments (in addition to the taxes paid to the federal government).[3]

- **An educated workforce produces more total economic output.** Estimates using economic modeling software predict that 150 high-skilled, high-wage jobs create an additional 270 jobs for a total of 430 in the Colorado economy. By creating more demand for industries that provide inputs to high-skilled jobs, those high-skilled jobs indirectly create other high-skilled jobs. High wage earners also spend more of their disposable income on housing, restaurants, groceries, services, and retail products which induces additional employment.

- **The ASSET Bill will have an accumulative impact.** Each year there will be a new wave of ASSET Bill recipient graduates entering the work force adding to the recipients who are already in the workforce from the prior years. The economic and fiscal impacts continually build because the benefits of the 150 graduating one year will be added to the benefits of the 150 immigrant graduates in the workforce from the year prior, assuming the graduates remain in Colorado.

College Graduates	Added State/Local Taxes	Added spending
150	$240,600	$3,046,500
300	$481,200	$6,093,100
450	$721,800	$9,139,700

- **Higher education provides a large return on investment.** For a student obtaining a 4-year degree, Colorado would be investing $7440 over the four-year tenure in college.[4] The additional taxes paid by a bachelor's degree holder to the state amounts to $1600. It would take less than 5 years for the graduate to indirectly repay the state in the form of higher taxes. Over a lifetime of working and paying higher taxes, that COF investment would translate into an 850 percent return on investment for the state.

- **The ASSET bill does not add workers to the state, but instead increases the skills of people already in the labor force.** Undocumented workers in Colorado have a high labor force participation rate. They are already a part of our economy and will likely remain here, but they are currently working for less money and in less skilled jobs. Boosting their education will simply provide them with better skills.

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[2] 2011 American Community Survey
[3] *Who Pays? A Distributional Analysis of the Tax Systems in All 50 States* (Washington D.C. Institution of Taxation and Economic Policy) 2013
[4] 4 years of COF at $62 per credit with 30 credits a year.

- **Out-of-state college tuition is prohibitively high for undocumented families.** All 4-year universities are at least twice as expensive and many are three times as expensive for out-of-state tuition compared to in-state. 2-year colleges are even more expensive for non-residents: the average non-resident tuition at a Colorado community college is more than 3 times the amount of the in-state fee. A majority of undocumented families live around or below the poverty line, and thus will be unlikely to afford non-resident tuition rates.

A Glimpse at Tuition		
	In State	Out of State
University of Colorado-Boulder	$9,152	$30,330
University of Colorado-Denver	$7,702	$22,064
Colorado State University	$8,042	$23,742
Fort Lewis College	$5,592	$17,616
University of Northern Colorado	$6,624	$18,146
Adams State College	$5,627	$15,875
Metro State College of Denver	$4,834	$15,690
Colorado Community College System	$3,508	$11,088
Source: Colorado Commission on Higher Education Tuition and Fees Report 2012		

- **Deferred Action for Childhood Arrivals (DACA) is clearing the path to ensure that Colorado will be able to realize the benefit from investing in these students.** DACA authorizes immigrants who came into the U.S. as children and meet several guidelines the ability to live, work, and continue to pay taxes in the U.S. while they seek permanent status. Under DACA, many students who qualify for in-state tuition under the ASSET bill also qualify for two-year work permits that would allow them to get a job during that period. And if the DREAM Act is passed by Congress, these students could eventually become permanent college-educated members of our workforce. In other words, DACA allows Colorado to fully reap the benefits of our educational investment in these students.

Conclusion

Most would agree that getting a quality education is one of the best ways to improve earnings, lower poverty, and augment Colorado's labor force. Colorado thrives because it is one of the states with an extremely high proportion of college graduates. Colorado currently has the second highest percentage of college graduates in the U.S., but ranks 32nd in sending its own high school graduates to college[5]. A better educated workforce means higher productivity and makes Colorado an attractive place to locate a business. Colorado is currently missing out on an extra 150 college graduates per

[5] CFI analysis of 2011 ACS education attainment data.

year (approximately 90 bachelor's degree and 60 2-year degree earners), paying on average $1,200 more in taxes (combined bachelor's and 2-year degree holders), and adding to overall productivity in the economy.

The state already invests in undocumented students' K-12 education. Colorado should strengthen that initial investment, guaranteeing a large return on investment, by providing these students the ability to obtain a college education. The ASSET Bill would remove a large deterrent giving approximately 375 students a year the ability to continue their academic career. The ASSET Bill would also potentially provide dynamic effects down the road as younger undocumented students witness the benefit of a college degree, they may be more likely to graduate high school knowing they have the ability to afford higher education.

"Colorado is currently missing out on an extra 150 college graduates per year, paying on average $1,200 more in taxes, and adding to overall productivity in the economy."

Methodology

The following was used in CFI's calculations: American Community Survey data, Pew Hispanic Center data, and tax data from the Institution on Taxation and Economic Policy in conjunction with IMPLAN input/output economic modeling software.

Calculating the number of ASSET Bill recipients per year

Calculating the number of undocumented students applying for in-state tuition in Colorado begins with an estimate of the undocumented population ages 5-17. Undocumented immigrants are a population hard to count, but the Pew Hispanic Center produces estimates of the undocumented population that are regarded as the most accurate. The latest estimates from the Pew Hispanic Center are that there are 180,000 total undocumented immigrants in Colorado and that some 12.6 percent of them, or 22,680, are below 18 years of age. This percentage is lower than the 17.3 percent of the entire Colorado population under 18 years of age.[6] The age distribution of undocumented immigrants is different than in the U.S. born population, with a smaller share of children and elderly than either the legal immigrant or the U.S.-born population.[7] To estimate the school-age population, the next step is to subtract the number of children under the age of 5 who are not yet old enough for school, using the American Community Survey. The data indicates that 12 percent of Colorado's non-naturalized immigrants under-18-population are 4 years old or less. This delivers 19,950 school-age undocumented immigrants which is divided by 12 to produce 1,663 undocumented high school seniors. Applying the 58% Colorado graduation percentage[8] to those undocumented high school seniors means about 960 undocumented seniors graduating high school a year. The 960 figure was reduced to 915 to account for those students without 3 years of high school preceding graduation and thus would be ineligible. Assuming 85% of those students will be new enrollees at Colorado institutions and not other states or already enrolled at out-of-state prices, the next step is to apply a 49% college attendance rate[9] to those graduates. This means approximately 375 Colorado undocumented immigrants would take advantage of the ASSET bill annually. Applying a 40% college

[6] http://proximityone.com/st0030sa.htm
[7] Passel, Jeffrey S., and Cohn, D'Vera (2009) *A Portrait of Unauthorized Immigrants in the United States.* Washington DC: Pew Hispanic Center.
[8] http://datacenter.kidscount.org/data/bystate/Rankings.aspx?state=CO&ind=472
[9] http://www.pewhispanic.org/files/reports/107.pdf page 12

graduation rate to the 375 undocumented immigrants enrolling each year would mean 150 college graduates each year.[10]

Other studies calculate the number of undocumented graduating high school students from aggregate national data. The National Immigration Law Center estimates that there are 65,000 undocumented high school graduates each year. Counting 1.61% of those (because Colorado is home to about 1.61% of all undocumented immigrants) gives 1,045. Applying a 49% college attendance rate with a 85% CO-college attendance rate gives 430, which is comparable to CFI's 375 figure of undocumented students applying for college in Colorado.

Additional taxes paid[11]

Estimating the additional taxes paid from the ASSET bill, involves calculating the differential that 150 high school graduates pay in taxes compared to 150 college graduates. CFI assumed that a high school graduate makes $28,000 and pays 8.5 percent of income in state/local taxes, an associate's degree-holder makes $35,000 and pays 8.5 percent of income in state/local taxes, and a bachelor's degree-holder makes $48,000 a year and pays 8.3 percent of income in state/local taxes. Of those 150 graduates, 40 percent were 2-year and 60 percent were 4-year institution graduates. Break-down between 2-year and 4-year were estimated from 2010 enrollment in Colorado's institutions of higher education. As 4-year degree holders pay on average $1600 more in taxes than high school graduates and 2-year degree holders pay on average $600 more in taxes than high school graduates, weighting graduates by 60 percent and 40 percent across 4 year and 2 year institutes respectively produces as average of $1200 additional taxes paid for college graduates.

Job creation figures

IMPLAN input/output economic modeling software was used to generate job creation numbers. IMPLAN converts household income changes into job creation numbers through a series of mathematical matrices unique to each sector in the Colorado economy.[12]

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[10] This number should be higher in the first year after implementation as eligibility for in-state tuition is granted to those graduating high school within the prior 12 months.

[11] In Colorado, combined state and local taxes (before federal offsets) are between 5.9 percent and 8.5 percent of income for all families. See: "Who Pays: A Distributional Analysis of the Tax Systems in all 50 States," (Washington, D.C.: Institute of Taxation and Economic Policy) 2013, page 34-35 http://www.itep.org/pdf/whopaysreport.pdf

[12] For more information, see the IMPLAN website: http://implan.com/v3/